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Institute for Scientific Publication Development (Lembaga Pengembangan Publikasi Ilmiah)-UMM
Jalan Raya Tlogomas No. 246 Malang, Jawa Timur, Indonesia

Kode Pos : 65144

Phone: +62341- 464318 Ext.243 Fax: 0341- 460782

E-mail: jese@umm.ac.id / jese.umm@gmail.com

Website: <http://ejournal.umm.ac.id/index.php/jese>

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Government contribution to community empowerment based on local potential in Percut village-Deli Serdang Regency

Liza Khairani ^{a,1,*}, Hasan Sazali ^{a,2}

^a Development of Islamic Society Department, Faculty of Da'wah and Communication, Universitas Islam Negeri Sumatera Utara, Jl. Willem Iskandar Pasar V, Medan Estate, North Sumatera 20371, Indonesia

¹ liza0103202018@uinsu.ac.id, ² hasansazali@uinsu.ac.id

*Corresponding author

ARTICLE INFO	ABSTRACT
<p>Article history Received: 2024-04-01 Revised: 2024-05-03 Accepted: 2024-05-12 Published: 2024-05-19</p> <p>Keywords Economy Empowerment Local potential</p>	<p><i>Indonesia is a country that is very rich in marine resources. The extraordinary potential of Indonesia's natural resources can be utilized for the welfare of society. This potential helps Indonesia get out of poverty and become a more developed country. Poverty is one of the problems that until now requires action. Increased community empowerment is needed to strengthen the principle of poverty reduction based on local potential. This research aims to get an overview of how the Village government's contribution to local potential-based community empowerment in Percut Village, as well as the impact of activities carried out by the government on the community. In this research using Qualitative method through Descriptive approach. The location of this research was Percut Village, Percut Sei Tuan District, Deli Serdang Regency. This research consists of 5 resource persons. The data collection techniques used are observation, interview and documentation. The data analysis technique is carried out by data reduction, data display and conclusion drawing. Based on the results of the study, it was found that the contribution of the village government through various programs and activities, the village government provides counseling, training, empowerment and assistance in the management and sustainable use of marine resources. In addition, the impact of activities carried out by the government on the community consists of social and economic impacts. The social impact of the community's life is well maintained and the economic impact of the community has increased.</i></p>
<p>Kata Kunci Ekonomi Pemberdayaan Potensi lokal</p>	<p>Kontribusi pemerintah terhadap pemberdayaan masyarakat berbasis potensi lokal di Desa Percut-Kabupaten Deli Serdang. Indonesia merupakan Negara yang sangat kaya dengan sumber daya laut. Potensi sumber daya alam Indonesia yang luar biasa dapat dimanfaatkan untuk kesejahteraan masyarakat. Potensi ini membantu Indonesia keluar dari kemiskinan dan menjadi negara yang lebih maju. Kemiskinan adalah salah satu masalah yang sampai saat ini memerlukan tindakan. Diperlukan peningkatan pemberdayaan masyarakat untuk memperkuat prinsip pengurangan kemiskinan yang berbasis pada potensi lokal. Penelitian ini bertujuan untuk mendapatkan gambaran tentang bagaimana kontribusi pemerintah Desa terhadap pemberdayaan Masyarakat berbasis potensi lokal di Desa Percut, serta dampak kegiatan yang dilakukan pemerintah kepada masyarakat. Dalam penelitian ini menggunakan metode Kualitatif melalui pendekatan Deskriptif. Lokasi penelitian ini dilakukan di Desa Percut, Kecamatan Percut Sei Tuan, Kabupaten Deli Serdang. Penelitian ini terdiri dari 5 narasumber. Teknik pengumpulan data yang digunakan berupa Observasi, wawancara dan dokumentasi. Adapun Teknik analisis data dilakukan dengan Reduksi Data, Display Data dan Penarikan Kesimpulan. Berdasarkan hasil penelitian ditemukan bahwa kontribusi pemerintah Desa Melalui berbagai program dan kegiatan, pemerintah desa memberikan penyuluhan, pelatihan, pendayaan dan bantuan dalam pengelolaan dan pemanfaatan sumber daya laut secara berkelanjutan. Selain itu Dampak Kegiatan yang dilakukan Pemerintah didapatkan masyarakat terdiri dari dampak social dan ekonomi. Dampak social Masyarakat Kehidupan masyarakat sekitar terjain dengan baik dan dampak ekonomi Masyarakat mengalami peningkatan.</p> <p style="text-align: right;">Copyright © 2024, Khairani, et al This is an open access article under the CC-BY-SA license</p> <div style="text-align: right;">  </div>

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INTRODUCTION

Indonesia is considered one of the countries that has abundant wealth because it has a very large natural resource base including biological and non-biological natural resources (Yuliana et al., 2021). The rich natural potential is spread in various regions, both on land, in the sea, on the surface of the earth, and in the earth. This potential helps Indonesia get out of poverty and become a more developed country (Roitman, 2019). Poverty is a problem of irony that still persists in the Indonesian nation. Not a few programs provided by the government in an effort to reduce and alleviate poverty problems (Susanti et al., 2022). Therefore, it is necessary to increase community empowerment to strengthen the principle of poverty reduction based on local potential (Wisnumurti et al., 2020). Many plans to address this problem have been made, but there is still no clear solution. Economic issues are challenges encountered by the community, both in urban and rural areas. Economic problems that arise include poverty problems that have an impact on decreasing the quality of human resources and competition in the labor market. Pemberdayaan ekonomi diwujudkan melalui langkah-langkah untuk memajukan usaha ekonomi produktif, with the aim of improving welfare while reducing poverty and unemployment rates (Surya et al., 2020). The active involvement of locals in tourism activities in the area provides an opportunity for them to seek different sources of income (Kunjuraman, 2022).

Based on the Central Statistics Agency, the number of poverty in Deli Serdang Regency in 2019 was 3.89%, in 2020 it was 3.88%, but in 2021 it increased to 4.01%. Due to the lack of income coming into society, poverty increases and unemployment increases. In addition, the cause of poverty is lack of employment (Brady, 2019). Based on the Central Statistics Agency (BPS), the number of unemployed in North Sumatra Province, as of August 6.16% and August and in the August 2022 period was 5.99% (BPS, 2022). From the data above that only community empowerment programs can reach the whole community, the data above shows that community empowerment must be encouraged.

Sustainable improvement in quality of life is often connected to community readiness for empowerment. In this context, the community is not only the focus of development, but also an important actor in ensuring the successful implementation of Development (Rachman et al., 2022). Community empowerment must also be carried out in accordance with planning, implementation, monitoring, and evaluation to realize this empowerment, one way is through empowerment by exploring local potential in the village or area. Community empowerment can be concluded from the discussion of how the community overcomes problems. The importance of common goals and acting together for the common good can be characterized as building "community capacity". Awareness, communication, and participation remain key elements of community empowerment (Gerdner & Borell, 2003). Empowerment as the ability to do something both individually and together in a community. Although it can be a useful means to increase the ability and wealth of local communities, both individually and together, community empowerment requires participation and action with community members, not just individual actions (Khalid et al., 2019). In this case, community empowerment is intended to increase community independence by using the capabilities it has. Community empowerment involves a participatory process of identifying and redefining local capacities and assets, applying resources, skills, and talents, and enhancing community assets and functions in line with community values (Cavaye & Ross, 2019).

According to Muhammad Raqib who researched community empowerment through a life skills program based on local potential to increase family productivity in Lero Village, Suppa District, Pinrang Regency, the study obtained results that local potential can increase community participation in empowerment programs through life skills training based on local potential in Lero Village, Suppa District, Pinrang Regency through trainings held by the government local and Increasing awareness of the fishing community in realizing self-financing and self-help in developing small business units/households in Lero Village, Suppa District, Kabupten Pinrang. (Rakib & Sham, 2016). In addition, based on the results of research (Sadat et al., 2021) by obtaining the results that Tourism Villages have provided transformation for residents, especially in increasing knowledge and the community's economy. Community Empowerment Based on Local Potential through Fashion Village in Kali Tengah Village, written by Katiah, Asep Dahliyana, Mila Karmila, Fashion Design and Sociology Education Study Program, Universitas Pendidikan Indonesia. The research conducted by Katiah, Asep, and Mila aims to improve the knowledge and economy of the community by developing a fashion village based on mental revolution, as well as a learning center for students (Mila Karmila, Asep Dahliyana, 2019).

Percut Village is a village located in Labuhan Deli District, Deli Serdang Regency, North Sumatra Province. It has an area of 7,079 km², consisting of 19 hamlets. Percut Sei Tuan Village has potential natural resources that must be developed to improve the community's economy. This potential includes marine products, which must be developed by the community to improve welfare. Seafood here in the form of fish, baby crab, and shellfish are used as processed food that becomes culinary. Utilizing local food sources, for example by utilizing gulame fish and tongue fish, can produce products that can be stored for a longer period of time and have additional economic value. For example, in Percut Village, many people use tongue fish and carp to be used as salted fish. The utilization of fish products is due to the high interest of the public in marine products in general.

Local potential is all resources, both natural (physical) and human (non-physical) resources, that exist in a village that can be used to improve welfare (Tobuhu et al., 2019). Especially in Percut Village, local potential is very important to support the economic life of the community. Local potential If physical local potential is managed effectively, it can improve community welfare. Meanwhile, non-physical local potentials, such as human resources, highlight the role of

humans as subjects in development, empowered through a community empowerment process that aims to explore these local potentials, in the hope of achieving community independence. As stated in the Qur'an Surah Ar-Rad verse 11: It means: "For him (man) there are angels who always guard him in turn, from the front and behind him. They guard it at God's command. Indeed, God will not change the condition of a people until they change the condition of themselves. And if God wills evil against a people, then no one can resist it, and there is no protector for them but Him." (QS. Ar-Ra'd 13: Verse 11). (Ministry of Religious Affairs, 2015)

From the Surah Ar-Rad, it can be concluded that man will not experience change and achieve his social and economic goals without making changes to himself. Therefore, various programs are needed that enable community empowerment, one of which is through tourism village development programs. Tourism villages are a combination of attractions, accommodation, and supporting facilities, which are organized in the context of community life that is bound by prevailing norms, ways of life, and traditions (Putra et al., 2021). In addition, the tourism village program as a generator of economic growth aims to optimize the potential possessed by the village to improve the welfare of people who are able to generate income for their residents (Sara et al., 2021).

This research explores the strong linkage between government measures in strengthening community empowerment based on aspects of local potential in Percut Village, Percut Sei Tuan District, Deli Serdang Regency, and the achievement of Sustainable Development Goals (SDGs). Focusing on developing local potential, this research investigates how the contributions made by governments can have a positive impact on rural communities and achieve the SDGs. The Percut village government, with the support of the district government, has launched a series of programs to reduce the poverty rate in the region. Through local economic empowerment approaches, such as skills training, access to financing, and microenterprise development, rural communities are empowered to reduce dependence on unstable livelihoods and increase family incomes.

Based on the previous explanation, this study focused on determining the government's contribution to community empowerment based on local potential in Percut Village. In addition, the impact of activities carried out by the Government on the community in Percut Village, Percut Sei Tuan District, Deli Serdang Regency.

METHOD

This research was conducted using Qualitative Method with Descriptive approach. Qualitative research is a research method that collects and analyzes data in the form of words, a type of research that uses a natural setting to interpret phenomena that occur. Qualitative Research uses a variety of current methods to discover and narratively describe what people do and how those things impact their lives (Adlini et al., 2022). Researchers use this research method to describe or describe the contribution made by the Village Government in empowering local potential-based communities in Percut Village and the impact obtained from the government's contribution to the surrounding community in Percut Village. Thus Descriptive Qualitative Research Methods are relevant to be used in obtaining results in the field.

The location of this research was conducted in Percut Village, Percut Sei Tuan District, Deli Serdang Regency. The informants of this research amounted to 5 people including Mr. Asyhari Syah as the head of the village, Mr. Ayub as the village secretary, Mr. Sofyan as the head of Hamlet 17, Mrs. Poniati as the community, and Mr. Ramli as the community who works as a fisherman. Research informants were selected based on their in-depth knowledge and experience of local conditions, potentials, and challenges faced by communities in Percut Village. They can provide valuable insights into social, economic dynamics at the village level. In addition, informants are selected based on their openness to sharing information and their experiences in interactions with researchers. Their ability to communicate clearly and openly will ensure that the data obtained from them is relevant and reliable. Researchers selected informants for this study by applying purposive sampling techniques, a method of sampling data by considering certain criteria. (Nur & Utami, 2022).

Data collection techniques used in the form of observation, interviews and documentation. The Data Analysis Technique is carried out by Data Reduction, Data Display and Conclusion Drawing. The validity of the data in this study is triangulation of sources to check the truth and clarify data obtained from research informants from primary data to analyze community empowerment based on local potential in Percut Village, Percut Sei Tuan District, Deli Serdang Regency.

RESULTS AND DISCUSSION

Overview of Local Potential

Percut Village is located in Percut Sei Tuan District, Deli Serdang Regency. Percut Village consists of 19 hamlets where some are located to the north of the Strait of Melaka. Five villages from the sub-district area are coastal villages with a height from sea level ranging from 10-20 m with an average rainfall of 24 percent. One of them is Percut Village which is located with the distance from the village to the capital of Percut Sei Tuan District (Tembung) is 15 Km and the distance to the capital of Deli Serdang Regency (Lubuk Pakam) is approximately 35 Km. And approximately 20 Km distance to the capital of North Sumatra Province (Medan). Percut Village is divided into 19 hamlets, of which 19 hamlets one consists of densely populated settlements and the second environment is the center of fisheries and marine animals. Percut villagers have diverse livelihoods but in general the livelihood of residents is fishermen.

Based on Figure 1 This village is also known to have a variety of typical food places that are not small, the location is not far from residential areas so that it allows direct interaction between the community and visitors. Percut Village is known to have local potential that can be developed. The potential of natural resources in Percut Village consists of marine products in the form of fish and Sentis Shrimp. Fish is not only used as a side dish but can be processed by the Percut Village Community into local food. From the potential of the sea produces many results obtained. Various types of fish produced from the sea in Percut Sei Tuan Village include Gulame, Boiled Puffy and Sentis Shrimp. Gulame Fish and Boiled Puffy Fish The processed products are processed into salted fish and marketed so as to increase community income. This potential in Percut Village can be considered by the government as an effort to improve the community's economy. The natural potential of the sea in Percut Village attracts the attention of many visitors who want to explore the beauty of the sea. Bagan tourism is an attractive destination because it is where tourists can cross the sea using traditional canoes.



Figure 1. Local Potential of Percut Village

Contribution in Community Empowerment Based on Local Potential

Village Apparatus has a very important role for the development and change of villages, especially in optimizing village potential, Village governments will further maximize their role with a view to managing village resources in an effective, economical, and sustainable way (Premana et al., 2022). In the development of local potential, it is important that its management is in line with improving the quality of human resources in the industrial structure. Although implementing this is not easy. Therefore, efforts are needed to achieve it. The first step is to increase public awareness to change their bad habits, followed by training, mentoring, or coaching activities that are carried out gradually and continuously (Afif Noval Fahrizal, 2021). Several contributions have been made to optimize local potential in Percut Village, Percut Sei Tuan District, Deli Serdang Regency. This effort aims to ensure that local potential can be optimally utilized to improve the community's economy.

The community's response to the government's efforts in local potential-based empowerment in Percut Village, according to Mr. Asyhari Syah, was quite positive. More and more people are starting to be interested in developing Micro, Small and Medium Enterprises (MSMEs) based on local potential, such as seafood culinary, traditional handicrafts, and tourism development based on local culture (Figure 2). From this interview, it can be seen that the government's contribution in providing counseling to the community plays an important role in utilizing local potential and improving the overall welfare of the community. Mr. Asyhari Syah also emphasized the importance of cooperation between the government and the community in optimizing local potential. Mr. Asyhari Syah stated that the government is ready to provide technical support and assistance to communities who want to develop their local potential. However, he also stressed the importance of awareness and active participation of the community itself in utilizing the existing potential.

With the synergy between the government and the community, it is hoped that Percut Village and the surrounding area can continue to grow and become an example in community empowerment based on local potential. This will not only improve the welfare of the community, but will also strengthen the identity and sustainability of local development as a whole. Thus, it can be concluded that through proper counseling and support from the government, the people of Percut Village have been able to better recognize and utilize their local potential, paving the way to sustainable and inclusive development for all levels of society.



Figure 2. MSME Counseling Based on Local Potential

The village government also provides training on seafood processing. Training for human resource development (HR) can improve the economic level of the community. Communities can be empowered by providing skills so that they are able to manage available natural resources (Rizqi Toyibah et al., 2021). In an effort to empower communities based on local potential, training is one of the important instruments used by the government. Based on the results of an interview with Mr. Rahmat who is the coordinator of the fishery product processing training program in Percut Village, Percut Sei Tuan District, Deli Serdang Regency. According to Rahmat, the village government has played an active role in providing training to the community related to the processing of fishery products. The main focus of this training is on the processing of salted fish, boiled puffy fish, mentis shrimp, and shellfish processing, local potential in Percut Village. The training was conducted by involving a number of experts and practitioners in the field of processing fishery products. This training is held once a year. They provide the best knowledge, skills, and techniques to trainees so that they are able to process fishery products with high quality and hygiene. The main objective of this training is to empower the people of Percut Village to increase the added value of their local fishery products. Thus, it is hoped that people can achieve better income and improve their welfare.

Mr. Ayub mentioned that the community's response to this training was very positive. The community is very enthusiastic to attend training and learn new techniques in processing fishery products. They recognize the importance of having skills in managing their own local potential. After attending the training, many participants succeeded in developing their fishery product processing business. Some of them began to produce salted fish with good taste and quality, process mentis shrimp into ready-to-eat processed products that are in demand by the local market, and produce local potential shellfish in a variety of interesting preparations. From this interview, it is clear that the government's contribution in providing training to communities based on local potential has a significant impact in driving the local economy and improving community welfare. Mr. Ayub also emphasized the importance of continuing and continuing this training program. He hopes that the government can continue to support and expand training programs like this to other areas in Deli Serdang Regency. Through these efforts, Percut Village and its people have been able to better utilize their local potential. With the support of the government and the entrepreneurial spirit of the community, it is hoped that the local potential will continue to grow and provide greater benefits for the entire community.

Human resources include all the potentials of a country's labor force that have been prepared to a certain extent, which can be used in socio-economic development (Ngoc & Hoang-tien, 2022). This training aims to improve the skills of the local community in Percut Sei Tuan Village. The training carried out was salted fish processing, boiled puffy fish processing, mentis shrimp processing, and shellfish processing. After attending the training, the community is expected to be able to apply the skills gained to improve their economy, such as by opening Micro, Small and Medium Enterprises (MSMEs) in the culinary field. Micro, Small and Medium Enterprises (MSMEs) have been recognized as the main technique

for alleviating income poverty (Okolie et al., 2021). Not only that, the community is also empowered in the field of creative economy, such as making jewelry from seashells, piggy banks, cigarette ashtrays, bags, and hats. With this training, it is hoped that people can develop their own economic potential and create new opportunities to increase income and overall welfare. Training can improve individual skills so as to improve the economic condition of the community.

Based on the results of an interview with Mr. Sofyan in optimizing the existing village potential, the government provides assistance such as machines, canoes, nets, besides that the government also makes street lights (flow lights) for fishermen, which aims to fully support community activities in creating MSMEs sourced from the results of existing local potential, namely the sea. With support from the government, the community formed a handicraft-based Home Industry group.

Table 1. Government Contribution to Community Empowerment Based on Local Potential

No.	Contribution	Information
1.	Conducting Counselling	The people of Percut Village were given enlightenment and encouragement by conducting counselling by the village government to realize that they have the potential of natural resources that can be optimized to improve the economy as well as the welfare of the Percut Village Community. In this case, the government conducts counselling related to opening MSME businesses based on local potential.
2.	Conducting Training	The government conducts training to the community related to fish processing of local potential products such as salted fish processing, fish processing, puffy fish processing, mentis shrimp processing and shellfish processing.
3.	Doing Empowerment	With the contribution of the government in the community, it already has the ability to utilize local potential so that the community can open MSME businesses such as home industries so that they can improve the economy and prosper the community.
4.	Provide facility assistance	In optimizing the existing village potential, the government provides assistance such as machines, canoes, nets, besides that the government also makes street lights (flow lights) for fishermen, which aims to fully support community activities in creating MSMEs sourced from the results of existing local potential, namely the sea. With support from the government, the community formed a handicraft-based Home Industry group.

The Impact of Government Activities on the Community

Based on the results of an interview with Mr. Ramli as village secretary, the impact was carried out by the government in empowering communities based on local potential as follows:

Social impact

- a. Enlightenment and Encouragement: Through counseling, the community is given a better understanding of the potential of natural resources in Percut Village. People are becoming more aware of their potential and feel motivated to make better use of it. This creates a sense of pride and confidence in the community, and strengthens solidarity between citizens in developing their local potential. Community-to-community relations may have a significant role in the success of community-based local potential development (Mayaka et al., 2020)
- b. Empowerment: Training provided by the government provides new skills to the community in managing local potential, especially in fish processing. With this new skill, the community feels more empowered and has the opportunity to take an active role in developing MSME businesses based on local potential. This empowerment also creates opportunities for communities to increase self-reliance and increase their sense of belonging to their villages.
- c. Facility Support: Facility assistance provided by the government, such as machinery, canoes, nets, and street lights, has a direct impact on the welfare of the community. This support increases efficiency and productivity in managing marine potential, as well as improving the safety and quality of life of fishermen. In addition, the formation of handicraft-based Home Industry groups can also create closer social relationships between group members, as well as facilitate the exchange of knowledge and skills between citizens.

With the existence of local potentials such as the sea, it certainly affects the social life of the surrounding community in Percut Village. Theoretically, explaining individual behavior and collective action based on groups can drive transformative societal change (Schulte et al., 2020). Based on the results of an interview with a mother with the initials P, the life of the surrounding community is well established, this can be seen when activities at sea, from catching fish to repairing damaged boats, are carried out jointly by fishermen. They build positive relationships at work and spend their free time talking or discussing current topics.

Likewise, the mothers in Bagan Percut Village who go to the sea to look for shells also build good relationships. They spend their time telling stories and discussing topics such as rising rice prices and fish prices. Likewise, after returning from the sea, they gather with fellow mothers to discuss government assistance and topics that are hot in the village or nationally. This positive interaction creates trust and serves as a starting point for strong cooperation. In addition, the

community also has the opportunity to introduce customs, culture, and other aspects as an effort to promote the cultural richness of their area. This is in accordance with Marc Iver's opinion which states that a social change can be considered a change if it involves interaction and balance in social interaction (Putri Tambun et al., 2023).

Economic Impact

The impact obtained by the community with local potential such as the sea each gets the benefits. Village Potential is a resource that can be increased to advance the village and improve community welfare through focused and sustainable development (Pradani, 2020). Based on the results of an interview with Mrs. K the impact obtained by the government's contribution in community empowerment based on local potential among the community is where there is a change in the community in terms of economic income that previously had no income with the activities held by the government, the community can work as fishermen, catches can be sold / marketed so that the community can increase The community's economy and creating a more prosperous society is marked by increasing access to education for the community's children. With a more stable income and greater support from the government, many children in Percut Village are now able to continue their education to a higher level. This is a sign that their future is becoming brighter, thanks to the progressive and continuous measures of the government. The potential of local Tourism Villages most of the income generated actually flows to the Community (Lapeyre, 2010). In addition, there are also benefits obtained by the community. The impact obtained by the government with the local potential of the Village Government can empower the Community by creating training programs so that it can improve the human resources (HR) of the Community in Percut Village, Percut Sei Tuan District, Deli Serdang Regency.

Based on the results of an interview with Mr. Ayub that the contributions made by the government are as follows:

1. **Increased Income:** With training and empowerment, the community can open MSME businesses based on local potential, such as home fish processing industries. This opens up new opportunities for people to increase their income through the sale of processed fish products. This increase in income can help reduce poverty levels and increase people's purchasing power. Regarding economic empowerment, there is evidence that jobs have been created for some local communities (Gohori & van der Merwe, 2022)
2. **Unemployment Reduction:** The opening of local potential-based MSME businesses also creates new jobs for local communities. People who were previously unemployed or depended only on seasonal work now have the opportunity to work independently or join existing small businesses. This can reduce unemployment and improve household welfare.
3. **Local Economic Improvement:** With the increase in MSME business activities based on local potential, there is also an increase in the overall local economy. The local products produced will become the main choice for local consumers and tourists, thereby increasing income and competitiveness of the local economy. This can create a more dynamic and sustainable economic environment in Percut Village.

Overall, the steps taken by the Percut Village government have a positive impact on the social and economic aspects of the community. Communities are becoming more self-reliant, productive, and have greater opportunities to improve their quality of life, while villages as a whole experience sustainable economic growth.

CONCLUSION

The local potential of the sea owned by Percut Village, Percut Sei Tuan District, Deli Serdang Regency is a valuable asset that can lift the economy and community welfare significantly. The potential of natural resources such as fish and Sentis Shrimp is the main attraction utilized by the local community. From these marine products, the community is able to process them into local food products that have high selling value, such as salted fish and processed boiled puffy fish, which are then marketed to increase their income.

Village governments also play an important role in optimizing the local potential of the sea. Through various programs and activities, the village government provides counseling, training, empowerment and assistance in managing the sustainable use of marine resources. By opening Micro, Small and Medium Enterprises (MSMEs) based on local potential, as well as providing training on seafood processing, the village government strives to improve the quality of human resources and advance the economy of the local community.

In addition, the village government also provides infrastructure support such as machines, canoes, nets, and street lights (flow lights) to support fishermen's activities. This support aims to ensure that communities can access marine resources more efficiently and safely.

The impact of activities carried out by the village government in empowering local potential-based communities consists of social and economic impacts. Social Impact, Counseling and training increase community understanding and skills in managing local potential, create a sense of pride and confidence, and strengthen solidarity between residents, Facility assistance such as machinery and canoes increases efficiency in managing marine potential, while positive interaction creates strong cooperation and introduces regional cultural wealth. Economic impact, Community empowerment through training and assistance enables the establishment of MSME businesses based on local potential, which in turn increases income, reduces unemployment, and improves the overall local economy.

With the collaboration between the village government and the community, Percut Sei Tuan Village is able to develop the local potential of the sea into a strong and sustainable economic pillar. This initiative not only has a positive economic

impact, but also lifts the dignity and independence of the local community. The local potential of the sea has been a catalyst for positive change in building the overall prosperity and progress of the village.

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Implementation of women's empowerment program in improving family welfare in Batu Bara Regency

Ulfa Fadillah ^{a,1,*}, S. Salamuddin ^{a,2}

^a Department of Islamic Community Development, Faculty of Da'wah and Communication, Universitas Islam Negeri Sumatera Utara, Jl. William Iskandar Ps. V, Medan, North Sumatera 20371, Indonesia

¹ ulfa0103201004@uinsu.ac.id *; ² salamuddin@uinsu.ac.id

*Corresponding author

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ABSTRACT

Ladies enjoy different benefits and fluctuated jobs, remembering for instruction and vocations. The issues of ladies from low monetary gatherings, particularly connected with orientation, need regard for increment their social and financial support. Ladies' strengthening, particularly among unfortunate families, shows the requirement for substantial activities in reinforcing social and monetary viewpoints. This study means to examine the execution of the Ladies' Strengthening Project in Further developing Family Government assistance in Tanah Itam Ulu Ranch Town, Datuk Lima Puluh Locale, Batubara Rule. This sort of examination is subjective exploration utilizing Spellbinding strategy. Not entirely settled by purposive testing, information assortment methods were done by perception, interview and documentation. Information legitimacy test in this review is source triangulation. Information investigation strategies use information decrease stages, information show, and end drawing. The consequences of the review show that there is a ladies' strengthening program, yet it has not had the option to make a huge commitment in further developing family government assistance through the Deqoupage create program. There are impediments in the execution of this strengthening program, chiefly because of the low level of ladies' cooperation. This low interest can be brought about by a few things, like the absence of socialization, the absence of preparing given by the public authority, and the degree of instruction.

Kata Kunci

Kesejahteraan keluarga

Pemberdayaan

Perempuan

Implementasi program pemberdayaan perempuan dalam meningkatkan kesejahteraan keluarga di Kabupaten Batu Bara. Wanita menikmati manfaat berbeda dan berganti pekerjaan, mengingat pendidikan dan profesi. Permasalahan perempuan dari kelompok ekonomi rendah, khususnya yang terkait dengan orientasi, perlu mendapat perhatian untuk meningkatkan kepentingan sosial dan keuangan mereka. Perempuan pemberdayaan, khususnya di kalangan keluarga kurang mampu, menunjukkan perlunya aktivitas besar dalam memperkuat perspektif sosial dan moneter. Kajian ini bertujuan untuk membedah pelaksanaan Sistem Penguatan Perempuan dalam Mengembangkan Lebih Lanjut Bantuan Pemerintahan Keluarga di Kota Perkebunan Tanah Itam Ulu, Daerah Datuk Limapuluh, Kabupaten Batu Bara. Eksplorasi semacam ini merupakan pemeriksaan subjektif dengan menggunakan teknik pencerahan. Sumber diselesaikan dengan menggunakan pengujian purposif. Prosedur pengumpulan informasi dilakukan dengan memanfaatkan persepsi, pertemuan dan dokumentasi. Uji legitimasi informasi dalam pemeriksaan ini adalah triangulasi sumber. Prosedur pemeriksaan informasi menggunakan tahap penurunan informasi, menampilkan informasi, dan menggambar akhir. Hasil peninjauan menunjukkan adanya program penguatan perempuan, namun belum mempunyai komitmen besar untuk mengembangkan lebih lanjut bantuan pemerintah keluarga melalui program pembuatan Deqoupage. Ada kendala dalam pelaksanaan program penguatan ini, terutama karena dukungan terhadap perempuan masih rendah. Rendahnya investasi ini dapat disebabkan oleh beberapa hal, seperti tidak adanya sosialisasi, tidak adanya pelatihan yang diberikan oleh pemerintah, dan rendahnya tingkat pendidikan perempuan.

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INTRODUCTION

Women are creatures that have many advantages, making them interesting subjects to discuss in various topics (Aprianti & Yunita, 2023). The roles of women today are very diverse, ranging from educators to pursuing careers. Today, many women serve as the backbone of the family, similar to traditional roles usually carried out by men. Limited income provided by family officials (spouses), encourages women to take part effectively in increasing family financial salaries. Seeing the extraordinary potential that women have, women must be empowered to help themselves and others. As role models and family support, women should be given full opportunities to develop (Kusumahadi, 2012).

Providing low-income women with the right financial tools to save and borrow money, make and receive payments, and manage risk is essential for women's empowerment, and also for poverty alleviation, especially since women are a disproportionately poverty-stricken group (Hendriks, 2019). The importance of empowering women, especially in poor families, from lower socio-economic positions, especially (Ortigoza et al., 2023) shows the need for concrete steps in the socio-economic field. One of the steps that can be taken to empower all levels of society is through concrete efforts in empowering women (Ulpa & Fatmariza, 2020). Therefore, empowerment is not an end point, but rather a journey characterized by negotiation and compromise with uncertain outcomes due to its uncertain nature (Indarti et al., 2019).

Women's empowerment has a very important role in achieving Sustainable Development Goals (SDGs), especially in efforts to achieve gender equality, women's empowerment, and inclusive and sustainable economic development. Sustainable Development Goals (SDGs) are a set of sustainable development goals and indicators that were universally agreed upon in September 2015, replacing the Millennium Development Goals (MDGs) by combining development and environmental agendas (Bexell & Jönsson, 2017). SDGs are global commitments accepted by world leaders, including Indonesia, to end poverty, reduce inequality, and protect the environment, with 17 Goals and 169 Targets expected to be achieved by 2030.

The 2030 Agenda for Sustainable Development, to which all UN members have committed, includes SDGs dedicated to achieving gender equality, with a single target aimed at ensuring women's full and effective participation and equal opportunities for leadership at all levels of decision-making in politics, economics, and public life (Besnier, 2023).

The statement highlighted the urgency of gender equality in sustainable development, which is recognized as an important element in the 2030 Agenda. The focus on women's participation in political, economic, and public life decision-making demonstrates efforts to address longstanding gender gaps. The specific goal of providing equal opportunities for women in leadership confirms the importance of their active role in the decision-making process. However, the challenge of turning these commitments into concrete actions demonstrates the complexity of implementing gender equality policies. It highlights the importance of cross-sectoral cooperation and engagement of all relevant parties to achieve the gender equality goals set out in the 2030 Agenda.

Women's empowerment is a crucial aspect to achieve sustainable growth. To advance sustainable development, it is important to give every woman the opportunity to recognize her rights (Martín-Bellido & Gonzalez-Sanz, 2024) and encourage them to achieve achievements (Yoshioka Vargas et al., 2023) Women's empowerment in various fields, including politics, economy, health, and social, has the potential to provide significant benefits for women themselves as well as is an important goal for society (Abrar ul Haq et al., 2019).

Through empowerment programs, women's participation in the economic sector can be increased, including involving them in designing programs that focus on women's empowerment. The program aims to create opportunities for women to develop their skills, focusing on establishing businesses that can enhance their role in the economy.

The Women's Empowerment Program is an initiative that aims to overcome the problem of poverty, especially among women. This program is structured with the aim of increasing business activities for women involved in it, with the hope that they can create a more prosperous family life through participation in the program (Indarto et al., 2019). This activity is in accordance with the provisions in QS. Ar-ra'd verse 11: It means: "Surely God will not change the condition of a people until they change their own situation. And if God desires evil in a people, then no one will be able to resist it, and there is no protector for them but Him. (QS. Ar-Ra'd[13]:11) (MoA, n.d.).

This repetition underscores that God will not change what is happening or the economic well-being of the general public unless they personally make changes. People are encouraged to strive sincerely and work according to their capacity to change destiny. The message of this refrain also encourages the autonomous spirit in the eyes of the public. Reinforcement is aimed at helping individuals and networks to be able to change their own destiny and work on the basis of government assistance and their way of life. The underlying phase of reinforcement is attention and the longing for change. Without the comfort of creating, individuals will face challenges in achieving their personal satisfaction (Sany, 2019).

Meanwhile, explained by Ibn Abi Hatim, from Ibrahim, he said, "Allah Almighty has sent down to one of the Prophets of the Children of Israel, that, "tell your people truly the inhabitants of the city and its cultivators." whatever house obeys Allah, then if they shun it and practice disobedience, then Allah Almighty will drive them from what they like to something they despise, ”.

Overall, this section focuses on examining the changes that occur in a group, from the word **يُغَيِّرُ** has a very broad meaning, it can be in the form of monetary, social, etc. changes, but reinforced by the word **قُوْمًا**, so that the

development here is more aimed at changes of a cultural nature, or social changes. People who have a large share in the development that occurs in humans, in this temple there are two variables, namely the effort made by a group to do good for others, and the will of Allah SWT. who have the power and solidarity to change the individual's situation (Dwi Fajri & Saepudin, 2022).

Some past research has shown that women's empowerment can contribute to economic improvement and family welfare. Previous research conducted by Jabbar and Zaza highlighted that providing women with skills through vocational training programs, such as cooking, sewing, and beauty skills, can produce positive impacts (Jabbar & Zaza, 2016). The results of the study showed an economic improvement which in turn improved family welfare. Another study by Purnamasari et al., found that empowering women through decoupage skills training and marketing strategies can increase their income, which contributes to improving family welfare (Purnamasari et al., 2020).

Furthermore, research conducted by Julianingsih et al., highlighted women's empowerment through moringa stick making training. This training provides knowledge and insight to women in the field of entrepreneurship, which ultimately helps improve family welfare (Julianingsih et al., 2023). Despite differences in objects and subjects and research focus, these studies show that empowering women through skills training can be one of the important strategies in improving family welfare.

Based on initial observations obtained by Itam Ulu Land Plantation Village, Datuk Fifpuluh District, Batu Bara Regency shows that this village is actively implementing women's empowerment programs through the Decoupage Craft Program. The majority of women in this village rely on economic income from their husbands, but this is not enough to meet the needs of life. With a female population of 492 people (51.25%), which is higher than the number of men of 468 people (48.75%), out of a total population of 960 people, it can be seen that there is great potential for women to be developed. However, there are still a number of heads of families at the pre-prosperous level as many as 75 families (28.6%), while the heads of prosperous families number 187 families (71.3%), so that the total heads of families in Tanah Itam Ulu Plantation Village reach 262 families.

The Women's Empowerment Program through decoupage crafts provides benefits for women, the majority of whom occupy positions as housewives and are at the underprivileged level. However, women's participation in this program is still limited due to shortcomings in training, socialization, and coaching support from the government or management groups. This situation results in the program being less likely to be active. In addition, the results of the product have not been able to improve family welfare, especially with the low level of education of women which results in limited knowledge in starting a business. Other obstacles include the lack of potential Human Resources (HR), which hinders the ability to innovate on products.

Decoupage, which comes from the French word *découper* meaning to cut, is a type of craftsmanship or art that involves pieces of material (mostly paper) connected to an object, then covered with several layers of stains or clean (Nurlaila & Yulastri, 2017). The advantage of decoupage craft is that it can help housewives in increasing their salaries because it has a high imagination value, so that the goods sent have a large offering value to help further develop family government assistance by providing additional income (Trisniawati & Wahyu Setya Ratri, 2020).

Based on the foundation and findings of previous explorations on Women's Empowerment, it can be seen that with the presence of women's empowerment programs, women can potentially uphold family needs. However, the level of government assistance is still not ideal. This study aims to determine the implementation of women's strengthening programs, women's cooperation in women's strengthening programs, and the impact of women's strengthening programs. Therefore, further examination is expected to find out outside and inside that point of view.

METHOD

The examination strategy used is subjective exploration with an elucidation approach. Subjective exploration plans to plunge deeply into the peculiarities experienced by the research subjects, such as ways of behaving, insights, inspiration and overall activity (Adhimah, 2020). This exploration was completed in Tanah Itam Ulu Plantation, Datuk Lima Puluh District, Batu Bara Government which is associated with strengthening women in further developing family government assistance carried out by the City Government (Figure 1).

Tanah Itam Ulu Plantation Village is located in Datuk Lima Puluh District, Batu Bara Regency. Geographically, this village is bordered by Lubuk Cuik Village to the North, Four Countries Village to the South, Lubuk Besar Village to the East, and Perk of Tanah Gambus Village to the West. With an area of 3,005.00 Ha, this village is divided into 5 Hamlets. Its territory includes plantations, rice fields, and residential areas. In addition, Tanah Itam Ulu Plantation Village is also known to have oil palm plantations that have historical value in the history of oil palm plantations in Indonesia. The majority of these villagers work as employees, reflecting the main livelihood there.



Figure 1. Map of Tanah Itam Ulu Plantation

In this examination, scientists use purposive testing methods to determine witnesses. Purposive testing is an information checking technique equipped with special contemplation (Subagja, 2018). The resource persons in this examination were 6 people, including Mr. Ahmad Syukri as Village Head, Mrs. Ninda as City Secretary, Mrs. Fitri as Head of the Puteri Strengthening Project, Mrs. Nining as Puteri Strengthening System Manager, Mrs. Niar as the Beneficiary Area of the Women's Strengthening System, and Mrs. Indah as the Beneficiary Area of the Women's Strengthening Project. The selection of 6 respondents in this study was based on the superior quality of information possessed by those who had experience or deeper knowledge of the topic under study. It is expected that the data obtained from such respondents will be more accurate and relevant. In the context of qualitative research, the quality of respondents' information is a crucial factor to ensure the validity of research results (Leung, 2015).

The strategy of collecting information in this exploration uses perception, which is a method of collecting information which includes seeing peculiarities directly without direct intercession from scientists. When reviewing the implementation of women's empowerment programs in Tanah Itam Ulu Plantation, Datuk Lima Puluh District, Batu Bra Regency, perception plays a major role in obtaining direct data on program implementation and member reactions. Questions and answers, especially those that direct questions and answers as well as direct conversations with the city government, especially with parties related to the object of exploration. The exploration led direct meetings from the city and local areas. Documentation includes research into materials compiled from offices related to this exploration, as well as the collection of information and photographs taken during fieldwork.

The data obtained were analyzed using the Miles and Huberman data analysis model in the process researchers used an interactive model consisting of three stages, namely data reduction, data presentation, and data verification. The data reduction process began with the collection of information from observations, interviews, and documentation with women of Tanah Itam Ulu Plantation Village regarding the implementation of women's empowerment programs through decoupage crafts. Then, researchers filter relevant and significant data for research focus. Furthermore, the data is presented through descriptive descriptions and photographs to illustrate the findings comprehensively. Finally, the data verification process is carried out through drawing conclusions to ensure the validity and consistency of the conclusions produced (Zulfirman, 2022). To test the validity of information, this deepening uses source triangulation which includes checking reality and explaining information obtained from research witnesses and other important information, to examine women's empowerment programs in Tanah Itam Ulu Village, Datuk Lima Puluh District, Batu Bara Regency.

RESULTS AND DISCUSSION

Government Work Plan

The importance of effective governance in the development of a country should not be overlooked. The success of such governance depends on several key aspects, including support for women's empowerment and an emphasis on gender equality in the education system, with a particular focus on girls (Sackey et al., 2023).

The results of the implementation of improvements that emphasize strengthening local areas in rural areas depend largely on what the Village Authority pretends to be. The responsibility of government is to ensure the welfare and

prosperity of citizens, through prudent economic management, support for open labor markets, and provision of quality health services and educational opportunities (Biddle et al, 2024). The city government led by the regional head and assisted by the village authority is the main component in supervising and fostering the area. Regional Heads also play an important role in the cycle of improvement and connectedness of life (Palenewen, 2015). One of the ways that the Government, Tanah Itam Ulu Plantation, Datuk Lima Puluh District, Batu Bara Regency can understand this progress is through efforts to engage city networks.

Based on the results of an interview with Mr. Ahmad Syukri as Village Head, the main motivation of the village government to implement the women's empowerment program through Decoupage craft is because they want to empower women in the Tanah Itam Ulu Plantation Area, Datuk Lima Puluh District, Batu Bara Regency. Mr. Ahmad Syukri believes that empowering women is an important step in advancing the village as a whole. Empowerment can serve as a tool or process to achieve certain goals, as well as being the result of those efforts (Noordink et al., 2023). The empowerment process requires mentoring and coaching aimed at increasing the capacity and competitiveness of individuals or groups. This is done as part of national economic development strategies and efforts to realize the welfare of the community as a whole (Koeswahyono et al., 2022).

Through this program, they hope to give birth to a generation of women who are more resilient, independent, and have a more active role in village development. With this program, it can make Tanah Itam Ulu Plantation village better. This women's empowerment program aims to improve the skills and potential of women in the village. This women's empowerment program focuses on Decoupage craft making training.

Upskilling is a very important prerequisite for the growth of various countries. When young people have the necessary skills, they can be self-reliant and help others find their identity in an ever-evolving world. It is believed that when young people are empowered, they are likely to give impetus to overall national development as well as increase employment opportunities (Olonade et al., 2022).

This step was taken after the village government learned that about more than 100 women in the village held the role of housewives. Inspired by this great potential, the village government targets the participation of as many as 30 participants in this program. By seeing the large number of women in the village, the majority of whom act as housewives, which is around 100 people, the village government feels compelled to provide opportunities and support these women in developing their skills. They hope that this program will provide opportunities for women to improve their skills, so that they can open up new opportunities in the world of work or even create independent businesses that can expand the peace of families and local residents as a whole.

Although there are strong intentions and clear targets that have been set, the reality on the ground is not always in line with expectations. Practical constraints such as limited resources, and daily busyness, caused only 15 people to be able to participate in this program. Despite this, the village government did not despair. They saw the 15 participants who participated as a good start in the process of empowering women in the village. With continuous efforts, they are committed to continuously improving this program and finding solutions to overcome existing obstacles.

Implementation of Women's Empowerment Program

Strengthening is an effort made by public authorities to improve information and human capabilities. The Women's Empowerment Project means collaborating with women in expanding their duties in the family climate, so that they can have an equal commitment with men in supporting family government assistance. According to Rizkia (2018) quoted from Ihromi's point of view, the women's empowerment program is an administrative effort that aims to advance the position of women in the public eye and treat them as equal accomplices with men in various fields of life. Women should be seen as free men in a structure of balance, having the same privileges, commitments and valuable opportunities as men to develop their true capacities and enhance their horizons.

The Women's Empowerment System through Decoupage Specialization is a Women's Empowerment Project in Tanah Itam Ulu area, part of Datuk Lima Puluh, Batu Bara Authority. The resulting crafts are in the form of bags and other decorations. Making decoupage crafts goes through several processes, one of the stages is by cutting the tissue as desired, then gluing it to the media that will be pasted tissue, followed by attaching a tissue with pictures to the media you want to paste, and left to dry.

Based on the results of an interview with Mrs. Ninda as Village Secretary, explained that this program is an initiative from the village government to empower the community, especially women, with the aim of increasing their ability and independence. According to Mrs. Ninda, this empowerment program through decoupage art has attracted participation from 15 women in their village. Training there are coaches who are in charge of training women in making handicrafts using decoupage techniques. She emphasized that the village has allocated a special budget to meet all the needs needed in this program.

Mrs. Ninda also explained that all training needs, from tools to materials, were fully funded by the village. This aims to ensure that participants do not experience problems in participating in the training. Training activities are held for 1 month which are regularly held every 2-3 meetings a week, so that participants can continue to hone their skills consistently. Mrs. Ninda emphasized the importance of this program as a concrete step to empower women in their villages. She hopes that through this activity, their members can gain useful knowledge and skills that can contribute to the economic improvement of their families.

Mrs. Fitri as the manager of the women's empowerment program in Tanah Itam Ulu Plantation Village, Datuk Lima Puluh District, Batu Bara Regency she explained that to run decoupage craft making activities smoothly, there are several steps that need to be done, namely:

1. Providing Guidance

The coach must provide guidance or guidance to participants to provide appropriate instructions to ensure the smooth implementation of activities. In addition, coaches are also responsible for providing the necessary equipment to the members who attend the training, so that they have everything needed to begin the process of making decoupage crafts.

2. Delivering Equipment

The village provides the necessary equipment to the participants, such as materials that they want to decoupage. This media can come from various equipment, such as wood, bamboo, and so on. In this training, participants will receive bags made of woven as a decoupage medium. In addition, they are also given other equipment such as scissors, brushes, glue, varnish, and tissues.

3. Conducting Training

Mrs. Fitri will manage this training and be assisted by Ibu Nining as the coach of the women's empowerment program. The purpose of this training is to help improve the skills and independence of mothers in Itam Ulu Land Plantation Village. Also, this activity will be expected to expand their family income. With this training, it is hoped that participants can develop their skills in making decoupage crafts and use it as an additional source of income for their families.

Mrs. Nining hopes that with this training, the participants will be able to develop their skills in making decoupage crafts and make it an additional source of income for their families. He will try his best to provide guidance and support to the participants so that they can optimize their potential.

In the training session, participants learned intensively about the art of decoupage. The instructor guides them patiently through every stage, from selecting the drawings to the application techniques. In Figure 2, the instructor can be seen giving an explanation to participants on how to sew bag handle material in the context of decoupage art. After various training sessions, participants begin to apply the knowledge they have gained. They have experienced significant improvements in their skills and feel proud of the progress that has been made. This is reflected in the decoupage works they create, as seen in Figure 3, which amaze with their beauty and detail.



Figure 2. Decoupage Making Training



Figure 3. Decoupage Crafts

The production of Decoupage bags has increased over time. It can be seen in the Table 1. In the first week, participants successfully made 10 bags, showing initial adaptation to the manufacturing process. In the second week, the production number increased to 15 bags as participants began to understand the technique better. In the third week, there was a significant increase to 20 bags, as participants became more skilled and confident. This was maintained in the fourth week with the re-production of 20 bags. The cause of this change in production can be influenced by various factors, such as the level of expertise of participants, experience, and their level of understanding of the material.

Table 1. Number of Decoupage bags produced each week

Weeks	Number of Bags Produced
Week 1	10
Week 2	15
Week 3	20
Week 4	20

Women's Participation in Women's Empowerment Programs

Development success can not only be achieved by certain individuals or groups in society, but must be done collaboratively and synergistically. This is because the success of development is not only assessed from the physical aspect, but also must provide sustainable benefits that can be felt as a whole. Thus, development will not be in vain, which is only used and felt by a small part of the community (Gerokgak, 2019). Community involvement in the development process has the potential to empower previously marginalized and disadvantaged individuals. Direct access to resources and active participation in decision-making are key to meaningful engagement in development processes (Namoog & Agyekum, 2024).

The efforts of Tanah Itam Ulu Plantation Village to expand cooperation and sensitivity of residents in Tanah Itam Land Plantation Village are carried out through empowering women to overcome various problems such as lack of social situation, lack of cooperation, and lack of sensitivity of individuals, especially women, to regional development. Ray's (2020) view of community participation in development refers to their involvement in the development process, including participation in development activities and the benefits and outcomes of development they enjoy. According to Jim Ife, one of the 22 principles of community development is the principle of participation, which aims to achieve maximum involvement of all individual participants in all exercises and cycles lived in them (Na, 2020).

Based on the results of the study, that the women's empowerment program through decoupage crafts faced several factors that caused the lack of women's participation in these activities. The researchers found that women there face a double burden, where they have to handle domestic tasks and work outside the home environment. They are expected to do a balanced division of time between caring for the family, including children and husbands, and carrying out household tasks such as cleaning, washing, and completing other household chores, while running side jobs. This is due to the view that women should not depend entirely on their husbands, in the hope of increasing women's independence.

Traditional roles tend to give men more financially valued jobs, while women are often directed to unpaid work that is disproportionate in number; it also hinders their access to assets, economic capital, and markets, which can ultimately reduce

women's self-confidence (Beriso et al., 2023). Assuming a woman does a variety of jobs is not uncommon. Additional skills or more knowledge are expected to support the implementation of these tasks. If a woman has a desire to support collaborative work, then at that time she must have skills relevant to the task she will perform. Women who carry many roles may have difficulty managing the time to complete each task compared to women who only focus on one job.

There are 70% of women living in conditions of poverty in developing countries. It also includes disproportionate ratios between women and men in the job market as well as in leadership positions, low levels of education among women, and low socio-economic status among them (Kuma & Godana, 2023). Lack of access to formal education, such as not completing primary education, causes them to have difficulty in reading and writing. This kind of challenge is a real problem in rural areas, which hinders the progress of women or housewives in contributing to government assistance for their families (Rizkia, 2018). Women's empowerment is a process by which they acquire supporting resources, such as education, that can enhance women's agency, that is, the ability to make life choices in an evolving social context (Samari, 2019). This is believed to increase women's self-esteem and confidence and enable them to exercise their rights (Etea et al., 2023).

The broad consensus is that women allocate most of their income to investments in household welfare through education and health. This is supported by research by Domenech and Ringle and Van den Bold which shows that women's involvement in income has a greater impact on improving well-being in households. Women play a role in protecting household welfare by managing assets, so that greater women's economic empowerment is expected to improve overall household welfare (Belete & Melak, 2020). In this context, empowerment measures are very important, and both public institutions and NGOs have prioritized empowerment activities to improve women's status and opportunities, and achieve gender equality (Doneys et al., 2020).

Increasing women's incomes, which is one of the main goals of empowerment efforts, is often seen as a way to give women a stronger voice in their households. However, this can cause tension in the family, especially if the woman's income exceeds the husband's, which is likely to cause conflict between the wife, husband, and other family members (Völker & Doneys, 2021). However, there are still couples who refuse to give permission to their wives to work outside the home because they consider it unnecessary to focus on household tasks, which is one of the factors in women's low support for empowerment efforts. In addition, some women who have early childhood children have difficulty in attending training because they have to care for their children.

According to Panda (2023), strengthening women is a system to increase their contribution to urban development, especially in efforts to improve living standards and family government assistance. The idea of empowering women includes their dynamic work in navigation and access to resources necessary in everyday life. But the fact is that in the field there are still women who are reluctant to work because they are faced with the problem of concurrently working as helpers and laborers. Maintaining harmony between family and work responsibilities is difficult, especially if the choice of partner is seen as a top priority.

The art contained in decoupage craft products shows that participating women should have special talents or skills in decoupage making. However, the fact is, there are still women who do not have these interests or skills, so they are less enthusiastic about participating in empowerment programs. Furthermore, the lack of training from women empowerment program managers through decoupage crafts is another factor that affects participation, considering the accuracy needed in the process of making decoupage so that the products produced are of high quality. In addition, the lack of motivation from the government is a factor that causes some women not to feel the need to earn additional income. Furthermore, the lack of training to the community led to a lack of interest and understanding among women there in developing skills to create a decoupage craft. As a result, women's participation in business group activities has become less active.

Impact of Women's Empowerment Programs

Social Impact

The activity of strengthening women through Decoupage craft in the Itam Ulu Land Plantation Area, Datuk Fifty District, Batu Bara Regency has created a positive social impact. Based on the results of an interview with Ibu Niar, many impacts were felt by the people of Itam Ulu Land Plantation Village such as Women in the village are increasingly actively involved in social activities, especially in the practice of decoupage skills. This not only strengthens social bonds among group members, but also creates greater interaction and involvement of the community as a whole in joint activities. In addition, this program also helps increase women's knowledge and creativity in craft making, as well as strengthen solidarity and caring among them.

Another impact is increased awareness of women's rights and the importance of empowering them. It could change traditional views of women in households and societies, pushing for advanced gender equality. And that, this activity is also able to motivate young women to pursue higher education and careers. They can see examples of success from women who participate in this program, and this can open up new opportunities for them to achieve their dreams and become a positive force in society.

Economic Impact

The economic impact of the Women's Empowerment Program through Decoupage craft in Tanah Itam Ulu Plantation Village, Datuk Lima Puluh District, Batu Bara Regency has not been fully achieved. Despite progress in skill development and craft production, there are still some obstacles that hinder the economic improvement of women in the village. Women in

Tanah Itam Ulu Plantation Village still face obstacles in optimizing resources and improving product quality. This results in limited revenue generated.

Based on the results of an interview with Mrs. Indah, until now there has not been a significant economic impact from the women's empowerment program. This is because the training provided is more focused on improving skills alone. Even though people's welfare is not only determined by skills alone. In addition, constraints in marketing are also obstacles to reach a wider market and increase revenue significantly. Therefore, efforts must be made to expand skills, develop effective marketing strategies, and improve the management of women's businesses in the village. This is essential to achieve greater and sustainable economic impact on society.

As Nurfadillah (2019) emphasized that to increase the capacity, expertise, and welfare of people with low incomes, it is important to provide opportunities for small business actors to develop business capital and achieve financial independence. In this context, researchers conclude that the emphasis on business capital development aims to increase the capacity, expertise, and welfare of low-income communities. In addition, efforts to encourage women to be independent in running and managing their own businesses are also emphasized. This opportunity is expected to have a positive impact on the financial expansion and peace of women and low-income citizens as a whole.

CONCLUSION

The women's empowerment program through Deqoupage craft in the Tanah Itam Ulu Plantation Village, Datuk Lima Puluh District, Batu Bara Regency has had a positive social impact. Women in the village became more active in social activities, strengthened social ties, and raised awareness of women's rights. However, there are still several factors that hinder women's participation in this program, such as the double burden in household and work duties, low formal education, and lack of support from the government.

In terms of economy, the women's empowerment program in this village has not shown a significant impact. Although there have been efforts to improve women's skills through this program, there are still obstacles in optimizing available resources and marketing their products effectively. This is due to the program's focus that attaches too much importance to improving skills alone, without paying enough attention to marketing and business management aspects.

This obstacle resulted in the income generated by women in the village still far from expectations. The main challenge faced is the lack of an efficient promotion strategy to reach a wider market. In addition, weaknesses in business management have also exacerbated the situation, so that although skills have improved, they have not presented a significant positive impact on the financial situation of women in the area.

It is expected that the government of Tanah Itam Ulu Plantation Village, Datuk Lima Puluh District, Batu Bara Regency to provide further efforts in improving skills, marketing strategies, and conducting socialization as well as motivation encouragement and more effective training. The Women's Empowerment Program through Deqoupage Crafts makes a positive contribution and requires special attention to overcome challenges and increase effectiveness in order to have a greater impact on the welfare of women and local communities. The government also needs to provide support in the form of a forum for entrepreneurial development and promotion of deqoupage products through exhibitions and competitions, so that these crafts can be seen by citizens.

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Strategy of local government in achieving the target of the long-term contraceptive method program in sukabumi City

Tantri Sri Wahyuni ^{a,1,*}, Dian Purwanti ^{a,2}, Yana Fajar FY Basori ^{a,3}

^a Public Administration Science Study Program, Faculty of Social Sciences, Universitas Muhammadiyah Sukabumi, I. R. Syamsudin, S.H. No. 50, Sukabumi, West Java 43113, Indonesia

¹ tantri.sri13@gmail.com ² dianpurwanti042@ummi.ac.id ³ yanafajar@ummi.ac.id

* Corresponding author

ARTICLE INFO	ABSTRACT
<p>Article history Received: 2024-02-15 Revised: 2024-02-18 Accepted: 2024-02-22 Published: 2024-05-20</p> <p>Keywords Family planning Long-Term Contraceptive Method Population control</p>	<p><i>Long-Term Contraceptive Method is a contraceptive that can be used for a long time, which is more than three years used to delay, minimize pregnancy, and stop fertility, which includes IUD, Implant and steady contraception, this study aims to determine the factors associated with the use of Long-Term Contraceptive Method in Sukabumi City. The purpose of this study is to determine the strategy of the Office of Population Control, Family Planning, Women's Empowerment and Child Protection (DP2KBP3A) in achieving the target of the long-term contraceptive method program in Sukabumi City. This study used descriptive qualitative methods with observational data collection techniques, interviews and documentation. Data analysis was carried out by snowball sampling technique, namely by determining informants who were initially small in number and then enlarged. The results of this study measured by strategy indicators by Mintzberg et al (2003) show that the Agency in achieving the targets of the MKJP program begins with planning, implementing and evaluating. However, in the implementation there are still some obstacles. Existing programs have helped in the process of implementing long-term contraceptive method programs. But not yet fully optimized. Therefore, it is necessary to expand the range of strategies, so that the program of long-term contraceptive methods is maximized.</i></p>
<p>Kata Kunci Keluarga Berencana Metode Kontrasepsi Jangka Panjang Pengendalian populasi</p>	<p>Strategi pemerintah daerah dalam mencapai target program metode kontrasepsi jangka panjang di Kota Sukabumi. Metode Kontrasepsi Jangka Panjang merupakan alat kontrasepsi yang dapat digunakan dalam jangka waktu lama yaitu lebih dari tiga tahun digunakan untuk menunda, meminimalkan kehamilan, dan menghentikan kesuburan yang meliputi IUD, Implan dan kontrasepsi mantap, penelitian ini bertujuan untuk mengetahui faktor-faktornya. terkait dengan Penggunaan Metode Kontrasepsi Jangka Panjang di Kota Sukabumi. Tujuan penelitian ini adalah untuk mengetahui strategi Dinas Pengendalian Penduduk, Keluarga Berencana, Pemberdayaan Perempuan dan Perlindungan Anak (DP2KBP3A) dalam mencapai target program metode kontrasepsi jangka panjang di Kota Sukabumi. Penelitian ini menggunakan metode deskriptif kualitatif dengan teknik pengumpulan data observasional, wawancara dan dokumentasi. Analisis data dilakukan dengan teknik snowball sampling yaitu dengan menentukan informan yang awalnya berjumlah kecil kemudian diperbesar. Hasil penelitian yang diukur dengan indikator strategi Mintzberg et al (2003) menunjukkan bahwa Badan dalam mencapai sasaran program MKJP diawali dengan perencanaan, pelaksanaan dan evaluasi. Namun dalam pelaksanaannya masih terdapat beberapa kendala. Program-program yang ada telah membantu dalam proses penerapan program metode kontrasepsi jangka panjang. Namun belum sepenuhnya optimal. Oleh karena itu, perlu diperluas cakupan strateginya, agar program metode kontrasepsi jangka panjang dapat maksimal.</p> <p style="text-align: right;">Copyright © 2024, Wahyuni, et al This is an open access article under the CC-BY-SA license</p> <div style="text-align: right;">  </div>

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INTRODUCTION

Indonesia's population in 2023 will reach 280.73 million people. This population explosion occurred due to a very high population growth rate. This gives rise to two different sides. On the one hand, this is a great strength for Indonesia (Jones, 2014; Wagianto et al., 2024). But if population growth is high and not restricted, it will have a negative impact on the social, economic, and political fields which will ultimately hamper national development activities and these conditions can be a big burden for the Indonesian state. The more the population the more problems faced by this nation, the problem faced by some developing countries at this time is reducing the number of poverty (Jones, 2014; Wagianto et al., 2024).

However, the main obstacles faced are almost all the same, which generally stem from population problems. Starting from the still high number of mothers giving birth, low public awareness about reproductive rights and still quite high population growth rate, which is not comparable to the carrying capacity of the environment which can result in population accumulation. However, the government has implemented Family Planning (KB) program policies to improve family welfare through maturation of marriage age, fostering family resilience, birth control, to realize happy and prosperous small families (Achmad, 2020; Nurinzana et al., 2023; Rochaida et al., 2020).

The family planning program aims to meet the demand for quality Family Planning (KB) and Reproductive Welfare Services and control the birth rate which ultimately improves the quality of the population and realizes quality small families (Budiati, 2023; Tafese et al., 2013). However, with the lack of public knowledge about family planning, there are still many people who still do not believe in the government program, besides that the lack of participation in the development of this program and the low level of education make the path of this policy hampered, other problems also affect the ineffectiveness of the policy is the problem of improving the quality of resources. Starting from the lack of facilities and infrastructure for officers (Kim et al., 2023; Kwete et al., 2018; Roudsari et al., 2023).

Based on Law Number 52 of 2009 concerning Population Development and Family Development, it is stated that Family Planning. In the Law, efforts to regulate the birth of children, the distance and ideal age of childbirth, regulate pregnancy, through promotion, protection, and assistance in accordance with reproductive rights to realize a quality family. The family planning program policy in Sukabumi City is regulated in the Regional Regulation of Sukabumi City Number 9 of 2017 that the family planning program is implemented to assist prospective husbands and wives in making decisions and realizing reproductive rights responsibly regarding the ideal age of marriage, ideal age for childbirth, ideal number of children, ideal distance of child birth, and reproductive health counseling.

Based on the BKKBN Strategic Plan (RENSTRA) 2020-2024 which is a description of the National Medium-Term Development Plan (RPJMN) for 2020-2024, one of the problems that needs attention in the use of contraception is the low number of MKJP method use. The family planning program is a service in the Office of Population Control, Family Planning, Women's Empowerment and Child Protection in Sukabumi City. There are two types of methods used in family planning services, namely using Long-Term Contraceptive Methods (MKJP) and Long-Term Non-Contraceptive Methods.

Long-Term Contraceptive Method (MKJP) is a contraceptive method that successfully delays pregnancy and stops fertility in the long term which includes IUDs / intrauterine devices, implants and steady contraception. While the Non-Long-Term Contraceptive Method is a contraceptive method whose use ranges from 1 to 3 months such as injections and pills. Of the two contraceptive methods, the method most widely used by couples of childbearing age is the long-term non-contraceptive method (Malka et al., 2023; Sari et al., 2024).

The number of Couples of Childbearing Age (PUS) in Sukabumi City is 7 districts including Gunung Puyuh, Cikole, Citamiang, Warudoyong, Baros, Lembursitu, and Cibereum. It is known that the most couples of childbearing age (PUS) are in Warudoyong sub-district, while the least number of couples of childbearing age (PUS) is in Baros sub-district. Family planning program services are one way to reduce the rate of population growth. Many couples of childbearing age (PUS) find it difficult to choose a Long-Term Contraceptive Method (MKJP) or use non-Long-Term Contraceptive Methods. Based on the results of the study, the number of couples of childbearing age in Sukabumi City is around 59,868 people.

Family planning program services are one way to reduce the rate of population growth. Many couples of childbearing age find it difficult to choose a Long-Term Contraceptive Method (MKJP) or use non-Long-Term Contraceptive Methods. The government encourages people to use family planning programs with long-term contraceptive methods compared to long-term non-contraceptive methods. This is because the Long-Term Contraceptive Method (MKJP) is considered safer and has fewer side effects, while the Long-Term Non-Contraceptive Method is not recommended by the government because it is considered less safe if used. However, there are still many couples of childbearing age (PUS) in Sukabumi City who prefer to use long-term non-contraceptive methods.

In Sukabumi City, the number of couples of childbearing age using the Long-Term Contraceptive Method (MKJP) is only 12.69%, while the number of couples of childbearing age using the Long-Term Non-Contraceptive Method is 31,430%. From these data, researchers can conclude that the interest of users of Long-Term Non-Contraceptive Methods is more than the interest of MKJP users. This means that the Office of Population Control, Family Planning, Women's Empowerment and Child Protection (DP2KBP3A) of Sukabumi City, as a representative of local government,

has not succeeded in implementing the MKJP program in Sukabumi City. The purpose of this study is to determine the strategy of the Office of Population Control, Family Planning, Women's Empowerment and Child Protection (DP2KBP3A) in achieving the target of the long-term contraceptive method program in Sukabumi City.

METHOD

This research was conducted at the Office of Population Control, Family Planning, Women's Empowerment and Child Protection in Sukabumi City. The method used in this study is qualitative method. The data collection techniques that researchers used in this study were observation, interviews, and documentation. This research indicator focuses on how the strategy of the Office of Population Control, Family Planning, Women's Empowerment and Child Protection of Sukabumi City in achieving the targets of the Family Planning Program for Long-Term Contraceptive Methods. In this study, researchers saw low awareness of couples of childbearing age in the program of long-term contraceptive methods. To examine a strategy related to forming a long-term contraceptive method program, it is necessary to know the variables and factors that influence it. For this reason, an element of strategy is needed, where many factors influence each other in accordance with the variables proposed by Mintzberg et al.

The subjects of this study are people who are considered to know and understand things related to the focus of research, so as to be able to provide the necessary information. The determination of informants in this study using snowball sampling is by determining informants who are initially small in number and then enlarge. Data analysis used in the form of data collection, data reduction, data presentation and conclusions. The data validation test in this study used triangulation techniques and source triangulation.

RESULTS AND DISCUSSION

To find out how the strategy of the Office of Population Control, Family Planning, Women's Empowerment and Child Protection of Sukabumi City in achieving a goal regarding the Long-Term Contraceptive Method Program must have the right target so that a strategy achieves its goals. The success of policies and efforts in implementing the family planning program is seen from what is the object of its implementation.

The data presented in this discussion uses strategy indicators proposed by Mintzberg et al (2003) in measuring strategies carried out by the Population Control, Family Planning, Women's Empowerment and Child Protection Office of Sukabumi City. Strategy is a plan or pattern that integrates objectives, policies and sequences of actions in the form of programs into a cohesive whole (Mintzberg et al., 2003). The strategies of the Population Control, Family Planning, Women's Empowerment and Child Protection Office of Sukabumi City in implementing the long-term contraceptive method program (MKJP), are as follows:

1. Stages/Programs

The stages or programme specify the action steps required to achieve the main objectives. Guided by the procedures that have been made, directed programs are published to guide activities in improving health in the community. Every government agency is ensured to have work programs that must be realized during the running of the government to realize the goals and objectives set.

2. Policy

Policies are regulations or procedures that outline boundaries in the implementation of organizational activities. After the organization makes goals as a step to be addressed, then it is necessary to have policies as procedures or activity guidelines in acting to realize the goals that have been determined.

3. Goals/Objectives

Goals or objectives state what needs to be achieved and provide an idea of where the organization is headed. Goals or objectives state what needs to be achieved and provide an idea of where the organization is headed. Objectives are also the elaboration or implementation of the organization's mission statement, which is something that will be achieved or what will be produced within the time period in accordance with the plan. To overcome population challenges in Indonesia, the government has set a big agenda in the national medium-term development plan (RPJMN), namely improving the quality of life of the Indonesian people through population development and family planning. Birth control using two methods MKJP (Long Term Contraceptive Method) is an Intrauterine device / IUD, and Implant is a female surgical method (MOW), male surgical method (MOP), and Non MKJP such as condoms, syringes and pills (Darwin et al., 2015; Frans & Djasri, 2023; Hayes, 2006).

Given the various benefits of using contraceptives, the increase in the use of modern contraception is what is expected by the Office of Population Control, Family Planning, Women's Empowerment and Child Protection of Sukabumi City. Then the strategy is then applied based on the existing situation and conditions. The use of contraceptives is at the core of the Family Planning program where it plays an important role in regulating population and also has many

benefits. Through this family planning program, the government wants people to plan to build prosperous and quality families. The plan in question is the maturation of marriage age to come to understand that the benefits of the Family Planning program are not only limited to the use of contraceptives but the formation of a quality family (Alano & Hanson, 2018; Nasution et al., 2021).

The strategy formulated by the Office of Population Control, Family Planning, Women's Empowerment and Child Protection of Sukabumi City in increasing the prevalence of long-term contraceptive methods is to provide IEC (Communication, Information and Education), guidance and motivation about modern contraception and its benefits. These strategies are chosen so that people know more about what long-term contraceptive methods are and understand more about the benefits of long-term contraceptive methods. For contraceptives, the most popular and most widely used by EFA in Sukabumi City are injections and pills. According to contraception, injections and pills are classified as short-term contraceptive methods because the use of injections lasts for three months at most and for pills must be taken every day. The widespread use of short-term contraceptives such as condoms, pills, and injections is precisely the government through the Office of Population Control, Family Planning, Women's Empowerment and Child Protection of Sukabumi City suggests the use of long-term contraceptive methods (MKJP) such as IUDs and implants. IUDs and implants are considered the most effective contraceptives because in one use they can benefit for years. Its use is not as troublesome as the pill that is mandatory to take every day and monthly injections. IUDs and implants are considered the most effective with fewer side effects compared to other contraceptives (Britton et al., 2020; Stoddard et al., 2011).

For this reason, the strategies formulated by the Office of Population Control, Family Planning, Women's Empowerment and Child Protection how the public must know and fully understand the benefits of modern contraceptives. The public must understand the various methods and contraceptives as well as the benefits and even side effects of contraceptive use itself. Public understanding, especially in this case EFA, is needed considering that when people really understand what contraception is and its benefits, we are on the right path to combat the negative impacts of demographics. As for the Office of Population Control, Family Planning, Women's Empowerment and Child Protection the main purpose of the MKJP family planning program is to determine the quality of the family, because this program can save women's lives and improve maternal health status, especially in preventing unwanted pregnancies, reducing birth spacing reduces the risk of infant death.

One of the objectives of the Population Control, Family Planning, Women's Empowerment and Child Protection office of Sukabumi City in implementing a long-term contraceptive method program is to support the vision of a golden Indonesia in 2045 which must be supported by controlling the total fertility rate of birth rates regulated by the number of births using long-term contraceptive methods. The main goal is to control the population, the total fertility rate will be controlled with the use of MKJP is prioritized for couples of childbearing age (PUS) who want to delay pregnancy for more than three years. However, it is still a homework for the Office of Population Control, Family Planning for Women's Empowerment and Child Protection in the field of family planning in Sukabumi City to invite couples of childbearing age to carry out family planning programs, especially IUD, MOW, MOP because there are still many couples of childbearing age who feel embarrassed / afraid to do MKJP family planning.

The steps taken by the Office of Population Control, Family Planning, Women's Empowerment and Child Protection in the field of family planning in Sukabumi City in implementing a long-term contraceptive method program are collaborating with field people such as PLKB PNS, PLKB non-PNS, PTD in Bale to carry out MKJP services. In addition, in the implementation of MKJP activities, the service has three stages called P3, namely Planning, Implementation and Evaluation. The first step is to plan by preparing an activity plan and budget. The second step is to carry out the implementation of the MKJP program mobilization and the third step is to evaluate the MKJP program activities that have been implemented.

The period for achieving the MKJP program occurs once a year. Where field people will submit reports from each sub-district and sub-district related to achievements using family planning to the Office of Population Control, Family Planning, Women's Empowerment and Child Protection in the field of family planning in Sukabumi City. And for MKJP family planning programs such as IUD, MOW, MOP each time has been targeted.

In the process of implementing the long-term contraceptive method program to achieve the goals / objectives, the Population Control, Family Planning, Women's Empowerment and Child Protection of Sukabumi City in the field of Family Planning coordinates and conducts field line coaching, as well as conducting counseling and reaching patients to carry out the MKJP.

Many are involved in the process of implementing long-term contraceptive method programs both internally and across fields. For the internal family planning sector, it collaborates with the reproductive health department, IEC advocacy. For cross-fields to coordinate with the field of Family Welfare. In addition, the family planning field also coordinates with partners of the Health Office, professional organizations, especially IBI, Hospitals, TNI and others involved.

At the point of goals / targets focused on achieving the vision of a golden Indonesia 2045, where the government pursues smart human development, especially related to health. With this, the P2KBP3A office implements the MKJP program starting with planning, implementation and evaluation. This certainly refers to the framework of the agency

itself, in collaboration and supported by various cross-sectors, both internal and external, one of which is in collaboration with the Sukabumi City Health Office.

The Office of Population Control, Family Planning, Women's Empowerment and Child Protection in the field of family planning in Sukabumi City strongly recommends EFA (Couples of Childbearing Age) to use the MKJP program because this program is guaranteed safety, but there are still many Couples of Childbearing Age (PUS) in Sukabumi City who do not use MKJP and there are still many who use Non-MKJP. It is the duty of the agency to be able to better convince Couples of Childbearing Age (PUS) in Sukabumi City in the implementation of the MKJP family planning program.

Judging from the achievement of the targets carried out by the Office of Population Control, Family Planning, Women's Empowerment and Child Protection in the field of Family Planning in Sukabumi City, it can be said that it is quite good. But of course in the implementation and implementation of the strategy there must be obstacles encountered. The main obstacle encountered by the Office of Population Control, Family Planning, Women's Empowerment and Child Protection in Sukabumi City is that there are still many patients who are still afraid to do MKJP programs, especially IUDs and MOWs, while for MOP itself due to lack of information knowledge about family planning in men. Another obstacle that can hamper the strategy of the Office of Population Control, Family Planning, Women's Empowerment and Child Protection is the negative stigmas circulating in the community about contraceptives and the side effects of contraceptive use. The most popular is regarding changes in the physical shape of the body of contraceptive users. In addition, there are also those who debate the use of contraceptives and are associated with certain religious understandings.

Regarding the obstacles faced in implementing the strategy, the Office of Population Control, Family Planning, Women's Empowerment and Child Protection of Sukabumi City certainly does various ways to overcome them. Some of the ways the Population Control and Family Planning Office faces obstacles in implementing the strategy are to seek guidance, especially for male birth control and the formation of family planning groups for men who are no longer active.

The benefit of this study, after knowing that there are still many women who are still afraid to do birth control, especially MOW, there are still many men who do not know information about the existence of male birth control. With this research, it becomes an evaluation material for the Office of Population Control, Family Planning, Women's Empowerment and Child Protection in the field of family planning in Sukabumi City to contain new strategies related to socialization about the benefits of family planning for both women and men.

CONCLUSION

Based on the results of research that has been carried out by researchers by collecting data/information on the strategy of the Population Control, Family Planning, Women's Empowerment and Child Protection (DP2KP3A) Office of Sukabumi City in implementing the Long Term Contraception Method (MKJP) program which is measured based on strategy indicators by Mintzberg et al (2003), the following conclusions can be drawn.

The Department of Population Control, Family Planning and Child Protection (DP2KBP3A) of Sukabumi City, the goals/targets focus on achieving the vision of a golden Indonesia 2045, where the government pursues smart human development, especially related to health. With this, the P2KBP3A office implements the MKJP program starting with planning, implementation and evaluation. This certainly refers to the framework of the agency itself, in collaboration and supported by various cross-sectors, both internal and external, one of which is in collaboration with the Sukabumi City Health Office.

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The strength of Muhammadiyah's existence in the modern era: Pillars of empowerment and community strengthening

Wahyu Prihanta ^{a,b,1,*}, Moh. Nurhakim ^{a,c,2}, Saiful Amien ^{a,d,3}

^a Doctoral Education, Postgraduate Programs, Universitas Muhammadiyah Malang, Jl. Raya Tlogomas 246 Malang, East Java 65144, Indonesia

^b Department of Biology Education, Faculty of Teacher Training and Education, Universitas Muhammadiyah Malang, Jl. Raya Tlogomas 246 Malang, East Java 65144, Indonesia

^c Department of Islamic Family Law (Ahwal Syakhshiyah), Faculty of Islamic Religion, Universitas Muhammadiyah Malang, Jl. Raya Tlogomas 246 Malang, East Java 65144, Indonesia

^d Department of Islamic Religious Education, Faculty of Islamic Religion, Universitas Muhammadiyah Malang, Jl. Raya Tlogomas 246 Malang, East Java 65144, Indonesia

¹wahyuprihanta@umm.ac.id*; ²nurhakim@umm.ac.id; ³amien75@umm.ac.id

* Corresponding author

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ABSTRACT

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A study regarding the role of Muhammadiyah in the pillars of community empowerment and strengthening needs to be carried out, considering that this organization is the largest organization in Indonesia. This article aimed to analyze the strength of Muhammadiyah's existence which focuses on the pillars of empowerment and strengthening of society. This paper was prepared using library research methods. Data were analyzed using qualitative descriptive analysis. Data visualization, especially regarding references and keywords that frequently appear, is assisted with VOSviewer. The results show that Muhammadiyah is an Islamic organization that has a clear and real role in empowering and strengthening of society. Muhammadiyah has a central role in the field of philanthropy, in fact this has become Muhammadiyah's identity. Al-Ma'un became the ideological-theological foundation of Muhammadiyah's struggle. The advocacy movement through community empowerment has changed the face of Muhammadiyah to become more populist. Community empowerment is carried out through action programs that directly touch on the real problems of poor and marginalized communities represented by farmers, fishermen, livestock breeders, workers, urban poor communities and people with disabilities. Women's groups who have been marginalized and tend to be subordinated have also become targets of empowerment work carried out by Muhammadiyah, especially through its wing organization, namely Aisyiyah.

Kata Kunci

Penguatan komunitas
Pemberdayaan
Muhammadiyah
Kedermawanan

Kekuatan eksistensi Muhammadiyah di era modern: Pilar pemberdayaan dan penguatan masyarakat. Kajian mengenai peran Muhammadiyah dalam pilar pemberdayaan dan penguatan masyarakat perlu dilakukan, mengingat organisasi ini merupakan organisasi terbesar di Indonesia. Artikel ini bertujuan untuk menganalisis kekuatan eksistensi Muhammadiyah yang menitikberatkan pada pilar pemberdayaan dan penguatan masyarakat. Makalah ini disusun dengan menggunakan metode penelitian kepustakaan. Data dianalisis menggunakan analisis deskriptif kualitatif. Visualisasi data khususnya mengenai referensi dan kata kunci yang sering muncul dibantu dengan VOSviewer. Hasilnya menunjukkan bahwa Muhammadiyah merupakan organisasi Islam yang mempunyai peran jelas dan nyata dalam pemberdayaan dan penguatan masyarakat. Muhammadiyah mempunyai peran sentral dalam bidang filantropi, bahkan hal ini sudah menjadi identitas Muhammadiyah. Al-Ma'un menjadi landasan ideologis-teologis perjuangan Muhammadiyah. Gerakan advokasi melalui pemberdayaan masyarakat telah mengubah wajah Muhammadiyah menjadi lebih kerakyatan. Pemberdayaan masyarakat dilakukan melalui program aksi yang menyentuh langsung permasalahan nyata masyarakat miskin dan marginal yang diwakili oleh petani, nelayan, peternak, pekerja, masyarakat miskin perkotaan, dan penyandang disabilitas. Kelompok perempuan yang selama ini terpinggirkan dan cenderung tersubordinasi juga menjadi sasaran kerja pemberdayaan yang dilakukan oleh Muhammadiyah, khususnya melalui organisasi sayapnya yaitu Aisyiyah.

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INTRODUCTION

Muhammadiyah is an Islamic movement which in its preaching carries out the mission of Amar makruf Nahi Mungkar and tajdid, based on Islam based on the Al-Quran and As-Sunnah. In accordance with its identity, Muhammadiyah is always Istiqomah in its high commitment to advancing the lives of the people and nation, as well as the world of humanity as a form of effort to spread Islam with the pattern of rahmatan lil 'alamin. The birth of Muhammadiyah was not only as an Islamic movement that prioritizes thought reform, but also as an organization oriented towards realizing a truly Islamic society (Elihami, 2022; Ferihana, 2022; Ramadhan, 2022; Wardiyanto et al., 2020).

The role played by Muhammadiyah takes place in various dynamics. Since its founding in 1912 during the colonial era, the Islamic movement formed by K.H. Ahmad Dahlan experienced the grip of colonialist politics, as was the same thing experienced by all Indonesian people. In the early days of independence and the old order, Muhammadiyah experienced various difficulties due to national political conflicts, but the Islamic movement continued to carry out its work in preaching and community activities. Muhammadiyah also continues its struggle to develop business charities and da'wah activities, even under a depoliticizing regime and authoritarian political policies during the New Order era (Aprillianti et al., 2022; Bakry et al., 2021). In the reform era, Muhammadiyah revitalized and improved the quality of its preaching by taking advantage of open national conditions. Through a long journey, Muhammadiyah has been accepted by the wider community as one of the pillars of Islamic strength that makes a valuable contribution to the progress of mankind (Nashir, 2015).

Muhammadiyah has established many schools, ranging from kindergartens, primary to secondary schools, universities, financial institutions, publishing and other charities. Muhammadiyah also builds houses of worship, as well as carrying out da'wah steps in various forms of community development activities spread throughout the country. In the social sector, Muhammadiyah has established orphanages and nursing homes, while in the health sector, this organization has built medical centers and hospitals, in order to free Muslims from the shackles of ignorance, backwardness and poverty. Muhammadiyah never stops carrying out its national and humanitarian role in national and global dynamics. Muhammadiyah's work shows that the Islamic Movement's mission is charitable for the sake of progress and enlightenment which leads to the benefit of the wider community (Hamami, 2021; Lestari & Fauzi, 2022; Muhammadiyah & Kabupaten, 2024; Setyawan, 2017; Tongat, 2023).

It is felt that Muhammadiyah's dynamic steps and progress have not yet reached the peak of success in its ideals and goals. Thus, Muhammadiyah is increasingly required to be steadfast in revitalizing its movement in all areas of life. Muhammadiyah continues to carry out reforms (tajdid) in every movement, so that in the complex modern era of the 21st century it can appear as a pillar of strength for the civilizational enlightenment movement, in accordance with the beliefs and personality of the organization. As the 46th Congress in Yogyakarta in 2010 which carried the theme "Progressing Islam" showed that Muhammadiyah is a reforming Islamic movement that continues to take part in advancing the lives of the people and universal humanity.

In the modern era, Muhammadiyah also plays a role in playing the digital world, this is important to do because it is very relevant to the conditions that have occurred in the last decade. This article was aimed to analyze the strength of Muhammadiyah's existence in the modern era, which focuses on the pillars of empowerment and community strengthening. This study contributes to a picture of Muhammadiyah's strength to continue to exist in the face of current challenges, so that it can be used as a guide for Muhammadiyah members or researchers who are focused or interested in studying Muhammadiyah to understand the direction of Muhammadiyah's struggle holistically, especially on the pillars of empowerment and community strengthening (Aprillianti et al., 2022; Sugianto & Darmayanti, 2022).

This study is related to the Sustainable Development Goals (SDGs). Muhammadiyah has become one of the organizations that supports SDGs in Indonesia (Trisnaningtyas, 2023). The Muhammadiyah movement is included in the expanded impact category, its big impact touches on 9 issue points which can be translated into six movements, namely poverty alleviation, health services, women's empowerment, education for all, economic improvement, environmental preservation (Echo, 2023). *Lembaga Amil Zakat, Infak dan Shadakah Muhammadiyah* (LazisMu) or Amil Zakat, Infaq and Sadaqah Muhammadiyah Institution as a philanthropic institution belonging to Muhammadiyah, it takes several parts in accordance with the 5 pillars of LazisMu, namely education, health, economics, da'wah and social humanity (Ardianto, 2020).

METHOD

This paper was prepared using the library research method. Library research limits its activities to library collection materials only without requiring field research (Sari & Asmendri, 2020). This technique is used to collect data related to the problems discussed from various literary sources, including books, research report, scientific journals, and articles that are relevant to the topics discussed. Information obtained from various sources will be studied to understand Muhammadiyah's beliefs, values, organizational culture, as well as management and leadership systems.

In connection with this research, considering that currently it is a digital world and almost all reference sources are available online (there is also an e-catalog), the research uses a reference search tool, namely Google. Researchers also use the world's leading indexer, namely Scopus, to ensure that the references used are quality. The data obtained was then analyzed using qualitative descriptive analysis, to produce data that could be described through the results of the behavior and sentences observed by the researcher. In data analysis, the interactive model used is content analysis which refers to Miles et al (2019). According to Ilyas (2016), In general, data analysis in this research was carried out through the following stages; (1) record all data findings in the library; (2) reviewing data records, and separating data that is considered important and unimportant, this work is repeated again to check for possible classification errors; (3) describe the data that has been classified taking into account the focus and objectives of the research; and (4) make a final analysis in the form of a research results report. As for data visualization, especially regarding references and keywords that often appear, using VOSviewer software.

RESULTS AND DISCUSSION

Muhammadiyah in the Literature Spotlight

So far, the Muhammadiyah organization is known as the second largest Islamic organization in Indonesia based on old standards and theories regarding quantity (number of masses). However, recently, these quantity-based measures have become increasingly irrelevant. Experts began to measure the status of 'largest organizations' based on quality. Some social scientists have defined new categories. As a result, the Muhammadiyah organization is called the largest modern Islamic organization in Indonesia, even the world. This great achievement achieved by Muhammadiyah was not the result of a short struggle, but was a long and dedicated struggle from Muhammadiyah leaders and members spread throughout the world. Until now, Muhammadiyah continues to exist carrying out its da'wah and social activities for the benefit of the people. Obstacles in Muhammadiyah's journey have never dampened the organization's progress.

We tried to analyze Muhammadiyah's position, based on the highlights of various researchers whose articles have been published in journals indexed by Scopus. Thus, these articles have been included in the Scopus database. We focused on articles that used the word "Muhammadiyah" in the title, and focused on "social sciences" articles. The data was simulated with VOSviewer, the results are as presented in Figure 1.

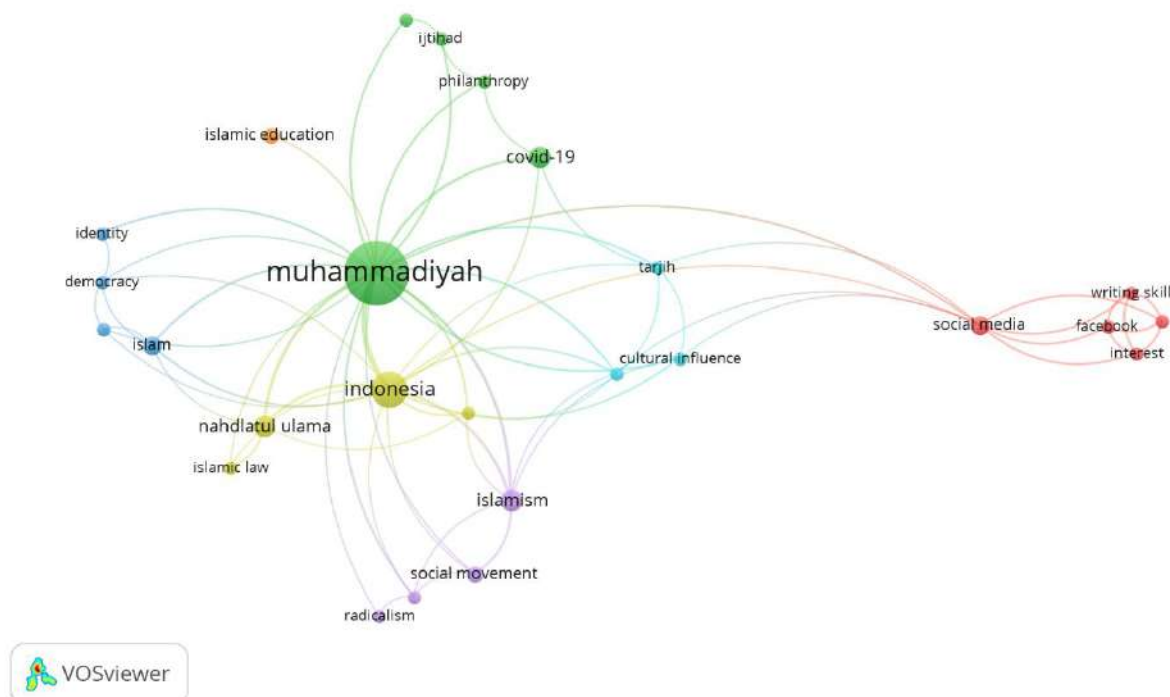


Figure 1. Relationship between Muhammadiyah and various keywords in Scopus (Source: Authors' own elaboration, using VOSviewer software)

Figure 1 shows that Muhammadiyah is an Islamic organization that has a clear and real role in social movements and cultural influence. In this regard, Muhammadiyah has a central role in philanthropy, in fact this has become Muhammadiyah's identity. One thing that is still close in our memory is the role of Muhammadiyah in helping overcome the problem of the Covid-19 pandemic.

Muhammadiyah's participation in handling Covid-19 in Indonesia is significant. Since its formation on March 2 2020, the Muhammadiyah Covid-19 Command Center (MCCC) as part of the Muhammadiyah Disaster Management Center (MDMC) has played a role, among other things, in providing health services, social assistance, outreach and education about Covid-19, as well as Covid-19 vaccination. Apart from that, as a management agency, it has participated in the management of the Covid-19 disaster and has tried to do its best in carrying out its duties as a Muhammadiyah disaster management agency. Of the eight stages of disaster management, MDMC has participated in 6 stages, namely; 1) preparedness, 2) mitigation, 3) early warning, 4) emergency response, 5) emergency assistance, and 6) recovery. Disaster management activities are carried out in all regions in Indonesia with millions of people receiving benefits (Alfaris, 2022).

Muhammadiyah, an Islamic organization in Indonesia, has played an important role in philanthropy and community strengthening through various Empowerment and Community Strengthening initiatives. Through its programs, Muhammadiyah is committed to improving community welfare through a holistic approach, including education, health, economics and religion. They have established schools, hospitals, health centers and sharia economic institutions to empower communities, especially the marginalized, to become economically independent and improve their standard of living.

Apart from that, Muhammadiyah is also active in providing social assistance in the form of food, clothing and shelter for those in need, as well as being involved in infrastructure development programs in remote areas. With this approach, Muhammadiyah not only acts as a provider of material assistance, but also as an agent of social change who works to strengthen the local community as a whole. Thus, Muhammadiyah's role in philanthropy and community strengthening in Empowerment and Community Strengthening efforts is very significant in bringing positive change to Indonesian society.

Muhammadiyah and its relationship to Community Empowerment and Strengthening

As an Islamic organization and together with the autonomous organizations under it, Muhammadiyah pledges itself to be a movement that carries out the mission of da'wah and tajdid based on Islam, based on the Al-Quran and As-Sunnah. The spirit of returning to the Al-Quran and Hadith is especially found in Surah Al-Maun verses 1-7 and Surah Ali-Imran verse 104. These two suras have become a characteristic and permanent value in the organizational culture shared by all Muhammadiyah members. The values and norms that grow and develop from Islamic teachings in Muhammadiyah eventually become organizational culture (Mansyur dan Ahmad, 2015).

Since its inception, Muhammadiyah has shown its enormous contribution to the Indonesian nation, especially Muslims. Muhammadiyah has liberated Muslims from the shackles of religious practices mixed with superstition, bid'ah and khurafat towards an Islam that is in accordance with the teachings of the Al-Quran and Sunnah. Muhammadiyah also participates in efforts to enlighten the people through the field of education by establishing schools from kindergarten to tertiary level (Figure 2). In the health and social sector, the organization established orphanages (Figure 3), medical centers and hospitals (Figure 4). This step was taken to save Muslims from backwardness, poverty and ignorance. Muhammadiyah was also present and contributed significantly in determining the future fate of the Indonesian state.



Figure 2. Example of a Muhammadiyah educational institution (SMP Mu Ahmad Dahlan, 2018).



Figure 3. Example of a Muhammadiyah orphanage (Panti Asuhan Muhammadiyah Magetan, 2020).



Figure 4. Example of a Muhammadiyah Hospital (source: UMM Hospital)

Muhammadiyah is not a pure social movement but a social movement linked to Islam which makes Islam a solution to social and life problems. Muhammadiyah, as an Islamic movement, has an obligation to convey da'wah as a form of acting on behalf of the Islamic movement, because da'wah is the breath of the Islamic religion. However, Muhammadiyah's important role is not only in religious affairs and da'wah, but Muhammadiyah must be able to position itself as a social movement as a form of embodiment of the messages contained in Islamic teachings (Hakim & Muslikhati, 2022). After a century of this social-religious movement, the tajdid movement has begun to embrace new areas in the field of community empowerment. (Karsiman & Eddyanto, 2018). The hypothesis proposed here is that the al-Maun ethos of KH. Ahmad Dahlan, the founder of Muhammadiyah, has been reinterpreted by subsequent generations after a century.

In fact, community empowerment is an economic development concept that summarizes social values. This concept reflects a new development paradigm, namely one that is "people-centered, participatory, empowering, and sustainable". This concept is broader, not only meeting basic needs (basic needs) or providing a mechanism to prevent the process of further impoverishment (safetynet), whose thinking has recently been developed as an effort to find alternatives to past growth concepts (Khoiruddin, 2019).

In fact, the basic character of Muhammadiyah is empowerment and social service. In a historical context, the early generation of Muhammadiyah in the Kiai Dahlan era pioneered many efforts to develop communities or congregations in society. The founder of Muhammadiyah formed and fostered study groups such as Wal-Ashri, Fathul Asrar Miftahu Sa'adah, Nurul Iman, and others. This was followed by the establishment of Qismul Arqa, a group of boys and girls who were trained in their homes or dormitories, which became the embryo for the birth of Madrasah Mu'allimin and Mu'allimat Yogyakarta. Kiai and his closest friends also fostered scouting, which gave birth to Hizbul Wathan in 1918.

Empowering women through Sopotresno as the embryo of Aisyiyah in 1917. Also developing Praja Students as the embryo of the Muhammadiyah Student Association in 1961(Khoiruddin, 2019).

Al-Ma'un became the ideological-theological basis for Muhammadiyah's struggle. The Tarjih and Tajdid Council of PP Muhammadiyah has formulated the normative basis of al-Ma'un theology into a more operational Fikih al-Ma'un. Fikih al-Ma'un as a complement to the Muhammadiyah movement system to strengthen the commitment to advocacy da'wah. The advocacy movement through community empowerment has more or less changed the face of Muhammadiyah. Many people think that Muhammadiyah's preaching tends to be elitist and has shifted to become more populist. If so far the empowerment efforts carried out by Muhammadiyah have mostly occurred around business charities, currently community empowerment is carried out through action programs that directly touch the real problems of poor and marginalized communities represented by farmers, fishermen, livestock breeders, laborers, the urban poor, and disabled people (Khoiruddin, 2019). Women's groups, which have been marginalized and tend to be subordinated, are also the target of empowerment work carried out by Muhammadiyah, especially through its wing organization, namely Aisyiyah (Rohana, 2018). One of the social capital possessed by the Indonesian people to empower society from before independence until now is 'Aisyiyah. Since its founding in 1917, 'Aisyiyah has had many models of community empowerment through its movements spread throughout Indonesia and abroad (Sofia, 2021), as exemplified in Figure 5.



Figure 5. Examples of women and children empowerment activities by Aisyiyah (Buletin Sleman, 2023)

Muhammadiyah and Aisyiyah have a crucial role in empowering and strengthening women's communities through programs aimed at increasing women's access to education, reproductive health, skills training and economic empowerment. Through this initiative, they strive to reduce the gender gap and empower women to have a more active role in community development and society as a whole.

CONCLUSION

Muhammadiyah is an Islamic organization that has a clear and real role in social movements and cultural influence. In this case, Muhammadiyah has a central role in the field of philanthropy, in fact this has become Muhammadiyah's identity. One thing that still sticks in our memories is Muhammadiyah's role in helping overcome the problem of the Covid-19 pandemic. Al-Ma'un became the ideological-theological foundation of Muhammadiyah's struggle. The advocacy movement through community empowerment has more or less changed the face of Muhammadiyah, shifting to become more populist. If so far the empowerment efforts carried out by Muhammadiyah have mostly occurred in business charities, now community empowerment is carried out through action programs that directly touch the real problems of poor and marginalized communities represented by farmers, fishermen, livestock breeders, laborers, urban poor communities, and people with disabilities. Women's groups who have been marginalized and tend to be subordinated have also become targets of empowerment work carried out by Muhammadiyah, especially through its wing organization, namely Aisyiyah.

This study only focuses on the pillars of empowerment and community strengthening. Therefore, future researchers or writers can focus on other pillars, for example on Muhammadiyah's beliefs and ideals, Muhammadiyah's organizational culture, and Muhammadiyah's management and leadership system. In this way the study will be more holistic and varied.

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City growth and its impact on residential problems: A case study in the city of Jakarta

Puji Arifin ^{a,1,*}, Didin Muhafidin ^{a,2} Ramadhan Pancasilawan ^{a,3}

^aFaculty of Social and Political Sciences, Padjadjaran University, JL. Bukit Dago Utara no. 25 Bandung, West Java 40135, Indonesia

¹puji21003@mail.unpad.ac.id; ²didin.muhafeidin@mail.unpad.ac.id; ³ramadhan.pancasilawan@unpad.ac.id

*Corresponding author

ARTICLE INFO	ABSTRACT
<p>Article history Received: 2023-12-16 Revised: 2024-01-20 Accepted: 2024-05-06 Published: 2024-05-20</p> <p>Keywords City growth Housing backlog Jakarta Slums</p>	<p><i>This study aims to examine housing and settlement problems, especially in the Jakarta area as a result of population growth which has caused a very large population by identifying the number of housing needs and housing deficits. This study takes the object of the city of Jakarta as a case study and focuses on the housing sector which includes 2731 residential neighborhoods (RW) where the city occupies an area of 664.01 km². Studies show the cause of the problem is caused by relatively stable city growth with a growth rate of around 1% over the past 20 years, which is reflected in the number of families, which amount to 3,627,111 families, with a housing density of 5462 families/km², living in 2,242,163 housing units. The findings show that another cause is the spread of slum settlements in the city, which total 445 RWs, which means 16.30% of the total RWs. The results of the research show that so far, the problem has not been resolved.</i></p>
<p>Kata Kunci Backlog perumahan Jakarta Permukiman kumuh Pertumbuhan kota</p>	<p>Pertumbuhan kota dan dampaknya terhadap permasalahan pemukiman: Studi kasus di kota Jakarta. Penelitian ini bertujuan mengkaji permasalahan perumahan dan permukiman khususnya di wilayah Jakarta sebagai akibat dari pertumbuhan penduduk yang menyebabkan populasi yang sangat besar dengan mengidentifikasi jumlah kebutuhan rumah dan defisit perumahan. Studi ini mengambil objek Kota Jakarta sebagai studi kasus dan berfokus pada sektor perumahan yang mencakup 2731 lingkungan perumahan (RW) dimana kota ini menempati area seluas 664.01 km². Studi menunjukkan penyebab masalah disebabkan oleh pertumbuhan perkotaan yang relatif stabil dengan tingkat pertumbuhan di kisaran 1% selama 20 tahun terakhir, yang tercermin dari jumlah keluarga, yang berjumlah 3,627,111 keluarga, dengan kepadatan perumahan 5462 keluarga/km², tinggal di 2,242,163-unit rumah. Temuan menunjukkan bahwa penyebab lain adalah tersebarnya permukiman kumuh di kota yang berjumlah 445 RW yang berarti 16,30% dari total RW. Hasil penelitian menunjukkan bahwa selama ini permasalahan belum terselesaikan.</p> <p style="text-align: right;">Copyright © 2024, Arifin et al This is an open access article under the CC-BY-SA license</p> 

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INTRODUCTION

Home is one of the basic/basic human needs. The house is an integral part of the settlement. The house also functions as a place to live and is used to shelter from climate distcityces and other living creatures. A house is a residential building that must meet the criteria for comfort, safety and health in order to support its occupants so they can work productively and can be used as a healthy and safe place to live for their occupants (Chamid, 2016). A city is a spatial layout on the surface (land) with defined administrative boundaries where there is a concentration (concentration) of population within it along with various economic, social and political activities. A city is a residential layout with a large population on limited city land which is generally non-agrarian in nature (Muta'ali, 2016)

One of the main functions of the city is the residential function so that city development cannot be separated from the form of residential geography which is characterized by high flexibility in movement and expansion because the residential function grows in response to city growth in addition to the development of other city functions such as industrial, commercial and administrative city space (Mutar et al. 2022). The housing problem in Jakarta City, as with other large cities, is related to demographic aspects of natural growth, in-migration, economic, social and administrative

factors, as well as weaknesses in planning and political aspects, resulting in the emergence of a clear housing deficit in the city that does not meet the needs of the city with adequate housing units on the one hand, and the inability of a large part of the population with limited income to buy houses on the other hand, and this gives a negative indication of the efficiency of housing units with land in city areas (Muta'ali, 2016).

City growth refers to the process of growth and decline of economic agglomerations. The pattern of concentration of economic activity, and its evolution, has proven to be an important determinant, and in some cases a result of cityization, city structure, organization of economic activity, and national economic growth. The size distribution of cities is the result of cityization patterns that result in city growth and city creation. The evolution of city size distribution is in turn closely linked to national economic growth (Ioannides, 2012). The development of cities and the high flow of cityization are the main factors. The development of the city makes it the center of every important event that attracts rural residents to come (cityization). Cityization causes rapid population growth. The high number of residents has an impact on the increasing need for housing faced with limited land in city areas (Mutar et al. 2022).

In addition, income levels are not directly proportional to the increase and the high price of land in city areas makes decent housing unaffordable. This has triggered the emergence of informal areas. Informal areas are a phenomenon that emerges and is accompanied by rapid city growth in cities. This is due to the high demand for housing while the supply is low. The term 'informal estate' refers to residential areas within a community where residents build their own dwellings. This can be observed when there is a shortage of formal housing at income-appropriate prices. prices that are commensurate with income. This generally leads to the phenomenon of squalor (Alkhalidy, 2022).

Slums have an adverse impact on several aspects, namely the environment, human and socio-economic which are interrelated. From the environmental aspect, slums will have an impact on reducing the quality of the environment into disaster-prone areas such as floods and fires. This is due to the high density of buildings and the absence of green open space as a water catchment area. This decline in environmental quality will greatly affect the health aspects of the community, especially vulnerability to environmentally-based diseases. People living in slums are generally more concerned about economic movement than health, although there will still be socio-economic disparities. This situation forces the population to be vulnerable to the risk of crime (city crime) both regarding personal issues due to lack of privacy and public issues such as evictions. This of course will have a major impact on the psychology of the population, especially children (Muta'ali, 2016).

The existence of slums is also closely related to poverty. For poor people who have low incomes, they cannot afford the cost of maintaining a habitable settlement environment. If this continues to happen, slums will continue to grow. Many negative impacts that can occur as a result of slums include fire, flooding and infectious diseases. In essence, the polemic that occurs regarding slums is the low quality of the environment. In essence, this area overrides the concept of sustainability (Simanjuntak & Amal, 2017). In simple terms, the housing and settlement problem is that the number of available dwellings does not match the needs and the number of people who will occupy them. The main problems in housing and settlement are population, spatial planning and regional development, housing and settlement development planning that is still not optimal, land and infrastructure, financing, technology, institutions, community participation and legislation (DPRKP Provinsi DKI Jakarta, 2023).

An Italian study shows that uncoordinated city and regional planning has had negative effects in the past in Italy, with city development overriding sustainability (Martellozzo et al. 2018). Sustainable cities are a concept built on the belief that human life in the world must continue. We always strive to make life of a better quality in accordance with the values we believe in. A decent and quality life is expected not only for the current generation, but also for future generations (Sodiq et al., 2019).

There has been a lot of research on slums and especially on housing around the world, but most of it has focused on the subject area of health. While research on housing problems and the statistical reality of housing itself has not been done very often so it is still possible to find novelty or development of similar research that has been done before. The importance of this research lies in revealing the real cause of the housing problem through the selection of Jakarta city as a case study and the stakeholders of city planning policies to address this problem in the future. Therefore, this study aims to identify the factors that contribute to population growth in the city of Jakarta. Also, this study tries to look at the reality of settlements and housing deficits that occur as a result of the causal factors based on the statistical data obtained as well as the housing problems that still occur in the city of Jakarta. Finally, it proposes scientific solutions to address the housing problem.

The structure of the research is divided into three parts, as the first part discusses the factors of population growth in Jakarta City. The second section discusses the reality of settlements, which includes demographic and housing characteristics, and the third topic focuses on housing issues in Jakarta City. The high rate of cityization has made Jakarta experience a decrease in carrying capacity. Therefore, Indonesia and especially Jakarta have agreed to the sustainable cities and communities' program which is one of the goals of the Sustainable Development Goals (SDGs) SDGs in addition to achieving sustainable cities and communities, also cover various social and economic development issues.

Indonesia through the Central Government has made efforts since 1976 to relieve population pressure on DKI Jakarta as the National Capital through Presidential Instruction No. 13 of 1976 concerning the Development of the Jabodetabek Region. This regulation aims to harmonize the development planning of the Jakarta, Bogor, Tangerang and Bekasi areas,

hereinafter referred to as Jabotabek, with the aim of fostering population settlement patterns and a more equitable distribution of employment opportunities. This policy encourages city development with an invasion pattern (new city development) and creates large-scale housing and settlements in areas adjacent to Jakarta. However, this invasion pattern policy leaves problems that are unique to the outskirts of Jakarta, including traffic congestion and the unpreparedness of the region to prepare settlement facilities and infrastructure.

METHOD

Jakarta City Case Study

Jakarta is the capital city of Indonesia, located on the north coast of the island of Java, which is the most populous island in Indonesia, located between 6° and 7° south latitude and 106° and 108° east longitude. It includes a city located within the main design boundary of 661.5 km², consisting of five cities and 1 archipelago region (regency) inhabited by more than 10 million people, according to the 2020 population census and already reaching more than 11 million in 2022. The administrative areas of DKI Province are South Jakarta administrative city (blue color), East Jakarta administrative city (green color), Central Jakarta administrative city (red color), West Jakarta administrative city (yellow color), North Jakarta administrative city (purple color) and Thousand Islands administrative district. The region with the largest area is East Jakarta City with an area of 188.03 km². While the area with the narrowest area is the Thousand Islands Regency of 8.7 km² (BPS, Jakarta in figures 2010). For the number of districts in the city of Jakarta as many as six cities or regencies. subdistrict area is divided into 44 sub-districts, and Ward into 267 Ward. The time limit includes a study of the reality of city population growth in Jakarta City for the period 1961-2022 (Figure 1).

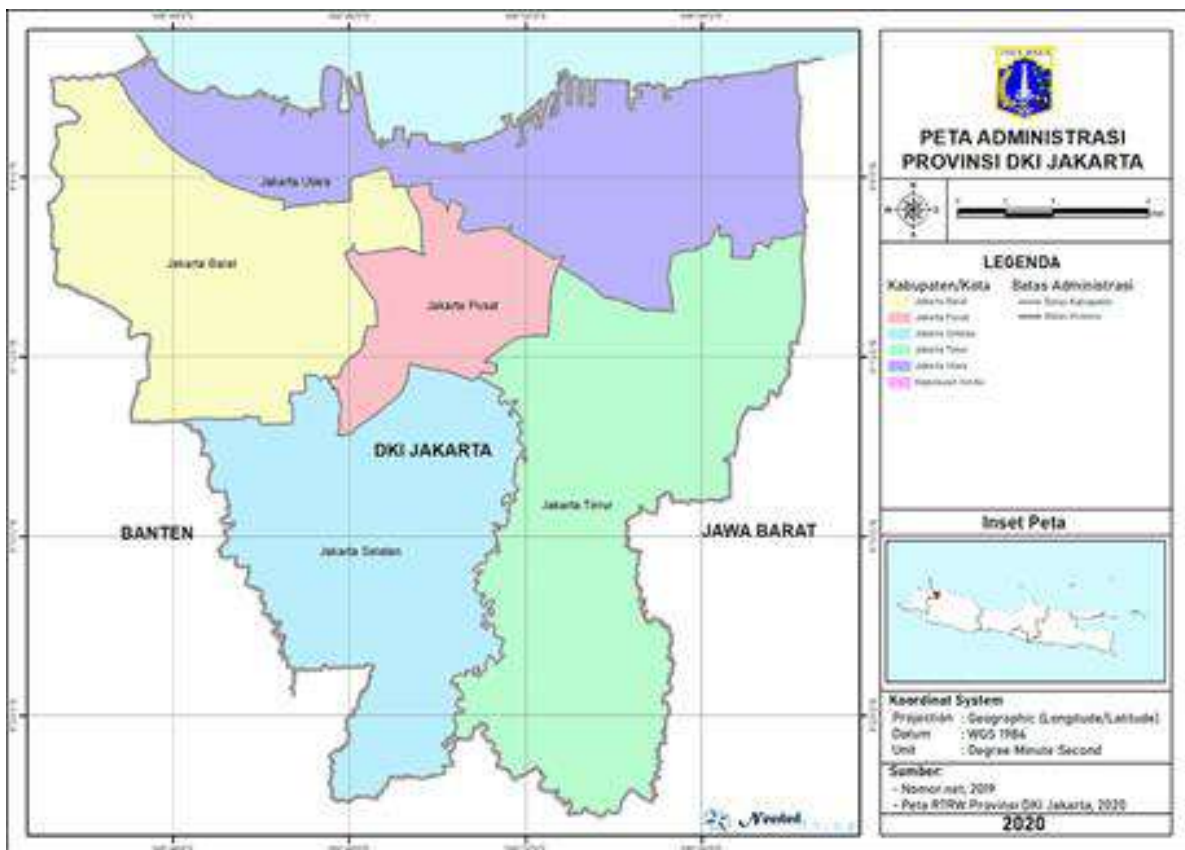


Figure 1. Base Map of Jakarta City

This research examines city population growth in Jakarta City with the aim of assessing its impact on the high number of residents and families faced with limited housing. The research used qualitative methods with a descriptive approach and analytical and statistical approaches in line with the research objectives, based on data on the population census, number of housing units, and base maps of Jakarta City. The study used statistical methods to extract the annual growth rate of the population and its density, which determines the city's need for housing units. The study was conducted in the city of Jakarta from July to December 2022. The statistical data collected was sourced from data from the Central Bureau of Statistics and the Department of Public Housing and Settlement Areas (DPRKP) of DKI Jakarta Province, which was processed and restated by the researcher.

City Growth Factors in City Spatial Planning

Indicators include demographic, migration, economic, political and planning factors. There is a close relationship between population growth and planning and development, as population is the main starting point in planning (Glaeser et al., 2006). Development goals in its various dimensions lead to sustainable population growth and more pressure on city land use (As-Salh, M.M., 2020).

Total Population of Jakarta For the Period 1961-2022

Population means the number of people counted in a certain area and at a certain time. Population studies provide the data on which city studies are based, as well as being a basic indicator of the needs of the city's population for all services. City expansion is directly proportional to population growth (Belal & Shcherbina, 2018). From the data analysis in Figure 2, it can be seen that the population growth rate is always positive, which means that the population of Jakarta continues to increase.

RESULTS AND DISCUSSION

When compared to the national annual growth rate during the census period (1961-1990), the population of Jakarta reached 2,973,052 people in 1961 and increased to 8,222,515 people in 1990, an absolute increase of more than 250% and an average growth rate of over 4% until 1980 and 2.4% in the period 1980-1990 which is higher than the national growth rate of only around 2% (Figure 2). The causes of this increase were an increase in the number of births and cityzation to the city, as the city is a factor that attracts people from rural areas to seek a better life in the city center.

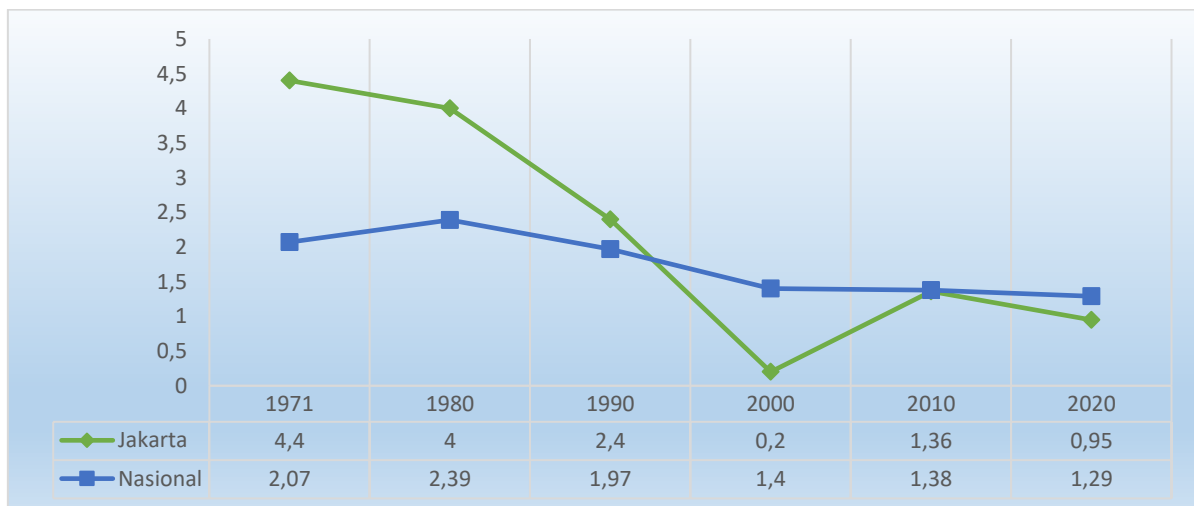


Figure 2. Annual Population Growth Rate in Jakarta City Compared to National Level (1961-2020)

During the census period (1961-1971), the recorded increase in the city's population reached 4,576,009 people in 1971, an increase of 1,602,957 people compared to 1961 with an annual growth rate of 4.4%, which was higher than the national growth rate of 2.07%. During the period (1971-1980), the total population of the city reached 6,503,449 people, and the population increased by 1,927,440 people, with an annual growth rate of 4.0%, still higher when compared to the population growth at the national level of 2.39%. During the period (1980-1990), the city's population reached 8,222,515 people, with an increase of 1,719,066 people, and an annual growth rate of 2.4%, lower than the period (1971-1980) and the period (1961-1971).

The national annual growth rate was 1.97%. During the period 1990 to 2000 there was a decline in the population growth rate. During this period, Jakarta's population growth rate was the lowest, at only 0.20% (Figure 3). Much lower than the national growth rate of 1.40%. This is due to the main factor, namely the massive housing development in the capital's buffer areas such as Bekasi, Depok, Bogor and Tangerang, both carried out by the government through the national housing project and private property companies (Eryudhawan et al., 2010). In addition, the economic and business development in Jakarta during this period was also very rapid, causing the need for business locations in Jakarta. The combination of these two factors encouraged residents in the city center to sell their properties and move to the buffer zones (Soedirdja & (Indonesia), 1997). Starting from this period, the population growth rate was reduced and began to be controlled at around 1% although in quantity there was still an increase of 1,218,344 in the period 2000 to 2010 and by 954,301 in the period 2010 to the last census in 2020. Whereas in 2022, the total population of Jakarta has reached 11,249,585 people. The continuous increase in population in the study area will certainly put great pressure on housing units and reduce their functional efficiency, as well as a housing deficit and the emergence of slums.

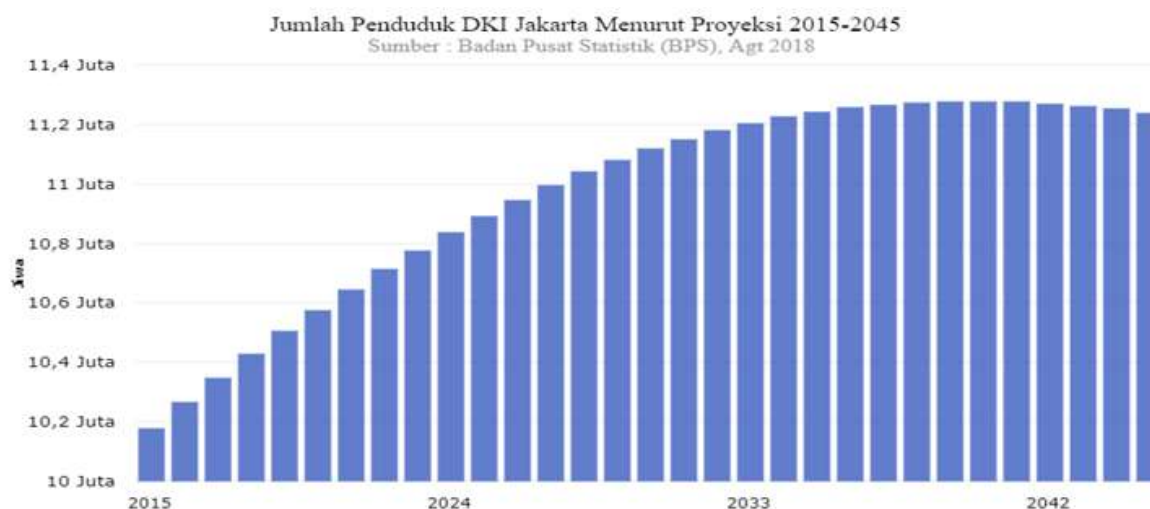


Figure 3 Projected Population of Jakarta 2015-2045
Source: Central Bureau of Statistics in 2018

Population Migration

Migration indicates the danger of a growing housing deficit in city areas, including Jakarta. Migration, according to the UN definition, is the movement of people from one geographical area to another geographical area where their place of residence moves, even for a limited period of time. After Indonesia's independence in 1945, Jakarta as the capital had the status of the center of government and business center, making the city a magnet for migrants from regions throughout Indonesia. In 1945, the population of Jakarta was estimated at around 600,000 and tripled to 1,733,600 five years later in 1950 and currently (2022) stands at 11,249,585. Despite many policies taken to suppress population growth, Jakarta is still the main destination for migrants in search of a better life. In 1970 when it was felt that the population increase was so rapid, Governor Ali Sadikin issued extreme policies for migrants including closing Jakarta from migrants (only migrants who have a place to live and work), only DKI Jakarta KTP owners can live in Jakarta to prohibiting the issuance of KTPs for migrants who do not have a place to live. Subsequent governors also issued many policies to suppress population growth. However, these policies did not deter rural migrants from coming to Jakarta. The economic and development gap between city and rural areas is still a major factor related to population migration in Indonesia in general and in Jakarta in particular. In 2018, the Central Bureau of Statistics predicted that the population of Jakarta would continue to grow, reaching 11.24 million people by 2045 (Figure 3). However, based on the latest data in 2021, the population of Jakarta has already exceeded the predicted figure, which means that the increase in the population of Jakarta is much faster than projected.

Economic Factors

Economically productive, administrative and service factors are important in attracting residents and stabilizing them in cities. Jakarta is the capital city for 270 million Indonesians. It is also the center of government as well as the center of business. Almost all high government institutions and most large companies are concentrated in Jakarta. This factor makes it a center of attraction for residents due to the availability of various jobs in industry, government and the service sector and even the informal sector. One of the most important economic factors that attracts people to Jakarta is that it provides many jobs in various fields.

Political and Planning Factors

Politics plays the biggest role in increasing or decreasing the number of housing units in cities, giving a clear indication of the reality of housing in these cities and the widening gap between reality and housing needs in these cities. Public housing development began to be taken seriously by establishing the National Housing Policy Agency (BKPN) in 1972. In Repelita I, the development of self-help and food self-sufficiency was the main priority, while public housing was still not prioritized because it was still in the preparation stage. At this stage, the government formed the Indonesian Real Estate Company (REI) in 1972 which functioned as a land provider and the party responsible for housing development. REI was also equipped with a Housing Counseling Center and Housing Research Institute that conducted research related to providing public housing (Budi, 2018).

The provision of public housing was further focused on in Repelita II, which discussed that public housing must keep pace with population growth, especially in city areas; be carried out with government assistance and community self-help; pay attention to city planning; and use a housing credit system to be more effective. To carry out development projects, the government conducted tender projects and open invitations to private investors (Budi, 2018). In financial matters, the government together with state-owned enterprises formed Perum Perumnas on July 18, 1974, which then

collaborated with state-owned banks to facilitate Home Ownership Loans (KPR) with subsidized interest rates. The target percentage of public housing is 80% low-income families, 15% middle-income families, and 5% high-income families. Although the target of public housing has been regulated, the government still prioritizes civil servants, military personnel, and private employees on fixed incomes. The initial development of public housing was focused in Jabodetabek, which is an city, economic support, and densely populated area. By 1979, 73,914 housing units had been built, and many public housing estates were established in Depok, Jakarta, Bekasi. The number of public housing developments further increased, from 233,770 units in 1984 to 300,280 units in 1994. Development projects stalled in 1998 due to the economic crisis and political instability.

After the regime change, public housing procurement continued, but not as massively as during the New Order. The program only received major attention when President Susilo Bambang Yudhoyono launched the One Thousand Tower Simple Flats (Rusuna) Program for the community which ran from 2007-2011. The targets of the program were people with a maximum income of Rp 5.5 million per month. During the implementation of the program, there was a mechanism that was considered "revolutionary", namely eliminating subsidies for the provision of public housing. Instead, mortgage papers were sold in the capital market and could be sold to investors in the global financial market. The mechanism is expected to mobilize funds for banks and the public housing industry. Thus, the state only plays a role in supporting a conducive investment climate, as well as providing public access to housing from credit loans from investments in the financial market (Kusno, 2012). To provide access for the community, there is a Housing Financing Liquidity Facility (FLPP) that addresses demand issues through lowering loan interest rates, thereby increasing housing supply. In reality, developers raise the rates of Rusuna according to market prices. In addition, developers also shifted the target market from MBR to the middle class (Kusno, 2012). The provision of public housing for the poor is increasingly deadlocked because Indonesia is experiencing economic instability and project development funds have become stagnant (Colombijn, 2011).

Residential Reality in Jakarta City

Population Density of Jakarta in 2022

Table 1 and Figure 4 show that the population density reaches 17,006 people/km² for the entire city of Jakarta by region, but there is a gap in population density for each region. The region with the highest density is Central Jakarta with a density of 23,249 people/km². The reason for this high density is the small area it occupies compared to its population. The second place is occupied by West Jakarta, with a density of 20,717 people/km².



Figure 4 Population Density (people/km²) by Sector in Jakarta City in 2022

This density is due to its high population compared to other sectors, while East Jakarta is ranked third in terms of density. The density level is 17,650 people per km². Then South Jakarta and North Jakarta rank fourth and fifth with a density of 16,449 and 12,652 people per km², respectively. As for the Thousand Islands region, the population density is only 2,770 people per km² (Figure 5). This very high population density of Jakarta contributes to the increasing pressure on housing units in the occupancy rate.

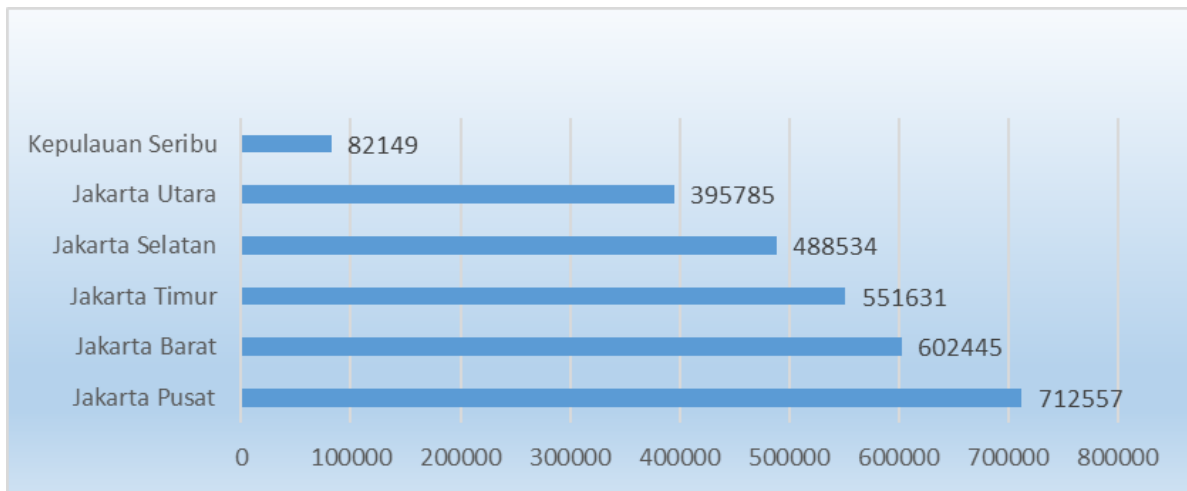


Figure 5. Population Density (family/km²) by Sector in Jakarta City in 2022

Table 1. Jakarta City Area, Population, Family, Housing and Density for 2021

Region	Number of RW	Population	%	Number Of Families	Number of Dwellings	Area (km ²)	%	Density (population /km ²)
North	449	1.865.647	15,58	613.327	386.249	139,99	21,08	13.327
South	576	2.384.183	21,20	762.228	461.357	154,32	23,24	15.454
East	707	3.274.716	29,11	1.032.021	623.475	182,70	27,52	17.924
West	586	2.589.589	23,02	819.866	560.090	124,44	18,74	20.810
Center	389	1.105.731	9,83	391.143	205.642	52,38	7,89	21.110
Thousand Islands	24	29.719	0,26	8.528	5.350	10,18	1,53	2919
Total	2731	11.249.585	100	3.627.111	2.242.163	664,01	100	16.942 (avg)

Central Jakarta ranked first, with the highest housing density at 712,557 families/km². This is due to the small area occupied by this region compared to other regions, while West Jakarta ranks second in terms of housing density at 602,445 families/km². East, South and North Jakarta come next with densities of 551,361, 488,534 and 395,785 families/km² respectively.

Meanwhile, the Thousand Islands region has the lowest density among other regions with 82,149 families/km². This is due to the relatively small number of residents balanced with the lowest area.

Size of Housing Unit

The total number of housing units in Jakarta City is 2,242,163 (Table 1). The number varies in each region. East Jakarta ranks first in the number of housing units, reaching 623,475 housing units or 27.7% of the total housing units in the study area. West Jakarta ranks second in terms of the number of housing units, totaling 560,090 housing units at 25.0%, with a density of 6588 housing units/km², and third is South Jakarta, which includes 461,357 housing units, representing 20.6% of the total housing units (Table 2).

Table 2. Number of Families and Density (family/km²) by Sector in Jakarta City for the Year 2022

Region	Number of RW	Population	%	Number of Families	Number of Dwellings	Area (km ²)
North	1.865.647	613.327	16,9	386.249	139,99	4381
South	2.384.183	762.228	21	461.357	154,32	4939
East	3.274.716	1.032.021	28,4	560.090	182,70	5649
West	2.589.589	819.866	22,6	623.475	124,44	6588
Center	1.105.731	391.143	10,8	205.642	52,38	7647
Thousand Islands	29.719	8.528	0,3	5.350	10,18	838
Total	11.249.585	3.627.111	100	2.242.163	664,01	5642

In fourth place is North Jakarta with 386,249 units or around 17.2%. Then Central Jakarta and Kepulauan Seribu occupy the fifth and sixth positions with 205,642 and 5350 residential units respectively or around 9.2% and 0.3%. Central Jakarta has the highest residential density with 7647 dwellings/km². Although the number of houses is not the highest, the small area makes the density very high. While Kepulauan Seribu due to the small amount of land occupied and the lowest number of dwellings makes its residential density of 818 units/km² the lowest among all regions. Table 3 shows that the occupancy rate of housing units is 5 persons/housing unit for the whole of Jakarta, and this figure varies at the sector level. Compared to other regions, East Jakarta ranks first with an occupancy rate of 5.8 persons per housing unit. Kepulauan Seribu ranked second with 5.5 people per housing unit despite having the smallest population. Central Jakarta and South Jakarta rank third and fourth respectively with 5.3 and 5.1 people per unit. North Jakarta ranks fifth with an occupancy rate of 4.8 people per unit. West Jakarta, which ranks second in terms of population, ranks last with an occupancy rate of 4.1 persons per unit, due to the large number of houses which is the highest among all regions.

Housing Problems in The City of Jakarta

There is demographic pressure in Indonesian cities in general and Jakarta City in particular due to a shortage of housing units, leading to a high demand for housing as a result of population growth, migration, and the aforementioned economic and political factors. A housing deficit is defined as an increase in population (number of families) with a shortfall in the balance of housing to cover the increased number of families.

Table 3 shows a clear housing deficit of 43,323 housing units at a deficit rate of -37.51% for the whole of Jakarta, and this deficit varies at the city sector level. The eastern sector ranks second in terms of housing deficit, with 13,977 housing units at a rate of (-38.3%), and the northern sector ranks third in terms of housing deficit, with 10,422 housing units at a rate of (-31.1%). This is due to the small number of families and population.

Table 3. Number of Housing Units, Number of Families and Housing Deficit in Jakarta by Region in 2022

Region	Population	Number Of Families	Number Of Dwellings	Occupancy Rate (People/House)	Housing Deficit (*)	Percentage Of Deficit (**)
North	1.865.647	613.327	386.249	4,8	- 227.078	- 37
South	2.384.183	762.228	461.357	5,1	- 300.871	- 39,4
East	3.274.716	1.032.021	560.090	5,8	- 471.931	- 45,7
West	2.589.589	819.866	623.475	4,1	- 196.391	- 23,9
Center	1.105.731	391.143	205.642	5,3	- 185.501	- 47,4
Thousand Islands	29.719	8.528	5.350	5,5	- 3178	- 59,4
Total	11.249.585	3.627.111	2.242.163	5	- 1.384.950	- 38,1

(*) Housing deficit = number of housing units - number of families

(**) Proportion of housing deficit = housing deficit ÷ number of families x 100

Slums

Figure 6 shows that according to data from the DKI Jakarta Provincial Government, the number of slums in Jakarta is around 445 RW out of the total number of RW. This means that there are about 16.30% of areas in Jakarta that are classified as slum areas with varying levels of slums from very light, light, medium and heavy. The data is shown in Figure 6.

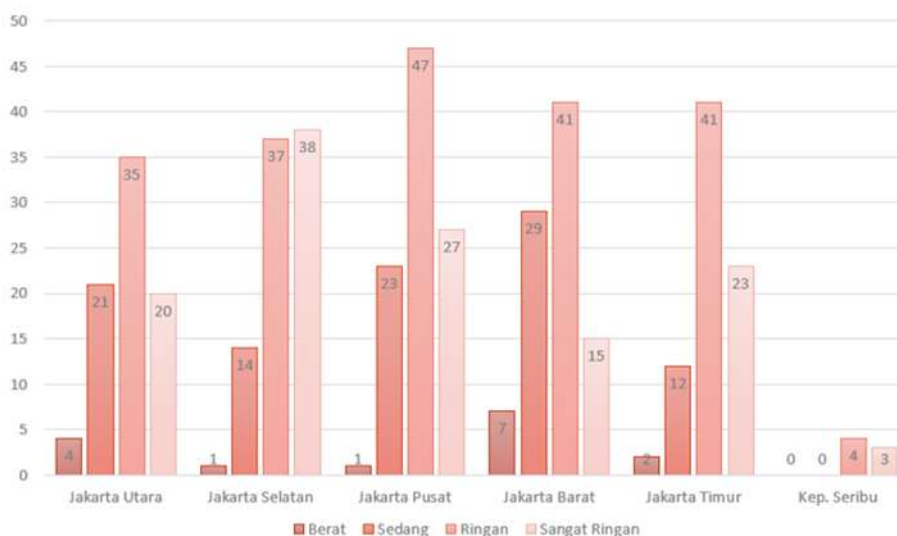


Figure 6. Slum Housing in Jakarta City in 2021

From the data and matters mentioned above, it is clear that the city's housing sector, especially in the area of construction of housing units, is not keeping pace with the increase in population and the number of families (Figure 7).

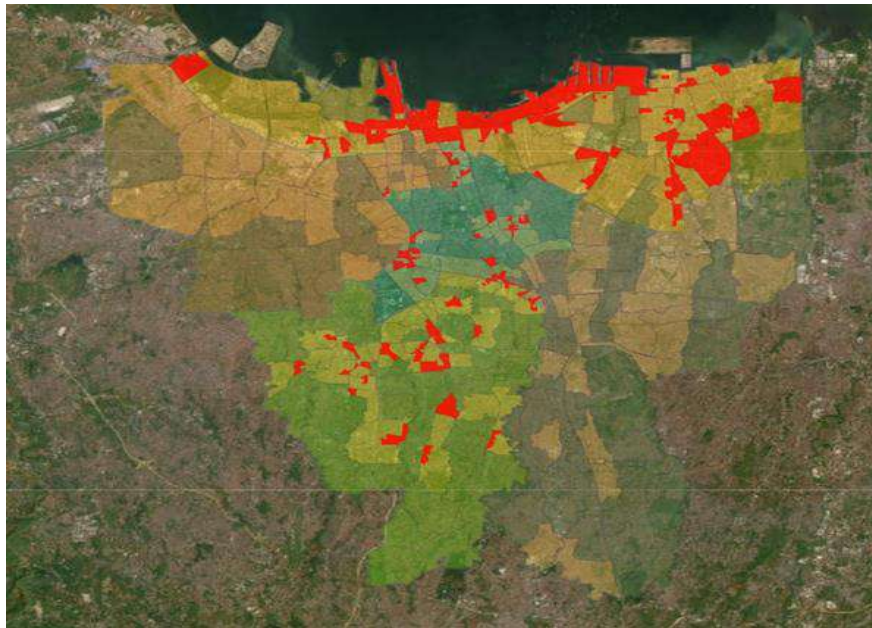


Figure 7. Slum Upgrading Target in 2022

Family Size and Housing Density

Family size is one of the important indicators in city studies. The larger the family or the multiplicity of families in a housing unit, the more it contributes to increasing pressure on services in general and on the efficiency of housing functions in particular. Table 1 and Figure 5 show a housing density of 5462 families/km² for the whole of Jakarta, but there are differences in housing density for each region. In 2022, the government targets the arrangement of 90 slum RWs spread across Jakarta with the Community Action Plan (CAP) and Collaborative Implementation Program (CIP) programs, which are slum arrangement programs by inviting community involvement in arranging their respective environments. The slum structuring targets of the DKI Jakarta provincial government are illustrated in Figure 7. The red areas are RW/areas that are targeted for structuring. The arrangement targets are spread throughout DKI Jakarta, the majority of which are in North Jakarta, Central Jakarta and South Jakarta.

CONCLUSION

City housing problems are closely related to the overall economic and political situation. Rapid and uncontrolled city growth in Jakarta City is the main cause of the housing crisis and deficit, as well as the emergence of slums. Data shows that Jakarta is growing rapidly as a result of natural population growth, as the population increased from 2,973,052 in 1961 to 10,562,088 in 2020 and 11,249,585 in 2021. Such a huge population is the main cause of the high housing deficit in Jakarta and major Indonesian cities in general. Although there are various ways. While the government has made various housing policies, it has not been able to keep up with the rate of population growth and new households, especially in city areas. Moreover, the price of land in city areas is increasingly expensive and unaffordable, especially for the lower middle class. This fact makes it very difficult for low-income people to have decent housing, which in turn can lead to new problems, namely the emergence of slums and inadequate settlements. As a suggestion to deal with these problems, the government needs to organize massive vertical housing in each area that is included in the slum category. These vertical housing estates are built according to livable standards and are intended for local residents with a cheap and affordable rental system (at least as a unit maintenance fee).

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Empowering high school students as peer counselors to prevent free sex and early marriage

Hanifiya Samha Wardhani ^{a,1,*}, Dyah Hariani ^{b,2}, Nur Duchu ^{b,3}, Nur Anindya Syamsudi ^{c,4}, Yusfita Kurniawati ^{a,5}


^a Faculty of Medicine, Universitas Negeri Surabaya, Lidah Wetan, Lakarsantri, Surabaya, East Java 60123, Indonesia

^b Faculty of Mathematics and Natural Science, Universitas Negeri Surabaya, Ketintang, Gayungan, Surabaya, East Java 60123, Indonesia

^c Faculty of Sport Science and Health, Universitas Negeri Surabaya, Lidah Wetan, Lakarsantri, Surabaya, East Java 60123, Indonesia

¹ hanifiyawardhani@unesa.ac.id*; ² dyahhariani@unesa.ac.id; ³ nurducha@unesa.ac.id; ⁴ nursyamsudi@unesa.ac.id; ⁵ yusfitakurniawati@unesa.ac.id

*Corresponding author

ARTICLE INFO	ABSTRACT
<p>Article history Received: 2024-01-26 Revised: 2024-05-11 Accepted: 2024-05-20 Published: 2024-05-24</p> <p>Keywords Early marriage Free sex Peer counselors</p>	<p>Adolescence is a period that is vulnerable to various problems, the establishment and training of peer counseling in schools can be the right choice in an effort to fortify adolescents from negative environmental influences and play a role in promoting the issues of free sex, early marriage, and reproductive health through counseling activities. The activity was carried out using the training method, in August 2023. The location of the activity was SMA Negeri 15 Surabaya, with the target participants being 2 representatives of class X and XI students, totaling 48 students. The instruments used in this activity are pre-test and post-test, with the main material of counseling on free sex, early marriage, reproductive health, and skills to become peer counselors. The success indicator of this activity, where >50% of participants get a minimum point increase of 5%. Community service activities through peer counseling training were successful in fulfilling activity success indicators. >50% of participants got an increase in points of at least 5% after training; namely, a total of 26 (54.17%) participants experienced an increase in knowledge scores of more than 5%. The training activities that have been carried out are effective in increasing the knowledge of participants.</p>
<p>Kata Kunci Konselor sebaya Pernikahan dini Seks bebas</p>	<p>Pemberdayaan Siswa SMA menjadi konselor sebaya sebagai upaya pencegahan seks bebas dan pernikahan dini. Remaja adalah masa yang rentan terhadap berbagai masalah, pembentukan dan pelatihan konseling sebaya di sekolah dapat menjadi pilihan yang tepat dalam upaya membentengi remaja dari pengaruh negatif lingkungan serta berperan mengusung isu seks bebas, pernikahan dini dan kesehatan reproduksi melalui kegiatan konseling. Kegiatan ini dilakukan dengan menggunakan metode pelatihan, pada bulan Agustus 2023. Lokasi kegiatan bertempat di SMA Negeri 15 Surabaya, dengan target peserta 2 perwakilan dari siswa kelas X dan XI, dengan total 48 siswa. Instrumen yang digunakan dalam kegiatan ini adalah pre-test dan post-test, dengan materi utama konseling tentang seks bebas, pernikahan dini, kesehatan produksi dan keterampilan menjadi konselor sebaya. Indikator keberhasilan kegiatan ini, dimana >50% peserta mendapatkan peningkatan poin minimum sebesar 5%. Kegiatan pelayanan masyarakat melalui konseling sebaya berhasil memenuhi indikator keberhasilan kegiatan. Lebih dari 50% peserta mendapatkan peningkatan poin setidaknya 5% setelah pelatihan; yaitu, sebanyak 26 (54,17%) peserta mengalami peningkatan nilai pengetahuan lebih dari 5%. Kegiatan pelatihan yang telah dilakukan terbukti efektif dalam meningkatkan pengetahuan peserta.</p> <p style="text-align: right;">Copyright © 2024, Arifin et al This is an open access article under the CC-BY-SA license</p> 

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INTRODUCTION

The development of technology, which has increased significantly, has many impacts on the lives of adolescents. In the era of globalization, which is currently experienced, culture from outside is accessed quickly and freely among the community, especially teenagers in Indonesia, many of whom carry out activities outside normal limits and cause problems both for themselves and others (Ridhani & Abidarda, 2020). Adolescence is a period that is vulnerable to various problems,

including personal, social, educational, and career problems. Adolescence is a period in which an individual experiences a transition from childhood to adulthood, which is accompanied by a series of radical physical, psychological, and behavioral changes (Salmiati et al., 2018). This period is often known as the rebellious period because adolescents who have just experienced puberty often display a variety of emotional turmoil, withdraw from the family, and experience many problems both at home, school, and in their friendship environment (Karlina, 2020).

Not all adolescents can go through the maturation process well; not a few of them fail to complete their developmental tasks so that they fail to achieve the expected competencies, and even behavioral deviations can occur (Fajar et al., 2022). One of the behavioral deviations that is a major issue and needs attention is free sex. In Indonesia, there are around 4.5% of male adolescents and 0.7% of female adolescents aged 15–19 who claim to have had premarital sexual intercourse. Among adolescents aged 15–19 years, the largest proportion dated for the first time at the age of 15–17 years. About 33.3% of adolescent girls and 34.5% of adolescent boys aged 15–19 started dating when they were not yet 15 years old (Andriani et al., 2022). Premarital sex can result in early marriage, potentially leading to numerous health issues arising from decreased birth weight and insufficient parental support (Nurmala et al., 2019). Meanwhile, this period is a time when adolescents are vulnerable to sexual and reproductive health problems, including early marriage, pregnancy at a young age, unwanted pregnancy, low sexual and reproductive health knowledge, sexually transmitted diseases such as HIV and AIDS, abortion, and gender-based violence (Fatkhayah et al., 2020). The presence of issues, poses a risk and contributes to the relatively high age-specific fertility rate among individuals aged 15-19 years (Kosasih et al., 2021).

Year after year, the incidence of adolescent health problems in East Java Province is rapidly escalating. The emergence of risky behaviors among adolescents further compounds the expanding impact and burden of disease, contributing to its continuous growth (Permatasari & Suprayitno, 2021). Based on the results of Susenas in 2018, out of 34 provinces in Indonesia, 23 provinces had cases of early marriage in women, with a higher prevalence of early childhood marriage compared to the national figure. In 2018, the number of marriage cases for women under 18 years of age was 11.21%, while for men it was 1.06% (BPS, 2020). The Directorate General of Religious Courts (Badilag) of the Indonesian Supreme Court presented data on marriage dispensation throughout 2022 in all Religious High Courts (PTA) in Indonesia, with a total of 50,704 cases of early marriage. As many as 30% came from East Java, with a total of 15,243 cases handled by PTAs throughout 2022. Other data from the Surabaya Religious Court showed a total of 375 cases in 2021, 264 cases in 2022, and 19 cases recorded until February 2023 (Directorate General of Religious Courts Agency, 2023).

To overcome these various problems, they can be overcome through peer group counseling. Counseling or peer counselors are adolescents who are able to provide information about health and help their peers recognize their problems and realize the need to seek help (referral) in order to solve their problems. Peer counselors are not professionals in the field of counseling, but peer counselors are expected to be an extension of professional counselors (Purwanti et al., 2022). For numerous decades, literature has shown evidence that peer counseling is equally effective (Topping, 2022). The effects of peer education were reviewed, that peer education proved advantageous in enhancing understanding of sexual health topics (Wong et al., 2019) and has the potential to diminish risky behaviors (He et al., 2020; Liu et al., 2018). The results of research conducted by Salmiati et al. (2018) showed that peer counselor training is one of the strategies for solving student problems at school. Similar research also states that peer counseling activities show effectiveness, especially in relation to guiding and directing peers to fortify themselves from negative environmental influences (Sarmin, 2017).

Peer counselors assist the counselee in the decision-making process for the problems experienced by the counselee. Peer counselors identify what kind of decision is needed by the counselee based on the diagnosis of the problem and describe the advantages and disadvantages of each decision option and its consequences (Purwanti et al., 2022). Salmiati et al. (2018) revealed that adolescents, especially students, are generally more comfortable talking about the problems they face with their peers than consulting with professionals in the school guidance and counseling room. On the other hand, when participants have the same diagnosis and severity level, they frequently share comparable experiences, fostering a deeper mutual understanding (Andalibi & Flood, 2021; Ruiz Rodríguez et al., 2018). Desirable traits of peer counselors involve coming from the same community, speaking the same language and sharing similar cultural beliefs (Rujumba et al., 2020). This shows that when adolescents are faced with a problem, they need friends who are able to accompany their developmental tasks well and can solve the problems they experience together through their peers. Therefore, the purpose of this article is to determine the participants' knowledge on free sex, early marriage and reproductive health through peer counseling activities at school. The establishment and training of peer counseling in schools can be the right choice in an effort to fortify adolescents from negative environmental influences and play a role in promoting the issues of free sex, early marriage, and reproductive health through counseling activities.

This program also aligns with certain Sustainable Development Goals (SDGs) number 3, which focuses on ensuring healthy lives and promote well-being for all at all ages. Empowering high schools peer counselors to educate their peers on sexual health and relationships, can reduce sexually transmitted infections (STIs), unwanted pregnancies and early marriages, aligning with SDGs number 3. Additionally, it supports SDGs number 4 by promoting inclusive and equitable education. This approach fosters inclusivity and respect for all individuals, particularly girls and women, contributing to SDG 5's goal of gender equality and empowerment.

METHOD

The activity was carried out using the training method, which was divided into two stages of implementation in August 2023. The location of the activity was SMA Negeri 15 Surabaya, with the target participants being 2 representatives of class X and XI students, totaling 48 students. The outline of how activities will be carried out to implement the methods was summarized in Figure 1.



Figure 1. The stages of activity implementation and problem solving.

An initial meeting was held to initiate cooperation in community service activities with the principal of SMA Negeri 15 Surabaya, followed by virtual routine coordination between community service members. Subsequently, preparation for training activities was made, include materials such as PowerPoints presentations, booklets and videos. Evaluation methods was outlined, involving pre-test, post-test and response questionnaires via Google Form. The implementation of the first phase of training is carried out by filling out pre-test questions, counseling, and question-and-answer discussions. At the end of the activity, participants will be given the task of practicing counseling with their peers in their respective classes for 1-2 weeks after the training. This practice included role-playing scenarios to stimulate peer interactions to stimulate peer interactions or exploring alternative approaches, such as seeking guidance from professionals, to address their concerns (Kalkbrenner et al., 2020). During the implementation of the second stage of training, participants will present the results of counseling to their peers who have been assigned to the first stage of training. At this stage, participants were given post-test questions to obtain data on the participants' final understanding after the training. Response questionnaires were also given to capture responses and input from participants regarding the training activities that had been carried out.

The instruments used in this activity are pre-test, post-test, and response questionnaires, with the main material of counseling on free sex, early marriage, reproductive health, and skills to become peer counselors. The success indicator of this activity is obtained from the pre-test and post-test evaluation results, where >50% of participants get a minimum point increase of 5%.

RESULTS AND DISCUSSION

Community service activities have been carried out according to the implementation plan and agreement located at SMA Negeri 15 Surabaya as a community service program partner. The implementation of the community service program through this counseling was carried out in two stages, with the target participants being high school students, considering that this age is included in adolescence. Before the activity implementation stage, preparations were made by coordinating with activity partners and preparing materials that would be delivered during counseling.

The first phase of the activity was carried out on August 11, 2023, which included filling out pre-test questions, counseling, and question-and-answer discussions. Giving pre-test questions aims to determine the initial knowledge possessed by the participants. Counseling was delivered directly by a team of Surabaya State University lecturer facilitators, with the material presented including: a) free sex; b) early marriage; c) reproductive health; and d) peer counselors. Counseling materials are also delivered through PowerPoints, booklets, and interactive videos that can attract participants' interest so that they can understand the counseling material well. In this activity, participants will also be given the opportunity to discuss with the facilitator team so that they can express their opinions and understand the

material that has been delivered. High enthusiasm was shown by the participants, which was shown by the active participants asking questions and discussing in this session.

At the end of the first activity, participants will be given a peer counseling simulation task where they will become counselors and counsees to each other and apply the peer counseling process that has been explained. Relatedly, initiative for peer-to-peer mental health support involve the training of students by school mental health professionals. These trained students then play a role in educating their peers about both physical and mental wellness. In certain instances, they are also equipped to identify and refer their peers to mental health support services when needed (Kalkbrenner *et al.* 2020). The role-playing and peer counseling activities aim to impart empathy and active listening skills. Students take turns playing the roles of counselors and counsees in various activities for both teaching techniques (Rodríguez *et al.*, 2018).

The second phase of the activity was held on August 23, 2023, and at this stage, the selected participants will present the results of the simulation that was assigned at the previous meeting (Fig. 2).



Figure 2. Peer counseling presentation by trainees

At the end of the second phase of activities, participants will be given post-test questions. Giving these questions aims to measure the level of knowledge possessed by participants after the material provided at the first meeting and the peer counseling simulation that has been carried out. Giving pre-test questions at the beginning of the meeting and post-test questions at the end of the meeting is evaluation data that will be used as a benchmark for indicators of the success of the activity.

Table 1. Trainee activity evaluation scores

Category	Knowledge Evaluation Score	
	Pre-test	Post-test
Good	24 (50.00%)	38 (79.17%)
Fair	22 (45.83%)	10 (20.83%)
Poor	2 (4.17%)	0 (00.00%)

Table 1 shows the evaluation value of training activities obtained from pre-test and post-test data. The results show that there is an increase in the number of participants with a score category of "good" from the pre-test data of 24 (50.00%) participants after the implementation of the post-test, which rose to 38 (79.17%) participants. There was a decrease in the number of participants who scored in the "fair" category, from 22 (45.83%) participants to 10 (20.83%) participants. There was also a decrease in the number of participants who scored in the "poor" category, from 2 (4.17%) participants to 0 (0.00%) participants after counselling.

The learning media used for counselling can also affect the evaluation results. Extension materials delivered through PowerPoints, booklets, and interactive videos tend to attract the attention of trainees who can develop creative thinking

skills. This is in line with the results of research conducted by Rachmawati et al. (2020), which show that students use interactive learning media effectively to be applied, as evidenced by the results of the pre-test before using interactive media and the post-test after using interactive learning media experiencing significant differences.

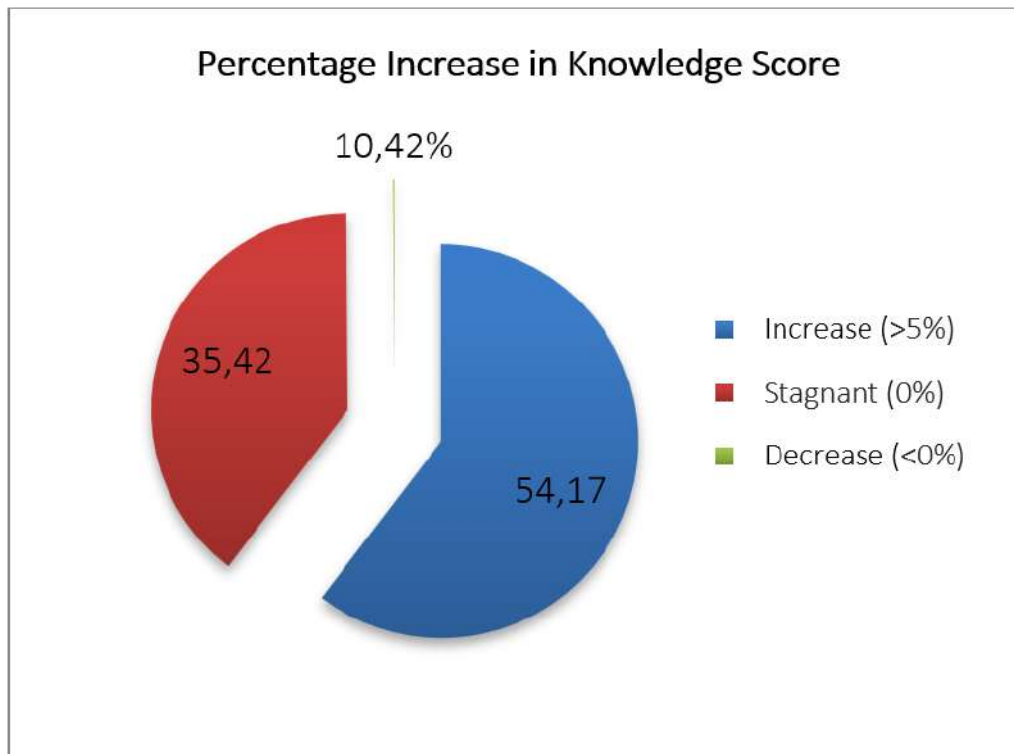


Figure 3. Increased post-training knowledge scores of participants

Based on the data on the increase in participants' knowledge scores after training (Fig. 3), it can be seen that this training activity was successful with the fulfillment of the activity success indicator, namely that >50% of participants got a minimum point increase of 5% after training. A total of 26 (54.17%) participants experienced an increase in knowledge value of more than 5%; 17 (35.42%) participants did not experience an increase in knowledge value or stagnant; and as many as 5 (10.42%) participants experienced a decrease in knowledge value. From this data, it can be seen that the training activities that have been carried out are effective in increasing the knowledge of participants. Participants have understood the material about peer counseling after the counseling is given. The result of a research conducted by Murdiningsih & Hindun (2020), indicated that participants can increase their knowledge through accessing diverse, reliable sources and engaging with various stakeholders such as schools, parents and environmental.

Based on the evaluation results of community service activities that have been carried out, there are supporting and inhibiting factors that affect the level of knowledge of training participants. Supporting factors that influence include: a) the existence of a team of facilitators who are experts in their fields and are able to explain the material and facilitate activities well; b) media for delivering counseling material through PowerPoints, booklets, and interesting interactive videos; c) support from the principal of SMA Negeri 15 Surabaya as an activity partner who welcomes the implementation of training activities; d) the enthusiasm of training participants in activities both during discussions and peer counselor practices; and d) the availability of funds to support activities from the university for the smooth running of community service activities. Media in delivering counseling services, especially audio-visual media plays a crucial role. According to Fuady & Mutalib (2018), utilizing instructional media significantly enhances the effectiveness of the learning process, aiding in message delivery and enriching lesson content. If teachers take an active role in the learning process, audio-visual materials can offer numerous advantages. Students can derive greater educational benefit from audiovisual media, as it facilitates broader thinking, analysis and enhances memory retention (Fauzi et al., 2017). Sutarto et al. (2020) states that participant's interest also important, interest serves as a catalyst for motivation, ultimately enhancing learning outcomes.

The inhibiting factors or obstacles experienced during the implementation of activities include: a) many training participants still do not have prior knowledge of the activity material, especially about peer counselors; b) participants' varying capacities, so that it takes longer to understand the material for participants who have low capacity. Ridha (2019) explained that the application of peer counselors in schools can be influenced by several factors, such as the types of problems experienced by students and the openness of students to conveying problems. This conclusion is supporting by

the findings of Permatasari & Suprayitno (2021), that the implementation of adolescent reproductive health counselling by peer counselors was influenced by three main factors: predisposing factors, enabling factors and reinforcing factors. Predisposing factors including knowledge, motivation, support and supervision of peer counselors play a significant role. Enabling factors involve the availability of training facilities and infrastructure. Reinforcing factors, such as support from family, teachers and peers, also contribute to the process. According to previous studies conducted by Malihah et al. (2022), while peers and schoolmates also play a role, the family stands out as the primary influence on adolescent development. The stronger the bond between adolescents and their parents, the greater the adolescents' self-control and conversely. When adolescents are not open and act more according to their immature minds, adults will find it increasingly difficult to control and guide them (Rafiola et al., 2022).

With the peer counselor training that has been carried out, training activity participants, especially SMA Negeri 15 Surabaya students, can gain knowledge about peer counseling and its application in everyday life so that the objectives of the training activities that have been carried out are achieved. Peer counselors are not professionals in the field of counseling, but peer counselors are expected to be an extension of professional counselors (Purwanti et al., 2022). The peer group is important for adolescents, not receiving acknowledgement or validation from this social group can lead to intense feelings of unworthlessness, loneliness and despair (Cowie & Sharp, 2017). The results of research conducted by Sarmin (2017) show that peer counselors have a vital role in helping schools and communities shape and foster adolescents into individuals who have better character and avoid juvenile delinquency. The implementation of peer counselors in schools shows positive changes and helps optimize the performance of BK and teachers in solving student problems at SMK 10 Surabaya (Ridha, 2019). The connection formed with a school counselor can facilitate students in articulating their problems. Surveys and tests serve as valuable tools, aiding in a deeper understanding of students and their needs (Akyol & Kutlu, 2023).

School counselors play a crucial role in trauma-informed schools and can advocate for this approach to enhance responsive service delivery (Brown, 2020). Peer counselors can lead to new abilities in psychosocial aspects of students that have been underdeveloped, namely understanding themselves and others and the willingness to be involved in dealing with other people's problems. On the school side, there will also be a movement to develop activities, namely by optimizing guidance activities to bridge and eliminate negative perceptions of school guidance and counseling. Besides serving as an extension of guidance and counseling service, peer counseling cadres can act as intermediaries for school counsellors in developing necessary student programs and also assist school counsellors in analyzing the situations and conditions faced by students (Ramli et al., 2024). For school counseling to effectively offer the required psychological support and other assistance in both scenarios, there is a critical need for an ample number of well-equipped and competent school counselors (Karaman et al. 2021). The formation of a peer counseling community can also be an agent of change for adolescents in schools (Salmiati et al., 2018).

CONCLUSION

Community service activities through peer counseling training were successful in fulfilling activity success indicators. >50% of participants got an increase in points of at least 5% after training; namely, a total of 26 (54.17%) participants experienced an increase in knowledge scores of more than 5%. The training activities that have been carried out are effective in increasing the knowledge of participants. Participants have understood the material about peer counseling after the counseling is given. Peer counseling in schools can be the right choice in an effort to fortify adolescents from negative environmental influences and is expected to play a role in promoting the issues of free sex, early marriage, and reproductive health through counseling activities.

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Effective strategies to enhance awareness and proficiency in open wound emergency management for students


Putra Agina Widyaswara Suwaryo ^{a,1,*}, Dadi Santoso ^{a,2}, Hendri Tamara Yuda ^{a,3}, Irmawan Andri Nugroho ^{a,4}, H. Hariyady ^{b,5}

^a Department of Nursing, Faculty of Health Science, Universitas Muhammadiyah Gombong, Jl Yos Sudarso 461 Gombong, Kebumen, Central Java 54412, Indonesia

^b Department of Informatics Engineering, Faculty of Engineering, Universitas Muhammadiyah Malang, Jl Raya Tlogomas No 246, Malang, East Java 65144, Indonesia

¹putra@unimugo.ac.id*; ²dadisantoso@unimugo.ac.id; ³hendritamara@unimugo.ac.id; ⁴andri@unimugo.ac.id; ⁵hariyady@umm.ac.id

* Corresponding author

ARTICLE INFO	ABSTRACT
<p>Article history Received: 2023-06-17 Revised: 2024-05-24 Accepted: 2024-06-03 Published: 2024-06-03</p> <p>Keywords Awareness Education Open Wound Emergency Transportation</p>	<p><i>Accidents can happen at home, school, day care center, or on the street at any time of the day. Children are prone to accidents or injuries because of their curiosity and vulnerability to accidents, especially at school. Accidents can include falls, choking on food, swallowing objects, electric shock, exposure to hot water, and drowning. The empowerment was carried out to increase the knowledge and skills of students in schools in providing first aid measures for open wounds. The activity was carried out at the Kota Kinabalu Indonesian School (SIKK) with 239 participants. The results of the activity showed an increase in knowledge and skills after being given education. Good knowledge and skills will improve health services and minimize the risk of injury. Similar activities can be carried out again with health topics and more diverse participants.</i></p>
<p>Kata Kunci Darurat luka terbuka Kesadaran Pendidikan Transportasi</p>	<p>Strategi efektif untuk meningkatkan kesadaran dan kemahiran dalam manajemen darurat luka terbuka bagi siswa. Kecelakaan dapat terjadi di rumah, sekolah, pusat penitipan anak, atau di jalan kapan saja sepanjang hari. Anak-anak rentan terhadap kecelakaan atau cedera karena rasa ingin tahunya dan kerentanannya terhadap kecelakaan, terutama di sekolah. Kecelakaan dapat berupa terjatuh, tersedak makanan, tertelan benda, sengatan listrik, terkena air panas, dan tenggelam. Kegiatan ini dilaksanakan untuk meningkatkan pengetahuan dan keterampilan siswa di sekolah dalam memberikan tindakan pertolongan pertama pada luka terbuka. Kegiatan dilaksanakan di Sekolah Indonesia Kota Kinabalu (SIKK) dengan peserta sebanyak 239 orang. Hasil kegiatan menunjukkan adanya peningkatan pengetahuan dan keterampilan setelah diberikan edukasi. Pengetahuan dan keterampilan yang baik akan meningkatkan pelayanan kesehatan dan meminimalkan risiko cedera. Kegiatan serupa dapat dilakukan kembali dengan topik kesehatan dan peserta yang lebih beragam.</p> <p style="text-align: right;">Copyright © 2024, Suwaryo, et al This is an open access article under the CC-BY-SA license</p> 

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INTRODUCTION

Accidents or injuries are events that occur around us. Accidents can happen at home, school, daycare centers, or on the road. Children are vulnerable to accidents or injuries due to their curiosity and their susceptibility to accidents, especially at school. Accidents can include falls, food choking, swallowing objects, electric shocks, exposure to hot water, and drowning (Alfred et al., 2015; Oktaviani et al., 2020).

Accidents can result in open wounds and serious injuries, which can even lead to death if not properly addressed (Suwaryo & Yuda, 2019). Accidents in children are not sudden, unpredictable events or due to bad luck. They can be prevented by adults around them. In schools or daycare centers, these accidents can be prevented by others such as friends or teachers, while at home, parents can prevent them (Nurlaela & Mamluaty, 2020). Accidents involving children not only threaten their safety and health but also have the potential to hinder the achievement of several Sustainable Development Goals (SDGs) (Fallah Shayan et al., 2022; Ma et al., 2021; Takian et al., 2022). This study primarily focuses on SDG 3 (Good Health and Well-being), which aims to ensure healthy lives and promote well-being for all at all ages. Preventing accidents and injuries in children also supports the targets of SDG 4 (Quality Education), as a safe learning environment is crucial for effective education. Additionally, this prevention and response program aligns with SDG 11 (Sustainable Cities and Communities), which advocates for inclusive, safe, resilient, and sustainable cities and human settlements. Therefore, preventive and educational efforts regarding child safety in schools and homes not only protect them from immediate dangers but also contribute to broader global goals for sustainable development (Barredo et al., 2015; WDT, 2023).

First aid accident prevention is crucially important to be implemented in schools, especially the process of transporting victims to the nearest healthcare facility for further treatment. This is supported by the World Health Organization (WHO) through the Safe Community program, which covers all ages in all environments and situations, with a focus on accident prevention and enhancing the community's capacity to prevent accidents. Health organizations play a vital role in implementing this program (Fujita et al., 2014; Suwaryo, 2021).

The broad implication is that by strengthening capacity, including increasing the knowledge of school children and teachers in accident prevention and first aid, it can be effectively implemented in schools and the surrounding community, as well as reviving the School Health Effort (SHE). Undesirable events such as wounds and bleeding can be minimized. Apart from that, if an accident occurs and there are injuries, then we already know what action you should take.

Indonesian School Kota Kinabalu (SIKK) is the largest Indonesian school abroad, established by the Indonesian government in Sabah, Malaysia. The school consists of a Playgroup, Kindergarten (TK), Elementary School (SD), Junior High School (SMP), and Senior High School (SMA). The newest addition, inaugurated in June 2022, is the Vocational High School (SMK) with a focus on the hospitality and aircraft industry.

Based on the discussion with the Indonesian School Kota Kinabalu (SIKK) in Sabah, Malaysia, it has been reported that there are frequent cases of open wounds among children in the school, particularly among teenagers. These accidents occur because children often play in a school environment with many trees. The wounds occur when students are running around the school premises. The school also faces difficulties in transporting injured children to healthcare facilities. The school authorities have also mentioned that they have never received any health education, and they are planning to invite speakers to share knowledge about health with the students, but it has not been realized yet. Based on this phenomenon, we conducted a community service activity focusing on education about managing open-wound emergencies and transportation.

METHOD

The activity took place at Indonesian Schools in Kinabalu City, Sabah, Malaysia, with a total of 239 student participants. The activity was conducted by a team of lecturers from Universitas Muhammadiyah Gombong and Universitas Muhammadiyah Malang, consisting of 5 people, with assistance from 7 accompanying teachers. Preparation was done on March 1, 2023, by coordinating with homeroom teachers to determine the time and location of the activity (shown in Figure 1). The materials and media used included triangular bandages, a drag bar or stretcher for transportation, and flip charts.



Figure 1. Discussion of preparatory activities & tool check preparation

The activity was carried out on March 3, 2023, in an open space with 239 student participants accompanied by 7 accompanying teachers. Before the activity, a pre-test consisting of 10 questions was conducted to assess the participants' initial level of knowledge before the education. Subsequently, education was provided through the delivery of materials on open-wound emergencies, transportation techniques, and techniques for managing open wounds. In the final stage, a demonstration was conducted, and participants were given the opportunity to practice several actions related to managing open wounds and transportation. In the evaluation stage, a post-test was conducted to assess the participants' knowledge level after the education. The collected data were subjected to descriptive analysis to examine the changes in participants' knowledge.

RESULTS AND DISCUSSION

Community service activities ran smoothly followed by 239 people. Active participants ask and want to do and try to help according to what is given (shown in Figure 2). Education on the management of open wounds and transportation plays a crucial role in the school environment, particularly considering the frequent occurrence of open wound cases in schools with limited healthcare facilities. Various journals and scientific articles have extensively discussed the importance of providing education to schools and involving children in understanding and managing open wounds. Educational activities on the emergency management of open wounds and transportation had a positive impact on participants and increased awareness of the importance of health and providing first aid before the victim arrived at a health facility. Increased knowledge and skills help improve emergency management and reduce deaths (shown in Figure 3).



Figure 2. Educational activities on emergency management of open wounds and transportation

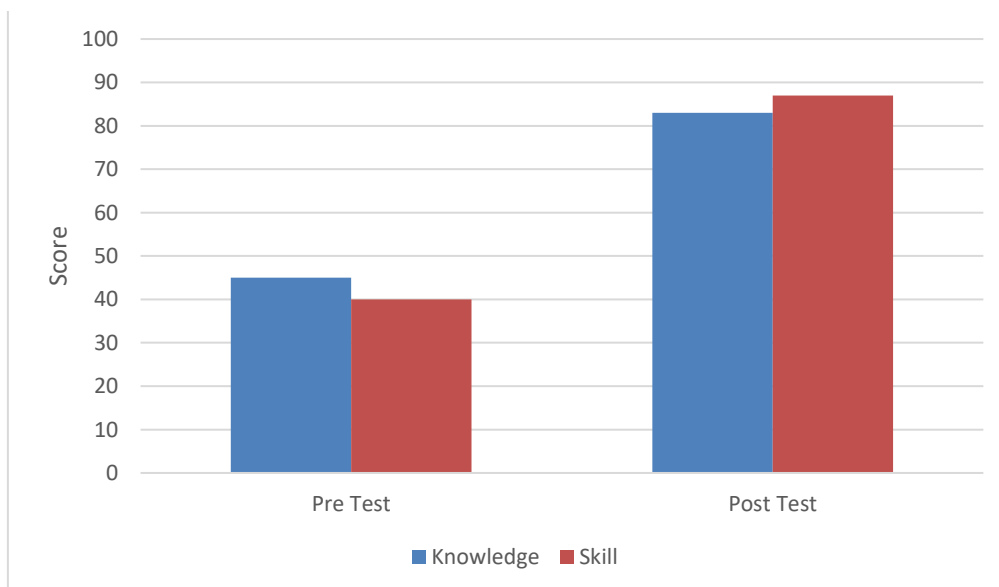


Figure 3. The average change in knowledge and skills before and after the activity

The finding that female respondents demonstrate a better increase in knowledge compared to males can be explained by gender differences in learning theory. Several studies indicate that females tend to be more responsive to collaborative and educative learning methods, and are more motivated in formal learning situations. Additionally, females often tend to

engage more in activities related to health and safety, thus they may be more interested and motivated to absorb the information conveyed.

Effective health education should start early and be conducted in relevant environments, such as schools. By involving children in understanding and handling open wounds, they not only learn practical skills but also develop an awareness of the importance of health and safety. This aligns with the principles of health promotion that encourage active community involvement in maintaining their own health.

One relevant journal is a study conducted by Smith, which highlights that open wounds are one of the common types of injuries that occur in the school environment. The research found that children are more vulnerable to open wounds due to physical activities and accidents that happen at school (Kim et al., 2016; Ranchhod et al., 2014). However, the study also discovered that a lack of knowledge and skills in managing open wounds among teachers and school staff is one of the barriers to effective treatment (Stafford et al., 2014).

Another article that can be referenced is the importance of education on the management of open wounds and transportation in schools with limited healthcare facilities (Suwardianto & Rimawati, 2018). They stress that with adequate knowledge and skills, both teachers and students can provide appropriate first aid when accidents resulting in open wounds occur (Xia et al., 2020). The article also demonstrates that proper education can enhance awareness and proficiency in managing open wounds, thus reducing the risk of complications, and expediting the recovery process. Good actions are supported by good knowledge and skills. All participants enthusiastic to do and try the actions that have been taught (Kim et al., 2016; Wilks et al., 2015).

Furthermore, the benefits of implementing an education program on the management of open wounds and transportation in schools with limited healthcare facilities (Ranchhod et al., 2014). The results of this study show a significant improvement in students' knowledge and skills in handling open wounds after receiving education.

CONCLUSION

Accidents or injuries are events that occur at any places. First aid accident prevention is crucially important to be implemented in schools, especially the process of transporting victims to the nearest healthcare facility for further treatment. The empowerment was carried out to increase the knowledge and skills of students in schools in providing first aid measures for open wounds. The activity was carried out at the Kota Kinabalu Indonesian School (SIKK) with 239 participants. Educational activities on the emergency management of open wounds and transportation had a positive impact on participants and increased awareness of the importance of health and providing first aid before the victim arrived at a health facility. Increased knowledge and skills help improve emergency management and reduce deaths. Similar activities can be carried out with other health problems to support health services. For the next activity, we recommend choosing the right time and a variety of participants, so that the target for the activity becomes wider.

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Training on making lemuru fish into healthy snacks to support stunting reduction

Yunda Maymanah Rahmadewi ^{a,1,*}, Harwi Wijayanti ^{a,2} Dwi Lestari Lukviana ^{a,3}

^aFaculty of Economic and Business, Universitas Ahmad Dahlan, Jl Pramuka No 42 Umbulharjo, Yogyakarta 55161, Indonesia

¹yunda.maymanah@culinary.uad.ac.id; ² harwi.wijayanti@staff.uad.ac.id; ³ dwi2015070033@webmail.uad.ac.id

*Corresponding author

ARTICLE INFO	ABSTRACT
<p>Article history Received: 2024-04-03 Revised: 2024-05-11 Accepted: 2024-05-23 Published: 2024-06-03</p> <p>Keywords Community Sardine Snacks Toddler</p>	<p>Indonesia, the country in Asia with the highest stunting rate (ranked fifth), has a program to accelerate reducing the number of cases with Banyuwangi Regency being one of the pilot projects for the Healthy Children's Movement to Prevent Stunting Toddlers and accelerating stunting prevention issued by the Regent of Banyuwangi in April 2022. On the other hand, Bangorejo District, which is close to the south coast in Banyuwangi, means that this area has a lot of marine products in the form of fish and has cheap prices. The problem is, the community, especially mothers, most of whom are housewives, do not yet have the skills to increase the use value of these marine products. This program aims to improve skills in extending the shelf life of products made from lemuru fish and increase the use value of these products. The methods used are counseling and direct practice through training. The target partners are 27 mothers/women in Padukuhan Kedungrejo, Sambirejo, and Pasembon, Bangorejo District, Banyuwangi Regency. Training activities were held on 23 and 31 August 2023. The results of this activity were that participants had knowledge of making processed fish food which increased by 29.6%, and skills in making processed fish food which increased by 33.3%. The conclusion is that people's knowledge and skills in making processed lemuru fish have increased. The target community is able to make dragon legs and nuggets from lemuru fish.</p>
<p>Kata Kunci Balita Cemilan Kelompok Sarden</p>	<p>Pelatihan menjadikan ikan lemuru menjadi jajanan sehat untuk mendukung penurunan stunting. Indonesia, negara di Asia dengan angka stunting terbanyak (rangking kelima), memiliki program percepatan penurunan jumlah kasus dengan Kabupaten Banyuwangi menjadi salah satu pilot project Gerakan Anak Sehat untuk Pencegahan Balita Stunting dan percepatan pencegahan stunting yang dikeluarkan oleh Bupati Banyuwangi pada April 2022. Di sisi lain, Kecamatan Bangorejo yang berdekatan dengan pantai selatan di Banyuwangi menjadikan daerah tersebut memiliki hasil laut berupa ikan yang banyak dan memiliki harga yang murah. Permasalahannya, masyarakat khususnya ibu-ibu yang sebagian besar sebagai ibu rumah tangga belum memiliki keterampilan untuk meningkatkan nilai guna hasil laut tersebut. Program ini bertujuan untuk meningkatkan ketrampilan dalam memperpanjang daya simpan dari produk yang diolah dari ikan lemuru serta meningkatkan nilai guna produk tersebut. Metode yang digunakan adalah penyuluhan dan praktik langsung melalui pelatihan. Mitra sasaran adalah ibu-ibu/kaum perempuan di Padukuhan Kedungrejo, Sambirejo, dan Pasembon, Kecamatan Bangorejo, Kabupaten Banyuwangi sebanyak 27 orang. Kegiatan pelatihan diselenggarakan pada 23 dan 31 Agustus 2023. Hasil kegiatan ini adalah peserta memiliki pengetahuan membuat olahan pangan ikan yang meningkat sebesar 29,6%, dan keterampilan membuat olahan pangan ikan yang meningkat sebesar 33,3%. Kesimpulannya adalah pengetahuan dan keterampilan masyarakat dalam membuat olahan ikan lemuru mengalami peningkatan. Masyarakat sasaran mampu membuat kaki naga dan nugget dari ikan lemuru.</p>

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INTRODUCTION

The global prevalence of stunting in toddlers is considerable. In 2016, 87 million stunted children lived in Asia, 59 million in Africa, and 6 million in Latin America and the Caribbean. Five subregions have child stunting rates that exceed 30%: West Africa (31.4%), Central Africa (32.5%), East Africa (36.7%), South Asia (34.1%), and Oceania (38.3%; excluding Australia and New Zealand). Both Asia and Oceania experienced slow and even zero growth in reducing child stunting.

On the other hand, Latin America and the Caribbean experienced a decline in stunting rates twice as fast as Africa between 2000 and 2016. However, the reduction in child stunting rates has not been equally distributed among all of the demographic groups. For example, from 1990 to 2013 in the Asia-Pacific, Latin America, and Caribbean regions, the reduction in child stunting was more significant in urban areas than in rural areas (Anonymous, 2018).

Indonesia, as a part of Asia with a relatively high stunting rate and ranked fifth in the highest number of cases (UNICEF, 2013), has an acceleration program to reduce these cases. Banyuwangi Regency is one of the pilot projects of the Healthy Children's Movement to Prevent Stunting in Toddlers, which aims to improve the nutritional status of toddlers through the fulfillment of nutritional intake and family feeding practices (Rokom, 2023). This program is also supported by the previous policies related to the acceleration of stunting prevention issued by the Regent of Banyuwangi in April 2022.

The acceleration program to reduce the national stunting rate is carried out through 5 pillars, one of which is Food and Nutrition Security, which aims to expand access to nutritious food and promote food security. Some of the strategies for achieving this program involve diversification of food based on local food resources and increasing consumption of animal and plant based foods. This aligns with the not yet optimal utilization of the local marine potential of Banyuwangi Regency which supports the acceleration of the reduction in stunting rates.

Sambimulyo Village, located in Bangorejo District, Banyuwangi Regency, has a program known as Village Empowerment and Creative Economy to improve UMKM in the village. There are facilities for traders located in the Sambimulyo RTH (Urban Public Space), which seeks to accommodate the creativity of young people and boost the economy, especially in the culinary sector. Another Creative Economy program is the website pesonasambimulyo.com, which has a TarunaJek feature that is already operating and is planned to be added with TarunaFood and TarunaJasa. TarunaFood is a concept that helps UMKM sell food online. On the other hand, its location close to the south coast makes Bangorejo District have many marine products, especially fish, which are affordable. However, the community, particularly women who are mostly housewives, does not yet have the skills to increase the value of these marine products. Therefore, there is a need to improve skills to increase the value of marine products that support the acceleration program to reduce stunting rates in Banyuwangi Regency.

Based on the introductory description, the solution to the problem is education on the importance of animal and plant based foods as food choices to prevent stunting, along with training on making lemuru fish into dragon legs and nuggets. The target partners are housewives from PKK (Family Empowerment and Welfare) and Aisyiyah community in the Kedungrejo, Sambirejo, and Pasembon hamlets in Bangorejo District.

So far, in Bangorejo District, lemuru fish has not been utilized as a snack with a long shelf life. After being harvested, the fish is usually sold and not processed by the local residents. Therefore, there is a great opportunity to develop snacks from fish such as galantin (Rizkia et.al., 2022) with a long shelf life as one of the products to support the acceleration of stunting prevention. In terms of quality, lemuru fish has a high protein content and is relatively affordable (Singapurwa et.al., 2022). Lemuru fish has been added to culinary products several times for character formation and to increase nutritional value. Snacks are light foods that provide little energy because they are only eaten as a side dish before the main meal. Healthy snacks also have several characteristics, such as providing sufficient calories and nutrients, containing low amounts of sugar, salt, and fat, and avoiding the use of food additives during processing (Putri, 2016).

On the other hand, Indonesia has the potential for sustainable fisheries resources of 12.54 million tons per year (Akbar, 2022). The magnitude of the potential requires good management to maintain ecosystem sustainability including ecology, economy, community and institutions that are in line with SDG's number 14. In addition, there needs to be a guarantee of sustainable production and consumption patterns that are in line with SDG's number 12 so that this large potential can have an impact on increased economic growth. Sustainable consumption patterns still have obstacles and the Nelayanku application could be one solution to integrate and distribute information regarding the number and type of fish from each region in Indonesia so that long-term use will have an impact on fish consumption figures per capita in Indonesia (Yanandhy and Christoffel, 2021). Meanwhile, production patterns can be improved by maximizing fish harvests so that they have a longer shelf life. This program aims to improve skills in extending the shelf life of products processed from lemuru fish and to increase the value of the product.

METHOD

Based on the background description, partner problems, and the goals and objectives of the activity, a community service program was developed. The program is a sequence of solutions to the problems found in the partner, including:

- a. Education on products for stunting prevention
- b. Training on making processed fish as snacks for stunting prevention

The community service activity consists of several main stages, namely the preparation stage, the community service stage, and the evaluation stage. These stages are carried out sequentially (Table 1).

Table 1. Stages of Community Service Implementation

No	Activity	Time
1	Education on products for stunting prevention	31 August 2023
2	Training on making processed fish as snacks for stunting prevention	23 and 31 August 2023

This community service activity used counseling and direct practice methods through training. The target partners are housewives/women and representatives of the Aisiyah community (27 women) in Kedungrejo, Sambirejo, and Pasembon hamlets, Bangorejo District, Banyuwangi Regency. The counseling activity includes education on products for stunting prevention and product innovation. The direct practice activity is carried out through training on making processed fish products as snacks for stunting prevention.

The community service activity was conducted by lecturers from the Diploma 4 Food Service Industry Department, who possess expertise in food processing and packaging technology. In addition to lecturers, this activity also involved several undergraduate students at Universitas Ahmad Dahlan. The training activities were held in Kedungrejo, Sambirejo, and Pasembon hamlets, Bangorejo District, Banyuwangi Regency.

The target partners actively participated through in-kind funding in the form of infrastructure and utilities. In addition, another form of participation was the large number of participants who attended. As for evaluation, time management could be organized more efficiently so that the waiting time could be used for other activities. Dissemination activities by each participant in their PKK groups can serve as follow-up steps after this community service activity is completed, which aims to make the application of IPTEKS (Science and Technology) to the community more widespread and contribute quickly to reducing the stunting rate in Banyuwangi Regency.

The processing of culinary products made from lemuru fish is divided into ready-to-eat healthy snacks and processed products preserved by freezing. Ready-to-eat snacks are wet snacks that do not have a long shelf life. In contrast, processed products that are preserved by freezing have a long shelf life because of the freezing process applied to the food ingredients. The preservation method of freezing is done by freezing the semi-finished product and putting it in a freezer. Freezing technology is employed to preserve food products by lowering the temperature and water content of the product to prevent the growth of microorganisms and enzymes that damage the quality of the product (Sasongko et.al., 2016) (Nento & Ibrahim, 2017).

RESULTS AND DISCUSSION

The educational material delivered emphasized the importance of combining protein and vegetables as a source of nutrition for children, specifically in an effort to prevent or reduce stunting rates (Figure 1).



Figure 1. Education on products for stunting prevention

The educational activity was followed by training on product creation, which involved making lemuru fish into ready-to-eat culinary products and frozen food. One of the IPTEKS that has been introduced for the utilization of animal potential is the processing of tilapia fish for culinary products (Ayuningtyas et.al., 2021). Therefore, the activity conducted in Bangorejo District is important to increase the value of lemuru fish and contribute to the health plan of Banyuwangi Regency. Before the material was given, participants were asked to fill out an initial questionnaire for initial identification of the distribution of participants and their prior knowledge.

The participants were a group of women ranging from 25 to 60 years old. The majority of participants were in the 51–60 age group (Figure 2). Most participants were housewives (IRT) (Figure 3), which represents a potential group with more free time and thus has the potential to be the main force in the food processing process.

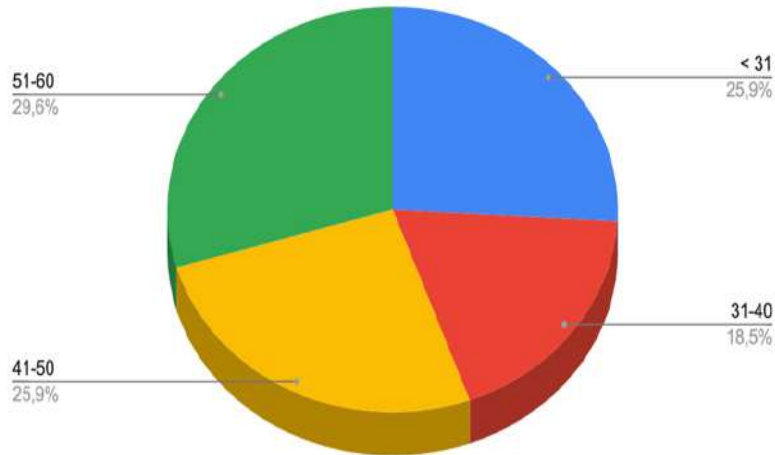


Figure 2. Age Distribution of Training Participants (years old)

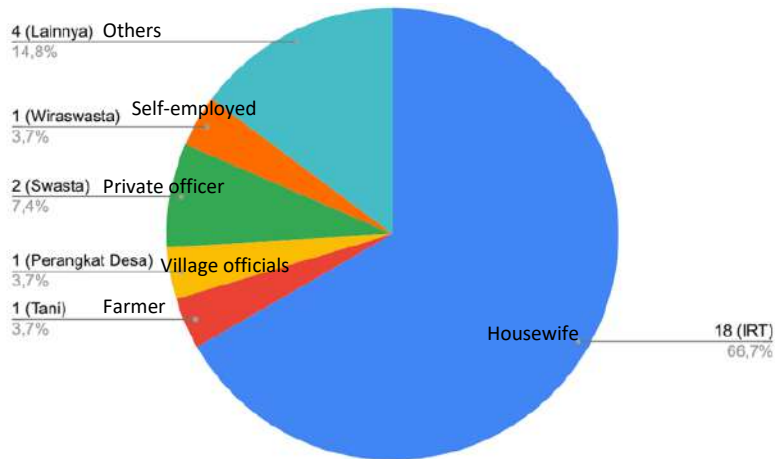


Figure 3. Distribution of Participants' Occupations

The training was conducted in groups, and participants could read the recipes and manufacturing methods that were provided in the training modules that have been distributed to them (Figure 4).



Figure 4. Training on Making Processed Fish

Community service activities through training and counseling have an influence on changing the knowledge of the target community. Although most participants were familiar with frozen food, where one product would be made on that day, many participants had not yet known about or made frozen food (Figure 5).

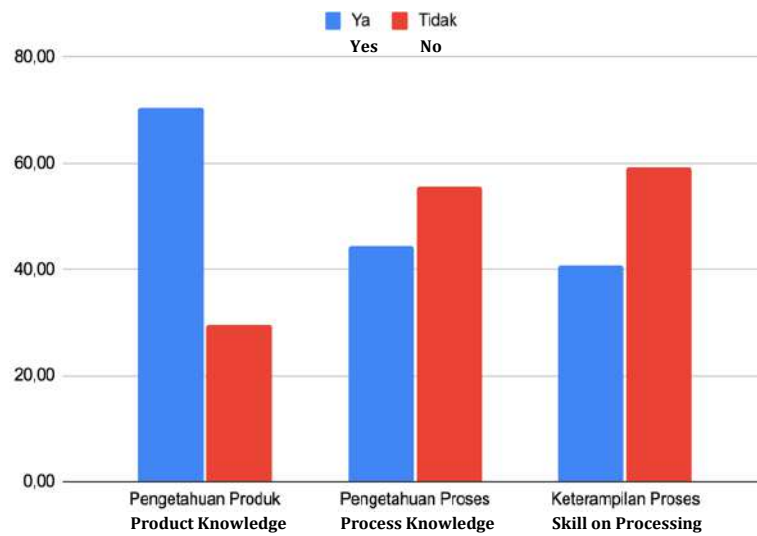


Figure 5. Participants' Prior Knowledge and Skills

After participating in this education and training, the community became aware and understood the process of making fish into nuggets and chicken legs. Based on the observations, there was an increase in the knowledge and skills of the community in making the product (Table 2).

Table 2. Changes in Community Knowledge and Skills After Training

Activity	Before Training (%)	After Training (%)
Knowledge in making fish processed was still low	44.44	74.07
Skills in making fish processed were still low	40.74	74.07

The training provided to the community can increase individuals' knowledge and skills. This increase was also seen in similar activities given to the community in Kalurahan Pengkok, Patuk District, Gunung Kidul Yogyakarta in the form of training on processed cassava, plantain, and ginger (Rahmadewi & Wahyuningsih, 2020) (Lukviana, et al., 2023) (Daima, et al., 2022). In addition to lemuru fish, to support the reduction of stunting rates, there is an addition of vegetables as ingredients in making nuggets and dragon legs. The next step, the fulfillment of nutrition from vegetables can be done through the vegetable garden movement which has been developed in Dusun Gumulan, Caturharjo Village, Pandak District, Bantul Regency and the SKM Vegetable House Group (Suka Karya Makmur), Somongari Village, and other processed products such as chips and sauces (Ayuningtyas et.al., 2021) (Utami et.al., 2022).

Additionally, this making process will produce by-products, one of which is lemuru fish skin. Fish skin can be processed into food products such as fish skin chips, as done in one region in Aceh (Handayani et al., 2022). Furthermore, these community service activities can contribute to supporting the achievement of the goals set forth in the Sustainable Development Goals (SDGs) No. 12, ensuring sustainable production and consumption patterns.

CONCLUSION

The community's knowledge and skills in making processed lemuru fish have increased. The target community is able to make dragon legs and nuggets from lemuru fish. Residents have knowledge of making processed fish food that has increased by 29.6%, and residents have skills in making processed fish food that have increased by 33.3%.

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Enhancing English and accounting skills through a VOCABING-based technology program for MSMEs in Kediri

Angga Prasongko ^{a,1,*}, Eni Srihastuti ^{b,2}

^a Faculty of Teacher Training and Education, Universitas Islam Kediri, Jl. Sersan Suharmaji No.38, Kediri, East Java 64128 Indonesia

^b Faculty of Economic, Universitas Islam Kediri, Jl. Sersan Suharmaji No.38, Kediri, East Java 64128 Indonesia

¹ prasongkoangga@uniska-kediri.ac.id; ² enisrihastuti@uniska-kediri.ac.id

*Corresponding author

ARTICLE INFO	ABSTRACT
<p>Article history Received: 2023-10-02 Revised: 2024-02-06 Accepted: 2024-05-24 Published: 2024-06-05</p> <p>Keywords Accounting technology Economic empowerment Integrated training Vocabulary building</p>	<p>Digital economic transformation which is the impact of technological development changes the perspective of Indonesian on economic behavior. The use of technology in economics activity is increasing nowadays. It impacts on the development of the economic sectors. Macro, Small and Medium Enterprises (MSME) one of the business roles in Indonesia have to do some innovation for its existing in today's trading world. The strategy that can be implemented for facing that case is by adapting the technology use and enhancing the quality of human resources through increasing competence and skills. Considering that the performance of an organization is determined by the human resources it has. Community service program through Integrated Training; Vocabulary Building & Accounting (VOCABING)-Based Technology needs to be held for MSMEs in Kediri. These activities include training in English and the Use of Accounting Technology for improving MSMEs skill. It is based on vocabulary mastery which influence the ability to understand the complex information and instructions. The activity held two days series through four steps; planning, implementation, evaluations, and reporting. For proving the training's goals, it used tests and assessment. The results showed that there was an increase of 12.5% in the final English test score and participants completed the work instruction assessment correctly.</p>
<p>Kata Kunci Membangun kosakata Pelatihan terpadu Pemberdayaan ekonomi Teknologi akuntansi</p>	<p>Meningkatkan kemampuan bahasa Inggris dan akuntansi melalui program teknologi berbasis vocabing untuk UMKM di Kediri. Transformasi ekonomi digital yang merupakan dampak perkembangan teknologi mengubah cara pandang masyarakat Indonesia terhadap perilaku perekonomian. Aktivitas ekonomi berbasis teknologi semakin meningkat kapasitasnya dewasa ini, sehingga berdampak pada perkembangan sektor perekonomian. Usaha Makro, Kecil dan Menengah (UMKM) salah satu pemeran bisnis diharuskan melakukan inovasi supaya tetap bisa eksis di dunia perdagangan. Strategi yang dapat diterapkan adalah dengan melakukan adaptasi penggunaan teknologi dan meningkatkan kualitas sumber daya manusia melalui peningkatan kompetensi dan keterampilan. Mengingat kinerja suatu organisasi ditentukan oleh sumber daya manusia yang dimilikinya. Program pengabdian kepada masyarakat melalui Pelatihan Terpadu; Vocabulary Building & Accounting (VOCABING) Berbasis Teknologi perlu diadakan bagi UMKM di Kediri. Kegiatan tersebut meliputi pelatihan Bahasa Inggris dan Pemanfaatan Teknologi Akuntansi untuk meningkatkan keterampilan UMKM. Hal ini didasarkan pada kebutuhan penguasaan kosakata yang mempengaruhi kemampuan memahami informasi dan instruksi yang kompleks. Kegiatan pengabdian ini dilaksanakan dua hari berturut-turut melalui empat tahap berupa; perencanaan, pelaksanaan, evaluasi, dan pelaporan. Untuk mengukur keberhasilan pelatihan digunakan tes dan form penilaian instruksi. Hasil pelatihan menunjukkan terdapat peningkatan nilai tes akhir bahasa Inggris sebesar 12,5% dan peserta mampu menyelesaikan penilaian instruksi kerja dengan tepat</p>

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INTRODUCTION

Information technology is now evolving exceptionally fast. This is indicated by a paradigm change in human existence focusing on automation and collaboration in technology. Due to this development, known as digitalization, information and communication technology (ICT) is now widely used in every sector of society. The economics is one of the sectors

that is impacted by technological development. People are currently taking on technology as a tool for financial transactions, and this phenomenon, known as the digital transformation (Kraus et al., 2021; Premana et al., 2020; Schwertner, 2017). The economic revolution towards digitization in Indonesia has also provided a number of advantages for businesses that can survive and develop its self (Fitari & Hartati, 2022; Rahayu et al., 2023; Ravindra Putra et al., 2022). On the other hand, the study's findings show that the growth of Indonesia's digital economy is adequate to effect Indonesia's Gross Domestic Product (GDP); increase productivity, increase production, consumption and distribution; economic growth in various sectors (Aprilia et al., 2021; Azhar & Nawawi, 2022; Natsir, 2021; Nurul Badriyah et al., 2023; A. A. Putri & Nurhuda, 2023; Utami & Maulana Baihaqi, 2020).

A key milestone in enhancing the Indonesian economy is the expansion of Micro, Small, and Medium-Sized Enterprises (MSMEs). According to data provided by the Ministry of Cooperatives and Small and Medium Enterprises (KEMENKOP UKM) in 2022, 8.71 million MSMEs are expected to exist in Indonesia (A. M. H. Putri, 2023). According to data provided by the Ministry of Finance of the Republic of Indonesia, MSMEs contributed more than 90% of all business activity globally and accounted for more than half of all jobs. Due to the large number of MSMEs and its high employment capability, Indonesia has the potential for a strong national economic basis (Hidayat et al., 2022; Nainggolan, 2020; Vinatra et al., 2023).

As business companies in the era of the digital economy, MSMEs see this as an opportunity for the business they are involved in. Mastering technology is essential for those in the MSME sector since a company's ability to adapt to technological advances is one of its determining elements. In spite of how straightforward it is to create an online-based MSME company, as higher-quality human resources are needed, which calls for more competitiveness in this sector. The human resources an organization has influence the extent to which it functions. The quality of human resources has a significant impact on the achievement of organizational objectives and operations. Human resources determine organizational success (Apriliana & Nawangsari, 2021; Badawi et al., n.d.; Kakilo et al., 2022).

In Dawuhan Kidul Village, Papar District, Kediri Regency, Dian Coklat, one of the MSMEs in the food product processing industry, is yet to have adopted the chance of using information technology to manage her business. Due to inadequate skill with technology-based accounting software and a poor understanding of the English language in existing apps, financial management is now just simple bookkeeping. This company survived for more than 15 years because to basic administration and experience-based business management.

Based on these problems, a community service program was implemented in the form of Integrated Training; vocabulary building & accounting- (VOCABING)-based technology for UD Dian Cokelat employees as MSMEs. This activity implemented aims for developing technologically advanced MSMEs, it is expected that this activity will increase the quality of human resources by supporting them to master basic accounting English vocabulary for use in in terms of technology-based accounting applications.

METHOD

Community Service Activities with the Integrated Training concept were carried out for 40 members of UD. Dian Coklat employees. It is An MSME food product processing industry located in Dawuhan Kidul, Kediri, East Java. The participants that contribute in this activity are production, warehouse, and administrative employees. Integrated training activities an integrated training program aimed at enhancing English and accounting skills related to technology which are carried out sequentially. The instrument used in this activity is a vocabulary paper test which consists of a pre-test and post-test with the aim of measuring the success of the training carried out, apart from that, to measure the success of accounting skills for the treatment given, assessment work instruction using Ms Excel is used.

The method used in this activity are Planning, implementation, evaluation, and reporting are the four initial stages in the process and technique for carrying out the objectives of this Integrated Training; vocabulary building & accounting- (VOCABING)-based technology for UD Dian Cokelat employees. The following flow diagram at Figure 1 shows the steps of community service activity.

According to the flowchart above, the following procedure is used to implement community service activities:

Planning

The first step is doing a survey. The team discussed and coordinated the issues faced by MSME Dian Cokelat in order to identify the best type of service activities and teaching method that could assist with solving the issues. The timing of events and field introduction are also decided at this stage.

Implementation

Based on the results from the field investigations, a service activity model was developed for MSME Dian Coklat employees requiring integrated training to increase English proficiency and training in the use of technology-based accounting tools. VOCABING based technology is an integrated training program aimed at enhancing English and accounting skills related to technology. Service activities were carried out over the course of two days series.

The first day began with a vocabulary pre-test to assess the level of vocabulary mastery owned by MSME Dian Coklat employees. After that, training sessions aimed to improve vocabulary mastery using presentation and drilling techniques were conducted. Following that, the project continued on to defining fundamental accounting skills mastering by the

employees, then providing training materials for using technology-based accounting programs, especially for warehouse and administrative staff.

On the second day, series of training sessions were conducted in the form of word games with the intention of enhancing the employees' English vocabulary. Microsoft Excel training was also offered on the same day as an accounting-related technology training exercise. Due of its comprehensive capabilities and compliance with office requirements, the team selected Microsoft Excel as a learning tool. Owner Dian Coklat also used Ms Excell to record cash flow, products flow, sales plan recaps, and purchase and sales notes is the basis for this usage. Training is intense and focused on using basic skills to provide operational assistance. An assessment survey and a post-activity vocabulary test were handed out to conclude the session. The goal of the test and survey findings is to find out how much employee vocabulary has improved and how respondents feel about the implementation of service activities.

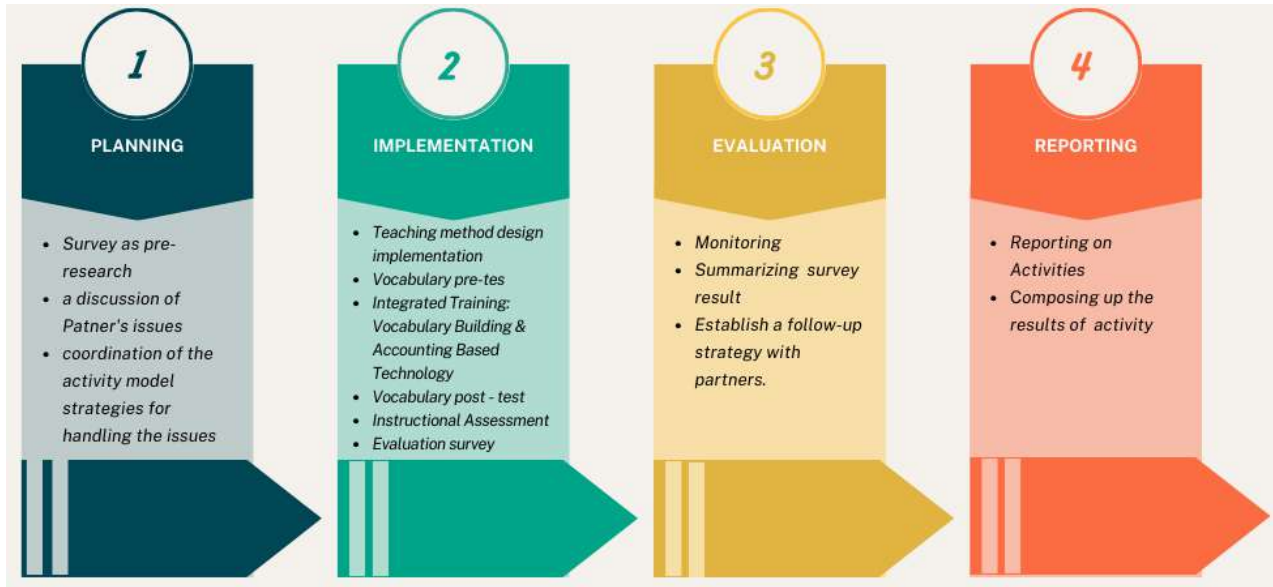


Figure 1. An illustration steps of the community service project

Evaluation

The aims of community service activities are intended to be evaluated in order to determine their success. Monitoring partner feedback on the impact of vocabulary development and Accounting-Based Technology activities is one of the activities. The summary of survey findings serves as an indicator of how successfully community service are accomplishing its objectives.

Reporting

The findings indicating benefits are presented to the community and used as a guide for similar activities by compiling all information about service activities into a written document including a summary and comprehensive outcome of the activity.

RESULTS AND DISCUSSION

A multiple-choice exam was distributed to MSME Dian Coklat employees to measure their English vocabulary. 40 training participants took the vocabulary exam, and the findings revealed 4 value classes which defined the groups of Dian Coklat MSME employees as it relates to their English language proficiency. There are four groupings: excellent, good, fair, and poor. Grades are determined by how many multiple-choice questions regarding common, daily vocabulary and the subject of economics are answered correctly. As shown in the table 1 below, each categorization indicates the number of test results in each group.

Table 1. pre-test results

No	Classification	Range Score	Frequency	Percentage
1	Excellent	86 - 100	5	13%
2	Good	71 - 85	12	30%
3	Fair	56 - 70	15	38%
4	Poor	≤ 55	8	20%
Total			40	100%

Based on Table 1, it is known that 38% of all employees have fair or above-average level of vocabulary mastery. There are 15 employees in total, which indicates that there is a need for improving in the form of language mastering abilities. After carrying out Vocabulary Building activities with presentation models, drilling and games, the test results were obtained as in the table 2.

Table 2. post-test results

No	Classification	Range Score	Frequency	Percentage
1	Excellent	86 - 100	10	25%
2	Good	71 - 85	17	43%
3	Fair	56 - 70	9	23%
4	Poor	≤ 55	4	10%
Total			40	100%

Table 2 shows that the excellent category, with 43% of the total classifications, most accurately describes the employees' mastery of the English language. It may be concluded based on the pre-test findings in table 1 that the value of employees' language mastering skills has increased. so that workers' English abilities might be improved through vocabulary building exercises done during community service. This is based on test results that the employees test scores have improvements in every value group categorization, as shown in the figures below.

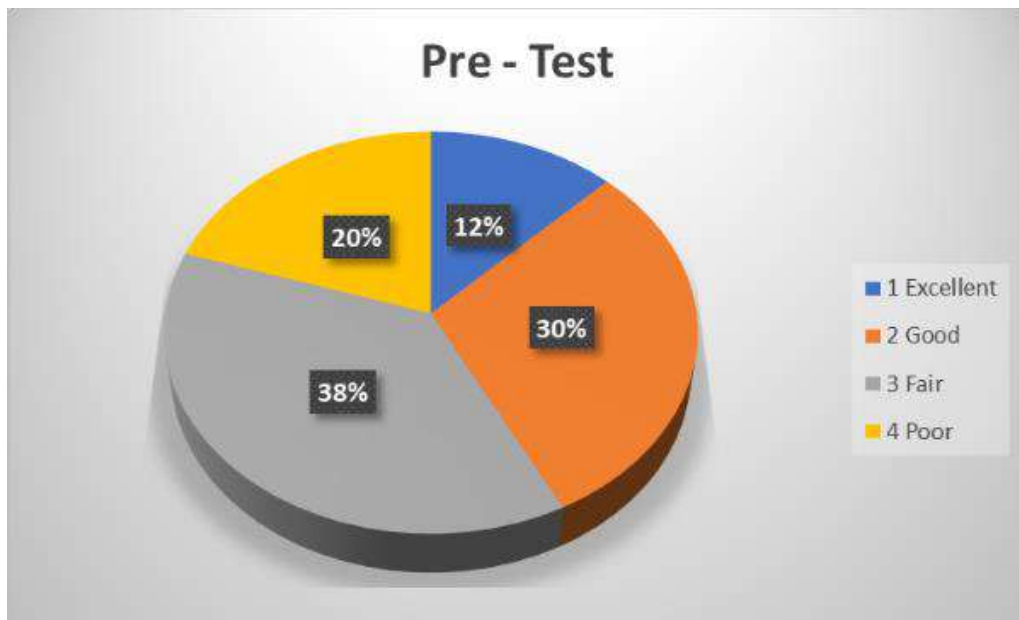


Figure 2. Pre-test results

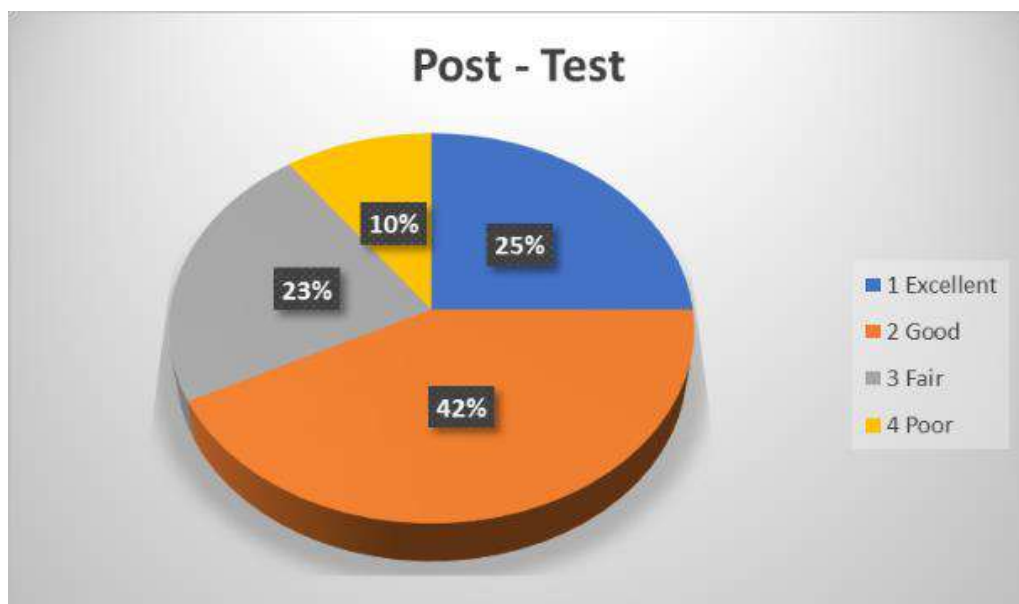


Figure 3. Post-test results

The findings revealed a change in post-test scores for the classification group of excellent 12%, good 13%, fair 15%, and 10% in that order. From figures 2 and 3 it can be concluded that the increase in the average value for each classification is 12.5 %. It shows that by the training can increasing the employees' personal vocabularies. An English language improvement training model using a similar method has also been successfully implemented (Amri et al., 2020; Andy & Muzammil, 2018; Azir, 2021). This result also inline by the research held that by Increasing a person's vocabulary is essential for improving comprehension since it enhances competence and self-assurance as well as communication efficiency (Kurniawati & Karsana, 2020).

The ability to understand vocabulary in vocabulary building activities before will influence technology-based accounting activities. It is carried out by training the employees at the office administration and warehouse staff how to operate Microsoft Excel. The outcomes of the planning step indicate that the staff does not have the skills needed to use the Microsoft Excel software. This provides a basis for implementing thorough instruction for using Microsoft Excel for office administration tasks. Training exercises were well conducted. The effectiveness of the activity is evaluated via assessing the practical outcomes of the participants in completing assessment questions in the form of work instructions in the format of skills in creating purchase and sales notes, product flow records, and breakdowns of sales schedules. Participants in the training activity seemed to be paying close attention to the material that was presented and engaging in lively discussions. In the final stage of the activity the participants have to full fill the evaluation survey. According to the findings of the evaluation survey conducted at the conclusion of the program, this service activity was highly beneficial, entertaining, and needed in everyday activities, particularly in the workplace. Additionally, they expect that in the future, similar actions will be taken. This result is in line by the study's findings held by (Farina & Opti, 2023; Fujianti, Wulandjani, & Susilawati, 2019; Fujianti, Wulandjani, Susilawati, et al., 2019; Husna, Lidya Rikayana, et al., 2020; Wahyuningsih, 2019), it shows that training positively and significantly affects employees' productivity, which means that implementing of training will increase their productivity (Farina & Opti, 2023; Husna, Rikayana, et al., 2020).

CONCLUSION

The community program was successfully conducted. The integrated training of Vocabulary building and accounting-based technology are able to increase English language skills and accounting technology skill for Dian Coklat MSME employees based on the outcomes of community service activities. Based on vocabulary test, it finds that each value categorization has seen an average rise of 12.5%. The training result prove that employees can correctly complete work instruction assessments using Microsoft Excel, it is also indicators of accomplished activity objectives. According to the findings of the service team's review of the upcoming community service projects, the time for activity allocation should be increased and more digital accounting resources should be made available for further reference as needed. Furthermore, the collaboration does not stop at this step. A follow up of this program is being prepared. As briefly mentioned in the observation step, need analysis has ben accepted . Both the community service team and owner of UD Dian Coklat Kediri agreed to continue the collaboration to solve another problem related.

ACKNOWLEDGEMENT

The research was conducted with funding from the Universitas Islam Kadiri – Kediri's research and community service institution (LPPM). A grant program established annually to encourage greater collaboration between researchers and the community serves as the funding mechanism. We appreciate the support and collaboration from our partners and all of those that made this activity happen. It is hoped that the findings of this study could assist society in finding a solution for its issues and serve as a basis for future policy decisions.

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Increasing teacher professionalism through learning innovative, creative and effective at Aisyiyah Boarding School Malang

Thatthit Manon Andini ^{a,1,*}, Aini Alifatin ^{b,2}, Dini Kurniawati ^{c,3}, Retno Firdiyanti ^{d,4}, Nur Hayatin ^{e,5}

^a English Language Education Department, Faculty of Teacher Training and Education, Universitas Muhammadiyah Malang, Jl. Raya Tlogomas No. 246 Malang, East Java 65144, Indonesia

^b Nursing Science Study Program, Faculty of Health Sciences, Universitas Muhammadiyah Malang, Jl. Bendungan Sutami No.188, Malang, East Java 65145, Indonesia


^c Department of Mechanical Engineering, Faculty of Engineering, Universitas Muhammadiyah Malang, Jl. Raya Tlogomas No. 246 Malang, East Java 65144, Indonesia

^d Psychology Department, Faculty of Psychology, Universitas Muhammadiyah Malang, Jl. Raya Tlogomas No. 246 Malang, East Java 65144, Indonesia

^e Department of Informatics Engineering, Faculty of Engineering, Universitas Muhammadiyah Malang, Jl. Raya Tlogomas No. 246 Malang, East Java 65144, Indonesia

¹ thatthit@umm.ac.id*; ² alifatin@umm.ac.id; ³ dini@umm.ac.id; ⁴ retnofirdiyanti@umm.ac.id; ⁵ noorhayatin@umm.ac.id

*Corresponding author

ARTICLE INFO	ABSTRACT
<p>Article history Received: 2024-05-16 Revised: 2024-06-12 Accepted: 2024-06-14 Published: 2024-06-16</p> <p>Keywords Education Increasing professionalism Teacher competency</p>	<p>Law No. 14 of 2005 concerning Teachers and Lecturers article 10 mandates that every teacher is required to meet the academic qualifications and teacher competencies that apply nationally, so that coaching to increase teacher competency needs to always receive more attention in its development. This service aims to increase teacher professionalism through innovative, creative and effective learning. This service was carried out at SMA Aisyiyah Boarding School Malang (SMA ABSM) in October 2022. The activity was attended by 13 teachers from various subjects. The methods used are two-way communication methods, lectures and training. This activity provides an explanation to teachers about strengthening teacher competency to become quality teachers and outstanding performance. This activity trains teachers in terms of pedagogical, professional, social and personal skills, and also equips teachers on how to be interesting when teaching and liked by their students, thereby creating innovative, creative and effective learning. This community service only reaches the stage of delivering material, and not yet at the stage of evaluating and assisting teachers in daily practice. Therefore, in the future it is hoped that there will be community service activities that focus on assisting teachers' daily practices, teaching practice, and reflecting together.</p>
<p>Kata Kunci Kompetensi Guru Pendidikan Peningkatan profesionalisme</p>	<p>Peningkatan profesionalisme guru melalui pembelajaran inovatif, kreatif, dan efektif di SMA Aisyiyah Boarding School Malang. Undang-undang No.14 tahun 2005 tentang Guru dan Dosen pasal 10 mengamanahkan bahwa setiap guru wajib memenuhi kualifikasi akademik dan kompetensi guru yang berlaku secara nasional, sehingga pembinaan peningkatan kompetensi guru perlu selalu mendapat perhatian lebih dalam pengembangannya. Pengabdian ini bertujuan meningkatkan profesionalisme guru melalui pembelajaran inovatif, kreatif, dan efektif. Pengabdian ini dilaksanakan di SMA Aisyiyah Boarding School Malang (SMA ABSM) pada bulan Oktober 2022. Kegiatan diikuti 13 guru dari berbagai mata pelajaran. Metode yang digunakan berupa metode komunikasi dua arah, ceramah dan Training. Kegiatan ini memberikan penjelasan ke para guru tentang penguatan kompetensi guru untuk menjadi guru yang berkualitas dan berperforma yang membanggakan. Kegiatan ini melatih guru dalam hal kemampuan pedagogik, profesional, sosial dan personal, dan juga membekali guru bagaimana bisa menarik ketika mengajar dan disenangi siswanya, sehingga tercipta pembelajaran yang inovatif, kreatif dan efektif. Pengabdian kepada masyarakat ini hanya sampai pada tahap penyampaian materi, dan belum pada tahap evaluasi serta pendampingan guru dalam praktik sehari-hari. Oleh karena itu, ke depannya diharapkan ada kegiatan pengabdian kepada masyarakat yang fokus pada pendampingan praktik keseharian guru, praktik mengajar, dan melakukan refleksi bersama-sama.</p> <p style="text-align: right;">Copyright © 2024, Andini et al This is an open access article under the CC-BY-SA license</p> <div style="text-align: right;">  </div>

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INTRODUCTION

Teachers as educators must pay attention to many things in carrying out their duties. Some of these things include increasing pedagogical competence, personality competence, social competence and professional competence. Pedagogical competency is a teacher's ability related to understanding students and managing learning from planning, implementing to evaluating. Personality competency is a personality that reflects a stable, stable, mature, wise and authoritative personality that is a role model for students and has noble character (Akuba & Alam, 2022; Erwin et al., 2023; Hakim, 2015). Social competence concerns the ability of educators as part of society to communicate and interact effectively with students, fellow educators, education staff, parents of students, and the surrounding community (Rusijono et al., 2020; Wijaya et al., 2023). Professional competence is an ability related to broad and in-depth mastery of learning material which includes mastery of the substance of the learning material, and the scientific substance that covers the material in the curriculum, as well as increasing scientific insight. If a teacher has these four competencies, he can be declared a professional person (Jabri, 2017; Wahid et al., 2023).

One of the manifestations of teacher professionalism is by always implementing innovative, creative and effective learning. Professional teachers must always strive to look for and apply new and different models, approaches, methods and learning techniques so that the learning process is not monotonous and arouses students' interest in learning (Hidayati, 2023; Simanullang & Panjaitan, 2022; Widiyanti et al., 2023). Professional teachers must also be able to develop creativity in designing and delivering teaching materials, as well as ensuring that the learning process they carry out is truly effective in facilitating students to achieve optimal learning outcomes. The application of innovative, creative and effective learning will improve the quality of learning and ensure optimal achievement of learning objectives, which is a manifestation of teacher professionalism in carrying out their duties and responsibilities in the classroom (Djalali et al., 2022; Hidayat et al., 2023; Saleh et al., 2017).

Muhammadiyah/Aisyiyah schools must also have teacher professionalism. Driven by this hope, this service was carried out at SMA Aisyiyah Boarding School Malang (SMA ABSM). ABSM High School was founded in July 2017, supported by 21 teaching and educational staff (17 teachers and 4 staff). The implementation of ABSM High School departs from the school's vision, namely "To become a superior and high-quality Islamic female cadre educational institution based on the Al-Qur'an and As-Sunnah".

From the initial survey obtained by the community service team, teachers need to improve the way they appear attractive in front of female students, both in the way they teach and their appearance. Because the students are women, they tend to imitate teachers as models to imitate in their words, appearance and speech acts. That is the basic nature of young people. Students will make their teacher a figure who is admired and respected. Teachers are real models in everyday life. Thus, teachers must always perform as professional teachers. Based on this reason, as a new school, ABSM High School needs to receive good assistance to improve teacher competency. This service aims to increase teacher professionalism through innovative, creative and effective learning. This community service activity contributes to helping teachers at ABSM High School comply with the mandate of Law No. 14 of 2005 concerning Teachers and Lecturers article 10 that every teacher is required to meet the academic qualifications and teacher competencies that apply nationally, so as to foster increased competency. Teachers need to always receive more attention in their development.

Teacher professionalism is closely related to achieving the Sustainable Development Goals/SDGs in the field of education. Goal 4 focuses on "Ensuring inclusive and equitable education and promoting lifelong learning opportunities for all". Professional teachers, who always carry out innovative, creative and effective learning, will be able to create a conducive learning environment and encourage active participation of students, regardless of their background. Professional teachers will also continue to develop their competencies in order to provide quality education that can be accessed by all levels of society (Baba, 2018; Kavitha et al., 2024; Saini et al., 2023; Tolstikova et al., 2021).

METHOD

This community service is carried out at ABSM High School which is located at Jln. Anjasmoro 34 Turirejo-Lawang-Malang, East Java. The activity was attended by 13 teachers from various subjects. This community service will be carried out in October 2022. The physical school building (front view) is as presented in Figure 1. The method used to deal with partners is by implementing two-way communication methods, lectures, training and mentoring. The communication method used is two-way, from the service program team to partners and vice versa. The two-way communication method is intended to be able to explore partner problems more objectively, in-depth, effectively and efficiently. This pattern is expected to provide appropriate solutions to the problems faced by partners. Two-way communication is carried out when exploring partner problems, proposing solutions to partner problems, preparing for outreach and training activities, as well as during evaluation. The lecture method is intended to convey information for general and theoretical material. In this case the lecture method is used to carry out material delivery activities. This training activity apart from equipping partners with understanding and skills is conveyed verbally and practically. The hope is that through the activities that have been developed, partners can obtain information related to teaching and caring for teenagers.



Figure 1. ABSM High School building

RESULTS AND DISCUSSION

Preparation

In realizing this service program, there are several things that are prepared, namely preparation and implementation. Before implementing the program, after there is an announcement that the proposal has been accepted, the team immediately coordinates internally and externally regarding the implementation of activities and suitability of schedules with service partners. This is presented in detail in Table 1.

Table 1. Preparation and activity planning

Execution time	Activity plan	Activity Output	Partner Participation
October 2022	Re-examining the possibility of service at ABSM High School	Agreement on service at ABSM High School	<ul style="list-style-type: none"> - Willing to provide an event venue - Responsible for coordinating the teachers
October 2022	Finalize activities by visiting ABSM High School	Agreement on service by designing a letter of willingness	<ul style="list-style-type: none"> - The principal is willing and responsible for the participation of the Teachers
October 2022	Conduct Training	Agreement to hold training	<ul style="list-style-type: none"> - The training participants are all teachers of various subjects
October 2022	Implementation of Training	Increase teachers' knowledge about the four teacher competencies and become teachers who are attractive and liked by female students.	<ul style="list-style-type: none"> - The school provides a place - The school prepares the backdrop and facilities. - The activity was attended by 13 teachers from various subjects.

Implementation

Teacher competency improvement training was carried out using activity techniques divided into 2 sessions with presenters Dra. Thathit Manon Andini, M. Hum. and Retno Firdiyanti, S.Psi., M.Psi.

Material 1: Professional Teacher-Educator

Documentation of this activity is presented in Figure 2. In this session, "What is meant by a teacher?" Teachers are

professional educators with the main task of educating, teaching, guiding, directing, training, assessing and evaluating participants. With the right upbringing, a generation that is smart, polite, tough and strong will be created. Preparing a strong and resilient generation is clearly stated in the Al-Qur'an Surah An-Nisa. One of the words of Allah SWT, requires every ummah not to leave behind them a generation that is weak, helpless and has no competitiveness in the competence of life.



Figure 2. Delivery of Material 1: Professional Teacher-Educator

In carrying out their duties and obligations, there are principles that must be followed to become a professional teacher, namely (1) Having talent, interests, a calling and idealism. With the talents and interests they have, teachers will carry out their duties and obligations happily; (2) Have a commitment to improving the quality of education, faith, devotion and noble morals. With a strong commitment, teachers will not tire of being positive; (3) Have academic qualifications and educational background in accordance with the field of assignment. In this way, teachers will continue to try to improve themselves, increase their abilities, especially those related to their academic fields, (4) Have the necessary competencies according to their field of assignment; and (5) Has responsibility for carrying out professional duties. With high responsibility, teachers will complete their duties and obligations completely because these tasks are their responsibility (Hidayah et al., 2022; S. M. Sari, 2023; Wahidah, 2021; et al., 2023).

The principles above will make teachers more successful because their work is carried out sincerely according to their talents, they are highly committed, they are not tired of pursuing their academic qualifications, they have competencies appropriate to their field and they are followed by a great sense of responsibility. There are several tips that teachers can pay attention to to achieve success, namely: (1) Be confident. The process of becoming a professional teacher begins with a steady attitude, namely confidence, belief in the teaching profession is the key to success. Believe that there is wisdom behind this profession. There are hidden things, there is a beautiful world, there are burning ideals, there is a promising future, and there are definite promises from Allah SWT (Barni et al., 2019; Jamilus, 2022; Pratiwi et al., 2022; Wright, 2018); (2) Don't hesitate. Don't doubt that the teaching profession is important. If a firefighter or doctor can help save someone's life, then teachers can build a country. Don't use the word "only" to refer to the teaching profession. If you don't respect the teaching profession, who else will? (Amerstorfer & Freiin von Münster-Kistner, 2021; Barni et al., 2019; Mombaers et al., 2023; Suryani & George, 2021); (3) Be grateful. Be grateful and enjoy the profession of being a teacher. This attitude is a great source of energy to carry out your profession (Räsänen et al., 2020; Timms & Brough, 2013).

In order to facilitate his duties as a teacher and also as an educator, there are 4 competencies that teachers must have. In accordance with the provisions of article 10 paragraph 1 of Law no. 14 of 2005 concerning Teachers and Lecturers and Government Regulation No. 19 of 2006 concerning National Education Standards Article 28 paragraph 3, the competencies that teachers must have are: 1). Pedagogical Competence, 2). Personality, 3). Professional, and 4) Social

Competence.

Mastery of pedagogical competencies includes 1) Mastering the characteristics of students from physical, moral, spiritual, social, cultural, emotional and intellectual aspects, 2) Mastering learning theories and principles of educational learning, 3) Developing curricula related to the subjects concerned. become their focus, 4) Organizing educational learning, 5) Carrying out assessment and evaluation of learning processes and results, 6) Utilizing the results of assessment and evaluation for learning purposes, 7) Carrying out reflective actions to improve the quality of learning.

Personality competencies include 1) Acting in accordance with Indonesian religious, legal, social and national cultural norms, 2) Presenting oneself as a person who is honest, has noble character, and an example for students and society, 3) Presenting oneself as a steady, stable person, mature, wise and authoritative, 4) Demonstrate work ethic, high responsibility, pride in being a teacher, and self-confidence, and 5) Uphold the teacher's professional code of ethics.

Social Competencies include 1) Being inclusive, acting objectively, not discriminating due to considerations of gender, religion, race, physical condition, family background and socio-economic status, 2) Communicating effectively, empathetically and politely with fellow educators, education staff, parents, and the community, 3) Adapt in places of duty in all regions of Indonesia which have socio-cultural diversity, 4) Communicate with your own professional community and other professions verbally and in writing or other forms.

Professional Competencies include 1) Mastering the material, structure, concepts and scientific mindset that supports the subjects being taught, 2) Mastering Competency Standards/Core Competencies and Basic Competencies in the subjects being taught, 3) Developing learning materials being taught creatively, 4) Developing professionalism continuously by taking reflective action, 5) Utilizing information and communication technology to develop oneself.

Material 2: What kind of teacher is interesting and liked by students?

Documentation of this activity is presented in Figure 3. This material is presented by explaining about teenagers. Adolescence is a crucial transition phase, which contains a person's adaptation phase from childhood to adulthood. So when you see teenagers, it would be inappropriate to treat them like children, but they are not yet fully capable of carrying out adult developmental tasks. Adolescence is a separate phase in which there are separate developmental tasks such as; Puberty is in harmony with the maturity of reproductive organs, socio-emotional maturity with family and peers, developing ideal self and so on.



Figure 3. Delivery of Material 1: Professional Teacher-Educator

Teenagers' problems arise when they undergo the adaptation phase. Complaints regarding teenage behavior that is less than expected in the social environment usually come from parents of teenagers and teachers in middle and high schools and the equivalent (Ogundele, 2018a, 2018b). Including from ABSM High School which seeks to improve the quality of teachers in providing the best service in the teaching and learning process for teenage students. Some of the complaints submitted include; Teachers have difficulty motivating teenage students to be enthusiastic or passionate about learning, teachers also hope that students will have the initiative and independence to develop themselves into adulthood without having to be told continuously or always directed and teachers have the desire to make interactions with teenage students more friendly and fun. remain professional so that the teacher is not just a rigid figure, but can mingle with teenage students for the purpose of supporting their developmental tasks as well as making the teaching and learning process fun and exciting. ABSM High School teachers have the desire to become idolized or favorite teachers for their teenage students.

Based on these problems, community service team has prepared psychoeducational activities containing material related to professional grooming, creating a productive classroom climate and studying the character of attractive teachers. The first material, namely professional grooming, contains teacher knowledge regarding how to look attractive to students based on physical and psychological aspects. Physically, teachers are given awareness of their physical appearance, namely how to dress neatly and pleasing to the eye, as well as applying make-up that suits the teacher's figure. Teachers are involved in determining how to look better and more pleasing to the eye as well as a fresh facial appearance that is pleasing to the students' eyes. So this material does not seem patronizing or personally judgmental about the teacher's appearance but is given indirectly so that the teacher can decide for himself which one is better regarding the physical appearance of a good teacher (Rajendran et al., 2024; Turner-Bisset, 2005).

Furthermore, psychologically the teacher is given tips on speaking so that what is conveyed is relevant to teenage students. These tips are material related to sensing consisting of visual, auditory, kinesthetic, tactile, tactile and proprioceptive. If visuals have been provided through material in clothing and facial appearance, then what is related to the psychology of teenage students in listening to teachers is mainly related to auditory, kinesthetic and proprioceptive. This means that when the teacher speaks, they should pay attention to intonation, the volume of their voice, pause, play their speaking tempo and give a certain tone, these are some tips that teachers can pay attention to when conveying material and information (Astri, 2018; Fitria, 2023; Gori, 2015). Through the kinesthetic sense, teachers can pay attention to body language or gestures, of course open body language, for example with open arms compared to folded in front of the chest, will produce a warmer impression for students; and also facial expressions that can be seen from the drawing of the lines of the mouth, eyes, forehead or eyebrows, which are the most effective to use, can give the impression of facial expressions that match what the teacher is conveying. In the proprioceptive sense, teachers are invited to pay attention to mastering the classroom location as a stage for speaking. Teachers should be able to take several classroom spots when explaining the lesson so that it is not monotonous in just one corner. Apart from that, this sense is also related to the teacher's ability to pay attention to the movements or positions of teenage students which may give certain messages such as restlessness, boredom and so on, so that they can then be more precise in determining appropriate activities (Rosmala & Setyaningsih, 2021; Sajjad et al., 2023).

Meanwhile, tactile and tactile senses can also be utilized, although their influence may be lower than other senses. Teachers can utilize students' ability to feel and touch for relaxation exercises which can be carried out at certain times when students experience stress, such as when facing an exam. Apart from that, teachers can also utilize the abilities of these two senses in the teaching and learning process.

The second material is related to creating a productive classroom climate in the teaching and learning process. Teachers are given knowledge on how to create conditions in the classroom that can foster student motivation. Teachers are told that there are two important elements in creating this climate, namely the element of the teacher's role having character and the element of students having good self-regulation. A teacher with character is determined by how the teacher shows personal efficacy, models and teacher enthusiasm, shows attention to students, and explains positive expectations to teenage students (Adolo et al., 2022; Ayu, 2017; Marwanto, 2021; N. I. P. Sari, 2020).

Teachers' personal efficacy is reflected in their confidence or self-confidence in their role as teachers even though some teachers are still relatively young. How the teacher shows confidence in mastering the material being taught, how the teacher shows confidence that he is able to deal with teenage students including complaints that may arise in the course of their journey and so on. Teacher modeling and enthusiasm will be visible when the teacher is able to "involve me" when presenting the topic (Barone & Bresler, 2000; Handrianto et al., 2021; Li, 2023). For example, a situation when students are not bored or less enthusiastic about studying history subjects, the teacher can involve himself according to what the students feel by saying "I know history is boring, but we have to keep studying history, we can get through it together, ok?". That way, students will feel more cared for and understood regarding their condition, thereby forming engagement between teachers and students.

Teachers with character also have the characteristic of being able to show their attention to students through how the teacher shows empathy for students' needs, as well as how the teacher can show that teachers and students can belong to each other or be friends with each other. And finally, the characteristics of a teacher with character are characterized by the teacher being able to communicate well regarding positive expectations or hopes for teenage

students as achievements that can be mutually agreed upon. Teachers can also give every student the fairest possible opportunity to have an opinion or something else. Meanwhile, the second element lies in the students themselves, namely the importance of students having good self-regulation in learning (Aldrup et al., 2022; Sun et al., 2023; Zhang, 2022). Characteristics of teenage students who have good self-regulation include having learning goals and being able to monitor their learning goals at several specified steps; carry out metacognition of what they are experiencing when learning something, for example reflecting on the material they learn from the teacher; as well as having a good learning strategy which is reflected in how students organize and control their study schedule, planning and executing according to the plan, assignment schedule and so on. This element of self-regulation in students is influenced by how the student's development period was in the childhood phase, or how the parents were raised, as well as how educational experience was at the previous level, as well as being influenced by how teachers with character can have an impact on students' good self-regulation (Isfiani & Ekanara, 2022; Syahmani & Amini, 2019).

The provision of learning material went smoothly, the teacher was enthusiastic and focused on listening, and most of them recorded the material in their respective notebooks. Several questions were also asked from several teachers. All questions were answered and with satisfactory results for teachers who needed solutions to the problems they complained about.

CONCLUSION

This community service activity at ABSM High School is an effort to empower teachers by providing materials to become fun, creative and innovative teachers. Providing material about professional teachers and the form of a teacher that is interesting and liked by students encourages teacher professionalism. Teachers at ABSM High School can carry out their profession with full responsibility and confidence. The teacher's job is not only to teach, but also to educate. Educating will be successful if the person educating (teacher) is educated. This service activity is a development process so that ABSM High School teachers become creative, innovative and effective teachers.

This community service only reaches the stage of delivering material, and not yet at the stage of evaluating and assisting teachers in daily practice. Therefore, in the future it is hoped that there will be community service activities that focus on assisting teachers' daily practices, teaching practice, and reflecting together.

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Go digital of PAMMA Herba through rebranding and digital marketing

Anang Sujoko^{a,1,*}, Eko Widodo^{b,2}, Muhammad Firdaus^{c,3}, Noer Rahmi Ardiarini^{d,4}, Zulfaidah Penata Gama^{e,5}, Dicky Wahyudi^{a,6}

^a Faculty of Social Science and Political Science, Brawijaya University, Jl. Veteran, Malang, East Java 65145, Indonesia.

^b Faculty of Animal Science, University of Brawijaya, Jl. Veteran, Malang, East Java 65145, Indonesia.


^c Faculty of Faculty of Fisheries and Marine Sciences, Universitas Brawijaya, Jl. Veteran, Malang, East Java 65145, Indonesia.

^d Faculty of Faculty of Agriculture, Brawijaya University, Jl. Veteran, Malang 65145, Indonesia.

^e Faculty of Faculty of Mathematics and Natural Sciences, Brawijaya University, Jl. Veteran, Malang, East Java 65145, Indonesia.

¹ anangsujoko@ub.ac.id*; ² eko.widodo@ub.ac.id; ³ muhamadfir@ub.ac.id; ⁴ rahmi.fp@ub.ac.id; ⁵ gama@ub.ac.id; ⁶ dickywahyudi366@gmail.com

* Corresponding author

ARTICLE INFO	ABSTRACT
<p>Article history Received: 2023-12-26 Revised: 2024-06-11 Accepted: 2024-06-14 Published: 2024-06-16</p> <p>Keywords Digital Marketing Go Digital Orphanage Rebranding</p>	<p>PAMMA (Panti Asuhan Muhammadiyah Malang) has a home industry product in the form of rhizome beverages. The beverage products from PAMMA were developed by the Doktor Mengabdikan program for Brawijaya University and has survived until now. The problem is, the previous Doktor Mengabdikan program still focused on the beverage production process, and PAMMA still markets its products conventionally, even though the industrial era has penetrated the digital market (e-commerce). This community service program aims to maintain of the rhizome beverage industry from PAMMA by conducting packaging rebranding and digital marketing, so that PAMMA products can go to the digital market (Go Digital). Implementation methods include: First, assistance with the legalization and re-branding of 5 rhizome beverage products. Second, a digital marketing workshop for rhizome beverage products for PAMMA residents. The results of this community program are measured by the legalization of NIB PAMMA Herba, and changes to the packaging design of 5 PAMMA rhizome beverage products. Digital marketing training provides results in the form of a shop on an e-commerce platform for PAMMA which can be used to sell its rhizome products, optimize advertising in new media by adjusting its target market, and expand marketing by utilizing digital media. The target is that with a schematic and sustainable program, it can increase economic income and maintain the sustainability of the home industry of rhizome beverage products from PAMMA.</p>
<p>Kata Kunci Go digital Panti asuhan Pemasaran digital Rebranding</p>	<p>PAMMA Herba go digital melalui rebranding dan pemasaran digital. PAMMA (Panti Asuhan Muhammadiyah Malang) memiliki produk industri rumahan berupa minuman serbuk rimpang. Industri minuman dari PAMMA dikembangkan oleh program Doktor Mengabdikan Universitas Brawijaya, dan mampu bertahan hingga sekarang. Permasalahannya, program Doktor Mengabdikan sebelumnya masih berfokus pada proses produksi minuman, dan pihak PAMMA masih memasarkan produknya secara konvensional, padahal era industri telah merambah ke pasar digital (e-commerce). Program pengabdian masyarakat ini bertujuan untuk keberlanjutan industri minuman rimpang dari PAMMA dengan melakukan rebranding kemasan dan digital marketing, sehingga produk dari PAMMA bisa menuju ke pasar digital (go digital). Metode pelaksanaannya meliputi: Pertama, pendampingan legalisasi dan re-branding 5 produk minuman rimpang. Kedua, workshop digital marketing produk minuman rimpang bagi warga PAMMA. Hasil program masyarakat ini terukur dengan legalisasi NIB PAMMA Herba, dan perubahan kemasan-design dari 5 produk minuman rimpang PAMMA. Pelatihan digital marketing memberikan hasil berupa toko di platform e-commerce untuk PAMMA yang dapat dimanfaatkan untuk berjualan produk rimpangnya, optimalisasi iklan di new media dengan menyesuaikan sasaran pasarnya, dan perluasan pemasaran dengan memanfaatkan media digital. Targetnya dengan program yang skematik dan berkelanjutan dapat meningkatkan pendapatan ekonomi dan menjaga keberlanjutan industri rumah tangga produk minuman rimpang dari PAMMA.</p> <p style="text-align: right;">Copyright © 2024, Sujoko et al This is an open access article under the CC-BY-SA license</p> 

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INTRODUCTION

Processed rhizome products produced by PAMMA (Malang Muhammadiyah Orphanage) encourage household economic independence, and have the potential to make a positive contribution by encouraging local economic development. As explained by Hapsari et al., (2014) and Rajaiah & Sivasankar (2012) the growth and development of home industries has had a significant impact on various sectors of life, including in the areas of community and economic empowerment. Apart from that, economic growth through optimizing MSME products has also become a mandate of the SDGs in point 8 "Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all", and is explicitly stated in point 8.3 " [...] encourage the formalization and growth of micro, small and medium enterprises [...]" (sdgs.bappenas.go.id, 2023).

The current challenge for MSMEs is technological disruption which is changing market conditions to a digital world and utilizing e-commerce as a marketing and sales platform for their products (Irawati & Prasetyo, 2021; Yigit & Kanbach, 2023). Several studies have highlighted how MSME strategies to survive and transform in industries experiencing technological disruption in the face of continuous market decline (Sinha & Fukey, 2021; Yigit & Kanbach, 2023); The impact of the Covid-19 pandemic on MSMEs (Harel, 2021; Sarker et al., 2022), and MSME strategies in utilizing technology to survive the impact of the Covid-19 pandemic (Fasth et al., 2023; Prakasa et al., 2022); Use of social media as a means of promotion, marketing and strengthening MSME product brands (Amoah et al., 2023; Kanth & Prasad, 2023; Kraus et al., 2019). These studies show that MSMEs must adopt technology and utilize it to survive in digital market competition.

Community empowerment that focuses on MSMEs and the use of digital technology, for example: Virtual tour-based digital batik village as a place to promote Bekasi city batik in the industrial era 4.0 (Sudjatmoko et al., 2023); Increasing the capacity of Lombok Sunrise Land tourism managers through digital marketing (Yudhiasta & Mijiarto, 2023); Economic empowerment through developing food and beverage micro businesses by encouraging digital marketing (Badriyah et al., 2023). Thus, community empowerment that focuses on MSMEs in the era of technological disruption shows the need for MSME actors to utilize technology to optimize their products in the digital market (Widyo et al., 2023).

Although research and empowerment trends show the need for MSME actors to adopt technology to compete in the online market. However, the problem is that not all industries are quick to adopt this change, including the home industry of rhizome powder drinks from PAMMA. Even though it previously received production development support from the Doktor Mengabdi Program (Brawijaya University, 2021-2022), the PAMMA rhizome beverage products industry still markets its products using conventional methods. Considering the importance of adapting to digital trends and increasingly fierce market competition, there is an urgent need to innovate, especially in terms of marketing and branding ((Kotler et al., 2019; Widyo et al., 2023), so that MSME products can compete amidst the technological disruption that is ushering in on going digital (digital markets and e-commerce).

This community service program is realized with the main aim of maintaining the sustainability of PAMMA's rhizome beverage products industry through strengthening branding and marketing, so that PAMMA's rhizome beverage products can go digital - which has previously been carried out in developing PAMMA Products (2021-2022) (Ardiarini et al., 2023). The focus of this program is on two crucial aspects, namely packaging rebranding and digital marketing of Rhizome beverage products. By assisting with product packaging rebranding and holding digital marketing workshops, it is hoped that PAMMA can make maximum use of digital potential in marketing its products and this will have implications for the level of sales of PAMMA's processed rhizome products. Fulfillment of the targets of this service program is measured through several concrete indicators such as the rebranding of five rhizome beverage products (transformation of product packaging) and success in using digital marketing strategies reflected through the presence of official PAMMA stores on e-commerce platforms, advertising optimization in new media.

METHOD

This community service program is carried out to maintain the sustainability of the PAMMA rhizome beverage product industry, especially in carrying out branding and marketing communications to expand into the digital market. PAMMA rhizome beverages are produced by the Muhammadiyah Malang Orphanage (Panti Asuhan Muhammadiyah Malang) located at Jl. Bareng Tenes 4A No. 637, Bareng, Kec. Klojen, Malang City, East Java 65116.

The implementation of this community service is carried out for 6 months with a series of methods including: First (months 1-2), assistance with the legalization of PAMMA as an MSME industry and its rhizome products. Assistance with the legalization of PAMMA and its products to prepare PAMMA's Go Digital process to then be strengthened through rebranding and digital marketing. The legal aspect of the MSME industry is important for an MSME product to gain the trust of consumers in the market, besides that it will avoid legal problems when the product is distributed on the market. To go digital or market PAMMA rhizome beverage products to the online marketplace, the legal aspect is also a necessity that must be fulfilled in the community service program. The indicator and output of this method is the registration of NIB (Business Identification Number) and PIRT (Home Industrial Food Certificate) of PAMMA products.

Second (months 3-4), rebranding and digital marketing workshop for PAMMA. This method is implemented by

service team members and digital marketing practitioners through workshops and tiered mentoring. The training method not only gives theoretical understanding, but emphasizes practical guidance on branding and marketing PAMMA products, so that participants can implement it. The participants in this training are 3 PAMMA product managers and 18 orphanage children aged 15 years and over. We provide this training to PAMMA residents because every PAMMA person/resident can become a PAMMA product marketer, this will create massive marketing of PAMMA products. The indicators and outputs of this method are in the form of joint preparation of Rebranding and Digital Marketing Modules.

Third (months 5-6), create a marketplace for PAMMA rhizome beverage products. This method was implemented by members of the research team who collaborated with digital marketing practitioners to optimize the marketing of PAMMA products in the digital market. The aim of creating a marketplace accompanied by promotional guidelines is that PAMMA has the means/medium to sell its products online, and these products can be promoted to increase the level of marketing and sales of PAMMA products. Indicators and outputs of this method are the active PAMMA stores in online marketplaces such as Tokopedia and Shopee.

Qualitative thematic analysis techniques were used to analyze descriptive data obtained from three series of methods in community service. The stages of thematic analysis include (Christou, 2022): first, understanding the data by describing the data obtained into textual transcripts to provide data reflection-understanding. Second, coding the data that is by the results of the reflection, coding is done on data that has similarities. Third, compiling themes from coded data to be presented narratively by the objectives that have been set.

RESULTS AND DISCUSSION

Legalization of PAMMA as an MSME Industry

The first stage to maintain the sustainability of PAMMA's rhizome beverage products to go digital is carried out by legalizing the PAMMA institution as an MSME industry, as well as legalizing its processed rhizome products. This is done to ensure the legality of PAMMA and its products distributed in the digital market, so that it does not become a legal problem in the digital market or online marketplace. According to Purwaningsih et al., (2023) and Ulya et al., (2023), the legality of MSME products to enter the digital market needs to be prepared and obtained, so that products marketed in online marketplaces do not have legal problems and gain consumer trust. By managing the legality of PAMMA as an MSME industry and its rhizome beverage products, it will strengthen the value offered in online marketplaces and even in conventional markets.

The legalization process is carried out by assisting the service team together with PAMMA. Assistance is provided because PAMMA still does not fully understand the process of legalizing the MSME industry, so assistance is provided by the service team to speed up the process of legalizing PAMMA as an MSME industry. Assistance is carried out by dividing tasks, namely the service team searches for administrative requirements and legal flow online, and PAMMA prepares administrative files for the legalization requirements for the MSME industry. With this assistance and division of roles, the process of legalizing PAMMA as an MSME industry that produces rhizome beverage products becomes an easier and faster process.

The legalization files that have been collected, such as PAMMA institution deeds, PAMMA institution NPWPs, industrial capital information, industrial product information, industrial production layouts, and others - are collected by the service team for review according to the administrative requirements for the MSME industry legalization process. The team obtained the legality file requirements for the MSME industry via the OSS (Online Single Submission) website and the Ministry of Industry website. The completeness of the required documents is used to register the legality of PAMMA as an MSME industry via the OSS website, the entire process is carried out online by the service team together with PAMMA.

The process of legalizing PAMMA as an MSME industry through OSS produces results in the form of a NIB (Nomor Induk Berusaha/Business Permit Number) which is issued directly by the Ministry of Investment which receives approval from the Head of the Investment Coordinating Board. NIB indicates that PAMMA has been deemed eligible as an MSME industry legally, and has obtained permission to try to produce products for sale on the market, both digital markets and conventional markets. The NIB obtained while making the MSME industry from PAMMA is under the latest legal aspects based on Law Number 6 of 2023 concerning the Stipulation of Government Regulations instead of Law Number 2 of 2022 concerning Cipta Kerja. The Figure 1 is the NIB obtained by PAMMA.

Legalization continues for rhizome beverage products from PAMMA. Previously, rhizome beverage products from PAMMA had legalization, but of the total of five products, only one product had a PIRT (Home Industrial Food Certificate), so the service team provided assistance in processing the new PIRT Certificate. for all PAMMA rhizome products, which include processed rhizome products from Jahe Emprit, Jahe Merah, Kunir, Temulawak, and Kencur. To strengthen the legality aspects of the five processed PAMMA rhizome products, the service team also assists PAMMA in processing the legality of the PIRT Certificates for the five processed rhizome products. The Figure 2 is PAMMA rhizome beverage products.



Figure 1. Business Registration Number Document (Source: PAMMA Document)



Figure 2. Old view packing of PAMMA rhizome beverage products
(Source: Doktor Mengabdi Document)

The progress of legalization of five PAMMA rhizome beverage products has achieved administrative success at the OSS, and is waiting for a review from BPOM first to obtain the legality of the BPOM Circulation Permit Number, then a review from the Health Service to obtain approval for the production safety aspect in order to obtain a PIRT Certificate. The process of obtaining PIRT in this community service program has encountered obstacles because the administrative requirements have changed from before due to changes in regulations, and PAMMA's readiness has not been optimal to prepare administration or support production equipment to obtain a distribution permit from BPOM and a PIRT Certificate.

Rebranding of PAMMA Rhizome Beverage Products

The rebranding was carried out by the service team in collaboration with practitioners who concentrate on developing MSME products in Malang City. The collaboration was carried out to provide a comprehensive understanding from a conceptual and practical perspective to PAMMA who were participants in the rebranding and digital marketing training. Rebranding and digital marketing training was carried out after carrying out an initial analysis of PAMMA's rhizome beverage products, especially in terms of branding and marketing which has been carried out by PAMMA so far. With the analysis carried out by the service team, rebranding and digital marketing training materials were prepared for PAMMA.

Speakers from the service team explained the results of brand analysis of PAMMA rhizome beverage products, especially SWOT (Strength, Weakness, Opportunity, and Threats) analysis. From the SWOT analysis, it was obtained that the strength of the PAMMA rhizome beverage products is legality from the NIB which is issued from having five product variants, an uncomplicated manufacturing process, having an academic mentor (from Brawijaya University and academics from the Muhammadiyah association), and production is already running and producing products that have been marketed. In terms of weaknesses, rhizome beverage products do not yet have a brand name that is characteristic and reflects PAMMA, four PAMMA rhizome beverage products do not yet have a PIRT Certificate, there is no information on the efficacy of rhizome beverage products, and rhizome products have not been mass-produced, and human resource capabilities are limited not yet qualified to do digital marketing.

Then, in terms of opportunities, PAMMA has a network from Muhammadiyah for marketing, has synergy with academics from universities who can become mentors for product development, and processed rhizome products have high demand in the market, especially regarding herbal products for health. In terms of threats, competitors with cheaper prices, competitors who can provide abundant product stock, more massive promotions from competitors in the marketplace, and the difficulty of obtaining legalization for herbal products such as processed rhizomes, can hamper the digital and conventional marketing process.

The results of the analysis of rhizome beverage products presented by the service team were used as a basis for rebranding to strengthen the brand of rhizome beverage products so that they could be better known by the public and represent PAMMA. As explained by Tsai et al., (2015), the product branding and rebranding process aims to make the product easily recognized and easy to remember by the public, as well as becoming a characteristic of a product. Apart from that, the rebranding process can also strengthen the bargaining and selling value of PAMMA rhizome beverage products in conventional and digital markets.

Furthermore, training was continued by MSME product branding practitioners with materials that focused on the practice of rebranding PAMMA rhizome beverage products. The practical branding material process was carried out jointly by practitioners and PAMMA participants, starting from determining the brand name to the packaging redesign process for rhizome beverage products. The rebranding process which is carried out simultaneously aims to gain mutual understanding regarding the new brand of PAMMA rhizome beverage products which will be communicated digitally.

The results of the rebranding training by practitioners together with PAMMA provided several changes to the PAMMA rhizome beverage product brand: 1) From initially having different product names (JaheMU, Jahe Merah MU, TemulawakMU, KunirMU, and KencurMU) to having one product name, namely PAMMA Herbal has five processed product variants; 2) Each variant has a design that includes benefits/efficacy as well as suggestions for serving; 3) Changes to the packaging design by utilizing color psychology according to the properties of each PAMMA Herba product variant. With changes to these three fundamental components, it is hoped that PAMMA's rhizome beverage products will have a brand that is easier for consumers to remember, and better represent PAMMA as the institution that produces them. The Figure 3, Figure 4, Figure 5, Figure 6 and Figure 7 are the results of the rebranding in this service.



Figure 3. Jahe Merah Product from PAMMA Herba

The first variant of the PAMMA Herba product is the red ginger variant (Figure 3). Through the product slogan which reads 'warm spirit in ginger powder', the design choices for this variant are dominated by 'warm' nuances but are still made 'fresh'. Orange was chosen as the main color in the product design of the instant red ginger variant, which represents antioxidant and refreshing properties that are beneficial in maintaining body health.



Figure 4. Jahe Emprit Product from PAMMA Herba

The second variant of the PAMMA Herba product is the ginger variant which uses a brown design (Figure 4). The brown color representation on the new packaging for this variant is expected to give the impression of warmth and energy which are the properties of instant ginger rhizome products. The product slogan which reads 'warm spirit in ginger powder' coupled with brown nuances in the product design is the perfect combination in visualizing this instant ginger product.



Figure 5. Temulawak Product from PAMMA Herba

The third variant of PAMMA Herba products is ginger (Figure 5). Having the slogan 'passion to increase appetite', the colors in this design must be made with an impression that is synonymous with 'fertility'. The light brown color was chosen as a representation to reflect the benefits in maintaining body health which is in line with the properties of the PAMMA Herba product, the ginger variant.



Figure 6. Kencur Product from PAMMA Herba

The fourth variant of the PAMMA Herba product is kencur (Figure 6). As an alternative drink that is said to 'get rid of coughs' according to its slogan, making this instant kencur variant requires choosing colors in the design that represent 'freshness or refreshment'. The dark green color on the packaging represents fresh, natural and energizing food which is in line with the benefits of the PAMMA Herba kencur variant of the product.



Figure 7. Kunyit Product from PAMMA Herba

The fifth variant of PAMMA Herba products is turmeric (Figure 7). Having different properties from previous products, the instant turmeric variant is useful as an anti-inflammatory drink and makes the body healthy. Through the yellow color which is the packaging color choice for the product variant, it represents the characteristic of turmeric which is a deep yellow color with anti-oxidant content which provides anti-inflammatory and health benefits for the body.

Rebranding of the PAMMA Herba product packaging design has different colors that are adjusted to the properties of each variant. The colors chosen are based on the characteristics and efficacy of each PAMMA Herba product variant. Visually, the rebranding of PAMMA Herba's product design is deliberately packaged with a more 'modern' touch than the previous design in order to influence buyers' interest by considering PAMMA Herba's packaging design to be 'eye catching'. The choice of design elements is packaged in a minimalist manner, namely only using original images (herbaceous plants) from each variant. Not only that, the font choice is also adjusted to the design proportions so that buyers can read and understand the product easily.

Digital Marketing Communication of PAMMA Herba

Digital marketing communication training was provided for PAMMA Herba products to go digital. The importance of the communication aspect in carrying out digital marketing was expressed by Kotler et al., (2019); Rehman et al., (2022); and Sujoko et al., (2020), that the role of communication in marketing is an instrument for reaching the target market and developing the right strategy for the audience or potential consumers of the product being marketed. Digitally. Therefore, the community service team collaborates with practitioners to provide training to PAMMA to carry out digital marketing of PAMMA Herba products that have been rebranded.

Practitioners provide material regarding the stages of product marketing by starting to determine the target market, namely the primary target and secondary target for the PAMMA Herba product. According to Kotler et al., (2019), primary targets in marketing are those main targets who will become consumers or potential buyers of the products being marketed. Meanwhile, secondary targets are those second targets who have the probability of becoming consumers or buyers of the products being marketed. In this training session, practitioners together with PAMMA began to determine marketing targets for PAMMA Herba products.

The primary target of PAMMA Herba is members of the Muhammadiyah organization residing in the Malang area or expanded to Java Island, with an age range of 15-50 years and a high school education level and above, and an income level from lower middle to upper middle. Meanwhile, the secondary target of PAMMA Herba is general citizens residing in the Greater Malang area or even expanded on the island of Java, with an age range of 15-50 years and a high school education level and above, and an income level from lower middle to upper middle class. The fundamental difference between the primary and secondary targets of PAMMA products is the identity of the target, namely the general public and people who have a Muhammadiyah religious identity.

The digital marketing communication strategy continues with the selection of new media for marketing PAMMA Herba products. The choice of media is adjusted to the initial goal of the dedication program to Go Digital for PAMMA Herba products, so that it uses internet-based new media such as social media and websites to maximize marketing of PAMMA Herba products. Apart from that, the new media chosen as a marketing tool is based on previously determined

primary and secondary targets. As a result, the service team and practitioners together with PAMMA determined the media used in the form of Facebook, Instagram, YouTube and the PAMMA website to maximize product marketing. The Figure 8 new media for digital marketing.

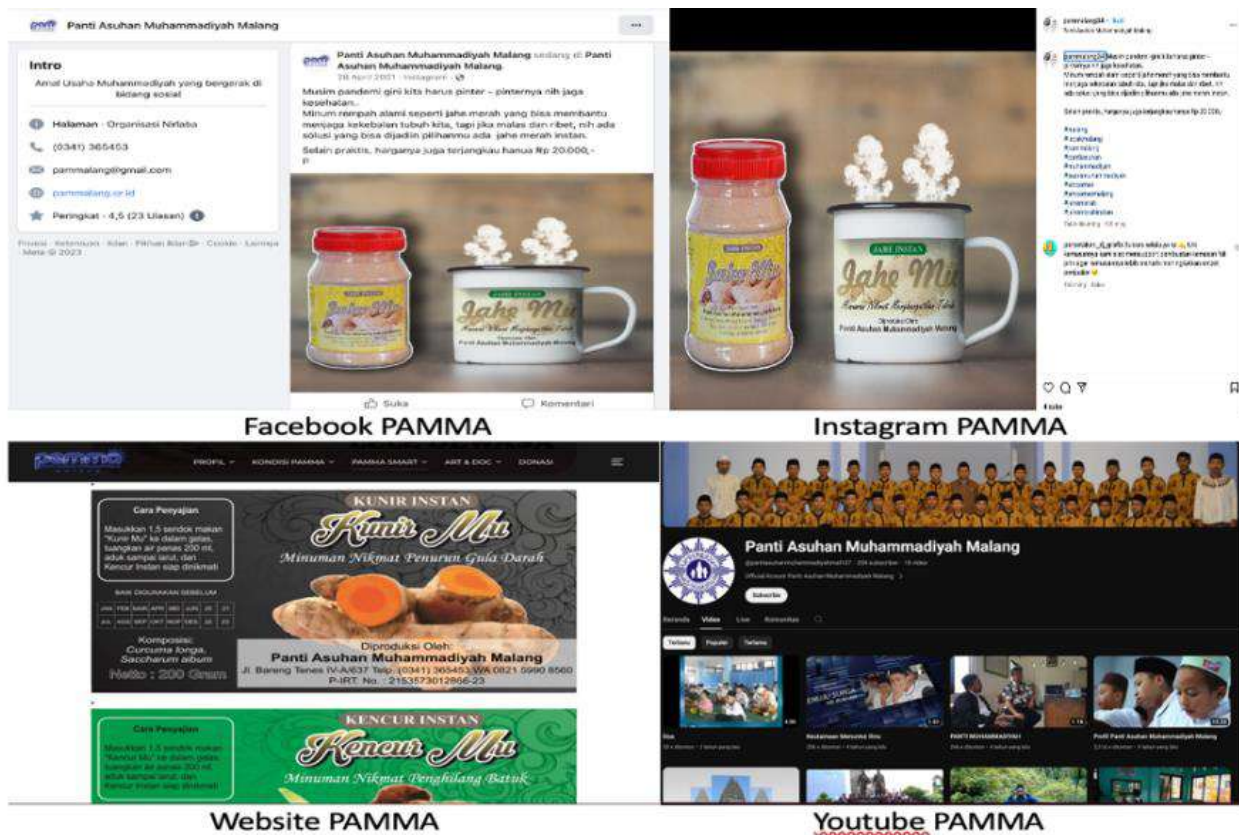


Figure 8. Social media marketing for PAMMA Herba products
(Source: Doktor Mengabdi document)

Digital marketing communication training for going digital for PAMMA Herba products also provides facilities for optimizing the marketplace that PAMMA already has for selling its products. This optimization is carried out through direct training by explaining the stages of carrying out promotions in their marketplace, starting from selecting promotional targets, and timing for promotions, to choosing promotional packages provided by the marketplace. Promotion is an important aspect in digital marketing, as explained by Kotler et al. (2019) that promotions provide benefits for products that can be recognized by the target market or potential consumers who know the products we sell. Several studies also highlight the importance of promotion in the marketplace to increase product sales (Haryati et al., 2023; William & Aripadono, 2020), and promotion even though it is carried out with strategic accuracy according to the potential target consumers and the marketplace where they sell (Lamis et al., 2022). The Figure 9 is PAMMA's marketplace documentation.

The output resulting from this training includes rebranding and digital marketing training modules for PAMMA, especially in maximizing its products to go digital. The rebranding and digital marketing module was prepared by the service team and practitioners by adjusting the needs and capacity of human resources who will manage PAMMA Herba in social media and the marketplace. The rebranding and digital marketing module contains the stages and procedures for digital marketing and carrying out promotions on social media and in the marketplace. The main use of the rebranding and digital marketing module is to make PAMMA Herba go digital so that it can expand its digital market reach and increase product sales. Figure 10 is the module documentation.

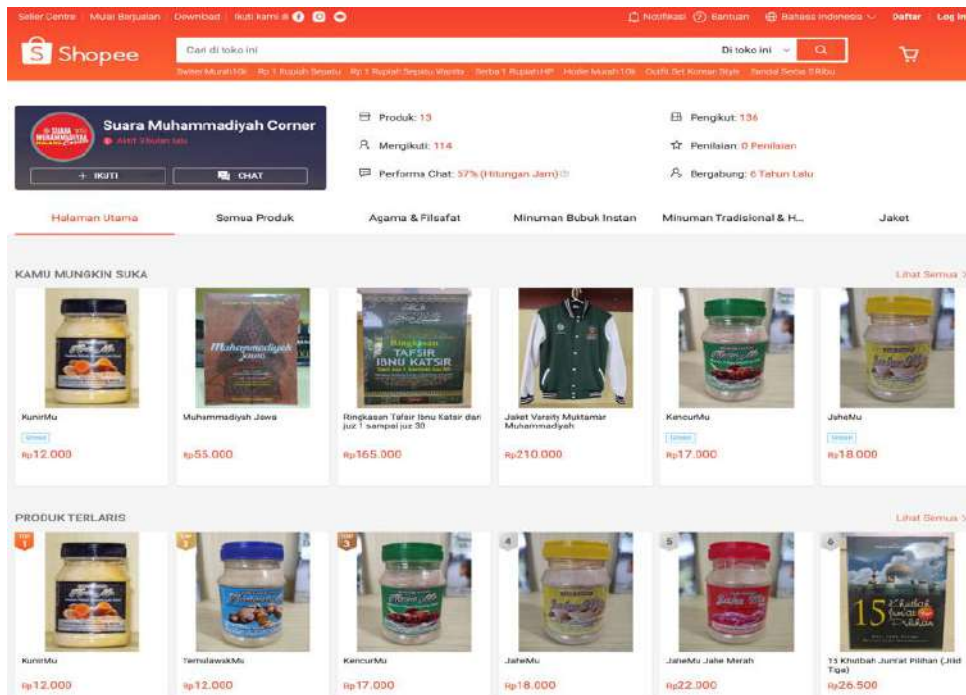


Figure 9. PAMMA product marketplace (Source: Doktor Mengabdikan Document)



Figure 10. Module of Rebranding and Digital Marketing "Go Digital" PAMMA Herba

The Rebranding and Digital Marketing Module for PAMMA Herba products has two main discussions; First, the rebranding strategy for PAMMA Herba products which includes (Chaudhri et al., 2022; Sintowoko et al., 2023): (a) The purpose of rebranding is to refresh the brand image of the herbal and natural aspects of herbal products, as well as to reach a wider market with an emphasis on health benefits. (b) Changes in brand identity to create a new brand "PAMMA HERBA," with new visual identity elements that emphasize health and naturalness, and present updated product variants, including JaheMU, Jahe Merah MU, TemulawakMU, KunirMU, and KencurMU. (c) New communication and messages to highlight the uniqueness of instant herbal products, replace the background mockup according to the color psychology of the variants, and explain the health benefits of the natural ingredients used.

Second, the digital marketing strategy for PAMMA Herba products includes (Kotler et al., 2019; Shankar et al., 2022): (a) Identifying consumers of PAMMA Herba products, starting from mapping consumer demographics, consumer behavior, to the use of digital media by consumers. (b) Identifying the characteristics of digital media as a marketing instrument for PAMMA Herba products, mapping the characteristics of social media for campaigns and advertising, and mapping the characteristics of the Tokopedia and Shopee marketplaces for selling. (c) Steps and tips for selling PAMMA Herba products in Marketplaces such as Tokopedia and Shopee, formulated through 15 steps which are a combination of organic and inorganic/robotic marketing.

CONCLUSION

This third year of community service has succeeded in maintaining the sustainability of the home industry of rhizome beverage products from PAMMA Herba, and led PAMMA Herba to go digital through rebranding and digital marketing. PAMMA Herba's go digital stage is carried out by legalizing PAMMA as a home industry and registering its processed rhizome products to obtain a PIRT Certificate. Then, after the legality of PAMMA Herba was fulfilled, facilities were prepared to go digital in the form of activating PAMMA's social media and marketplace accounts to function as digital marketing media. The process of carrying out digital marketing is supported by creating rebranding and digital marketing modules for PAMMA Herba products which contain practical guides from selling to promotions in the marketplace. By going digital, PAMMA Herba is expected to increase economic income and maintain the sustainability of the home industry of PAMMA rhizome beverage products. Suggestions for other service programs are to create promotion optimization programs and increase sales of MSME products that have penetrated the marketplace, so that the MSME industry can compete in the digital market.

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Empowerment of Dermo Youth Organization with design training, welding techniques and OHS towards the development of economic independence of village communities

Iis Siti Aisyah ^{a,1,*}, Ali Mokhtar ^{a,2}, Nur Hasanah ^{a,3}, Dini Kurniawati ^{a,4}

^a Department of Mechanical Engineering, Faculty of Engineering, Universitas Muhammadiyah Malang, Jl. Raya Tlogomas No. 246, Malang, East Java 65144, Indonesia.

¹siti@umm.ac.id, ²mokhtar@umm.ac.id, ³nurhasanah02@umm.ac.id, ⁴dini@umm.ac.id

* Corresponding author

ARTICLE INFO	ABSTRACT
<p>Article history Received: 2024-03-02 Revised: 2024-05-11 Accepted: 2024-06-16 Published: 2024-06-21</p> <p>Keywords Community empowerment Occupational health and safety Training Youth</p>	<p><i>Unemployment may cause problems for those who experience it for example depression and cause other social problems including criminal acts such as thuggery. This problem can only be eliminated if the root cause of unemployment is eliminated. Eliminating unemployment must be done comprehensively although every region always has unemployment due to various factors, and it would be wiser if in overcoming the problem of unemployment and its side excesses such as thuggery, the local potential of the region and the communal approach are put forward. Handling of these social problems will be applied in Dermo Hamlet, Dau Subdistrict, where many welding workshops are located, yet there are still many people of productive age who do not have permanent jobs or are unemployed. So that the proposed Science and Technology-Based Community Service program in collaboration with Youth Organization partners in Dermo Hamlet aims to overcome these social problems through organizing design training, welding training and OHS / Occupational Health and Safety socialization. The initial capital constraints in making this business even though it is simple are related to the funding budget that is still not available to buy welding equipment and other supporting tools, besides that it is also constrained related to skills. So that in this PKM, 1 set of welding machines is provided. And the indicator of program achievement is marked by understanding of the material by giving 10 Basic Welding certificates and 10 OHS certificates from the Mechanical Engineering Study Program.</i></p>
<p>Kata kunci Karang taruna Keselamatan dan kesehatan kerja Pemberdayaan masyarakat Pelatihan</p>	<p>Pemberdayaan karang taruna dusun Dermo melalui pelatihan desain dan teknologi pengelasan serta keselamatan dan kesehatan kerja dalam rangka mewujudkan kemandirian ekonomi masyarakat desa. Pengangguran dapat menimbulkan permasalahan bagi yang mengalaminya misalnya depresi dan menimbulkan permasalahan sosial lainnya termasuk tindak kriminal seperti premanisme. Permasalahan ini hanya dapat diatasi jika akar penyebab pengangguran dihilangkan. Penanggulangan pengangguran harus dilakukan secara komprehensif walaupun setiap daerah selalu mempunyai pengangguran karena berbagai faktor, dan akan lebih bijaksana jika dalam mengatasi masalah pengangguran dan eksekusinya seperti premanisme, dikedepankan potensi lokal daerah dan pendekatan komunal. Penanganan permasalahan sosial tersebut akan diterapkan di Dusun Dermo, Kecamatan Dau, yang banyak terdapat bengkel las, namun masih banyak masyarakat usia produktif yang tidak memiliki pekerjaan tetap atau menganggur. Sehingga usulan program Pengabdian Masyarakat Berbasis Iptek bekerjasama dengan mitra Karang Taruna di Dusun Dermo bertujuan untuk mengatasi permasalahan sosial tersebut melalui penyelenggaraan pelatihan desain, pelatihan pengelasan dan sosialisasi K3/Keselamatan Kerja. Kendala modal awal dalam membuat usaha ini walaupun sederhana adalah terkait anggaran dana yang masih belum tersedia untuk membeli peralatan las dan alat pendukung lainnya, selain itu juga terkendala terkait keterampilan. Sehingga pada PKM ini disediakan 1 set mesin las. Dan indikator ketercapaian program ditandai dengan pemahaman materi dengan pemberian 10 sertifikat Dasar Pengelasan dan 10 sertifikat K3 dari Program Studi Teknik Mesin.</p> <p style="text-align: right;">Copyright © 2024, Aisyah et al This is an open access article under the CC-BY-SA license</p> 

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INTRODUCTION

Employment has an important role in the survival of society therefore high unemployment will always be a social problem that needs to be resolved and become a public nightmare. Unemployment can also cause problems for those who experience it such as depression and cause other social problems including criminal acts (Sabiq & Apsari, 2021). In general, unemployment is caused by an imbalance between the number of available jobs or employment opportunities and the number of labor force or job seekers. This imbalance can have an impact on economic conditions and community life (Basrowi, 2019), causing political and social instability (Di & Di, 2021). This problem has also occurred in the area where this Science and Technology-Based Service partner is aimed at Youth Organization in Dermo Sub-district. With prioritized problems that will be resolved related to unemployment and economic improvement with workshops on design, welding and OHS. Hopefully, Dermo residents, especially young people, can be empowered and play an economic role in their own community. The output of this program is a paper published in the Sinta Journal and module copyright work. This service program will be carried out with the support of the CoE (Center of Excellence) Welding Inspector owned by the UMM Mechanical Engineering Department, support in terms of equipment facilities, instructors and students are involved. In line with the goal of achieving IKU2, namely students gaining experience outside the campus with a conversion value of 4 credits for 1-month PMM (Student Community Service) Lecturer Partners, besides that IKU3 lecturers doing activities outside the campus will be able to apply their work directly in the community, as well as IKU5 lecturers and students get recognition.

Generally, these cafes are owned by entrepreneurs or even wealthy students who come from out of town. Likewise, the employees are their fellow students. Meanwhile, Dermo's young men generally quit school after graduating from high school or vocational school. Many then work in self-employment, become construction workers while others become unemployed. The unavailability of job opportunities in their own neighborhood is a clear inequality. Moreover, after the reformation period, the nation's economic and politic condition has worsened (Saragih, 2022) (Aswicahyono & Christian, 2017)(Tarmidi, 2003) (Purwoko, 2010). Not only is there an economic crisis, but there is also a moral crisis. The increase in population density, the increasing number of unemployed people, supported by the increasing poverty rate, has resulted in a person not having fear in committing crimes(Sugiarti, 2014)(Ishak, 2013)(Freeman, 1991) (Youth et al., 2020) . Due to economic pressure, many people take shortcuts by using any means to get money. This problem has led to higher crime rates, especially in densely populated urban areas (Notohamidjojo, 2011). These conditions may have triggered some of the recent events that occurred in the Dau area, such as cases of brawls or clashes among youths (<https://malangposcomedia.id/sekelompok-pemuda-bentrok-di-dau/>), cases of alcohol that claimed lives (<https://suaraindonesia-news.com/pesta-miras-akhir-pekan-tiga-warga-dau-tewas/>), and other cases that are quite alarming. Gangsters and street crime are social problems that originate from the mental attitude of people who are not ready to accept jobs that are considered less prestigious. Gangsters in Indonesia have existed since the Dutch colonial era, in addition to acting as vigilantes, the perpetrators of gangsterism have also utilized several local champions to carry out low-level acts of thuggery which generally commit street crimes such as theft with threats of violence, extortion, rape, persecution, committing acts of violence against persons or goods in public and even committing murder or premeditated murder, public drunken behavior, which of course can disturb public order and cause unrest in the community. Cases of thuggery develop due to marginalization and lack of education. One of them is due to the communal nature of Indonesian society and especially the people of Dau Sub-district where communal rules such as autonomous rules are effective in preventing certain crimes (Arifin, 2016).

Data from the Central Bureau of Statistics shows that the demographics and economic potential of Dau Sub-district need to be considered. The population of productive age (15-64 years old) is 72% (50,862 people) while the economic potential of Dau Sub-district is supported by agriculture, tourist areas, hotels and restaurants, and industries that absorb a lot of labor from the productive age (BPS Malang, 2020). For the industrial sector, especially for small industries, there are many welding workshops, most of the work is related to the manufacture of fences, doors, trellises, and accessories related to flower plants with the peculiarity that the workers involved in this industry are mostly residents around the workshop. As an alternative to the above products, products related to accessories related to flower plants need to be explored because if the industry only relies on the manufacture of doors, fences, and trellises, it will only rely on orders, which are sometimes not continuous in volume. Although the area is known as a center for welding workshops, there are still many people of productive age who are unemployed. If left unchecked, the unemployed productive-age population, if not handled quickly and appropriately, could potentially fall into unlawful activities such as thuggery. In the view of the proposer, if this unemployed population is trained in metal welding skills, it will be very useful for them to get jobs in the metal welding industry or even set up their own workshops if they have enough technical and capital assets.

Another technical problem encountered in supporting the diversification of welded products in order to be competitive with other welding workshops is the ability to produce other products such as flower container accessories. Limited knowledge and innovation about design and unfamiliarity with the various welding methods and techniques needed to produce various types of accessories can make product diversification efforts unattainable. Almost all welding workshops use metal arc welding with various types and brands of welding machines combined with using generic electrodes to weld various types of raw materials. Various forms of materials such as plates, tubes, and solid cylinders require certain electrode

diameters with certain current settings and certain welding techniques. This expertise can be obtained from training and educational institutions, but unfortunately most of the workers or prospective workers who join this industry mostly do not come from graduates of these two institutions which means that welding skills are obtained from a self-taught process. As a result, the quality of welds between welders is not uniform due to the difference in expertise. The side effect is that they are very unfamiliar with OHS (Occupational Health and Safety), which is something that must be applied in all lines of industry (Benjamin O. Alli, 2008). So, it is deemed necessary to improve this welding skill by providing technical assistance and the implementation of OHS.

Against the background of these conditions, this science and technology-based service program targets empowerment, especially in the youth community, by cooperating with the Dermo Youth Organization, by conducting workshops on design, welding and OHS. Thus, the main problem of Partners is the existence of economically marginalized and economically unproductive youth communities, which are very vulnerable to thuggish practices. Partners are empowered with the method of 1) organize design training, 2) organize welding training, and 3) OHS socialization.

The lecturer and PMM (Student Community Service) students together with partners have carried out several activities, including identifying youth who need skill enrichment for work readiness. Designing training mechanisms, selecting venues and developing businesses The training chosen was welding practice. Specifically, designing and welding steel wire into flower shelves. With the aim of making this form of product easier to market. Since Malang is known for its cool weather, various flowers are able to grow well, and as a result, the demand for flower shelves is very high. In addition, the café area in Dermo hamlet will be more beautiful if it is colored with various live flowers, so that in this program the Youth Organization can sell its products to café owners. With trainings, as well as entrepreneurship development, it is hoped that the Dermo Youth Organization community can play a role in this business. It is also necessary to carry out a technical assistance process regarding OHS in the welding process and in the welding industry.

Unemployment as the main priority to overcome can be resolved within 1 year by empowering local residents who have not been absorbed by employment with several stages, providing training on basic welding methods and techniques is one solution. Training on occupational safety and health management is also provided. Since the Dau sub-district is known as a center for small industries, especially the fence welding industry, it was deemed necessary to utilize this advantage to solve the unemployment problem. Welding workshops are growing in Dau Sub-district along with the development of settlements in both villages and housing estates. This requires a lot of demand for fences, trellises, doors, and canopies that are made using welding methods. These workshops are mostly small welding workshops with a workforce of between two and four people including the owner. Sometimes, workers who feel they have the skills and business capital take the initiative to open a welding workshop. This new business inevitably requires new welders and the abandoned workshop needs to replace the outgoing welders. According to information from Karang Taruna, welding workshops accept welders based on the principle of recommendation and preferably those who already have experience.

This recruitment pattern makes it difficult for someone who has never had welder experience to fill this demand. Instead of the demand for welders being filled by local youth, it could be filled by welders from other areas and still leave the problem of unemployment in Dermo Hamlet. Therefore, efforts were made to equip the youth with practical skills in welding. If they have expertise in welding, it can be used as an entry ticket to fill vacancies. Furthermore, there can be a scroll of benefits such as the establishment of new workshops when business actors feel they already have business capital and both technical and managerial abilities.

As new welding workshops emerge, the constant growth of settlements is seen as a challenge that needs to be considered to maintain the continuity of the welding workshop business process. Therefore, other alternatives to keep the business process running need to be considered. This can be done by diversifying products, and one that is proposed is a new product such as a plant shelf. This product is seen as a solution to open insights for Youth Organization members who want to work in the welding field both as workers (welders) and as business owners that welding workshop products are not only in the form of fences, doors, trellises, and canopies but can take other forms. The choice of this alternative product is based on the idea that Dau Subdistrict and Malang Regency in general have natural resources, where is perception The beauty of a city cannot be separated from the image problems of city users. Thus Malang is branded as a beautiful city (Sayoko & Wikantiyoso, 2019). Then the flower garden arrangement efforts or ornamental plants which in order to make the beauty at home or public places, always use equipment in the form of a shelf or stand which is generally made for iron which is shaped in such a way and put together by the welding method. In addition to the need for this shelf, it can be more promising for its sustainability also because its size tends to be compact so that this product can meet both the needs around Dau Subdistrict or other more distant areas because it is easier to deliver.

Although promising, the success of products such as this flower holder is highly dependent on the design. If the design is up-to-date and according to market tastes, it can be expected that this product will sell well in the market. But if not, it will be a problem later in marketing. Therefore, it is necessary to be briefed on the basic design of the flower holder, its trends and how to perform the welding process due to the different materials and sometimes complicated shapes.

Furthermore, considering that welding work is carried out using electricity and high heat that could potentially endanger operators and people around them, Occupational Safety and Health (OHS) is introduced (Permenaker No. 12 of 2015). The main purpose of the implementation of OHS (electricity) is to 1) protect the safety and health of labor and other people who are in the workplace environment from potential electrical hazards. It is also intended to 2) create electrical

installations that are safe, reliable and provide safety for the building and its contents, and 3) create a safe and healthy workplace to encourage productivity.

In addition, to introduce the importance of wearing Personal Protective Equipment (PPE). This PPE must be worn by welding operators when welding (Arsyad et al., 2019). PPE is an important part of the effort to implement OHS in the welding workshop. If examined, welding hazards can be distinguished based on the welding process, hidden hazards and other hazards. Hazards originating from the welding process can come from machine operation, electricity, fire, arc welding radiation, welding fumes and explosions. While hidden hazards can come from working with tools that are not commonly used, working in confined spaces, poor electrical or gas connections, hot metal and others.

The above potential hazards need to be introduced to welding operators and business owners so that work accidents can be avoided as early as possible. This is important because work accidents are always detrimental, especially to the personnel who experience them and the welding workshop both materially and non-materially. The implementation of OHS is inseparable from the quality of work that has standards as stated in the Permenaker both regarding Electrical OHS Permenaker Number 15 of 2015 (Ida, 2021) and on Occupational Safety in Law of the Republic of Indonesia Number 1 of 1970 (State, 2005). Improving the quality of this work can be done by carrying out work in accordance with OHS welding standards and providing training on the importance of Safety and Work in the field of welding.

This community service program is designed to provide the community in the vicinity with knowledge and technology on welding process which is become one of strenght in Mechanical Engineering - UMM through one of its flagship program, namely CoE Welding. There a several community service in Malang which give training in welding but in majority it is designed to solely give the skills in welding without further giving training on designing of the product and OHS. Both designing of product and OHS become the strength of this community service.

The importance of the community to play a role looking for a solution is what is expected from the DPPM-UMM Service program. As Community Empowerment academic community, devotees have plunged into the community like doing women empowerment (Iis Siti Aisyah et al., 2018), assistance to entrepreneurs small/MSMEs in assisting P-IRT certification (Iis Siti Aisyah & Evanale, 2019) and stunting prevention program (Iis Siti Aisyah, 2021) and assisting in implementation OSHC toward Halal Certification for UMKM (I S Aisyah et al., 2023). On this time Community Service conducted by Students (PMM Mitra Lecturer) 2022 and 2023 University of Muhammadiyah Malang guided by Iis Siti Aisyah, Ali Mokhtar, Dini Kurniawati and Nur Hasanah. This community service is conducted to support SDGs 1 No Poverty, SDGs no 8 Decent Work and Economic Growth, and SDGs no 10 Reduce Inequalities.

METHOD

Dermo is the name of a village in Mulyoagung, Dau District, Malang Regency in where the program of community service is implemented. In this hamlet, culinary tourism is developing with the growth of cafés along the main road of Dermo hamlet, shown in Figure 1.



Figure 1. Main axis of Dermo highway

The program was implemented in May-July 2023 in collaboration with Karang Taruna Dusun Dermo. The program is started by preparation phase. In this phase, an identification of targeted beneficiary which is youths who need skill upgrade and enrichment for job readiness. The results of this phase is used to design training topics and mechanism to delivers. Also, the training modules is prepared in accordance with level knowledge of trainee in design of product and welding process. The training modules consist of theory of welding, introduction and familiarization to welding apparatus, procedure to choose proper welding parameter, i.e. voltage, current, polarity, and welding distance, and also the knowledge of metal in welding and size of welding rod in accordance with metals to weld. All these knowledge is essential for welder to produce sound weld.

After the first training in welding technology then the second one take place in which the trainees learn to design welded products. The products is directed to other than commonly found products in Mulyoagung Village such as fences,

gates, doors, canopies or trellis but other type of products in forms of plant's rack regarding the competition of previous products is tighter. For the training purpose, trainee is tasked to design and produce simple plant's rack. In this training also covers Intellectual Properties (IP) of design. The last steps in the training is training and socialization of related OHS and welding practice. To measure the success of program, trainee is evaluated by doing test of competency in welding and OHS. Successful trainee is awarded certificate by Welding Center of Excellence (CoE) of Mechanical Engineering UMM.

RESULTS AND DISCUSSION

Program Preparation

Training preparation for a youth organization involves careful planning and consideration of the organization's goals, the needs of its members, and the desired outcomes of the training. The training preparation start from identification of the audience, involve surveys and interviews of the Karang Taruna's leader. Then create the training plan, preparing the training materials or modules. Also provide the welding experienced trainers.

Designing a simple plant shelf

The product specified as a welding learning is a simple multi-tiered plant shelf as shown in Figure 2. The shelf is built using esser solid iron material which is easy to weld.

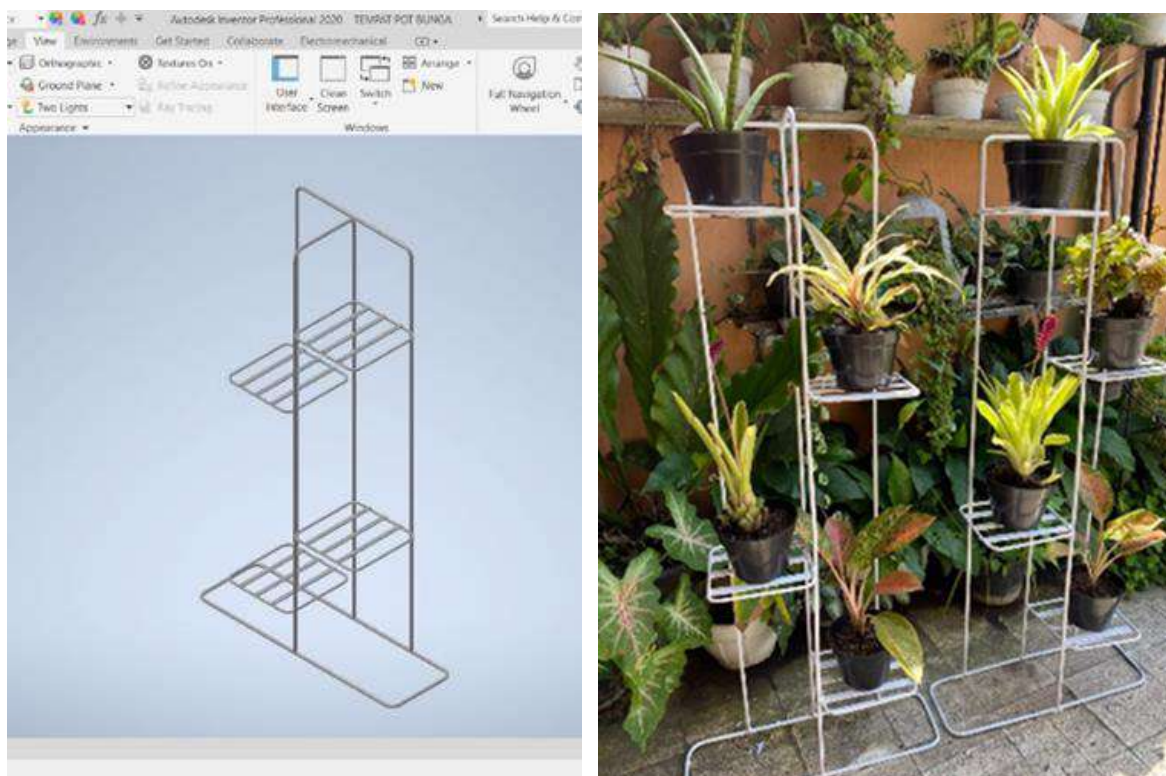


Figure 2. Design drawing of plant shelf (left) finished shelf (right)

Welding skills debriefing

In performing the metal welding process, welding machine operators need to know the metal welding technology itself. Some of the mechanisms for implementing the solution to the provision of welding skills are the proposed activities carried out:

1. Provide an introduction to electric welding machines and their auxiliary devices.
An introduction to electric welding machines and their auxiliary devices is necessary because welding machines have several types in addition to components and control buttons that need to be adjusted to a certain position so that the current used is in accordance with the material to be welded as well as the type and diameter of the electrode. If an operator is not familiar with the buttons and features of the welding machine, it cannot be expected that the resulting weld product will be optimal. Knowledge of input voltage, input power and maximum output power is very important to know whether the input electrical power both from home / workshop electricity (from the PLN network) and electric generators is sufficient to operate an electric welding machine for the amount of current selected. This is very important because if the input power is not able to meet the needs of the electric welding machine setting, it will cause the source power to be overloaded.
2. Provide an introduction to welding parameters such as setting voltage, current, polarity, and welding distance.
It is necessary to do this because good weld results cannot be separated from good welding parameter settings. The input voltage for DC Inverter type welding machines usually corresponds to the grid/generator voltage of

240V/50Hz so there is no need to adjust it. Depending on the thickness of the material and the diameter of the electrode, the choice of the amount of electric current used needs to be chosen correctly. The greater the current selected, the greater the power drawn from the source as well as the power applied to the electrodes. This will cause the heat generated by the welding machine as a result of plasma transfer from the electrode tip to the workpiece will be even greater.

3. Provide basic knowledge of metal materials and electrode equivalents used in the metal welding process. It is also important to discuss the compatibility of the specimen material with the electrode because the success of metal welding is strongly influenced by the molten metal deposit (droplet) which in turn is the result of electrode selection, welding parameters and material. The diameter of the electrode used should not be thicker than the thickness of the specimen because there is a possibility of penetration which will result in the weld being difficult to form / settle. Similarly, the shape of the joint and the welding position need to be considered in choosing the combination of workpiece and electrode (Junaidi: 2018).

The activity is shown in figure 3. For the effectivity of learning, the training is held in Manufacturing Laboratory, Mechanical Engineering Department, Faculty of Engineering, UMM.



Figure 3. Left during briefing before practice, right Welding Practice

Providng Occupational Health and Safety (OHS) training

For solutions to empower members of the Dermo Youth Organization that are in accordance with providing OHS welding training, the program offered in this Community Service is carried out with the following mechanism:

1. Provide understanding through training on welding standards
2. Provide an understanding of Personal Protective Equipment (PPE) and how to use it.
3. Provide an understanding of First Aid and Light Fire Extinguishers (APAR) and how to use them.

The OSH training was carried out with the help of PMM students, shown in Figure 4. The training also held in Mechanical Engineering department.



Figure 4. Occupational Health and Safety Training

Evaluation and provision of welding machines and certificates

In the implementation of these programs, partners actively participated in both the survey phase of partner problems, the preparation of program proposals, following the program being implemented and providing feedback for each program implementation. In addition to actively participating in the program, partners also fulfilled their obligations to prepare the venue for the first training at the Hamlet Hall, and the second training at the Mechanical Engineering Lab, Partners also helped mobilize their members to participate in implementing this program.

For programs related to welding expertise, the evaluation carried out is to test the absorption of training material in the form of pre and post tests for the training provided. Basic competency tests will also be given at the Center of Excellence Welding Inspection at the Department of Mechanical Engineering, Faculty of Engineering, University of Muhammadiyah Malang. In addition, feedback from participants regarding their satisfaction with the training material provided was also sought, resulting in the following results in the table below.

The provision of 1 set of welding machines is intended to motivate them to continue to perfect their welding skills. And plant rack products are also given along with Basic Welding competency certificates issued by the Mechanical Engineering Study Program. Shown in figure 5.



Figure 5. Closing the event, participants receiving Basic Welding competency certificates

From the indicator of program, the training gives significant boost to the knowledge to the material for welding. The trainee also pass the examination of proficiency in welding with all the participants (10 people) is awarded certificate. As programmed, the OHS training give similar results in which all participant pass the exams. From this results, it can be concluded that the training is delivered as expected. From others publication, all also report similar reports regardless of the training targets such as high school students (Mamungkas et al., 2020), workers (Risdiyanto et al., 2023), youths (Martawati et al., 2023), craftsmans (Sudjono et al., 2020), and villagers (Muzaki et al., 2021). For OHS, similar results also is obtained. From the interview, trainee acknowledge the importance of OHS and this finding similar such as villagers (Tri Widodo & Ismail Fardiansyah, 2023), workers (Suharso et al., 2023) (Yoto et al., 2020), welders (Putri & Tjahjono, 2022), and workshops (Putri & Tjahjono, 2021).

CONCLUSION

All design training, welding training and OHS socialization activities have been carried out successfully. After 4 meetings, participants were able to practice welding well. And it is proven that this program can produce business practitioners who are skilled in correct and effective welding techniques, and thus achieve efforts to empower young people towards building

the economic independence of rural communities. With the certificate they have obtained, hopefully they can have a career in the welding industry around the Dermo area.

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PPIM Sabah's admin performance: Smartphone App development for Indonesian students

H. Hariyady^{a,1,*}, Nur Hayatin^{a,2}

^a Department of Informatics, Faculty of Engineering, Universitas Muhammadiyah Malang, Jl. Raya Tlogomas 246 Malang, East Java 65144, Indonesia

¹ hariyady@umm.ac.id*; ² noorhayatin@umm.ac.id

* Corresponding author

ARTICLE INFO	ABSTRACT
<p>Article history Received: 2024-03-14 Revised: 2024-05-11 Accepted: 2024-05-24 Published</p> <p>Keywords Administrative performance Efficiency Effectiveness PPIM Sabah Smartphone app</p>	<p><i>Persatuan Pelajar Indonesia Malaysia (PPIM) is a Malaysian Indonesian Students Association in Sabah, an organization that associates with Indonesian students studying at campuses in Sabah, Malaysia. Due to the lack of supporting human resources, technological support is needed to assist the activities and work of management in order to improve organizational services and administration. For this reason, we provide a solution through community service. This service seeks to create a smartphone application called "PPIM Sabah" to Enhance Administrative Performance." PPIM Sabah encounters challenges such as inefficiency in administrative procedures, obstacles in data accessibility, and inadequate utilization of technology for administrative duties. In order to tackle these issues, we suggest creating a smartphone application that will aid PPIM Sabah in effectively maintaining member information, coordinating and advertising events, and monitoring financial matters with greater efficiency. The suggested system encompasses crucial functionalities, including membership administration, event coordination, and financial oversight. The application is anticipated to enhance the efficiency and efficacy of PPIM Sabah's administration, diminish the time and exertion needed to perform administrative activities, and enhance the quality of services supplied to members. The proposed activity plan encompasses a comprehensive series of steps, including needs analysis, application design, development, testing, implementation, and evaluation. A group of computer science and software development specialists will collaborate closely with PPIM Sabah at every phase of the development process. By integrating this smartphone application, the PPIM Sabah's administrative efficiency can be greatly enhanced, resulting in concrete advantages for the organization and its members.</i></p>
<p>Kata Kunci Aplikasi ponsel cerdas Efektivitas Efisiensi Kinerja administrasi PPIM Sabah</p>	<p>Kinerja Admin PPIM Sabah: Pengembangan Aplikasi Smartphone untuk Pelajar Indonesia. Pengabdian ini bertujuan untuk membuat aplikasi smartphone yang disebut "PPIM Sabah" untuk Meningkatkan Kinerja Administrasi." PPIM Sabah menghadapi tantangan seperti ketidakefisienan dalam prosedur administrasi, hambatan dalam aksesibilitas data, dan pemanfaatan teknologi yang tidak memadai untuk tugas-tugas administrasi. Untuk mengatasi masalah ini, kami menyarankan untuk membuat aplikasi ponsel pintar yang akan membantu PPIM Sabah dalam mengelola informasi anggota secara efektif, mengkoordinasikan dan mengiklankan acara, dan memantau masalah keuangan dengan lebih efisien. Sistem yang diusulkan mencakup fungsi-fungsi penting, termasuk administrasi keanggotaan, koordinasi acara, dan pengawasan keuangan. Aplikasi ini diantisipasi untuk meningkatkan efisiensi dan efektivitas administrasi PPIM Sabah, mengurangi waktu dan tenaga yang dibutuhkan untuk melakukan kegiatan administrasi, dan meningkatkan kualitas layanan yang diberikan kepada anggota. Rencana kegiatan yang diusulkan mencakup serangkaian langkah yang komprehensif, termasuk analisis kebutuhan, desain aplikasi, pengembangan, pengujian, implementasi, dan evaluasi. Sekelompok spesialis ilmu komputer dan pengembangan perangkat lunak akan berkolaborasi erat dengan PPIM Sabah di setiap tahap proses pengembangan. Dengan mengintegrasikan aplikasi ponsel pintar ini, efisiensi administrasi PPIM Sabah dapat ditingkatkan, sehingga menghasilkan keuntungan nyata bagi organisasi dan anggotanya.</p>

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INTRODUCTION

Persatuan Pelajar Indonesia Malaysia (PPIM) is a Malaysian Indonesian Students Association in Sabah, an organization that associates with Indonesian students studying at campuses in Sabah, Malaysia. The organization PPIM Sabah has significant potential in providing accommodation for Indonesian and Malaysian students in Sabah. This potential encompasses a substantial membership, a wide-ranging network, and a variety of activities. Furthermore, PPIM Sabah can enhance the ties between Indonesia and Malaysia, while also fostering international awareness and promoting mutual understanding among students (Anisah et al., 2020; Pratolo et al., 2020).

Nevertheless, despite its considerable promise, PPIM Sabah has various obstacles in effectively overseeing the administration of its organization (Jafrudin & Putra, 2020; Syahrudin, 2020). There are several challenges to this, i.e.: firstly, Lack of efficiency in administrative processes (Bai & Yoon, 2022). PPIM Sabah encounters challenges in executing its administrative procedures. These processes encompass the management of member data, the organization of events, and the recording of money. The inefficiency in administrative operations leads to a significant expenditure of time and effort, as well as an elevated chance of errors and data inaccuracies. Secondly, data access difficulties (Afrianti & Pujiyanto, 2020). PPIM Sabah encounters difficulties in obtaining member data and accessing information about activities. Presently, the data possessed remains fragmented, existing in diverse formats and originating from disparate sources. This poses a challenge to the efficient utilization and accessibility of data, impeding prompt and well-informed decision-making. And thirdly, limited use of technology (Ariffin et al., 2018; Dewi, 2023). PPIM Sabah has a low use of information and communication technologies for administrative operations. Their poor technological literacy and inadequate infrastructure hinder their capacity to fully leverage technology for enhancing administrative efficiency and effectiveness.

Upon analyzing this circumstance, it becomes evident that PPIM Sabah possesses significant potential but is confronted with various administrative issues that require resolution. Hence, we suggest the creation of a mobile application that might assist in addressing these obstacles and enhancing the overall administrative efficiency of PPIM Sabah.

After conducting a thorough examination of the situation, we have identified multiple administrative challenges encountered by PPIM Sabah (Kusdarini & Bagas, 2020; Dewi, 2023). There are several issues to this, i.e.: the first of all is a lack of efficiency and accuracy in managing member data (Abdullah et al., 2019). PPIM Sabah encounters challenges in effectively handling member data. The manual data input procedure and the restricted integrated system led to errors and inaccuracies in the data. Consequently, there have been challenges in overseeing membership, generating precise reports, and providing the necessary data for making informed decisions. The second is a limitation in event arrangement (Gad-Elrab, 2021). PPIM Sabah encountered difficulties in coordinating its events. The process of planning, organizing, and promoting events is still carried out using traditional methods and without the use of automation. The absence of efficient technologies poses challenges in managing schedules, monitoring member engagement, and obtaining feedback from event participants. And finally, constraints in financial recordkeeping (Syahrudin, 2020). PPIM Sabah encounters challenges in accurately documenting and monitoring the financial aspects of the organization. The manual recording technique introduces intricacy in documenting revenue and expenditures, as well as generating precise financial statements. Lack of clarity in financial recordkeeping might impede the transparency and accountability in the administration of organizational funds.

Given these challenges, we are confident that the implementation of our proposed smartphone application will serve as a viable remedy. This program aims to enhance the efficiency of PPIM Sabah in managing member data, organizing events in a structured manner, and maintaining accurate financial records. This application is anticipated to greatly enhance the administrative performance of PPIM Sabah, resulting in substantial advantages for the organization and its members.

The creation and execution of a mobile application for PPIM Sabah not only tackles the administrative difficulties encountered by the organization but also corresponds with the Sustainable Development Goals (SDGs), specifically SDG 4: Quality Education and SDG 9: Industry, Innovation, and Infrastructure. The proposed mobile application aims to enhance the quality of educational experiences for Indonesian and Malaysian students in Sabah by enhancing administrative efficiency and providing greater access to information (Ike et al., 2020; Setiawan et al., 2022). This action directly supports SDG 4 by guaranteeing inclusive and fair access to high-quality education and fostering opportunities for lifelong learning for everyone (Goal 4: Ensure Inclusive and Equitable Quality Education and Promote Lifelong Opportunities for All — SDG Indicators, 2023). Furthermore, the application utilizes contemporary technology to optimize operations and enhance data management, aligning with SDG 9 (Fourie, 2022). This objective highlights the significance of constructing durable infrastructure, advancing inclusive and sustainable industrialization, and nurturing innovation (Infrastructure Development, 2019; WorldSupporter | Goal 9: Industry, Innovation, and Infrastructure, 2021). Implementing these technological solutions can enhance the efficiency and creativity of PPIM Sabah, therefore promoting wider sustainable development goals and cultivating a more interconnected and knowledgeable student community (Importance of Technology Trends in Education, 2021; UNESCO, 2023).

METHOD

The approach to addressing the challenges encountered by the Malaysian Indonesian Student Association (PPIM) Sabah would be tailored to the specific traits and qualities of the organization. The subsequent text provides a comprehensive elucidation of the sequential phases or procedures involved in executing the proposed solution:

For Partners Engaged in a Productive Economy and Leading to a Productive Economy

a. Problems in the Field of Administration:

- **Problem Analysis:** Perform a comprehensive examination of issues about partner production, encompassing limitations in administrative procedures, enhancement of efficiency, quality of information, and utilization of technology (Apriliana & Suryani, 2019; Pramatha & Mimba, 2020).
- **Solution Planning:** Developing suitable solutions through thorough problem analysis, which may involve leveraging cutting-edge technology, providing training on application usage, or creating novel features.
- **Solution Implementation:** Execute a premeditated resolution, such as the incorporation of novel technologies, the adoption of streamlined production techniques, or the facilitation of skills development for collaborators.
- **Evaluation and Monitoring:** Assess the deployed solutions, gauge their efficacy, and closely observe any alterations in partner production processes.

b. Problems in the Field of Management:

- **Problem Analysis:** Examine the management issues encountered by partners, such as the absence of a proficient management system, disorganized planning, or unsuitable decision-making (Kurniasanti et al., 2022).
- **Solution Planning:** Designing suitable strategies to address the problem, such as creating a comprehensive management system, providing management training, or implementing efficient planning techniques.
- **Solution Implementation:** Execute a premeditated resolution, such as deploying a new management system, delivering management training to partners, or forming a proficient management team.
- **Evaluation and Monitoring:** Assess the effectiveness of implemented solutions, quantify the impact on partner management, and oversee the long-term viability of implemented solutions.

For Economically/Socially Unproductive Partners

Partners who do not contribute economically or socially will have the solutions implemented to address their specific difficulties according to the unique aspects of each situation. Several typical measures you can implement involve:

- **Problem Analysis:** Perform a comprehensive examination of the challenges encountered by partners, including but not limited to membership administration services, events, and financing (Sutawidjaya & Nawangsari, 2020).
- **Solution Planning:** Developing tailored solutions for unique concerns, such as offering membership, event, and financial management services.
- **Solution Implementation:** Execute premeditated solutions, such as the construction of smartphone applications, management of memberships, organization of events, and administration of financial services.
- **Evaluation and Monitoring:** Assess the effectiveness of implemented solutions, quantify their impact and success, and oversee the long-term viability of programs in the field.

Partner Participation in Program Implementation

The involvement of partners is crucial in the execution of the program. Partners will participate in all stages of the process, including problem analysis, solution planning, execution, and evaluation. Partner participation encompasses active involvement in decision-making processes, engagement in field operations, as well as the gathering of data and provision of feedback regarding the success of the program. By actively involving partners, the program can enhance its relevance, sustainability, and empower partners to overcome the challenges they encounter.

Evaluation of Program Implementation and Program Sustainability in the Field

Once the Community Service Program activities have concluded, an assessment is conducted to evaluate the program's implementation and its long-term viability in the field. Evaluation is conducted by the measurement of the impact of implemented solutions, analysis of the success in reaching established objectives, and identification of potential for further advancement. The evaluation also includes partners in providing input on the program's sustainability, the problems encountered, and the necessary measures to ensure its long-term viability.

Furthermore, to guarantee the long-term viability of the program in the field, the following actions will be implemented:

- **Monitoring:** Program monitoring is conducted once implementation is finished. This monitoring encompasses the assessment of attained outcomes, a gathering of data regarding program utilization and beneficiaries, and tracking of community changes.
- **Partner Engagement:** Partners will remain engaged in the program review and development process. Partners will offer feedback, critiques, and recommendations to enhance and advance the project. Through active

engagement with partners, the program can be continuously adjusted to accommodate the evolving demands and dynamics of the area.

- **Related Party Involvement:** Stakeholders, including local governments, appropriate institutions, and local communities, shall remain engaged in the program to guarantee its long-term viability and endurance. Engaging in collaboration with relevant stakeholders will facilitate the acquisition of the required resources, institutional backing, and consistent policy implementation.
- **Capacity Building:** Throughout the program's implementation, there will be a significant emphasis on enhancing the capabilities of partners and communities. Partners and communities will undergo training, education, and knowledge transfer to enhance their capacity to sustain the program and adapt to future challenges.

By conducting a comprehensive assessment and implementing strategic measures to promote sustainability, the program can guarantee that the solutions provided will consistently yield enduring advantages for both partners and the communities they serve. Program assessment and sustainability will serve as the foundation for improved program development in the future and can be adjusted to meet the evolving needs and changes in the field.

Partner Location

The PPIM Sabah Secretariat is situated at International Residence College 10c – 30, Universiti Malaysia Sabah (UMS), which is located at Lorong Raja Udang 1C, Kota Kinabalu, Sabah State, Malaysia. Figure 1 depicts the place situated at a distance of 8.2 kilometers from the UMS campus, where the service team leader is conducting the study. The distance from UMS can be covered in a duration of 15 minutes when using a four-wheeled vehicle.

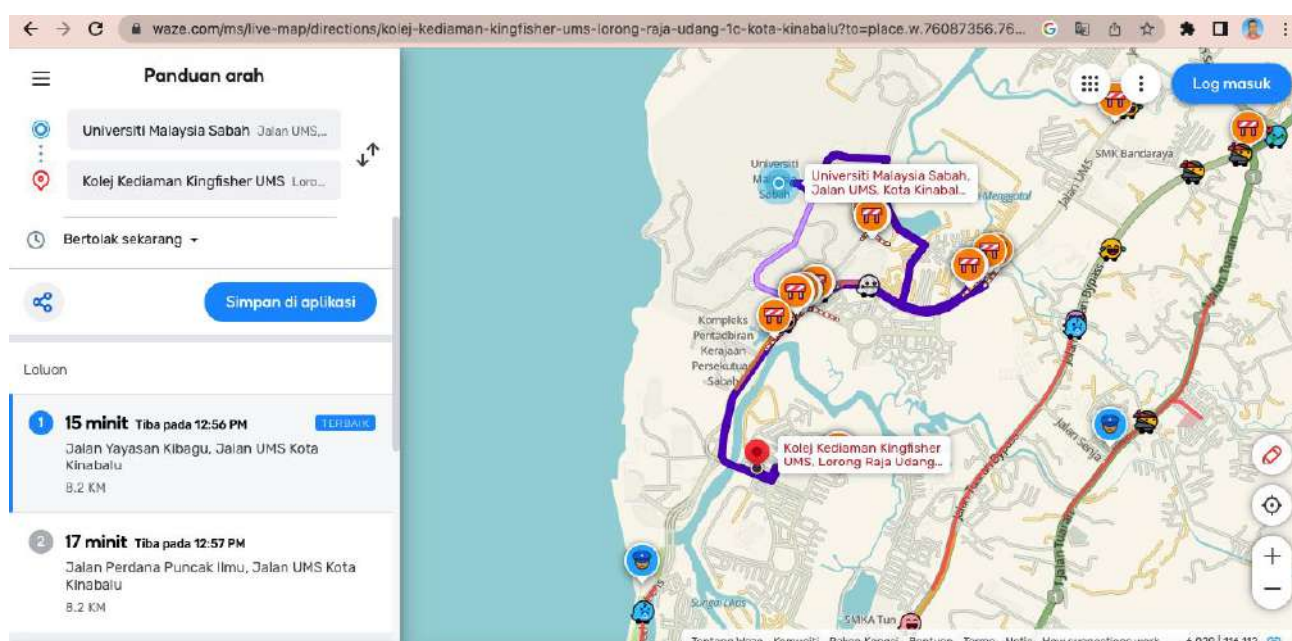


Figure 1. Map of Partner Location

RESULTS AND DISCUSSION

Improved Administration Performance Through Application

The creation of a smartphone application by the Indonesian Students Association Malaysia Sabah has the potential to greatly enhance the administrative efficiency of this organization (Ahmadzadegan et al., 2020; Simanjuntak & Nahdi, 2020). This program can decrease reliance on manual administrative procedures that require significant time and effort (Kurniawan, 2019; Ellis & Bredican, 2014). The smartphone application enables the administration of PPIM Sabah to be carried out with greater efficiency and speed (Yasah et al., 2021; Marsofiyati et al., 2020). The organization can utilize this software to conveniently and expeditiously obtain comprehensive information, hence obviating the necessity for manual searches or handling actual documents. Prior studies have demonstrated that smartphone applications can enhance knowledge, attitudes, and behaviors related to their utilization (Alfarsi et al., 2020; Ramezani et al., 2023).

PPIM Sabah Application Development Process

The creation of a smartphone application for PPIM Sabah can encompass multiple stages or procedures. Before proceeding, it is essential to conduct a comprehensive examination of the administrative necessities and criteria of the organization (Kurniawan, 2019; Razak et al., 2021). This research aims to discover precise features and functionality that must be incorporated into the mobile application.

Subsequently, the development team is required to create and implement the application by the specified requirements. Developers should take into account elements such as ease of use, ability to handle increased workload, and protection against unauthorized access while developing software. In addition, it is imperative to carry out user testing and collect feedback to ascertain that the application adequately fulfills the requirements of PPIM Sabah members. Furthermore, apps must be seamlessly incorporated into current information systems and databases to guarantee efficient data transmission and ease of access.

Membership Management Features

The initial proposal involved creating a smartphone application specifically tailored to aid in the organization and handling of PPIM Sabah member data. This program aims to streamline the process of registering new members, updating member information, and keeping track of membership history (*Shrka Apps Development, 2022*)(*Membership Management System, 2021*). This application aims to develop a real-time membership management system that is comprehensive and up-to-date (*Membership Management System for Association, Societies, Clubs, Non Profits, NGOs, 2022; Membership Management System- Streamline All Communication!, 2021*). This will streamline member management and ensure precise member data for informed decision-making.

The purpose of the application interface is to offer a user-friendly and effective user experience in handling member data (*Educational Institutions: Access Management System For School - TruMe, 2019; Membership Management Software and CRM for Organizations, 2023*). Figure 2 (a) displays a member list interface that offers a comprehensive overview of all registered members, enabling users to conveniently access fundamental details about each member. Figure 2(b) depicts a member search interface that enables expedited searches based on specific criteria, while Figure 2 (c) illustrates a data edit interface that permits users to promptly and accurately change member information.

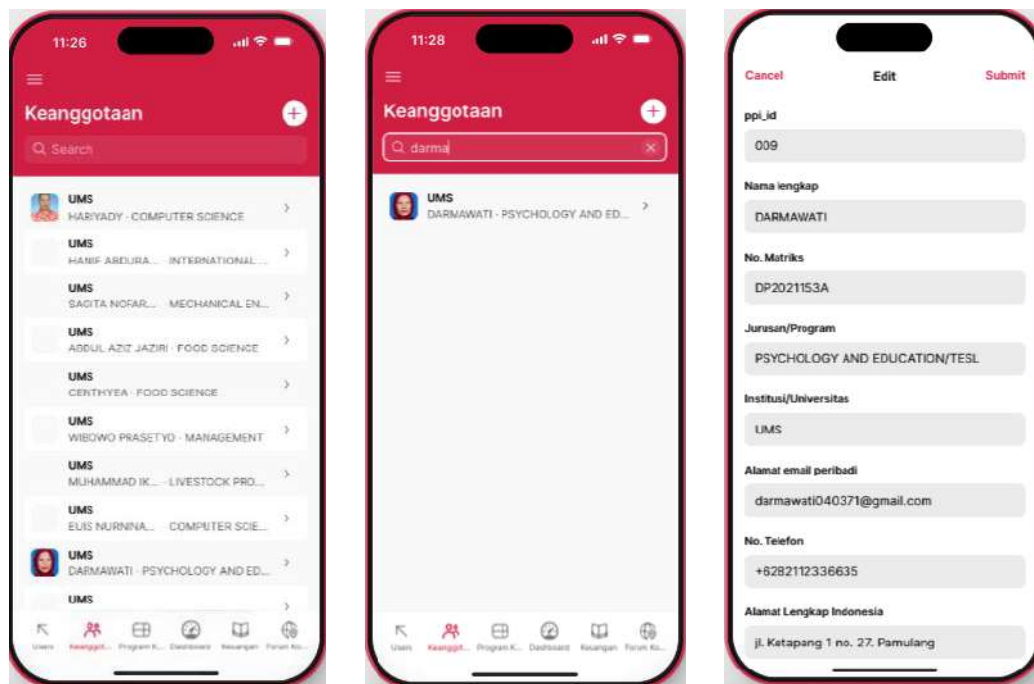
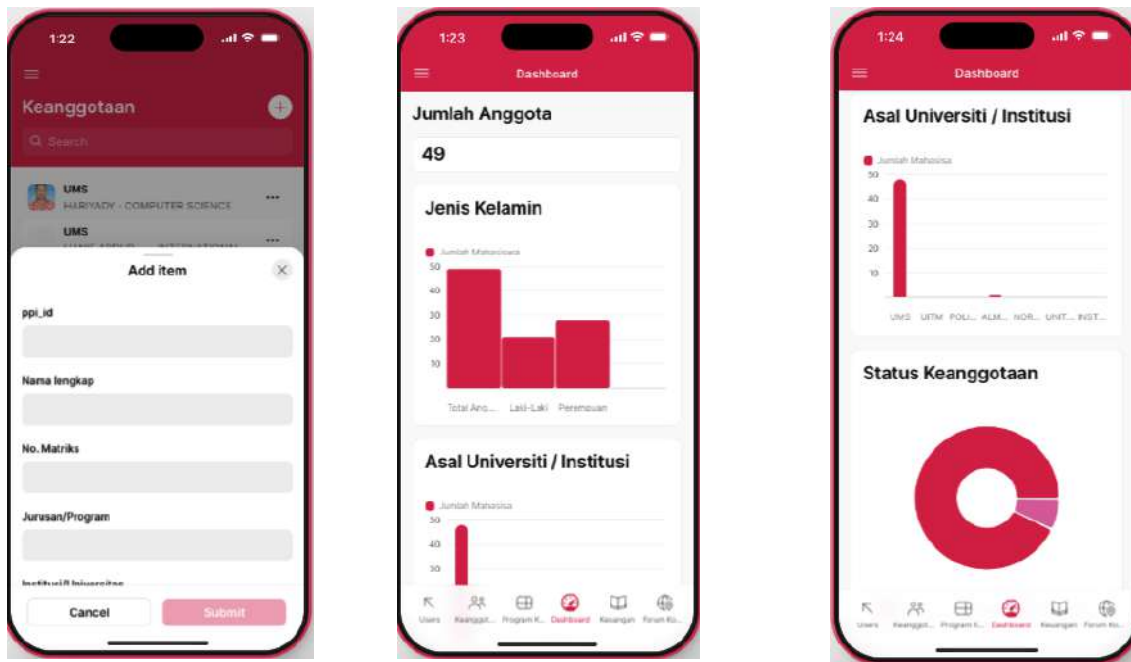


Figure 2. Data edit interface that permits users to promptly and accurately change member information
(a) Member list interface (b) Member search interface (c) Data edit interface

Furthermore, Figure 3(a) illustrates a data addition interface that simplifies the process of adding new members to the system. Figure 3(b) presents a graphical representation of member data, specifically the number of members and their gender. Figure 3(c), on the other hand, offers a graphical representation of the institutional origin and membership status of the members. These visualizations offer valuable insights to users, allowing them to gain a deeper understanding of member profiles. The software is specifically developed to enhance the efficiency of membership management with its straightforward interface and robust data analysis capabilities.

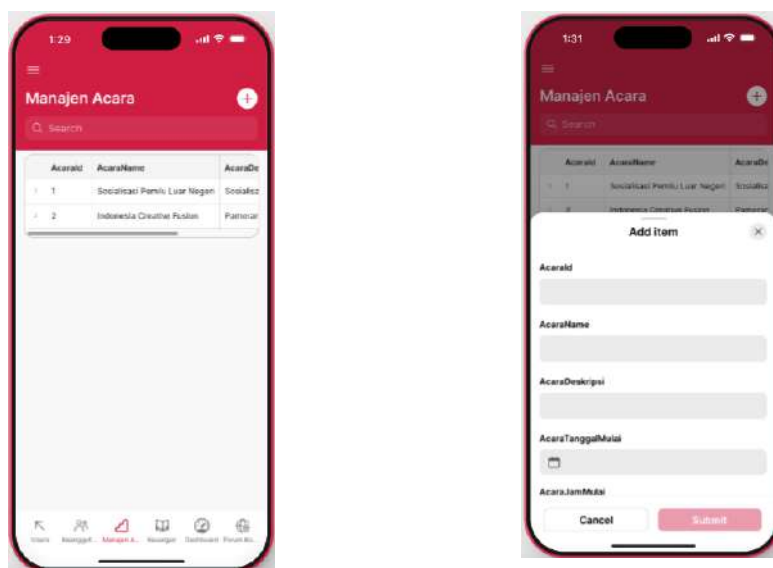


(a) Data append interface (b) Graph interface of number of members and gender (c) Graphical interface of institution origin and membership status

Event Management Features

A potential approach is creating a smartphone application specifically designed to oversee and coordinate events organized by PPIM Sabah. This application will facilitate the management of event schedules, the registration of guests, and the dissemination of notifications to members regarding impending events (*Event Management Software Development Company, 2023*). This application aims to develop a highly effective event management system that can track member involvement, monitor event success, and gather feedback from attendees.

The application interface depicted in Figure 4 (a) is designed to provide users with the convenience of accessing, modifying, and searching event data. The interface offers a meticulously arranged display, enabling visitors to effortlessly observe the roster of current events and retrieve comprehensive information about each event. Furthermore, the search function enables users to locate events by specific criteria, hence enhancing accessibility and efficiency in retrieving the desired information. Figure 4 (b) depicts the event data addition interface, which enables users to swiftly and precisely add new events to the system. By integrating these capabilities, the software is specifically developed to enhance event management with greater effectiveness and efficiency.



(a) Event data view, edit and search interface (b) Event data append interface

Financial Recording Features

A potential solution is creating a smartphone application specifically designed to document and monitor the financial activities of PPIM Sabah. This program will facilitate the process of documenting earnings and expenditures, generating organized financial reports, and sending alerts about the financial condition of the organization. This program aims to develop a precise and transparent financial recording system, facilitating efficient financial management and informed decision-making.

The application interface depicted in Figure 5 (a) is designed to offer a user-friendly and organized user experience for the management of financial data. This interface offers users a convenient and quick way to access, modify, and search financial data. The search function enables users to retrieve financial data by applying particular criteria, while the edit function facilitates the prompt and precise modification of financial information. Furthermore, Figure 5 (b) depicts a financial data addition interface that has been specifically created to enhance the ease with which users can input new financial data into the system. By including these elements, the program seeks to enhance transparency and efficiency in the organization's financial management.

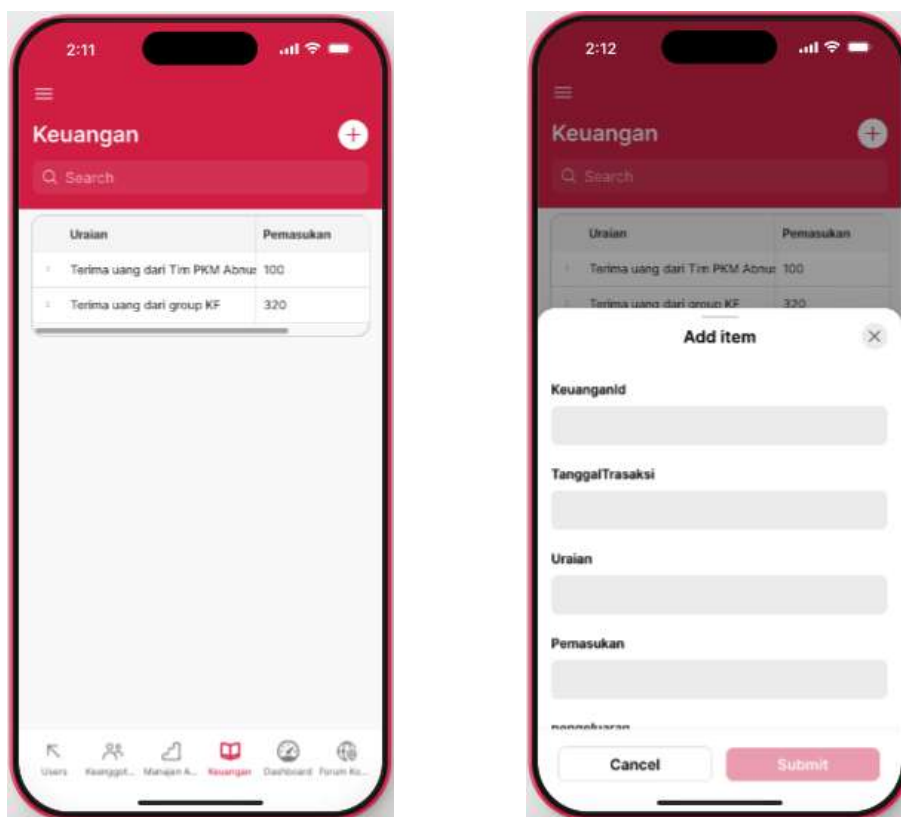


Figure 5. Financial data interface

(a) View, edit and search financial data interface

(b) Financial data addition interface

PPIM Smartphone Application Technology Discussion

The creation of a mobile application for PPIM Sabah will require a methodical approach to ensure its efficacy in enhancing administrative performance. Administrators and city planners must actively participate in the decision-making process for the creation of these mobile applications. Hence, engaging customers in the first phases of app development and soliciting their feedback and input, will guarantee that the app fulfils their requirements and resolves any concerns they might have. To commence the creation of this mobile application, it is necessary to establish a group comprising application developers, administrators from PPIM Sabah, and IT specialists. The team will be tasked with undertaking a comprehensive examination of the organization's administrative operations, pinpointing areas that can be enhanced through the use of mobile applications, and formulating meticulous strategies for application development.

After the analysis and planning process has been finished, the development team can move forward with the task of designing and constructing the mobile application. They must take into account aspects such as the intended audience, the design of the user interface, and the need for functioning. In addition, they had to take into account the distinct requirements and inclinations of PPIM Sabah members to develop a user-friendly and intuitive application. It is crucial to include functionalities that facilitate convenient access to information and services, such as event schedules, forms for registering as a member, regular news updates, and communication platforms like chat or messaging systems. Furthermore, mobile applications must be meticulously crafted to deliver a smooth and uninterrupted user experience

across a wide range of platforms and devices, guaranteeing compatibility with diverse operating systems like iOS and Android.

Following the completion of the development process, it is essential to conduct comprehensive testing to detect and address any problems or technical concerns. During this phase, it is important to actively seek user feedback and input to ensure that the application operates as planned and fulfills the requirements of PPIM Sabah members. Aside from the technical requirements of development and testing, it is crucial to address the legal and security implications associated with apps.

This involves creating privacy policies and terms of use papers to safeguard user data and guarantee adherence to applicable laws and regulations. Furthermore, it is imperative to provide password protection for applications to thwart unauthorized access and safeguard confidential data. To guarantee the security and dependability of the application, it is necessary to establish a verification mechanism. This process entails assessing the security needs of an application, choosing suitable testing tools, and ascertaining if the application complies with the organization's criteria for deployment on mobile devices. To construct mobile applications for administrative purposes of PPIM Sabah, it is essential to engage in meticulous planning, prioritize user-centric design, conduct comprehensive testing, and ensure compliance with security and regulatory requirements.

The creation and utilization of a mobile application for PPIM Sabah also offers the chance to address SDGs associated with technology and advancement. One potential area of impact is SDG 9: Industry, Innovation, and Infrastructure. By utilizing technology to simplify administrative procedures and enhance effectiveness, PPIM Sabah can contribute to the progress of industry and infrastructure in the region. Furthermore, implementing secure data practices aligns with SDG 16: Peace, Justice, and Strong Institutions as it encourages responsible use of technology for the organization's benefit. Additionally, when taking into account the environmental factors, employing a smartphone app has the potential to support SDG 13: Climate Action. This is achieved through reducing reliance on manual paperwork and physical storage space, which in turn helps minimize the organization's environmental impact by lowering paper consumption and decreasing energy usage for maintaining physical records. Embracing digital solutions like this aligns with global initiatives aimed at addressing climate change and advocating for sustainable practices.

CONCLUSION

When developing smartphone applications for PPIM Sabah, it is crucial to prioritize the partners' requirements for administration and the system's capacity to offer pertinent advice. Furthermore, the development of this application must also take into account the crucial topic of data security. Prototype approaches have been employed in the creation of smartphone applications for PPIM Sabah. These methods involve phases such as requirements analysis, converting data into user-friendly formats, and evaluating and enhancing applications as necessary. The objective is to guarantee the fulfillment of all partner requirements. Furthermore, it is crucial to uphold the security of highly confidential data when utilizing this smartphone application.

By implementing steps to secure information assets, the use of the PPIM Sabah application can guarantee the security of sensitive data. Conducting tests on the security elements of an application is crucial to ensure the elimination of any weaknesses and the effective safeguarding of user data. Furthermore, it is imperative to engage in a comprehensive discussion and elucidate the security protocols that have been incorporated throughout the creation of this application. Additionally, it is crucial to gain formal consent from users through consent documents, ensuring the safe use of their data by PPIM Sabah. Consistently implementing security measures and conducting evaluations are crucial for addressing technology advancements and emerging security concerns in the future.

When aiming to enhance administrative performance through the utilization of the PPIM Sabah smartphone application, it is advisable to take into account the following tips for future reference: 1. Establish integration between the application and relevant information systems to ensure coherence and eliminate data redundancy. 2. Create a notification and reminder system to guarantee that crucial administrative chores are neither overlooked nor delayed. 3. Integrate monitoring and reporting functionalities for administrative processes to enable real-time performance monitoring and supervision by management. 4. Implement budgeting and financial management functionalities to enhance transparency and accountability in the financial management of the organization. 5. Deploy a robust encryption system to safeguard sensitive user data from the risks of unauthorized disclosure or tampering. To effectively assess and enhance the application, it is crucial to consistently gather feedback from users and carefully consider the suggestions provided to enhance the PPIM Sabah application's relevance and ability to effectively meet user requirements.

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Coaching clinic research proposal writing: A practical guide to your research success

H. Hardani ^{a,1*}, Sri Sahbany ^{b,2}, Samsul Hadi ^{c,3}, Atri Sri Ulandari ^{d,4}, Ni Nyoman Ariwidiani ^{e,5}, Agus Supinganto ^{f,6}

^a D3 Pharmacy Study Program, Politeknik Medica Farma Husada Mataram, Jl. Batu Ringgit, Mataram, West Nusa Tenggara 83116, Indonesia

^b Bachelor of Public Sector Accounting Study Program, Politeknik Medica Farma Husada Mataram, Jl. Batu Ringgit, Mataram, West Nusa Tenggara 83116, Indonesia

^c Bachelor of Civil Engineering Study Program, Institut Teknologi dan Kesehatan Aspirasi, Jl. Anjani Suralaga, East Lombok, West Nusa Tenggara 83652, Indonesia

^d Bachelor of Pharmacy Study Program, Universitas Lampung, Jl. Prof. Dr. Ir. Sumantri Brojonegoro No.1, Kota Bandar Lampung, Lampung 35141, Indonesia

^e D4 Medical Laboratory Technology Study Program, Politeknik Medica Farma Husada Mataram, Jl. Batu Ringgit, Mataram, West Nusa Tenggara 83116, Indonesia

^f Bachelor of Nursing Study Program, STIKES Yarsi Mataram, Jl. Lingkar Selatan, Mataram, West Nusa Tenggara 83361, Indonesia

¹danylatchild07@gmail.com*; ²sahbany161691@gmail.com; ³smslh94@gmail.com; ⁴atri.ulandari@fk.unila.ac.id; ⁵arhiwidhia13@gmail.com;

⁶agussupinganto@gmail.com;

* Corresponding author

ARTICLE INFO	ABSTRACT
<p>Article history Received: 2024-02-20 Revised: 2024-06-10 Accepted: 2024-06-24 Published: 2024-07-04</p> <p>Keywords Coaching Clinic Research proposal Hybrid Pre-test Post-test</p>	<p>Writing a research proposal is a crucial first step in determining the success of your research project. However, authors often face challenges in formulating proposals that are clear, relevant, and persuasive. The purpose of this service is to help researchers, especially young researchers in making research proposals. The method of implementing this service uses a Coaching Clinic, discussion, and mentoring which is carried out in a hybrid manner with pre-test and post-test. Participants in this Coaching Clinic were young lecturers from Politeknik Medica Farma Husada Mataram and several other universities who participated online. There were 20 participants and it was held online through a Zoom meeting on December 16, 2023. The main target of this activity is young lecturers who have minimal experience writing research proposals. The results of this service show an increase in lecturers' abilities or skills and understanding in writing research proposals by 84.50%. Coaching clinics can improve the ability of lecturers to write research proposals.</p>
<p>Kata kunci Coaching clinic Hibrid Post-test Pre-test Proposal penelitian</p>	<p>Penulisan proposal penelitian coaching clinic: panduan praktis menuju keberhasilan penelitian. Seringkali penulis menghadapi tantangan dalam merumuskan proposal yang jelas, relevan, dan persuasif. Tujuan pengabdian ini adalah untuk membantu para peneliti, khususnya peneliti muda dalam membuat proposal penelitian. Peserta dalam Coaching Clinic ini adalah dosen-dosen muda dari Politeknik Medica Farma Husada Mataram dan beberapa perguruan tinggi lain yang mengikuti secara daring. Peserta sebanyak 20 orang dan dilaksanakan secara daring melalui zoom meeting pada tanggal 16 Desember 2023. Metode pelaksanaan pengabdian ini menggunakan Coaching Clinic, diskusi dan pendampingan yang dilakukan secara hybrid dengan pre-tes dan post-test. Sasaran utama pada kegiatan ini adalah dosen muda yang minim pengalaman menulis proposal penelitian. Hasil pengabdian ini menunjukkan adanya peningkatan kemampuan atau skill dosen serta pemahaman dalam menulis proposal penelitian sebesar 84,50%. Coaching clinic mampu meningkatkan kemampuan dosen dalam penulisan proposal penelitian.</p>

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INTRODUCTION

Writing a research proposal plays a crucial role in ensuring the smooth running and success of a research project (Sudheesh et al., 2016). However, researchers often face challenges in formulating proposals that meet academic standards, are relevant and persuasive (Puspitasari & Ishak, 2023). Some of the obstacles that may be encountered include difficulties in detailing research methods, formulating appropriate research questions, or even organizing theoretical frameworks properly (Collins & Stockton, 2018). The background to writing this article comes in response to the growing need among researchers for more intensive support and guidance in drafting research proposals (Boaz et al., 2018). Coaching Clinic for Research Proposal Writing is an approach that provides an effective solution to overcome these obstacles (Hardani et al., 2023).

Challenges in research proposal writing include; 1) Lack of In-depth Feedback, many researchers may be limited in getting in-depth feedback on their proposals. This can be a barrier in identifying areas of improvement and optimizing the quality of the proposal (Bombard et al., 2018). 2) Limited Knowledge of Academic Standards, Researchers, especially those in the early stages of their careers, may not fully understand the academic standards expected in a research proposal (Brown et al., 1999). 3) Difficulty Detailing Research Methods The research methods section is often a vulnerable point in proposals. Researchers may have difficulty in detailing the research design, data collection techniques, or analysis to be used (Taherdoost, 2021).

The rationale for the proposal needs to be well thought out by the researcher (Abdulai & Owusu-Ansah, 2014). The importance of a solid research proposal. A solid research proposal lays the foundation for the success of the entire research project (Sanu et al., 2022). A good proposal helps researchers formulate the right research questions, identify appropriate methodologies, and provide convincing arguments (Mugwe, 2022). Support for the development of young researchers. Young researchers and students who are still studying may need special guidance in developing their research proposals. The Coaching Clinic can provide the necessary support for their professional growth (Atkinson et al., 2022). The importance of external feedback. External feedback, especially from those with experience in the research field, can provide valuable insights. The Coaching Clinic creates a space for in-depth feedback and constructive dialog (Armson et al., 2019).

Solutions to the research proposal writing coaching clinic include; 1) Targeted guidance, Coaching Clinic provides guidance that is targeted and focused on the specific needs of researchers. This helps them understand the practical steps in drafting a quality research proposal. 2) Intensive feedback, Intensive feedback from mentors or supervisors helps researchers to see aspects that need improvement and fine-tune their proposals early on. 3) Researcher empowerment, Coaching Clinic not only provides answers but also empowers researchers to become more independent in formulating their research ideas and concepts (Purwanto et al., 2023).

By presenting the Research Proposal Writing Coaching Clinic as an effective solution, this article aims to provide researchers with insights and practical guidance in overcoming research proposal writing challenges. Hopefully, this approach can improve the quality of research proposals and make a positive contribution to the development of researchers and their research projects.

METHOD

The targets in this service are young lecturers at Politeknik Medica Farma Husada Mataram, but young lecturers on other campuses are also enthusiastic about participating in this activity which is carried out online through a Zoom meeting on December 16, 2023. The host of this activity is Politeknik Medica Farma Husada Mataram. The activity location map is presented in Figure 1.

Writing a research proposal requires a systematic and structured approach to ensure that every important aspect is communicated effectively (Sudheesh et al., 2016). The Research Proposal Writing Coaching Clinic is a method that involves intensive guidance to help researchers overcome obstacles and formulate a solid proposal (Nte & Awi, 2007). Here are the steps of the research proposal writing method with the Coaching Clinic approach:

1. Identify coaching clinic participants
Identify Coaching Clinic participants consisting of researchers who are developing research proposals. Select participants based on the needs and experience level of the researchers (Baxter & Jack, 2015).
2. Introduction and clarification of objectives
The first session of the Coaching Clinic begins with a clear introduction to the objectives of the Coaching Clinic. Clarify that the main focus is on improving the quality of participants' research proposals (Zhou et al., 2011).
3. Analysis of challenges and constraints
Participants are asked to share any challenges or constraints they face in drafting their research proposals. Identify general and specific issues that participants may face (Yip et al., 2016).
4. Brainstorming session
Conduct a brainstorming session to gather ideas and concepts that may apply to the research proposal. Discuss concepts that are relevant to each participant's research topic (Mauluddiyah et al., 2018).
5. Periodic review of proposals

Participants are asked to briefly present their research proposals. The mentor or Coaching Clinic leader conducts an initial review of each proposal and provides constructive feedback (Peláez Zuberbuhler et al., 2020).

6. Prioritization of improvements
Identify priority areas that require improvement in each proposal. Focus on aspects such as problem formulation, theoretical framework, research methods, or alignment with research objectives (Ali Khan et al., 2023).
7. Individual guidance session
Next, provide individual coaching sessions to each participant. Discuss more detailed feedback, provide practical advice, and encourage participants to develop their proposals in more depth (Abraham et al., 2014).
8. Introduction to effective writing techniques
Introduce effective writing techniques, such as how to detail research methods, build arguments, and formulate clear research questions. Discuss strategies to make proposals more persuasive (Yamin & Purwati, 2020).
9. Remedial exercises
Allow time for participants to conduct improvement exercises based on the feedback and suggestions provided. Support them to implement the improvements concretely (Collado-Mateo et al., 2021).
10. Clarification and question session
Organize a clarification and question-and-answer session. Participants have the opportunity to clarify any aspects they do not understand and get additional insights from the mentor or Coaching Clinic leader (Sarabipour et al., 2022).
11. Final Review and Preparation of Final Proposal
Conduct a final review of the revised proposal. Ensure that each participant has overcome the challenges and improved their proposal. Help them to prepare a final proposal that is ready for submission (Department of Home Affairs, 2023).
12. Evaluation session
Once the final research proposal has been prepared, organize an evaluation session. Participants and mentors provide final feedback on the Coaching Clinic process and the progress made (Al Hilali et al., 2020).

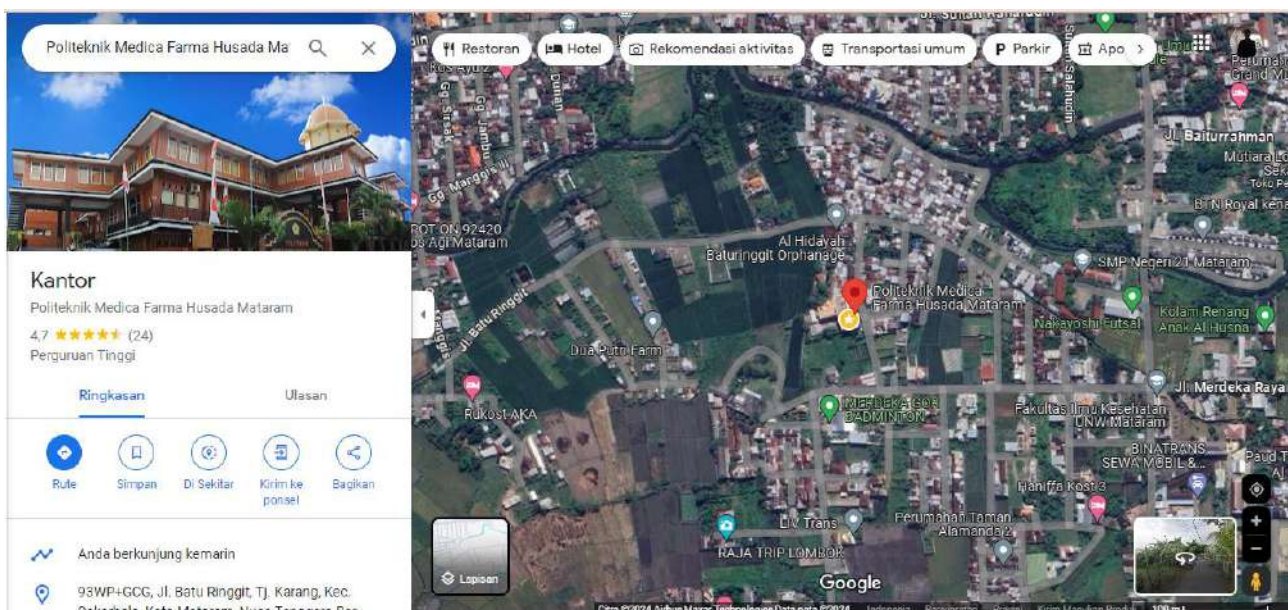


Figure 1. Map of activity location

The Research Proposal Writing Coaching Clinic method is designed to provide intensive guidance and support to researchers, helping them overcome the challenges of developing research proposals more effectively and efficiently (Pietersen, 2014).

RESULTS AND DISCUSSION

This service has been carried out with a hybrid system. Coaching clinics are conducted online, discussions and mentoring are carried out offline with young lecturers. The activity flyer is presented in Figure 2 and the material of presentation is presented in Figure 3. In the initial session of this training, the lecturers seemed enthusiastic about participating in the training activities, this can be seen from the participation of the lecturers in practice and questions and answers. In the second session, the lecturers were more enthusiastic because the training was more practical, they directly made research proposals and how to submit proposals to the BIMA Kemendikbudristek application. BIMA (Basis Information for Research and Community Service) is a platform for submitting research and community service grant

proposals made by KEMENDIKBURISTEK. Lecturers seemed very happy because they got tricks and tips in preparing research proposals.



Figure 2. Activity flyer

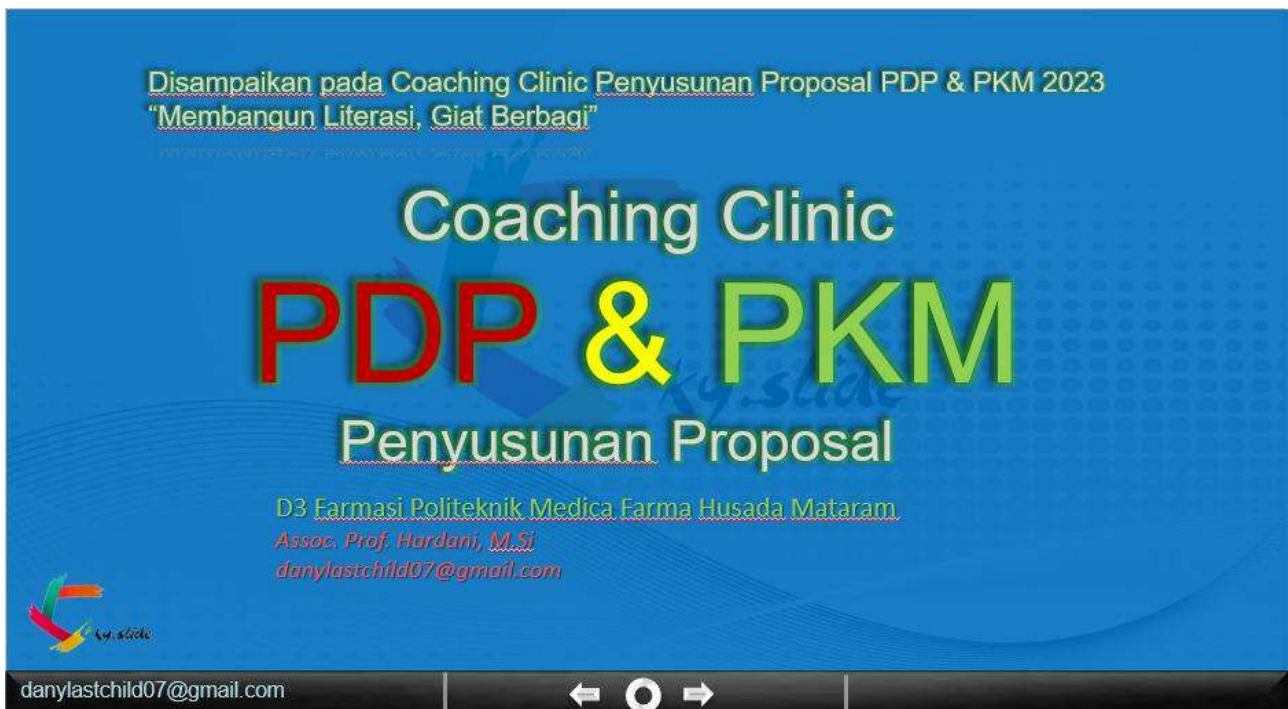


Figure 3. Research proposal preparation material

The implementation of the training activities went smoothly thanks to the participation and support of the Director of Politeknik Medika Farma Husada Mataram. The lecturers benefited greatly from the assistance provided by the presenters and tried to implement it in the preparation of research and service proposals. Effective online instruction depends on well-designed course content, motivated interaction between instructors and lecturers, and well-prepared and fully supported instructors. At the beginning of the meeting on December 16, 2023, community service activities began with the first material, namely an overview of the preparation of research and service proposals. Approximately 20 lecturers

attended via zoom, and they seemed enthusiastic about listening to the material presented. After completing the presentation of the material, the lecturers asked several questions.

In the second session, material on the practice of preparing research proposals starting from determining the title, writing a summary of the proposal, introduction, methodology, budget plan, as well as tips and tricks for penetrating novice lecturer research grants and the process of submitting to the BIMA Kemendikbudristek system. The coaching clinic participants were briefed on the structure and systematics of writing and preparing research proposals. After that, the participants discussed the topic in a discussion session (meeting).

The number of participants who attended this coaching clinic activity was 20 participants out of a total of 25 registrants. The total attendance percentage was 80%. To measure the success of this activity, a pre-test and post-test were given. The results of changes in participants' abilities are presented in Table 1. The documentation of the activity is presented in Figure 4.

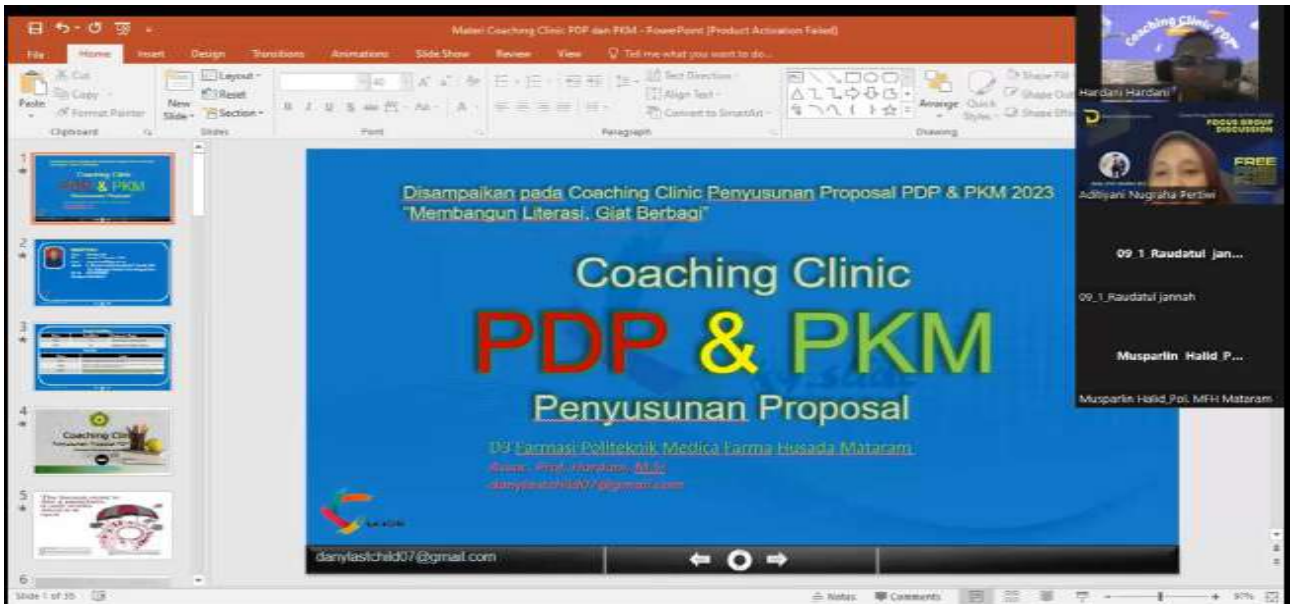


Figure 4. The documentation of the activity

Table 1. Pre-test and post-test results

No	Initials	Ability Improvement Results		Information
		Pre-Test	Post-Test	
1	DJS	60.00	90.00	Increase
2	WRR	60.00	80.00	Increase
3	TU	55.00	80.00	Increase
4	S	60.00	90.00	Increase
5	RAP	60.00	90.00	Increase
6	HA	65.00	90.00	Increase
7	SI	65.00	95.00	Increase
8	RAF	60.00	80.00	Increase
9	DW	60.00	80.00	Increase
10	IH	60.00	80.00	Increase
11	SJ	55.00	80.00	Increase
12	EK	60.00	85.00	Increase
13	NK	60.00	80.00	Increase
14	ADP	60.00	90.00	Increase
15	AS	55.00	80.00	Increase
16	EFU	50.00	80.00	Increase
17	RW	50.00	80.00	Increase
18	SR	50.00	90.00	Increase
19	F	55.00	90.00	Increase
20	MH	60.00	80.00	Increase
Percentage		58.00%	84.50%	

Results of the research proposal writing coaching clinic:

1. Improved proposal quality
The Coaching Clinic successfully achieved its main objective, which was to improve the quality of research proposals. Participants experienced significant improvements in formulating problems, enriching theoretical frameworks, and detailing research methods (Mohajan, 2018).
2. Improved problem formulation
Participants managed to improve the problem formulation in their proposals. The Coaching Clinic helped them to be more focused, specific, and relevant in formulating research problems, so that the research objectives became clearer (Zaman Fadhly, 2022).
3. Accuracy of theoretical framework
Through individual guidance sessions, participants were able to improve their theoretical framework. A deeper understanding of concepts and theories helps strengthen the theoretical foundation in each proposal (Söderlund, 2011).
4. Optimization of research methods
Coaching Clinic participants received specific guidance related to research methods. There was an improvement in detailing the research design, selecting data collection techniques, and determining analysis that was more in line with the research objectives (Asenahabi, 2019).
5. Stronger argumentation
The Coaching Clinic provided direction to build stronger arguments in each proposal. Participants were able to identify evidence to support their research plan, increasing the persuasiveness of the proposal.

Discussion process:

1. The importance of in-depth feedback
The Coaching Clinic results confirmed the importance of in-depth feedback in the research proposal writing process. Participants responded positively to the suggestions provided, and this was a key factor in improving the proposal.
2. The role of individual coaching
The individual coaching sessions proved effective in helping participants overcome specific obstacles they faced. Participants felt more confident after receiving direct guidance on their proposals.
3. The influence of writing techniques
The introduction of effective writing techniques, such as the use of clear language and emphasis on clarity of structure, had a positive impact. Participants reported improvements in the expression of ideas and presentation of proposals.
4. Implementation of improvement exercises
The improvement exercises provided after the Coaching Clinic help participants to implement the proposed changes. This ensures that each participant not only gets feedback, but can also implement the improvements.
5. Active involvement of participants
The active involvement of participants in brainstorming sessions and discussions greatly supports the success of the Coaching Clinic. They feel heard and involved in formulating solutions to the obstacles faced.
6. Final evaluation
In accordance with the results of the Coaching Clinic, a final evaluation was conducted to measure the overall impact of the process. Participants provided positive feedback regarding the benefits of the Coaching Clinic in preparing better research proposals.

Challenges and future recommendations for the research proposal writing coaching clinic. Time-related challenges A number of participants faced time-related challenges in implementing changes after the Coaching Clinic (Vizeshfar et al., 2022). Recommendations included providing continued support and creating realistic timelines. Encouragement for collaboration, Along with the positive results, there was encouragement to develop Coaching Clinic programs that involve collaboration between researchers. This can create an environment that supports the exchange of ideas and experiences. Introduction of coaching clinics in the curriculum, It is recommended to consider the introduction of coaching clinics as part of the research curriculum in educational institutions. This can ensure that the benefits of coaching clinics are accessible to more researchers.

CONCLUSION

Through the results of the Research Proposal Writing Coaching Clinic, it can be concluded that this approach succeeded in having a positive impact on improving the quality of research proposals and there was an increase in the ability of lecturers in preparing proposals by 84.50%. In-depth feedback, individual guidance, and the application of effective writing techniques were key to the success of the Coaching Clinic. Future recommendations include steps to overcome challenges and the development of a sustainable Coaching Clinic program.

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Empowering community at Kampung 1001 Malam through website development

Ragil Tri Atmi ^{a,1,*}, Faisal Fahmi ^{a,2}, Yunus Abdul Halim ^{a,3}, Yanuar Dwi Kurniawan ^{a,4}, Bertha Niken Ayu Pratiwi ^{a,5}, Ajeng Mustika Pratiwi ^{a,6}, Nur Khalisha Syamsi ^{a,7}

^a Department of Information and Library, Faculty of Social Sciences and Politics, University of Airlangga, Campus B. Jl. Dharmawangsa Dalam, 60286-Surabaya, East Java, Indonesia

¹ ragil.tri.atmi@fisip.unair.ac.id; ² faisal.fahmi@fisip.unair.ac.id; ³ yunus.abdul.halim@fisip.unair.ac.id; ⁴ yanuar.dwi.kurniawan@fisip.unair.ac.id;

⁵ bertha.niken.ayu.pratiwi-2021@fisip.unair.ac.id; ⁶ ajeng.mustika.pratiwi-2021@fisip.unair.ac.id; ⁷ nur.khalisha.syamsi-2021@fisip.unair.ac.id

* Corresponding author

ARTICLE INFO	ABSTRACT
<p>Article history Received: 2023-09-25 Revised: 2024-02-04 Accepted: 2024-05-30 Published: 2024-07-04</p> <p>Keywords Information and Communication Kampung 1001 Malam Technology Website</p>	<p><i>In the age of information technology, website development has become a crucial solution in empowering communities, and this article highlights the important role that library and information science students play in this endeavour. The focus is on Kampung 1001 Malam Surabaya, specifically on the community that has undergone relocation to Rusunawa Benowo, Pakal. The website developed by these students became a vital communication and information tool for the community. It provides important information about relocation, available resources, community support, and skills that can help them in facing new challenges after relocation. The importance of good interface design in the development of the website is key, as it ensures that users can easily interact with the website and obtain the information they need. In addition, training and mentoring programs are necessary to ensure effective use of the website. Through the socialisation program, the community is given an in-depth understanding of the importance of the website as a communication tool and source of information that can provide significant benefits in their daily lives. All in all, the development of this website helps to improve the welfare of the community, improve the image of their village, and help them overcome the technological challenges that exist in today's digital era.</i></p>
<p>Kata kunci Informasi dan komunikasi Kampung 1001 Malam Teknologi Website</p>	<p>Pemberdayaan masyarakat di Kampung 1001 Malam melalui pengembangan website. Dalam era teknologi informasi, pengembangan website telah menjadi solusi krusial dalam memberdayakan masyarakat, dan artikel ini menyoroti peran penting yang dimainkan oleh mahasiswa ilmu informasi dan perpustakaan dalam upaya ini. Fokusnya adalah pada Kampung 1001 Malam Surabaya, khususnya pada masyarakat yang telah mengalami relokasi ke Rusunawa Benowo, Pakal. Website yang dikembangkan oleh mahasiswa ini menjadi alat komunikasi dan informasi yang vital bagi masyarakat. Website ini menyediakan informasi penting seputar relokasi, sumber daya yang tersedia, dukungan komunitas, dan keterampilan yang dapat membantu mereka dalam menghadapi tantangan baru pasca relokasi. Pentingnya desain antar muka yang baik dalam pengembangan website menjadi poin utama, karena memastikan bahwa pengguna dapat dengan mudah berinteraksi dengan website dan memperoleh informasi yang mereka butuhkan. Selain itu, program pelatihan dan pendampingan sangat diperlukan untuk memastikan penggunaan website yang efektif. Melalui program sosialisasi, masyarakat diberikan pemahaman mendalam tentang pentingnya website sebagai alat komunikasi dan sumber informasi yang dapat memberikan manfaat signifikan dalam kehidupan sehari-hari. Keseluruhannya, pengembangan website ini membantu meningkatkan kesejahteraan masyarakat, memperbaiki citra desa mereka, dan membantu mereka mengatasi tantangan teknologi yang ada di era digital saat ini.</p>

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INTRODUCTION

Information technology makes it possible to become a forum for interaction between individuals or groups regardless of distance and time, country, race, economic class, ideology or other factors, either directly or indirectly (Dashora & Henry, 2022; Kim et al., 2020; Rahim et al., 2019). Humans need the internet as a means to communicate and access information (Fadhilah, 2023; He et al., 2020). The internet functions as a medium of information and communication needed to expose the resources owned by the community, as well as in Kampung 1001 Malam Surabaya. An information program with an appropriate and directed system in accordance with its usefulness will have a maximum positive impact on its users (Petrova & Pervukhina, 2022; Kurniawan et al., 2020). The existence of harmful information confusion in the community has resulted in public perception of the village, especially recently (Khatimah, 2018). The Surabaya City government has relocated residents under the bridge to other places; there are pros and cons to this. In fact, the community potential human resources that can be developed, which will be of value to the community and the Surabaya government.

Kampung 1001 Malam is one of the residential areas located on the edge of the Morokembang River and the Dupak-Port Tanjung Perak Toll Road, which is almost isolated because the access is relatively closed and far from the city road (Pertiwi & Sarmini, 2021). One of the accommodations to get to Kampung 1001 Malam is by using a mine, which is a raft boat pulled using steel by residents. After crossing the river, the next path will be through the tunnel under the bridge, commonly referred to as the 'mina tunnel'. The livelihoods of the local community, some of whom are scavengers, beggars, and the like, cause most people from other areas around Surabaya to have an unfavourable view of the existence of Kampung 1001 Malam, which is then supported by the uninhabitable environmental conditions. In addition, the people of Kampung 1001 Malam are classified as marginalised communities who are inhibited from expressing themselves because they almost never get more attention from various parties, both the community and the village government. This makes them powerless in the community, and they need access to village policies.

Even though the people of Kampung 1001 Malam are classified as marginalised, they do not despair about the situation and conditions they have. They certainly want changes to their quality of life in accordance with Law 11/2009 on social welfare. The law describes the condition of a prosperous society with the fulfilment of material, spiritual and social needs in a decent life and self-development of social functions (Muhammad, 2019). Interviews conducted with an interview with the head of village highlights that found information that the Kampung 1001 Malam community needs education and assistance regarding promotion and information communication media facilities to provide updates to the general public about a better quality of life after relocation activities in several Rusunawa, especially Rusunawa Benowo Pakal. This is supported by the agenda setting theory by Maxwell McCombs and Donal Shaw which states that the mass media has the power to change priorities on personal topics so that they get public attention (Karman, 2019). The public will assess what is the main topic in the audience has the ability to change the news agenda that is private into an agenda that can be accessed by the wider community.

In order to achieve a prosperous life and community conditions, various things are done by the people of Kampung 1001 Malam for this purpose. This can be seen from the various skills possessed by the people of Kampung 1001 Malam, especially for the purpose of fulfilling their daily economic needs and improving their own welfare. One example of such skills is the group of married-women who have potential skills such as making spinach chips, embroidering ribbons, making tempered chips, spinach brownies, and so on. The knowledge that exists in each individual needs to be stored and disseminated through website media, so that the knowledge possessed in each individual can have value, can be utilised and developed further (Wulandari & Nurisani, 2020). Thus, it is necessary to take an approach to disseminating information through website media that can be accessed anytime and anywhere, thus website has revolutionized the way information is shared (Baharuddin et al., 2022; Lord et al., 2019; Joly, 2017). The choice of information dissemination using a website is because the information presented on the website page can be conveyed more clearly, and described in an easy-to-understand form, so that the website becomes an appropriate, efficient, and accurate information media to use (Andriyan et al., 2020).

As the implementation of Tri Dharma Of higher education website development activities involve students and lecturers with the aim of empowering the community through the contribution of disseminating knowledge, skills, and resources needed to overcome the challenges faced (Ekadjaja et al., 2023; Maududi et al, 2022). The website is a bridge that connects knowledge and society (Sarantis, 2024; Fadhilah & Yulianita, 2023). Students will play a role as part of the website system development and facilitators in the training organised and help to understand the utilisation of the website so that it can be utilised properly by the Kampung 1001 Malam community to become a bridge in delivering information and ensuring all training activities run effectively. Efforts in website development for 1001 Nights Village are expected to expose all existing activities and potential to the wider community (Sudjatmoko et al., 2023). The benefits that can be obtained if the Kampung 1001 Malam area has a special website is that it can improve the image of their village where the general public can easily get information about existing developments and activities. As the implementation of Tri Dharma Perguruan, website development activities involve students and lecturers with the aim of empowering the community through the contribution of disseminating knowledge, skills, and resources needed to overcome the challenges faced (Salam, 2020). This aspect is a benchmark used in achieving sustainable development

(Anggara et al., 2022). This community service aims to realise several Sustainable Development Goals (SDGs) number 4, i.e Quality Education (United Nation, n.d.). Therefore, collaboration in the realisation of information technology, websites, and the development of human resources in managing information are the main objectives in the service carried out in Kampung 1001 Malam.

METHOD

The implementation of community service activities for website development for 1001 nights village is as in Figure 1.

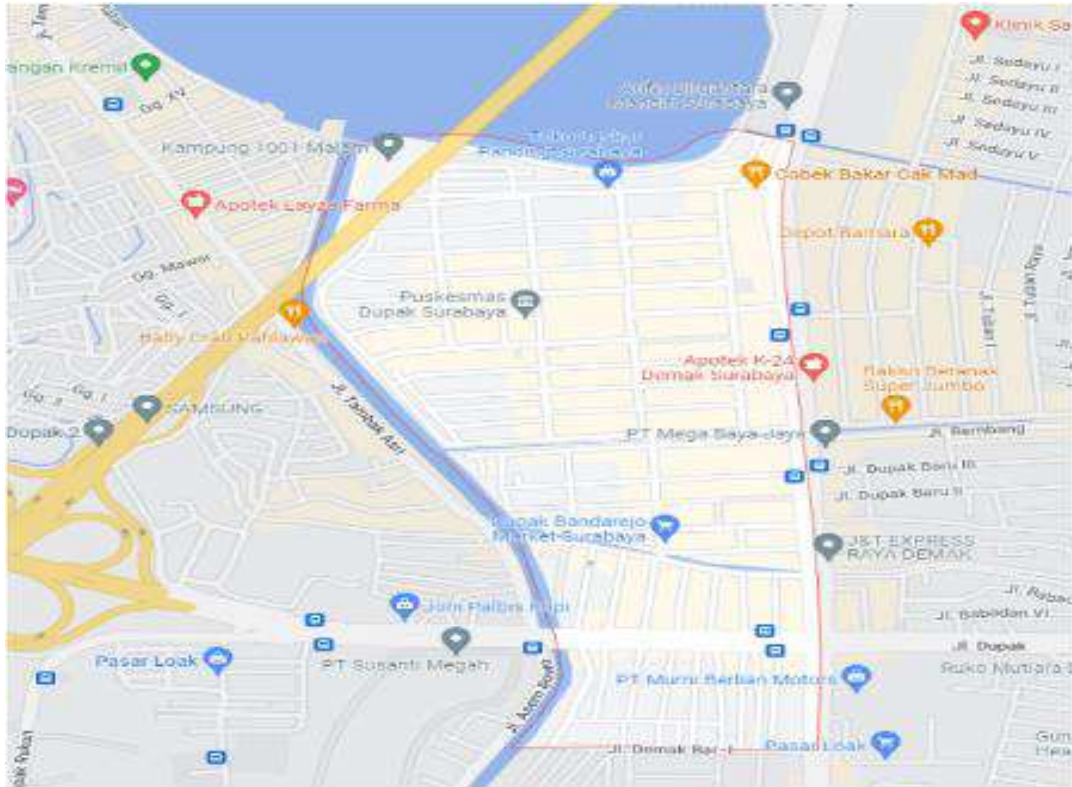


Figure 1. Location of Kampung 1001 Malam

Target Condition Analysis

The condition analysis activity was carried out by conducting a survey of the Kampung 1001 Malam community where in the course of community service, the original condition which was under the Dupak Toll Bridge was relocated by the Surabaya City government to several Rusunawa.

Condition analysis has the aim of designing activities that will be agreed upon for approximately three months by each party, namely representatives of the Kampung 1001 Malam Community Social Institution, the service team, and representatives from the UPTD Surabaya Rusunawa Service. The division of tasks is as follows: (a) The task of the Service Team in this activity is to become a facilitator for the community in developing website content and operations. (b) The task of the UPTD Rusunawa Office is to assist in accessing permits in the implementation of the scene. (c). The Kampung 1001 Malam community is the implementer and target so that they have responsibility for operating and creating news content for the website.

Mentoring and Training

The implementation of the mentoring and training program aims to increase the understanding of productive age communities about the structure and function of the menu on a website, with the aim of maximising the use of available features. This program also provides guidance in the process of creating content that will be uploaded to the website (Renshaw & Burton, 2023). The success indicator of this mentoring and training program is the level of active participation of local communities in the website development process as well as a deeper understanding of the functions, structure, and benefits that can be obtained from the website (Richter et al., 2023). In this context, it is important to understand that a website is a digital platform that has a central role in the current era of information and technology. It is a virtual platform that enables effective information delivery, social interaction, and content development.

Socialisation

Socialisation and training on optimising the use of website media as a means of information, communication, content creation, and as a support for online buying and selling is an important step in the context of current technological developments (Kurniawan, 2020). Socialisation is implemented through practical methods and lectures to make it easier to be accepted by the community (Tanjung et al., 2021). The purpose of this activity is to ensure that the community of Kampung 1001 Malam has good adaptability to the development of digital technology and the use of website media. In addition, this program also aims to improve their technical skills in managing the website as a communication and information tool for Kampung 1001 Malam Surabaya, as well as providing training in creating relevant and useful content, especially on news about daily activities and activities carried out. Thus, this website can be an effective platform to strengthen the image and identity of their village in the digital world, fulfil the information and communication needs of the community more efficiently, and become a means of supporting online buying and selling that facilitates economic growth.

Utilising the website as a tool to support online buying and selling allows small and medium entrepreneurs in the 1001-night village to expand their market reach. In this training, they will understand how to post products, manage product inventory, and run transactions securely. This will not only increase income but also help the local community in facing the challenges of technological development.

This implementation method is complemented by a socialisation program accompanied by discussions and lectures by bringing in speakers who are competent in the field of information technology. Monitoring during the socialisation activities was carried out through direct observation of the enthusiasm and activeness of the community to measure the level of understanding of the community regarding the material of the activities held. In addition, the demonstration and practice method made the community of Kampung 1001 Malam practice directly after the socialisation activities were held. This aims to encourage the community to be active in improving their skills, accompanied by mentoring as a forum to monitor and evaluate various kinds of mistakes during the activities.

RESULTS AND DISCUSSION

Preparation stages and observation of the target situation

At this stage is the first step in community service activities, in this case the efforts made are to conduct location surveys and interviews. The first interview activity was conducted with Bu Purwanti through a zoom meeting on 15 March 2023 to discuss the conditions of the community that occurred and accommodate the needs of the Kampung 1001 Malam community (Figure 2). This effort is made in order to provide sustainable benefits and create website features that will be designed.



Figure 2. Interview

During the interview, it was found that the 1001 Malam community located in the Dupak area will be relocated to several rusunawa spread across Surabaya City. So, the next step is to search for information about relocation planning considering that the relocated community will face various challenges, including changes in education facilities, health

access, and understanding the social and psychological impacts that may occur due to the implementation of relocation activities (Figure 3).

The relocation situation creates significant adaptation challenges, especially for the entire community of Kampung 1001 Malam. Further efforts to understand the relocation conditions, the next preparation is to conduct a survey in the Rusunawa Benowo area, Pakal which is one of the relocation areas by identifying social conditions, facilities, and post-relocation community activity plans (Figure 4). In the survey and interview process, information was extracted regarding the efforts made by the government and related organisations on post-relocation mitigation of the Kampung 1001 Malam community. These aspects include the establishment of programs in the rusunawa to help them adapt to the new environment. The results of the survey and interviews will be the basis for the formation of the website in the service project to determine features that are in accordance with existing conditions.



Figure 3. Relocation Situation



Figure 4. Rusunawa Benowo, Pakal

Website development process

The internet has a function as a medium of information and communication needed to expose the resources owned by the community, as well as in Kampung 1001 Malam Surabaya. An information program with an appropriate and directed system in accordance with its usefulness will have a maximum positive impact on its users (Kurniawan et al., 2020). This step is part of the role of Information and Library Science Students to implement knowledge and skills in creating a portal that is useful for the people of Kampung 1001 Malam who were relocated to Rusunawa Benowo, Pakal. The first aspect that becomes the main focus is the formulation of website objectives clearly so that the website can be utilised and provide benefits to the community. The aspects that will be accommodated in the website are the provision of information related to recolonisation, resources, community support, community skills, and providing communication space facilities to the relocated community.

In the context of website development, user interface design is a crucial stage (Figure 5). Interface design ensures that users can easily interact with the website and get the information they need (Issa & Isaias, 2022). It includes visual elements such as page layout, placement of the latest news on the front page, and the use of logos as identifiers (Kress & Leeuwen, 2020). The interface design process aims to achieve three important aspects, namely usability, aesthetics, and brand understanding. Usability ensures that users can easily access available information and features. Visual elements, such as layout and content placement, play an important role in creating an intuitive user experience. Aesthetics, on the other hand, creates a visual appeal that influences users' perception of the website's quality and professionalism. In addition, the use of a logo as an identifier serves a strategic purpose in branding (Figure 6). A logo is a symbol that depicts the identity and values that a website wants to convey. For example, the logo of Kampung 1001 Malam that combines the infinity and butterfly symbols reflects a deep meaning. Infinity, as a sign of limitlessness, depicts continuity and resilience, while the butterfly contains a symbol of transformation and growth, reflecting the spirit of change and progress desired by the people of Kampung 1001 Malam post-relocation. The presence of the word "reborn" in the logo becomes a strong identity, signifying the spirit of change, recovery, and meaningful growth in the Kampung 1001 Malam community. This logo represents the image and message that the website wants to convey, including the hope for a better future and the positive changes that occur after relocation.



Figure 5. Website Development Discussion



Figure 6. 1001 malam reborn logo

Website development training and mentoring

One of the strategies in improving the quality of an effective website such as good web content and necessary navigation is through information architecture (Bahri et al., 2022). Which contains information in the form of charts, columns, or structured designs that are interrelated so that it is more easily understood by others. A good website has a collection of information consisting of interconnected web pages either dedicated by individuals, groups, or organisations (Rochmawati, 2019). Thus, giving a quality impact on the image that is built. Effective website quality also directly impacts information about the activities and development of the Kampung 1001 Malam and product promotion on the website. However, because the knowledge of the Kampung 1001 Malam community regarding the structure and optimisation of the website is still lacking, the website information architecture (design) socialisation program needs to be carried out by means of training in understanding and creating a quality and effective website design structure in supporting their needs in the aspect of information dissemination facilities and product promotion. The main target in the implementation of this activity is the productive age community by introducing the contents of the structure and menu functions available on the website so that they can maximise the functions of the available features (see Figure 7 and Figure 8).



Figure 7. Introduction of the website architecture

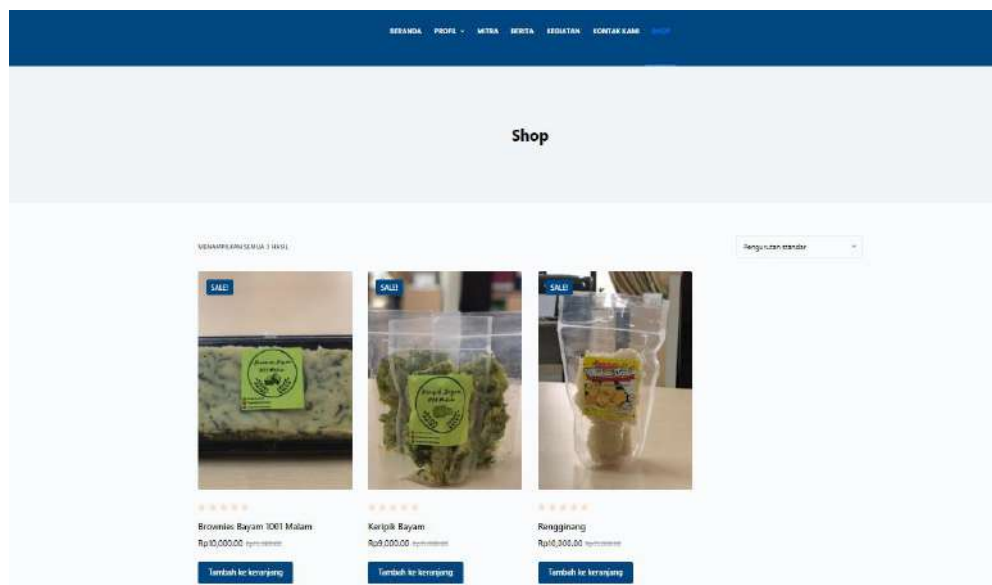


Figure 8. community business products

Socialisation and website launching

Along with the rapid development of technology, users are required to master science and information technology. Information technology is one of the main factors that support the effectiveness of society in facilitating all activities in everyday life. Technology is increasingly of various types. This is not limited to one of its functions, namely as a means of promotion and information, especially in the field of websites which currently play an important role in the aspect of delivering up to date information. This socialisation also explains about the website as a media used as a means of marketing, promotion, information, education, and communication because it is easily accessible to various levels of society in various regions using only internet access. The website as a medium to introduce the various potentials and advantages of a product is also related to information in sharing all information in an effort to brand something to the wider community (Figure 9 and Figure 10).



Figure 9. Socialisation for 1001 malam



Figure 10. Department representative's speech

Therefore, a socialisation program related to the use of websites for information and communication media with speakers who are competent in the field of information technology is expected to provide significant knowledge, experience and benefits. The program focuses on explaining the background of why the website should be used and how to make the most of the website for information and communication media in the current era. Therefore, this socialisation program is expected to be able to help the Kampung 1001 Malam community to optimise the use of the website and its utilization strategy to improve their welfare, especially in the aspect of improving information about the image of the Kampung 1001 Malam as well as the income and profit of their business in the future. The socialisation activity was held at Alexa Building, Campus B Universitas Airlangga and attended by representatives of the Kampung 1001 Malam community.

CONCLUSION

This community service explores the role of library and information science students in developing a website for Kampung 1001 Malam Surabaya. Kampung 1001 Malam is a settlement located on the banks of the Morokembang River and the Dupak-Port Tanjung Perak Toll Road, which is geographically isolated and less accessible. The majority of the population are scavengers and beggars. People in this village are faced with various challenges, including negative perceptions from the outside community. The Surabaya City Government recently relocated some of the residents of this kampung to Rusunawa Benowo, Pakal. This creates significant adaptation challenges, especially in changes to education facilities, access to healthcare, and the social and psychological impacts that may occur as a result of this relocation. In an effort to improve the quality of life of this kampung community and overcome the challenges of relocation, this research involves information and library science students. The students acted as website system developers and facilitators in the trainings organised. They helped the community understand the utilisation of the website as a tool for communication, information, and support for online buying and selling. The development of this website became an effective tool in providing information about relocation, resources, community support, skills, and means of supporting online buying and selling to the community. Good website interface design and information architecture ensure that users can easily interact with the website and obtain the required information. In addition to website development, socialisation and training programs are essential. The community is trained in understanding and utilising the website to its full potential. They are also given an understanding of the benefits of the website as a means of communication, information, and support for online buying and selling. This program is expected to help the community of Kampung 1001 Malam Surabaya in optimising the use of the website and its utilisation strategy to improve their welfare. The community service provided an understanding of the importance of collaboration between universities and communities in overcoming social challenges. With website development and appropriate training, the people of Kampung 1001 Malam can have better access to information, improve the image of their village, and enhance their quality of life in the digital era.

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Digitalization for family documents: Improving awareness of digital archives using Google Drive for facing industry 4.0

Febrika Yogie Hermanto ^{a,1,*}, Meylia Elizabeth Ranu ^{a,2}, Triesninda Pahlevi ^{a,3}, Jaka Nugraha ^{a,4}, Berlina Hidayati ^{b,5}, Anthony Ogbolu Nnamdi ^{c,6}, Maratus Sholikah ^{d,7}

^a Universitas Negeri Surabaya, Ketintang Street Number 2, Ketintang, Gayungan, Surabaya, East Java 60231, Indonesia

^b Universitas Terbuka, Cabe Raya Street, Pondok Cabe, Pamulang, South Tangerang, Banten 15437, Indonesia

^c Research & Development Manager, GCL Global Consulting, Nigeria

^d Politeknik Balekambang, Balekambang, RT.02/RW.07, Gemiring Lor, Nalumsari, Jepara, Central Java 59465, Indonesia

¹ febrikaermanto@unesa.ac.id*; ² meyliaaranu@unesa.ac.id; ³ triesnindapahlevi@unesa.ac.id, ⁴ jakanugraha@unesa.ac.id, ⁵ berlina@ecampus.ut.ac.id,

⁶ ogbolujur2060@gmail.com, ⁷ maratussholikah.polibang@gmail.com

* Corresponding author

ARTICLE INFO	ABSTRACT
<p>Article history Received: 2023-11-24 Revised: 2024-02-06 Accepted: 2024-03-27 Published: 2024-07-04</p> <p>Keywords Awareness of Digital Archives Digital Administration Literacy Digitalization for Family Documents Industry 4.0</p>	<p><i>It is necessary to understand digital-based family document management through training activities provided to the women's community in Sukodono-Sidoarjo. The aim of this program is to increase awareness of digital-based family document management in the era of technology 4.0 by providing lectures and practice of digital family archiving using Google Drive to mothers who have direct contact with managing documents in the family. This Community Service adopts experimental research with a quasi-experiment model, one group pretest-posttest design, where the level of success of the program can be seen from the increase in the training participants' abilities as shown by the results of the N-Gain Test calculation through Pretest and Posttest, affective scores, and psychomotor scores each participant. The results show that the digital-based family document management training agenda using Google Drive was effectively implemented by all participants based on the cognitive, affective and psychomotor aspects of this training. The effectiveness of this training has implications for increasing public awareness of digital archives for family documents owned by all participants, where this awareness is aimed at the use of digital public services in Sidoarjo. The use of the digital public service agenda promoted by the Government is an effort to increase SDGS 9 achievements in the indicator of the proportion of the population served by mobile broadband. Thus, the better prepared the community is to support digital public services, the higher the SDGS 9 score in a region/region.</i></p>
<p>Kata Kunci Digitalisasi untuk Dokumen Industri 4.0 Keluarga Kesadaran Arsip Digital Literasi Administrasi Digital</p>	<p>Digitalisasi untuk dokumen keluarga: Meningkatkan kesadaran akan arsip digital menggunakan Google Drive untuk menghadapi industri 4.0. Pemahaman mengenai pengelolaan dokumen keluarga berbasis digital melalui kegiatan pelatihan yang diberikan kepada komunitas perempuan di Sukodono-Sidoarjo perlu dilakukan. Tujuan program ini adalah untuk meningkatkan kesadaran pengelolaan dokumen keluarga berbasis digital di era teknologi 4.0 dengan cara memberikan ceramah dan praktik pengarsipan digital keluarga dengan menggunakan Google Drive kepada ibu-ibu yang bersentuhan langsung dengan pengaturan dokumen dalam keluarga. Pengabdian kepada Masyarakat ini mengadopsi penelitian eksperimen dengan model quasi experiment, one group pretest-posttest design, dimana tingkat keberhasilan program dapat dilihat dari peningkatan kemampuan peserta pelatihan yang ditunjukkan dari hasil perhitungan N-Gain Test melalui Pretest dan Posttest, skor afektif, dan skor psikomotorik masing-masing peserta. Hasil menunjukkan bahwa agenda pelatihan pengelolaan dokumen keluarga berbasis digital dengan menggunakan Google Drive efektif dilaksanakan oleh seluruh peserta berdasarkan nilai aspek kognitif, afektif, dan psikomotorik dalam pelatihan ini. Efektivitas pelatihan ini berimplikasi pada peningkatan kesadaran masyarakat akan arsip digital untuk dokumen keluarga yang dimiliki oleh seluruh peserta, dimana kesadaran tersebut ditujukan pada penggunaan layanan publik digital di Sidoarjo. Penggunaan agenda layanan publik digital yang digalakkan oleh Pemerintah merupakan upaya untuk meningkatkan capaian SDGS 9 pada indikator proporsi penduduk yang terlayani mobile broadband. Dengan demikian, semakin siap masyarakat dalam mendukung layanan publik digital, maka semakin tinggi pula skor SDGS 9 di suatu wilayah/daerah.</p> <p style="text-align: right;">Copyright © 2024, Hermanto, et al This is an open access article under the CC-BY-SA license</p> <div style="text-align: right;">  </div>
<p>How to cite: Hermanto, F. Y., Ranu, M. E., Pahlevi, T., Nugraha, J., Hidayati, B., Nnamdi, A. O., & Solikah, M. (2024). Digitalization for family documents: Improving awareness of digital archives using Google Drive for facing industry 4.0. <i>Journal of Community Service and Empowerment</i>, 5(2), 363-375. https://doi.org/10.22219/jcse.v5i2.30323</p>	

INTRODUCTION

The development of information and communication technology has brought about many influences and changes in social life. The concept of life with unlimited interaction patterns can be reached by everyone with different time and place backgrounds and has been applied in various parts of the world. One application of the development of information and communication technology is very massive in the field of government, where the government has the responsibility to provide the best service to the community. The classic model of service carried out by face-to-face service is gradually changing into digital service (Berényi & Sasvári, 2018) that is in line with technological developments in government administration services. This change occurred very quickly when the COVID-19 pandemic entered Indonesia in 2020, causing a transformation in the work system (Yudhiasta & Mijiarto, 2023) in the government sector, namely from Work from Office (WFO) to Work from Home (WFH) (Arlinwibowo, Retnawati, Kartowagiran, & Kassymova, 2020). The policy was taken due to the very rapid spread of the Covid-19 pandemic, so special treatment is needed for the transmission prevention stage through the implementation of lockdown, self-quarantine, and social distancing (Khachfe, Chahrour, Sammouri, Salhab, Makki, and Fares, 2020) in social activities in the community. Lupia, Scabini, Simone, Perri, Rosa, and Corcione (2020); Martinez (2020); Yang, Park, Lee, and Lee (2019) added that due to the rapid spread, many sectors changed service patterns where previously they had to meet each other. Moreover, in response to this, the Indonesian government enforces the transformation of work mechanisms according to (Ministry of Administrative Reform and Bureaucratic Reform, 2021) to simplify the process of bureaucratic work systems that adhere to the principle of business processes from state civil apparatus employees by utilizing electronic or digital-based government systems.

Changes in the work system have had an impact on the acceleration of digital public service changes in Indonesia, with the hope of achieving 12 principles of optimal public service delivery based on (Indonesian Republic, 2009; Putri & Soesiantoro, 2023), namely: 1) public interest, 2) legal certainty, 3) equal rights, 4) balance of rights and obligations, 5) professionalism, 6) participatory, 7) equality of treatment/non-discrimination, 8) openness, 9) accountability, 10) facilities and special treatment for vulnerable groups, 11) timeliness, 12) speed, convenience, and affordability. Digital public services have several benefits and advantages such as increasing efficiency and effectiveness, accelerating the process of providing services to the public, more complete, accurate, fast information at a more efficient cost, a high level of transparency, the availability of an updated database, and supporting the creation of good governance. Digital public services can minimize administrative services in the form of direct face-to-face service, whereas administrative services in the industrial era of 4.0 (Widianingrum, Suranto, Hermanto, & Sholikah, 2020) require all people to have a good understanding of digitalization for all sectors of public services. Sudiran and Adityo (2023) add that the Industrial Revolution 4.0 has advantages and challenges for people's social lives, so it is necessary to understand the digital space sufficiently to maximize the posture of the digital era. Besides, not all people in Indonesia are ready for the digitalization of public services (Putri & Soesiantoro, 2023), where these services require that all document requirements have to be provided in digital format. Then, Minarso, Salim, Rahmi, and Sani (2023); Sinn, Kim, and Syn (2017) stated that this digitalization process requires a thorough personal understanding regarding the advantages obtained, especially for the administrative process of digital public services.

Furthermore, the implementation of digital public services in Indonesia has been implemented in almost all regions in Indonesia, where Sidoarjo Regency has 1) SiPraja system that is designed by an application based on Android and Website (Suparno, 2021), and 2) Plavon Disdukcapil for digital public service based on Website (Putri and Soesiantoro, 2023). Both services are used to support the implementation of the Public Service Mall in Sidoarjo. First, some of the digital services in SiPraja include services for managing population administration, licensing, and non-licensing (Rekasari and Fanida, 2022). Besides, the SiPraja website page has classified the types of services at each level according to the subject of the required document processing. Second, The digital service of Plavon Disdukcapil has the main objective of processing population documents (Putri and Soesiantoro, 2023), where some of the services include services for birth certificates, death certificates, marriage certificates, divorce certificates, identity cards, child identity cards, family cards, moving certificates, arrival certificates, etc.

Digital services in the SiPraja and Plavon Disdukcapil in Sidoarjo Regency must log in with an account to choose a service that is needed by a person. Then, the person must fill in a lot of information and upload a digital document in a form that has been created. In the process, users of this application can print results independently or take the results to the public service office. Many problems occur in this process if a person does not have digital administrative literacy. Furthermore, the main problem is that many individuals need assistance and help in making arrangements through digital public services, where (Putri and Soesiantoro, 2023) revealed that public awareness related to personal population data is still very low.

The problem shows that accessing public services digitally requires digital administrative literacy skills by the community, di mana digital administrative literacy is the ability to use information and communication technology to find, evaluate, utilize, create, and communicate administrative information with cognitive and technical skills (Berényi and Sasvári, 2018; Safarov, 2023). Thus, all users of digital public services require digital administrative literacy skills. This digital administrative literacy skill is two competencies consisting of administrative literacy and digital literacy.

According to Berényi and Sasvári (2018); Winarno and Zulaikah (2021) administrative literacy is where a person can understand and apply administrative behavior in everyday life. Anjarsari (2014) adds that if someone has good literacy, they will be responsive and care about issues that develop in society, can think critically and creatively in solving problems, and have deep knowledge and understanding when applying them. In addition, digital literacy skills are a combination of operational skills needed to use digital hardware and information-related skills which are the ability to find, process, and produce information on the Internet (Safarov, 2023). Therefore, digital administrative literacy skills are skills possessed by someone related to the ability to find, process, and produce something in administrative activities presented through certain platforms or internet media.

Then, the digital administrative literacy skills can be realized in awareness of digital archives (Jantz and Giarlo, 2007) to prepare a digital environment in Sidoarjo starting from the family, where it focuses on digital archives for family documents. This agenda is aimed at digital environment preparation that can run effectively in supporting the achievement of the effectiveness of digital public services in Sidoarjo. Moreover, Rekasari and Fanida (2022) stated that, in Sukodono District, correspondence management must go through the SiPraja and Plavon Disdukcapil – a digital application or platform service – and the community does not fully understand the documents that must be prepared in digital form to support the ease of using these digital services. Thus, the team's agenda is to increase understanding of digital administrative literacy through family document management to families in Sukodono – Sidoarjo, from the women's community.

The need to store documents in digital form for family documents is strongly influenced by technological developments (Kleek and Ohara, 2014; Minarso et al., 2023; Sinn et al., 2017). Marshall (2011) identified the main factors for a person to archive digitally her/his documents: a digital collection, digital stewardship, and technology for storing and sustaining digital belongings. Minarso et al. (2023); Sinn et al. (2017) reported that a person's attachment to archive digitization is placed on awareness of the risk of losing original documents due to their disbursement and placement. In addition, the speed of archive retrieval can be one of the strong reasons for people to store their documents digitally (Bergman, 2013; Jones, 2007). Sinn et al. (2017) added that the most important thing on the digital document storage agenda is that users must have easily accessible storage space, sufficient storage memory capacity, a backup system of digital archives, and multiple duplicate copies.

Thus, referring to the person's preference to archive his document, the team chose the Google Drive platform because the platform has the characteristics needed by the person to practice digital archives. Herawati, Suwilo, Mawengkang, and Syahmrani (2023) stated that one account on the Google Drive platform has a storage capacity of 15GB, and each person has an account on Google Drive. This media is very familiar in Indonesia and is attached to the culture of the community in storing personal documents (Minarso et al., 2023). However, this potential has not been utilized by people in Indonesia, especially in Sidoarjo Regency, Sukodono District in managing family documents in preparation for the management of public services such as SiPraja, and Palvon Disdukcapil. So, this agenda can support the achievement of Indonesia's Sustainable Development Goals (SDGs) 9 (Allen, Metternicht, and Wiedmann, 2018; Omer and Noguchi, 2020) by helping to increase the indicator of the proportion of the population served by mobile broadband (National Development Planning Agency of Indonesia, 2023). With the readiness of the community to face digital public services and having a good understanding of digital administrative literacy, it is expected to accelerate the digitalization program and improve the achievement of SDGs 9 Indonesia.

METHOD

This Community Service is carried out in women's community at the village level to educate women in digital-based family document management using Google Drive by the groups in Sukodono District, Sidoarjo Regency, where this activity begins with 1) Observation and discussion with the target group, 2) Formulating activities with training schemes, 3) Developing program implementation instruments, 4) Program Implementation, and 5) Program Evaluation. In addition, this agenda was attended by 104 participants, where the respondents consisted of representatives in each village in Sukodono District, consisting of 32 villages. The selection of respondents was based on the distribution and coverage of the area in Sukodono District, using purposive sampling (Sugiyono, 2014), where it was intended that the dissemination of information and skills in digital-based family document management using Google Drive could be spread throughout the village community.

This Community Service adopts experimental research with a quasi-experiment model, one group pretest-posttest design (Cook and Campbell, 1979; Sholikah, Sutirman, and Hermanto, 2020), where the level of program success can be seen in the improvement of the trainees' abilities as shown in the results of the N-Gain Test calculation through the Pretest and Posttest of each participant (Arlinwibowo and Retnawati, 2015; Hermanto, Sutirman, Mar'atus, and Ranu, 2021). The indicators used in measuring the success of the program are about digital-based family document management using Google Drive, where participants must answer questions that have been made before and after training, so the results of each participant's ability are obtained. The indicators for the questions of the Pretest and Posttest are 1) why digital-based family document management is important for the person in industry 4.0, 2) what the tools are required for digital-based family document management, 3) what the classification of the family documents can

be archived by digital tools, 4) why the family documents need to be classified in digital-based family document management, 5) what the family documents can be organized in digital-based family document management, 6) what codes are used to manage digital-based family document, 7) why the codes are important for digital-based family document management, 8) what the advantages for digital-based family document management, 9) who the person needs digital-based family document management, and 10) who the person can manage digital-based family document management.

In addition, the assessment of the psychomotor aspect can be seen in the results of the practice. For the agenda, the indicators for the skill aspect are addressed in the classification of digital-based family document management by using Google Drive. The indicators are addressed in 7 forms of documents by utilizing storage facilities in Google Drive, namely 1) Personal Data Document (PDD), 2) Education Document (ED), 3) Employment Document (EmD), 4) Health Document (HD), 5) Finance Document (FD), 6) Assets Document (AsD), and 7) Family History Document (FHD), where in the Google Drive account each participant must have a folder with these names. The score for psychomotor aspect is placed on the practice results of each participant by using 0-100 scale. Furthermore, the family document for practice skills that have been scanned using a scanning machine or the photo on a smartphone are uploaded according to the predetermined classification type, for example, 1) ID card files should go into the folder of Personal Data Documents, 2) Diplomas and Grade Transcripts should go into the folder of Education Documents, 3) Land Certificates should go into the folder of Asset documents, 4) Personal or Family Photos should go into the folder Family History Document Documents, and so on. The archiving system for testing the practical skills is shown in the Figure 1.

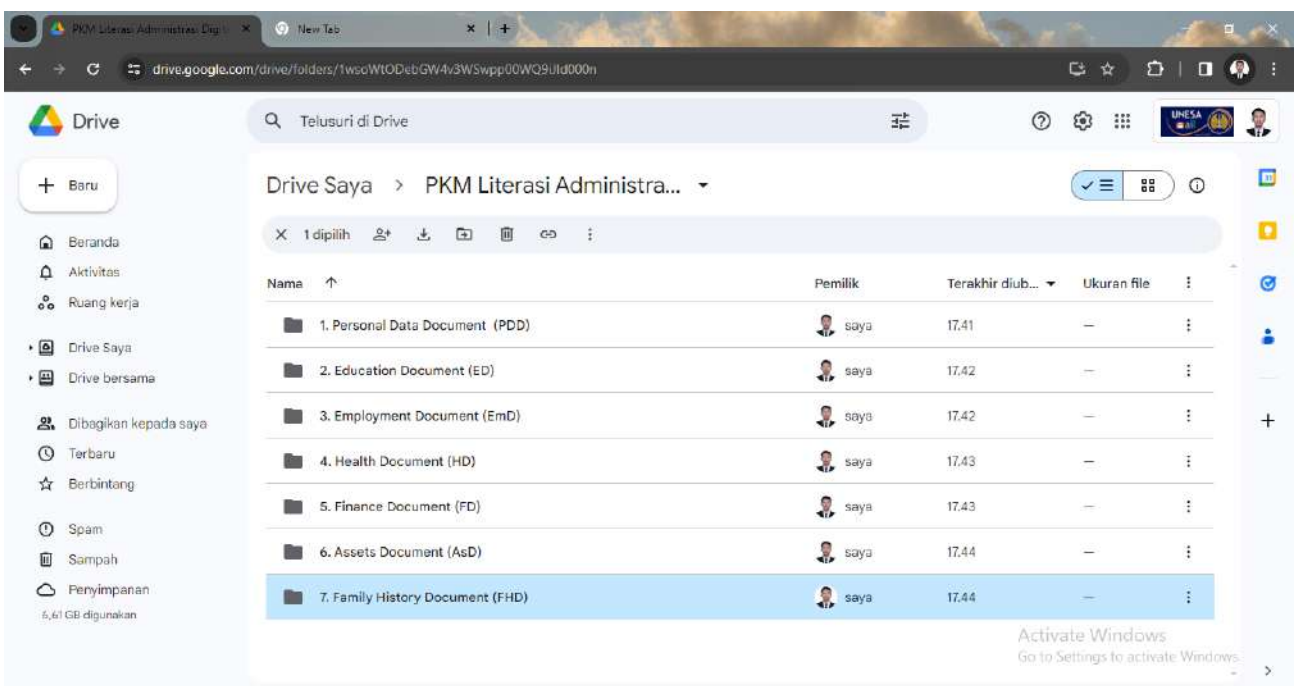


Figure 1. Archiving System for Family Documents by using Google Drive

Then, the assessment of the affective aspect can be seen from the Independence, Responsibility, and Discipline of each participant in completing the tasks in the training (Hermanto et al., 2021). Thus, the success of the program can be formulated from the three results of the assessment analysis. Furthermore, the assessment of training by participants is realized in the form of a questionnaire with Indicators and Statements modified from the model (Sari and Yarza, 2021). The questionnaires are on Table 1.

Table 1. Indicators and List of Statements in the Questionnaire

Indicators	Questionnaire
Training Theme	<ul style="list-style-type: none"> The training theme is the material provided. The training theme is suitable for what I need. The training theme is appropriate for the target group.
Punctuality	<ul style="list-style-type: none"> The training is carried out by the specified time duration. The time used is sufficient to explain the training material. The training starts according to the specified schedule.
Training Atmosphere	<ul style="list-style-type: none"> The training is conducted in a conducive atmosphere. The training environment supports the achievement of training objectives.

Indicators	Questionnaire
Material Completeness	<ul style="list-style-type: none"> The training atmosphere is in line with participants' expectations. The material is presented during the training completely following the training objectives.
Organizer Service	<ul style="list-style-type: none"> The material presented can explain the training topic well. The completeness of the material can improve the ability of participants. The organizer gives a good briefing during the training. The organizer is friendly during the training. The organizer helps the training to run well.
Tools Used	<ul style="list-style-type: none"> Implementation of training using supportive equipment. The training uses equipment that is appropriate to the needs. The training aids can help the implementation of activities.
Mastery of the Problem by the speaker	<ul style="list-style-type: none"> The Speakers can respond well to questions posed by participants. The speaker can provide solutions to the problems raised by the participants. The speaker understands the problem raised by the participants.
Presentation method by the speaker	<ul style="list-style-type: none"> The material presented at the training is very easy to understand. The material was presented interestingly by the speaker (not boring). The resource person presented the material in audio-visual form during the training.
Benefits of the material provided by the presenter	<ul style="list-style-type: none"> The material presented at the training is very useful. The material presented at the training can be implemented. The material presented at the training is as needed.
Interaction between the presenters and participants	<ul style="list-style-type: none"> The speaker provides opportunities for participants to ask questions. The speaker interacts when delivering material to participants. The speaker can liven up the training atmosphere so that there is an active discussion.

The assessment was aimed at participants who attended the training from start to finish, where the assessment was based on a Likert scale (Vagias, 2006) starting from a score of 1) Strongly Disagree, 2) Disagree, 3) Enough, 4) Agree, and 5) Strongly Agree.

Data Analysis

The data analysis used to measure the success of the program uses the N-Gain Test method where the pretest results and posttest results are calculated so that it can be seen at which interval the N-Gain is obtained. According to (Arlinwibowo and Retnawati (2015) determining the success of the program can use the formula $N - Gain = \frac{\text{posttest score} - \text{pretest score}}{\text{Ideal maximum score} - \text{pretest score}}$ with the criteria for the score obtained in Table 2.

Table 2. Criteria of the N-Gain Test

Interval	Criteria
N-Gain > 0.7	High
0.3 < N-Gain < 0.7	Middle
N-Gain < 0.3	Low

If the N-Gain assessment results are in the middle and high criteria, then the program can be said to be successful. If the N-Gain assessment results are in the low criteria, the program can be said to be unsuccessful. Then, the practice that is conducted by participants is assessed by the Team of Community Service or judgment method by the accuracy of the archiving results on the system. The accuracy can be shown by the score with a 1-100 scale, where a score above 70 is passed in the practice skill in digital-based family document management. As for the analysis to assess the quality of training, we refer to the model (Saputri, Sukirno, Kurniawan, & Probowasito, 2020) to assess the results of the questionnaire from the five-scale score shown in Table 3.

The scores that are shown will imply the quality of the implementation, where the criteria are addressed to very good, good, enough, not good, or very not good. This data is used to describe how the training is implemented by the community.

Table 3. Five Scale Score Conversion Guidelines

Score	Formula	Range	Criteria
5	$X_i + 0.6 SB_i < X$	4.21 – 5.00	Very Good
4	$X_i + 0.6 SB_i < X < X_i + 1.8 SB_i$	3.41 – 4.20	Good
3	$X_i - 0.6 SB_i < X < X_i + 0.6 SB_i$	2.61 – 3.40	Enough
2	$X_i - 1.8 SB_i < X < X_i - 0.6 SB_i$	1.81 – 2.60	Not Good
1	$X < X_i - 1.8 SB_i$	0 – 1.80	Very Not Good

Description:

- X_i : Average of ideal questions
 = $\frac{1}{2}$ (ideal maximum score + ideal minimum score)
 SB_i : standard deviation of ideal score
 = $\frac{1}{6}$ (ideal maximum score - ideal minimum score)
 X : score

RESULTS AND DISCUSSION

The agenda for improving awareness of digital archives is started from the village society, where they are a society that directly contacts all digital public services in a country. The training for improving awareness of digital archives was held on July 17th, 2024, and this training was followed by 104 participants from 19 villages in Sukodono District. This activity was implemented face-to-face at the Meeting Room in Sukodono Government with improving awareness of digital archives of women community as the main target. The implementation of this training is divided into two sessions, where the first session is held by material presentation from the archiving management expert from Universitas Negeri Surabaya, and the second session is implemented by practical learning, using the archival systems which utilizes Google Drive as a media in the 4.0 industrial era.

Completeness of training participants includes materials on family archive management adopted from digital archive management and family archive management materials, where the material is taken from the Book, Research Paper, and Working Paper from the archiving management expert. This training activity provides understanding, and experience to all participants in digital-based family document management, because the focus of this training is to provide awareness that, in the 4.0 industrial era, societies need to archive their documents in digital format. Besides, to accelerate the digitalization program and improve the achievement of SDGs 9, Sidoarjo needs community readiness to face digital public services, so this training is expected to be retrieved by all families in Sidoarjo. Furthermore, using this system, families can have an archive of family documents digitally, making it easier to find family documents needed quickly – especially if the original or printed documents are stored using the same document classification and facilitate families in digital correspondence management, where currently many public services require uploading complementary documents for digital correspondence management. In addition, this system has the advantage of assisting in the re-processing of lost or damaged original documents because we already have a copy of the original document in digital form. Thus, digital-based family document management is very important for families, especially in the 4.0 (digital) era where public services have shifted from manual to digital. The training overview is shown in the Figure 2.



Figure 2. Training Activities in Sukodono – Sidoarjo

Participants' awareness of digital archiving

The improvement in comprehension of digital-based family document management from the pre- and post-test results, as well as each participant's N-Gain score, demonstrate the effectiveness of the training sessions. The results of the pre-test, post-test, and the N-Gain score of each participant can be seen in table 4.

Table 4. Participants' Pretest, Posttest, and N-Gain Results

Participants	Score		N-Gain	Criteria	Participants	Score		N-Gain	Criteria
	Pretest	Posttest				Pretest	Posttest		
Participant 1	60	80	0.50	Middle	Participant 53	40	70	0.50	Middle
Participant 2	50	80	0.60	Middle	Participant 54	40	80	0.67	Middle
Participant 3	70	90	0.67	Middle	Participant 55	50	80	0.60	Middle
Participant 4	60	70	0.25	Low	Participant 56	50	70	0.40	Middle
Participant 5	50	70	0.40	Middle	Participant 57	50	70	0.40	Middle
Participant 6	40	70	0.50	Middle	Participant 58	40	70	0.50	Middle
Participant 7	40	80	0.67	Middle	Participant 59	60	80	0.50	Middle
Participant 8	40	90	0.83	High	Participant 60	70	90	0.67	Middle
Participant 9	50	90	0.80	High	Participant 61	50	70	0.40	Middle
Participant 10	60	100	1.00	High	Participant 62	60	70	0.25	Low
Participant 11	50	90	0.80	High	Participant 63	40	70	0.50	Middle
Participant 12	60	70	0.25	Low	Participant 64	40	90	0.83	High
Participant 13	50	80	0.60	Middle	Participant 65	60	100	1.00	High
Participant 14	40	80	0.67	Middle	Participant 66	70	90	0.67	high
Participant 15	40	80	0.67	Middle	Participant 67	40	70	0.50	Middle
Participant 16	50	70	0.40	Middle	Participant 68	40	80	0.67	Middle
Participant 17	50	90	0.80	Middle	Participant 69	40	80	0.67	Middle
Participant 18	50	90	0.80	Middle	Participant 70	50	70	0.40	Middle
Participant 19	60	90	0.75	Middle	Participant 71	40	80	0.67	Middle
Participant 20	60	80	0.50	Middle	Participant 72	40	90	0.83	High
Participant 21	50	70	0.40	Middle	Participant 73	50	100	1.00	High
Participant 22	50	70	0.40	Middle	Participant 74	50	70	0.40	Middle
Participant 23	50	70	0.40	Middle	Participant 75	40	70	0.50	Middle
Participant 24	50	80	0.60	Middle	Participant 76	60	70	0.25	Low
Participant 25	50	90	0.80	High	Participant 77	60	80	0.50	Middle
Participant 26	70	100	1.00	High	Participant 78	50	90	0.80	High
Participant 27	40	90	0.83	High	Participant 79	60	70	0.25	Low
Participant 28	50	70	0.40	Middle	Participant 80	40	80	0.67	Middle
Participant 29	40	80	0.67	Middle	Participant 81	40	90	0.83	High
Participant 30	50	80	0.60	Middle	Participant 82	50	100	1.00	High
Participant 31	50	80	0.60	Middle	Participant 83	60	70	0.25	Low
Participant 32	40	70	0.50	Middle	Participant 84	40	70	0.50	Middle
Participant 33	50	80	0.60	Middle	Participant 85	40	70	0.50	Middle
Participant 34	40	90	0.83	High	Participant 86	40	80	0.67	Middle
Participant 35	40	100	1.00	High	Participant 87	60	70	0.25	Low
Participant 36	50	80	0.60	Middle	Participant 88	50	80	0.60	Middle
Participant 37	50	90	0.80	High	Participant 89	50	80	0.60	Middle
Participant 38	50	100	1.00	High	Participant 90	60	80	0.50	Middle
Participant 39	60	90	0.75	High	Participant 91	50	70	0.40	Middle
Participant 40	50	70	0.40	Middle	Participant 92	60	80	0.50	Middle
Participant 41	60	80	0.50	Middle	Participant 93	50	90	0.80	High
Participant 42	60	80	0.50	Middle	Participant 94	40	70	0.50	Middle
Participant 43	60	70	0.25	Low	Participant 95	40	70	0.50	Middle
Participant 44	50	70	0.40	Middle	Participant 96	40	80	0.67	Middle
Participant 45	50	70	0.40	Middle	Participant 97	50	80	0.60	Middle
Participant 46	50	70	0.40	Middle	Participant 98	50	90	0.80	High
Participant 47	40	80	0.67	Middle	Participant 99	50	80	0.60	Middle
Participant 48	40	90	0.83	High	Participant 100	60	80	0.50	Middle
Participant 49	40	90	0.83	High	Participant 101	60	70	0.25	Low
Participant 50	40	80	0.67	Middle	Participant 102	40	70	0.50	Middle
Participant 51	50	70	0.40	Middle	Participant 103	70	90	0.67	Middle
Participant 52	50	80	0.60	Middle	Participant 104	60	90	0.75	High

Based on the table, we can see that all participants have increasing scores from Pretest and Posttest. The results imply that the awareness and understanding of digital-based family document management for all participants increase

in each N-Gain (Arlinwibowo and Retnawati, 2015; Hermanto et al., 2021). The N-Gain of each participant indicates the increase in understanding of the cognitive aspects of participants as measured by questions that are answered directly in line with the training material (Hermanto et al., 2021).

Furthermore, to find out the increase in the psychomotor aspects of each participant can be seen in the results of the practice of digital-based family document management in training. To see the psychomotor abilities of the training participants, see the Table 5.

Table 5. Participants' Practice Results

Participants	Score	Participants	Score	Participants	Score	Participants	Score
Participant 1	90	Participant 27	80	Participant 53	85	Participant 79	85
Participant 2	80	Participant 28	80	Participant 54	90	Participant 80	80
Participant 3	90	Participant 29	80	Participant 55	80	Participant 81	90
Participant 4	80	Participant 30	80	Participant 56	80	Participant 82	90
Participant 5	80	Participant 31	80	Participant 57	90	Participant 83	75
Participant 6	80	Participant 32	80	Participant 58	80	Participant 84	85
Participant 7	80	Participant 33	80	Participant 59	85	Participant 85	80
Participant 8	90	Participant 34	90	Participant 60	90	Participant 86	85
Participant 9	90	Participant 35	100	Participant 61	95	Participant 87	75
Participant 10	80	Participant 36	80	Participant 62	90	Participant 88	80
Participant 11	90	Participant 37	90	Participant 63	90	Participant 89	95
Participant 12	80	Participant 38	95	Participant 64	80	Participant 90	80
Participant 13	75	Participant 39	90	Participant 65	90	Participant 91	90
Participant 14	80	Participant 40	80	Participant 66	95	Participant 92	85
Participant 15	80	Participant 41	80	Participant 67	80	Participant 93	90
Participant 16	80	Participant 42	75	Participant 68	85	Participant 94	80
Participant 17	90	Participant 43	80	Participant 69	90	Participant 95	80
Participant 18	80	Participant 44	80	Participant 70	80	Participant 96	80
Participant 19	90	Participant 45	90	Participant 71	80	Participant 97	80
Participant 20	90	Participant 46	80	Participant 72	90	Participant 98	95
Participant 21	80	Participant 47	85	Participant 73	100	Participant 99	80
Participant 22	80	Participant 48	90	Participant 74	80	Participant 100	80
Participant 23	90	Participant 49	90	Participant 75	90	Participant 101	95
Participant 24	75	Participant 50	85	Participant 76	80	Participant 102	80
Participant 25	90	Participant 51	90	Participant 77	80	Participant 103	95
Participant 26	95	Participant 52	80	Participant 78	90	Participant 104	90

Based on the table, we can see that all participants have a score of practical skills is more than 70. This result implies that all participants have the ability (Hermanto et al., 2021) to digital-based family document management, where this ability can be implemented in their community – families, friends, and neighbors.

From all processes of this training, the attitude score of each participant in completing the tasks for Independence, Responsibility, and Discipline indicators that were taken by observation can be seen in Table 6. The table shows the average score and criteria from the three indicators of each participant.

Table 6. Participants' Attitude Results

Participants	Average Score	Criteria	Participants	Average Score	Criteria
Participant 1	3.67	Good	Participant 53	3.67	Good
Participant 2	4.67	Very Good	Participant 54	3.67	Good
Participant 3	4.00	Good	Participant 55	4.67	Very Good
Participant 4	4.00	Good	Participant 56	4.33	Very Good
Participant 5	3.67	Good	Participant 57	4.33	Very Good
Participant 6	3.67	Good	Participant 58	4.00	Good
Participant 7	4.33	Very Good	Participant 59	4.67	Very Good
Participant 8	3.33	Enough	Participant 60	4.00	Good
Participant 9	4.33	Very Good	Participant 61	4.00	Good
Participant 10	3.67	Good	Participant 62	4.00	Good
Participant 11	4.67	Very Good	Participant 63	4.67	Very Good
Participant 12	4.33	Very Good	Participant 64	4.33	Very Good
Participant 13	4.33	Very Good	Participant 65	4.67	Very Good
Participant 14	4.67	Very Good	Participant 66	3.67	Good
Participant 15	4.33	Very Good	Participant 67	4.33	Very Good
Participant 16	4.33	Very Good	Participant 68	4.00	Good
Participant 17	3.67	Good	Participant 69	4.33	Very Good

Participants	Average Score	Criteria	Participants	Average Score	Criteria
Participant 18	4.67	Very Good	Participant 70	4.67	Very Good
Participant 19	4.00	Good	Participant 71	4.00	Good
Participant 20	4.00	Good	Participant 72	4.33	Very Good
Participant 21	3.67	Good	Participant 73	4.33	Very Good
Participant 22	3.67	Good	Participant 74	3.33	Good
Participant 23	4.67	Very Good	Participant 75	4.67	Very Good
Participant 24	4.33	Very Good	Participant 76	4.33	Very Good
Participant 25	4.00	Good	Participant 77	3.33	Good
Participant 26	4.67	Very Good	Participant 78	3.00	Enough
Participant 27	3.33	Enough	Participant 79	4.33	Very Good
Participant 28	4.67	Very Good	Participant 80	4.33	Very Good
Participant 29	4.33	Very Good	Participant 81	3.67	Good
Participant 30	3.33	Enough	Participant 82	4.67	Very Good
Participant 31	3.00	Enough	Participant 83	4.00	Good
Participant 32	4.33	Very Good	Participant 84	4.00	Good
Participant 33	4.33	Very Good	Participant 85	3.67	Good
Participant 34	3.67	Very Good	Participant 86	3.67	Good
Participant 35	4.67	Ver Good	Participant 87	4.67	Very Good
Participant 36	4.00	Good	Participant 88	4.00	Good
Participant 37	4.00	Good	Participant 89	4.00	Good
Participant 38	3.67	Good	Participant 90	3.67	Good
Participant 39	3.67	Good	Participant 91	4.67	Very Good
Participant 40	4.67	Very Good	Participant 92	4.00	Good
Participant 41	4.33	Very Good	Participant 93	4.33	Very Good
Participant 42	4.67	Very Good	Participant 94	4.33	Very Good
Participant 43	3.67	Good	Participant 95	3.33	Good
Participant 44	4.33	Very Good	Participant 96	4.67	Very Good
Participant 45	4.00	Good	Participant 97	4.33	Very Good
Participant 46	4.33	Very Good	Participant 98	3.33	Good
Participant 47	4.67	Very Good	Participant 99	3.00	Enough
Participant 48	4.00	Good	Participant 100	4.33	Very Good
Participant 49	4.33	Very Good	Participant 101	4.33	Very Good
Participant 50	4.33	Very Good	Participant 102	3.67	Good
Participant 51	4.00	Good	Participant 103	4.67	Very Good
Participant 52	4.00	Good	Participant 104	4.00	Good

For the attitude score, almost all of the participants meet the Good and Very Good requirements. Each participant's score demonstrates how seriously they have taken the training. Thus, this result indicates that the entire training process, material delivery, and practice of digital-based family document management, was followed and provided a good process and result for all participants (Hermanto et al., 2021). Andriyani, Maslahah, and Suud (2023) stated that the good implementation of practices of training can effectively increase the understanding of the training material for the participants.

The Quality of Workshop

In addition, the participant's assessment of the training, on each Indicator, can be seen in Table 7 for the quality of the training.

Table 7. Results of Participants' Assessment of Training Quality

No	Indicators	Average Score	Category
1	Training Theme	4.26	Very Good
2	Punctuality	4.13	Good
3	Training Atmosphere	4.23	Very Good
4	Material Completeness	4.17	Good
5	Organizer Service	4.25	Very Good
6	Tools Used	4.21	Very Good
7	Mastery of the Problem by the speaker	4.25	Very Good
8	Presentation method by the speaker	4.21	Very Good
9	Benefits of the material provided by the presenter	4.25	Very Good
10	Interaction between the presenters and participants	4.22	Very Good
Average for All Scores		4.21	Very Good

Based on this data, it can reflect that the training was carried out effectively in the target group and the participants' assessments fell into the good and very good categories in each indicator tested. Sari & Yarza (2021) state that if the response of the training participants is good, then this can indicate that the quality of the training provided is very good, with a total average value of 4.21.

Implication for practice

The success of the training conducted for the women's community in Sukodono–Sidoarjo is expected to be an effort to create a community that is aware of the importance of digital document management in industry 4.0 - digital era. All aspects - cognitive, affective, and psychomotor – in the learning process through training activities on digital-based family document management show that the activity is effectively implemented in the community (Hermanto et al., 2021; Sholikah et al., 2020). Participant score shows that they have obtained the skills for digital-based family document management by using the Google Drive platform (Herawati et al., 2023; Putri and Soesiantoro, 2023). Therefore, we hope that these skills can be transmitted to all families in Sukodono–Sidoarjo, and these skills can be utilized for digital public services to realize the effectiveness and efficiency of public services in Sidoarjo (Putri and Soesiantoro, 2023; Rekasari and Fanida, 2022; Suparno, 2021).

In line with Minarso et al. (2023) study, the big challenge for the digitalization for digital-based family documents is to increase the awareness of the importance of digital-based family documents, where the awareness is in line with the practice and behavior. Besides, the other challenges are 1) criteria of important documents, 2) difficulties in archiving techniques, 3) fatigue/overload documents, 4) technology using - large memory space, and protection of privacy, 5) backup/duplication system, 6) trusted digital repositories (Jantz and Giarlo, 2007; Kleek and Ohara, 2014; Minarso et al., 2023; Sinn et al., 2017). However, the community needs of digital document management in Sidoarjo is very high, where almost all public services, such as Plavon Disdukcapil and SiPraja (Putri and Soesiantoro, 2023; Rekasari and Fanida, 2022), are maintained by digital, so all societies in Sidoarjo need to manage their data in digital. Thus, the effectiveness of the training shown in the data is in line with the needs of the community and the challenges for digital-based family documents that are well-packaged and interesting for all participants.

Furthermore, the digital public service agenda promoted by the Government of Indonesia and Sidoarjo is an effort to improve the achievement of SDGs 9 on the indicator of the proportion of the population served by mobile broadband (National Development Planning Agency of Indonesia, 2023). Creating a digital public service is a step that must be taken to make all people in Indonesia able to enjoy mobile broadband services, even though this policy indirectly forces the transfer of services from face-to-face services to digital services. To support the achievement of the program and supported by data, facts, and community needs (Allen et al., 2018; Omer and Noguchi, 2020) related to the provision of digital-based family documents, this training is needed for many societies in Indonesia. The more prepared the community to support digital public services, the higher the SDGs 9 score in that region/area. Thus, this training is urgently needed for many societies in Indonesia that have prepared a good digital infrastructure to increase the proportion of the population served by mobile broadband.

CONCLUSION

The training agenda of digital-based family document management using Google Drive was effectively implemented by all participants from the scores of cognitive, affective, and psychomotor aspects. The effectiveness of the training implies that increasing community awareness of digital archives for family documents is owned by all participants, where the awareness is addressed to the use of digital public service in Sidoarjo. Then, the skills can be distributed to their families, friends, and neighbors to support the Government's agenda to set up a comprehensive digital environment. In addition, the participant's view of the training activities is the excellent implementation category, and it indicates that the training was effective and easily understood by all participants.

The government's main objective in providing digital public services is to improve the SDGs 9 score in the region/area. After a comprehensive digital environment is formed in society down to the smallest level, the proportion of the population served by mobile broadband can increase rapidly. The more prepared the community to support digital public services, the higher the SDGs 9 score in that region/area. Thus, this training is urgently needed for many societies in Indonesia that have prepared a good digital infrastructure to increase the proportion of the population served by mobile broadband in digital public service.

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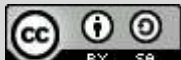
Safety induction for agricultural workers in particular areas of Gadog Village in handling hazardous agrochemical exposures

Allodya Nadra Xavier^{a,1}, Alya Hijrianisa^{a,2}, Astrid Blandina Cynthia Lubis^{a,3}, Elva Stiawan^{a,4,*}, G. Gunaryo^{a,5}

^a Department of Chemistry, Faculty of Military Mathematics and Natural Sciences, Republic of Indonesia Defense University, Kawasan IPSC Sentul, Bogor, West Java 16810, Indonesia

¹ allodya.nadra@gmail.com; ² ahijrianisa@gmail.com; ³ astridlubis66@gmail.com; ⁴ elvastawan@gmail.com*; ⁵ gunaryo92000@gmail.com

* Corresponding author

ARTICLE INFO	ABSTRACT
<p>Article history Received: 2023-11-15 Revised: 2024-01-27 Accepted: 2024-02-18 Published: 2024-08-01</p> <p>Keywords Agrochemical Chemical exposure Pesticide Safety induction</p>	<p><i>An integrated program of community service and chemical teaching has been conducted to deliver proper information to handle chemical agents that are commonly used in agricultural activities. This initiative addresses the limitation of chemical understanding among local farmers and livestock breeders regarding the safety aspect of common agrochemicals, leading to either health risks or environmental problems. Knowledge regarding agrochemical handling and disposal was delivered through presentations, discussions, and hands-on practices. Accordingly, through this community service, we encouraged agricultural workers with a basic understanding of the chemical properties of hazardous agrochemicals and the safety induction in handling and disposing of those compounds. Based on the activities carried out, the results of the pre-test and post-test showed an increase of 62% in farmers' understanding of hazardous chemicals and proper handling of these chemicals. In addition to providing some beneficial scientific information to enhance agricultural workers' safety in their working area, an activity related to education and training of agrochemicals could increase peoples' awareness toward hazardous chemicals that would be still freely commercialized, for example, in terms of mitigating risks associated with chemical threats.</i></p>
<p>Kata Kunci Agrokimia Paparan kimia Pestisida Induksi kimia</p>	<p>Induksi keselamatan pekerja pertanian di Desa Gadog dalam menangani paparan bahan agrokimia berbahaya. Program terpadu pengabdian masyarakat dan pendidikan kimia telah dilakukan untuk memberikan informasi yang tepat dalam hal penanganan bahan kimia yang biasa digunakan dalam kegiatan pertanian. Program ini diinisiasi untuk mengatasi kurangnya pemahaman petani dan peternak lokal mengenai keamanan bahan agrokimia yang umum digunakan, sehingga berpotensi menyebabkan risiko kesehatan atau masalah lingkungan. Pengetahuan mengenai penanganan dan pembuangan bahan agrokimia disampaikan melalui presentasi, diskusi, dan praktik langsung. Melalui pengabdian masyarakat ini, pekerja pertanian didorong untuk memiliki pemahaman dasar tentang sifat kimia bahan agrokimia yang berbahaya dan induksi keselamatan dalam penanganan dan pembuangan senyawa tersebut. Berdasarkan kegiatan yang telah dilakukan, perbandingan hasil <i>pre-test</i> dan <i>post-test</i> menunjukkan adanya peningkatan sebesar 62% pada pemahaman petani mengenai bahan kimia berbahaya dan cara tepat penanganan bahan kimia tersebut. Selain memberikan informasi ilmiah untuk meningkatkan keselamatan pekerja pertanian di wilayah kerjanya, kegiatan pendidikan dan pelatihan bahan agrokimia dapat meningkatkan kesadaran masyarakat terhadap bahan kimia berbahaya yang masih dijual secara bebas, misalnya dalam hal mitigasi resiko bencana akibat bahan kimia.</p> <p style="text-align: right;">Copyright © 2024, Xavier, et al This is an open access article under the CC-BY-SA license</p> 

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INTRODUCTION

Hazardous chemical agents are chemicals present in the environment that can affect humans (James et al., 2018). According to Ministerial Decree No. 187 of 1999, hazardous chemicals refer to chemicals in both single and mixed forms that have chemical, physical, and/or toxicological properties that are harmful to workers, institutions, and the environment, either directly or indirectly. Hazardous and toxic substances have serious consequences for the environment, including coral reef destruction, air and water pollution, and negative impacts on human health such as increased risk of cancer, genetic mutations, and damage to body systems (Wanda & Pattiasina, 2022). The term "hazardous chemical agents" encompasses various compounds, including carbamates, organochlorines, organophosphates, and Dichlorodiphenyltrichloroethane (DDT). Hazardous chemical safety is a key component of work safety and public safety, so improving hazardous chemical safety in the Thirteenth Five-Year Plan period is critical (Wang et al., 2018). A hazard is typically defined as something that has the potential to cause harm (Scheer et al., 2014). Hazardous chemicals basically arise from the disposal of waste directly from the source (Utomo, 2012). This can cause disturbances to living things around the location or around the waste disposal site, including in the human body and if these harmful chemicals accumulate in the body, they can cause negative impacts on the body's health (Thristy et al., 2022).

Chemicals, in general, have been associated with different health challenges and they pose a risk for specific occupations that use them daily. Dangerous chemicals can cause damage to body tissue, itchy skin, peeling skin, skin burns, disrupt the respiratory system, and even long-term illnesses (Muh Shofi et al., 2021). High-risk groups exposed to pesticides include various roles such as production workers, formulators, sprayers, mixers, loaders, and agricultural workers. Engaging in the manufacturing and formulation processes tends to increase the risk of hazards as these activities are not without risks. There is evidence to suggest that professional exposure to chemical, physical, and biological risks can cause serious health impacts. According to the European Agency for Safety and Health at Work report in 2015, about 17% of workers in the European Union (EU) reported exposure to chemicals, products or substances at least a quarter of their working time (Papadopoli et al., 2020). Workers face higher risks in industrial environments as they handle various toxic chemicals, including pesticides, raw materials, toxic solvents, and inert carriers (Scott & Pocock, 2021).

Workers, in several areas, such as agriculture, fisheries, or electricity, may have a limitation in obtaining information regarding the negative effects of exposure from the use of chemicals they use every day, e.g., fertilizers, pesticides, polishing agents, etc. Intensive application of chemical fertilizers over a long period on agricultural land will lead to decreased productivity and land degradation, especially related to the decrease in organic carbon levels in the soil (Marwantika, 2020). In addition the use of pesticides, pesticides are chemical substances employed to prevent plant diseases, control weeds, manage pests, and improve the overall quality of food products (Rajmohan et al., 2020). The potential health risks stemming from pesticide exposure are contingent not only upon the toxicity of the components but also on the extent of exposure (Kim et al., 2017). Safe chemical process avoids hazards instead of controlling them, particularly by removing or reducing the amount of hazardous material in the plant or the number of hazardous operations (za, 2016). Poisonous agents or toxic agents are anything that can produce an adverse biological effect. It may be chemical, physical, or biological in form. For example, toxic agents may be chemical (such as cyanide), physical (such as radiation), and biological (such as snake venom) (Gupta, P., 2020).

As a consequence of the limitation of chemical understanding toward hazardous chemical agents, they may find difficulties in distinguishing between safe chemicals and poisonous agents. The health sector also requires serious attention because it affects the quality of life in the community (Devi & Kumalasari, 2024). Understanding the factors that influence the use of personal protective equipment (PPE) during handling of plant protection products (PPPs) is critical in designing tailored interventions to minimize exposure among farmers (Damalas & Abdollahzadeh, 2016). Hence, it is quite confusing to decide what kind of personnel protection equipment (PPE) should be used. For instance, the limitation of knowledge about personal protective equipment is one of the causes of poisoning, irritation, and dermatitis suffered by some farmers (Aeni et al., 2020).

Several efforts have been made to reduce the negative impact of agrochemical exposure. One of them is by replacing the composition of pesticides with other compounds registered by the United States Environmental Protection Agency (EPA) (Dodds et al., 2021). For example, according to its official website regarding pesticide registration, EPA displays some organophosphate compounds that could be alternatively replaced by various non-organophosphate compounds. However, this effort only partially mitigates the impact of pesticides (Yuantari et al., 2013). Direct approach toward agricultural workers, particularly in agrochemical handling and PPE training, should be also performed to provide them with appropriate methods to prevent direct or long-term exposure to pesticides and other potentially harmful materials in their working area.

To support the national surveillance in terms of Sustainable Development Goals (SDGs) on its mission of health and well-being (SDGs no. 3), chemical safety is one of the efforts to protect humans, facilities, and installations, as well as the environment in all parts of the work cycle of chemicals, from the misuse and improper use of chemicals. Accordingly, the issue of safety aspect in handling chemicals should be tackled for the sake of maintaining a healthy life and longevity, not only for laboratory workers or university technicians but also for broader professional applications (Zaip et al., 2021). In particular, safety induction of handling agrochemicals and its exposures to agricultural workers is ought to properly delivered to minimize negative impacts when handling hazardous agrochemicals (Said, 2023). In particular, safety

induction of handling agrochemicals and its exposures to agricultural workers is ought to properly delivered to minimize negative impacts when handling hazardous agrochemicals (Yenni et al., 2023).

Puncak Pass, commonly recognized as Puncak, is a popular destination close to the capital city of Indonesia. This area has an enormous and beautiful agricultural area that is capable of attracting both domestic and international tourists, such as Gadog village. Gadog is a part of the Puncak area where many agricultural workers skillfully grow various vegetables and fruits for consumption and leisure purposes. The topology of Gadog Village is surrounded by rice fields and others so the majority of the people work as farmers (Widyastuti et al., 2023). Although Gadog is well-recognized for its agribusiness and leisure activities, this agricultural area could be slightly busier than other agricultural areas on Java Island since this area is relatively closer to both the seaport of Jakarta and several industrial areas of Jabodetabek. Considerably, many agrochemical products could easily enter this area so the socialization of obtaining and utilizing those agrochemical products should be delivered to the agricultural workers (Lekei et al., 2014). Hence, this community service was generated at a particular agricultural area at Gadog, Bogor Regency by combining chemistry learning with safety induction toward professionals with non-chemical backgrounds to enhance the safety aspect of personnel as well as the environment.

METHOD

The first concern that needs to be known is the real situation of daily happening to the agricultural workers. Accordingly, before H Day, information regarding common issues that could be frequently faced by agricultural workers when handling agrochemicals was thoroughly gained, such as common pesticide products that are easily obtained in the market and symptoms after handling a particular pesticide. Based on that information, learning materials regarding the chemical and technical aspects of handling agrochemicals were prepared in the form of presentation slides. There are several factors to consider in enhancing the optimal knowledge transfer from instructors to the farmers, including the content of the material, the type of media used, and the implementation method. Thus, the presentation materials were slightly adjusted and simplified into conceptual information that could be found in the daily agricultural activities. Afterward, pre-tests and post-tests were designed to display the audiences' understanding. The pretest and post-test were designed to measure the agricultural workers' understanding of the safety aspects of handling chemical agents in agriculture before and after the safety induction activities. The result of the post-test was expected to enhance after the sessions.

At the beginning of the activity, participants filled out pre-test questionnaires before joining the presentation session. The pre-test is carried out in the form of an objective test, which is an assessment test using a score where if you are correct you get 1 point and if you are wrong you get 0 points (Magdalena et al., 2021). The presentation mainly described hazardous chemical agents that could be found in agrochemical products, e.g., organophosphates, carbamates, or DDT, and the safety aspect of handling those chemicals, subsequently. Afterward, the participants were guided to proactively be involved in practical training in wearing appropriate PPE as well as performing emergency aid in case any accidents happen in their work area. After the presentation and the practical training session, a discussion was conducted between the participants and the chemistry lecturers, as instructors, to solve their common problems when using some pesticides and fertilizers products. This discussion is important because discussions are a way for participants to broaden their points of view by expressing their own opinions and from there you will find various new ideas and concepts that will broaden your insight into something (Ermi, 2015). At the end of the program, participants filled out the post-test questionnaire which had the same content as the previous pre-test. The steps of the program are shown in Figure 1.

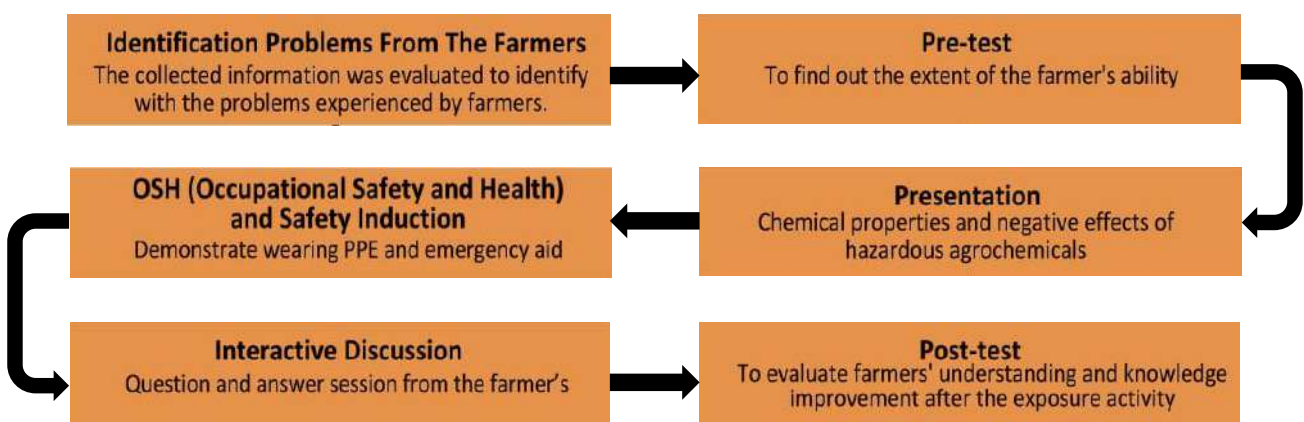


Figure 1. The flowchart for the whole socialization and safety training in handling hazardous agrochemicals

RESULTS AND DISCUSSION

This community service was attended by 30 audiences, while due to particular reason only 19 participants fully participated in the pre-test and post-test sessions. The pre-test itself is carried out at the beginning of the activity to measure the extent of the community's understanding before learning begins, which helps the material provider gather information about the community before teaching (Shivaraju et al., 2017). Most participants were excited in both the presentation and practical training session. Interestingly, some elderly did not find difficulties in the presentation of the PPE topic since one of the three instructors delivered the presentation in Sundanese. In the practical training session, some students creatively helped the participants to quickly memorize the steps of washing hands and wearing PPE by using a particular song followed by the participants. Figure 2 displays some of the activities conducted during the presentation session and the safety induction section.



Figure 2. Four main sessions of the safety induction: pre-test (top-left), socialization (top-right), PPE training (bottom-left), and emergency aid training (bottom-right)

At the end of the session, a post-test was given to the farmers and the result demonstrated an enhancement of their understanding. Post-test is a graded assessment given to recipients of the material after completing a curriculum that was introduced (Hati & Kurnia, 2023). Figure 3 displays a comparison between the pre-test and post-test results for the farmers in terms of their understanding of active pesticide ingredients. Based on the graph in Figure 3, farmers tend to have an increasing knowledge regarding their understanding of active pesticide ingredients and the safety of agrochemical handling. This can be observed in Figure 3, which shows the comparison of percentage values between the pre-test and post-test. According to the data in Figure 3, there is approximately 45% enhancement of the overall participants' understanding of hazardous chemical agents of agrochemicals and proper handling of these chemicals, i.e., from 28% to 52%.

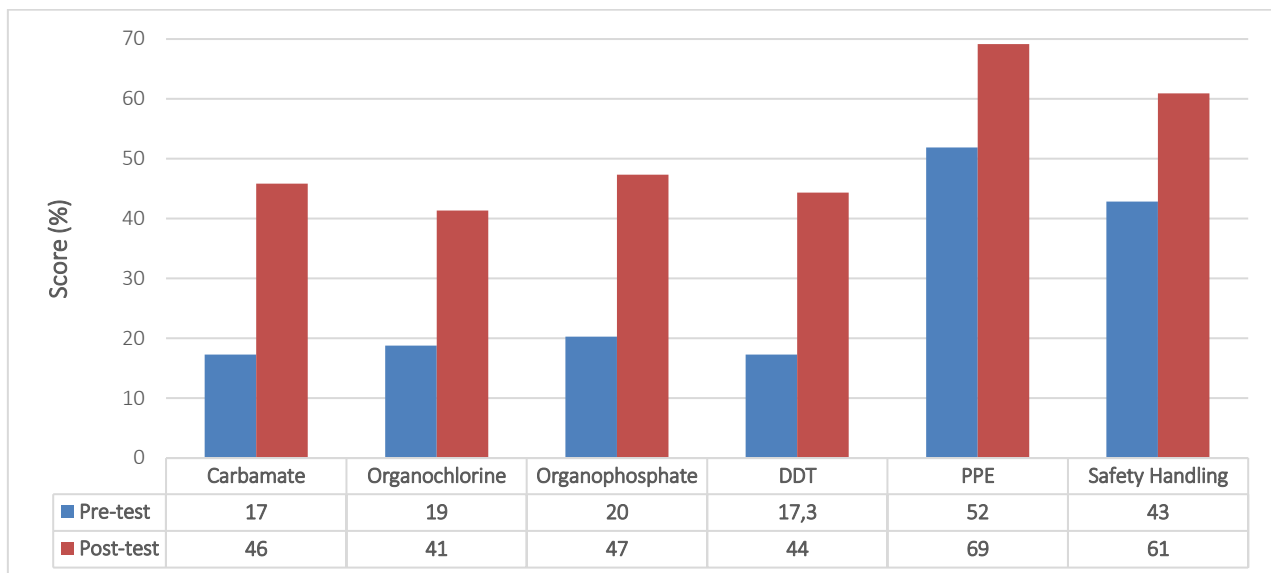


Figure 3. Participants' understanding of the active ingredient of pesticides and their safety handling

Figure 3 depicts an improvement in the audience's understanding of chemistry and technical knowledge of agrochemical handling. The pre-test result shows that most participants' initial understanding only reached below half of the achievement attained after the main session. This indicates that through community engagement, there is a tangible increase in knowledge and understanding among participants regarding exposure to hazardous chemical agents. This not only enhances farmers' awareness of the risks of chemical exposure but also improves their ability to implement preventive measures and proper handling. According to (Marete et al., 2021), in Kenya, the survey established that various classes of pesticides were used in horticultural crop farming and animal production in all three sub-counties, with the most frequently used (> 60 respondents out of 173) being parathion, diazinon, dimethoate, permethrin, pirimiphos methyl, endrin, deltamethrin, dieldrin, propoxur, and endosulfan. It was found that there is a gap between the existing government regulations on pesticide use and safe handling and the implementation of these regulations by dealers, farmers, and farm workers in the three sub-counties as some of the pesticides that were being used such as parathion, endrin, dieldrin, and carbofuran had been banned by the government. Rather than simply focusing on knowledge-based strategies, comprehensive interventions are needed to reduce both exposure and health risks, including training, improvements in labeling, measures to reduce cost barriers to the adoption of safe behaviors, promotion of control measures other than PPE and support for Integrated Pest Management (IPM) (Lekei et al., 2014).

A particular challenge was found during the presentation session, especially in introducing the chemical concept of harmful or deadly compounds of pesticides. Based on our brief observation, most agricultural workers involved in this activity might be unable to fully get the main information of each presentation slide showing the chemical structures of the hazardous agrochemicals since there was barely interactive communication observed in this section. Meanwhile, they started to be interested and proactively asked questions in the presentation session on the safety aspect of wearing PPE and the discussion section, respectively. A profound understanding of the types of chemical agents and effective handling measures is key to mitigating the risks of chemical attacks that can adversely affect society and infrastructure. The encouragement of non-pesticide alternatives for pest and weed control would also have a major impact on the health of both producers and consumers of agricultural products, bringing balance and health to the environment and to agricultural workers (De-Assis et al., 2021). For instance, they asked a confirmation regarding the suitability and safety aspects of mixing different pesticide products at the same time. Consequently, to effectively deliver the main message of appropriate agrochemical handling, it is encouraged to design in-context learning material that contains more technical concepts in relevant scope rather than put too many abstract concepts of chemical structures and their interaction results in the negative effect. In addition, the audience was excited about the session safety induction by the simulation of handling victims exposed to hazardous pesticides. Their interest is confirmed in the increasing result of post-tests.

CONCLUSION

This community service activity demonstrated the enhancement of agricultural workers' awareness regarding the safety aspect of handling and disposing of agrochemicals. Although some chemical concepts related to the chemical structure of harmful compounds of pesticides were challenging to fully deliver, the technical issues in handling agrochemicals were interactively informed and answered, subsequently, during the discussion session. Through this community service, we hope that the combination of their basic understanding of hazardous chemical ingredients and practical experience in handling agrochemicals exposure could diminish the negative impacts of agrochemicals on their health.

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International community service collaboration: Recommendations for village asset management in Kedah, Malaysia

Dita Fisdian Adni ^{a,1,*}, Tessa Shasrini ^{b,2}, Farahiyah Fadzil ^{c,3}

^a Department of Government Studies, Faculty of Social and Political Sciences, Universitas Islam Riau, Jl. Kaharuddin Nst No.113, Pekanbaru, Riau 28284, Indonesia

^b Faculty of Communication Sciences, Universitas Islam Riau, Jl. Kaharuddin Nst No.113, Pekanbaru, Riau 28284, Indonesia

^c College of Law, Government and International Studies, Universiti Utara Malaysia, Sintok, 06010 Bukit Kayu Hitam, Kedah Darul Aman, Malaysia

¹ ditafisdianadni@soc.uir.ac.id*; ² tessashasrini@comm.uir.ac.id; ³ farahiyah@uum.edu.my

* Corresponding author

ARTICLE INFO	ABSTRACT
<p>Article history Received: 2023-10-04 Revised: 2024-05-29 Accepted: 2024-06-02 Published: 2024-08-01</p> <p>Keywords Village asset management Sustainable development Economic growth</p>	<p><i>Village assets consist of various forms, such as buildings, roads, and so on. Asset management by the village government in a professional, transparent, accountable, efficient and effective manner is very important. Properly managed village assets will produce benefits such as creating jobs, realizing sustainable development and ultimately positively impacting the economy. But in reality, there are many similarities in the problems of managing village assets in Indonesia and Malaysia, one of which is the problem of managing village assets so far is only limited to recording. Not yet to the management that can generate village income. This service activity aims to increase the understanding of the government apparatus of Singkir Darat Village, Kedah State, Malaysia, about managing village assets in a professional, transparent, accountable, efficient and effective manner. The method of implementing this service involves counseling, which includes planning, implementation, and monitoring in collaboration with Universiti Utara Malaysia. The instrument for evaluating this activity is a questionnaire, and then analyzed descriptively. The results of this service show an increase in the understanding of the Singkir Darat Village Government apparatus and the community about the importance of village asset management, asset inventory and innovation in village asset management. Through this activity, the management of assets owned by Singkir Darat village can be carried out optimally to realize quality services to the community.</i></p>
<p>Kata Kunci Pengelolaan aset desa Pembangunan berkelanjutan Pertumbuhan ekonomi</p>	<p>Kolaborasi pengabdian masyarakat internasional: Rekomendasi pengelolaan aset desa di Kedah Malaysia. Aset desa terdiri dari berbagai macam bentuk, seperti bangunan, jalan, dan lain sebagainya. Pengelolaan aset oleh pemerintah desa secara profesional, transparan, akuntabel, efisien dan efektif menjadi sangat penting. Aset desa yang dikelola dengan baik akan menghasilkan manfaat seperti menciptakan lapangan pekerjaan, mewujudkan pembangunan yang berkelanjutan dan pada akhirnya berdampak positif terhadap perekonomian. Namun pada kenyataannya, terdapat banyak kesamaan permasalahan pengelolaan aset desa di Indonesia dan Malaysia. Salah satunya adalah permasalahan pengelolaan aset desa selama ini hanya sebatas pencatatan dan belum sampai pada pengelolaan yang dapat menghasilkan pendapatan desa. Kegiatan pengabdian ini bertujuan untuk meningkatkan pemahaman aparatur pemerintah Desa Singkir Darat, Negara Bagian Kedah, Malaysia, tentang pengelolaan aset desa secara profesional, transparan, akuntabel, efisien dan efektif. Metode pelaksanaan pengabdian ini menggunakan metode penyuluhan yang meliputi perencanaan, pelaksanaan, dan monitoring dengan mitra Universiti Utara Malaysia. Instrumen untuk mengevaluasi kegiatan ini adalah kuesioner, dan kemudian dianalisis secara deskriptif. Hasil pengabdian ini menunjukkan adanya peningkatan pemahaman aparatur Pemerintah Desa Singkir Darat dan masyarakat tentang pentingnya pengelolaan aset desa, inventarisasi aset dan inovasi pengelolaan aset desa. Melalui kegiatan ini, pengelolaan aset oleh Pemerintah Desa Singkir Darat dapat dilakukan secara optimal untuk mewujudkan pelayanan yang berkualitas kepada masyarakat.</p> <p style="text-align: right;">Copyright © 2024, Adni, et al This is an open access article under the CC-BY-SA license</p> <div style="text-align: right;">  </div>

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INTRODUCTION

Effective and efficient asset management by the government is very important (Schneider et al., 2005). Assets owned by a region, namely natural resources, infrastructure, and property, have a strategic role in creating prosperity and progress for the region (Tafazzoli, 2017). Good asset management can provide direct benefits to society. For example, through sustainable management of natural resources, revenue can be generated to improve people's quality of life, create jobs, and reduce poverty. Adequate infrastructure management will facilitate community accessibility and connectivity, accelerate economic growth, and improve public transportation, education, and health (Gavrikova et al., 2020). The complexity of government assets, both in type and amount, encourages the government to be careful in managing its assets. The accumulation of assets that have economic value and physically consist of various types and are scattered in location is an influential factor in complexity. It can potentially create problems in management, utilization, and recording due to weak coordination and supervision of regional asset management (Nohong et al., 2021). Although the practice of managing regional assets has been regulated in laws and regulations, problems are often found at each stage or cycle, impacting local government performance (Irwandi et al., 2019).

Efficient asset management will have a positive impact on the regional economy. Optimizing the use of assets owned can increase the productivity and competitiveness of the economic sector (Haberly et al., 2019). Asset management also protects and promotes cultural wealth and regional heritage (Dochev et al., 2019). Good asset management, including natural resources, infrastructure, and cultural assets, also contributes to sustainable development. Through efficient and sustainable asset management, we can create opportunities to improve people's welfare, strengthen the economy, protect the environment, and maintain cultural diversity (Sriastiti et al., 2020). Therefore, cooperation between diverse stakeholders in managing assets is becoming increasingly important to achieve sustainable development goals and ensure the planet's survival for future generations (Suprayitno & Soemitro, 2019).

The same applies to the management of village assets. The village government has the wealth to support its governance. Village assets are one of the results of the village's wealth that must be managed and developed. As a dominant element of the village, the village government needs to have village income and assets; without being supported by these elements, the village government will have difficulty carrying out its duties (Hidayat & Nursetiawan, 2022). To support the efficient and effective management of village assets and create transparency in asset management, the village government needs to have or develop a comprehensive and reliable management information system to make decisions (Marshaliany, 2019). Village asset management is carried out to improve the welfare and standard of living of the village community and increase village income. Managing village assets is a crucial issue, in addition to budget and village finance issues. If the village can carry out good and sustainable asset management, the village's role in alleviating poverty and underdevelopment will undoubtedly be realized (Kushartono et al., 2022).

Village asset management is more than just conducting an inventory to secure assets. However, optimising the use of assets is necessary so that every asset owned by the village government can provide economic benefits to the village government and the community (Shaleh et al., 2018). For this reason, village government officials must increase their capacity to manage assets (Suwarlan, 2019). The quality of human resources, namely the village government apparatus, is needed to encourage the running of the asset management process, which starts from planning, implementation, administration, reporting and accountability that is more measurable from start to finish (Harahap et al., 2020). Village asset management is carried out based on the principles of functionality, legal certainty, openness, efficiency, accountability and certainty of value. The village government manages village assets, which must be fully utilized to benefit governance, development and community services (Kristiyanto et al., 2020). Village assets can also be lost or removed because certain people use them. To avoid the loss of village assets by certain parties, the government and village communities are obliged to inventory and administer village lands so that assets are protected, and the community feels the benefits sustainably. In terms of inventory and management of village assets, the government and village community should make village regulations (Pinori, 2020).

Village assets need good management to be easier to monitor and track. The need for information technology regarding data and information on an asset is very important to improve efficiency in its management. Many village governments in Indonesia and Malaysia have yet to use an integrated system in asset data collection. Some management activities are still carried out verbally, and existing documents are stored as files, so existing reports need to be structured. With good asset management, employees can be facilitated in managing data more effectively and efficiently. In the processing process, it can save time and be stored safely. Processed data can also save storage space so that documents do not pile up and make it easier for employees to find data (Anisah et al., 2020).

Indonesia and Malaysia are countries in the Southeast Asian region that have similarities in terms of potential assets and problems in managing them (von Rintelen et al., 2017). Asset management in Indonesia and Malaysia is still not optimal, resulting in several problems. In Indonesia, some of the issues in managing assets owned by the village government are that currently, the role of the village in managing its assets still needs to run optimally. This is due to several factors, such as understanding, concern, leadership and low community participation. The management of village assets has been limited to recording only. It has yet to reach the control that can generate village income and be beneficial in the long term (Elim et al., 2020). Similar to Malaysia, especially in Kampung Singkir Darat, Yan District, Mukim Singkir Kedah,

Malaysia. Several problems were found regarding village asset management, namely that most village governments could not manage assets efficiently. Waste and mismanagement of assets have been found, implying that public funds are not used wisely (Tajudin et al., 2022). This situation affects the village government's effectiveness, efficiency and economics of asset management (Mohamad Azmi & Ismail, 2022). Over the years, asset management has consistently ranked lowest compared to other components of the financial management accountability index (Sani et al., 2012). In this context, community service focuses on educating and providing recommendations regarding asset management by considering learning from experiences in Indonesia and Malaysia. Through collaboration between the two countries, the service team aims to increase understanding and capacity in asset management and encourage sustainable community development.

Based on these problems, the Departement of Government Studies, Faculty of Social and Political Sciences, Riau Islamic University collaborated with the School of Government (SoG), University of Utara Malaysia, to carry out community service on an international scale in Singkir Darat Village, Mukim Singkir, Yan District, Kedah State, Malaysia. The community service was conducted by providing socialization on professional, transparent, accountable, efficient, and effective village asset management to the community and the Singkir Darat Village Government apparatus. This also aligns with realizing the Sustainable Development Goals (SDGs), the eighth point on Decent Work and Economic Growth. This international community service activity has the following objectives: (1) provide information in the form of professional, transparent, accountable, efficient and effective management of village assets as well as an inventory of village assets that apply in the Republic of Indonesia so that it can become a comparative study between Indonesia and Malaysia; and (2) increase knowledge and understanding of village government officials and the community in managing the assets owned by Singkir Darat Village.

METHOD

This international-scale community service activity is a collaboration between the Departement of Government Studies, the Faculty of Social and Political Sciences, Riau Islamic University and the School of Government (SoG), University of Utara Malaysia. Singkir Darat Village, Yan District, Mukim Singkir, Kedah, Malaysia, was chosen as the location for the service because this village is one of the villages assisted by the School of Government (SoG), University of Utara Malaysia. The method of implementing community service activities is based on interactive counselling. This method was chosen based on an agreement between partners, namely the Singkir Darat Village Government and the service team as presenters. This agreement was implemented through discussions, which included discussions such as the activity's objectives, the condition of asset management in Singkir Darat Village, and the targets set by the service team. The service activity was held on Thursday, June 22, 2023, at the Masjidul Ula Hall in Singkir Darat Village from 09.00 to 14.00 Malaysian Time. It lasted one day and included providing material in the form of counseling and discussions on asset management at the village level. This method was chosen because it can generate active interaction between presenters and participants. Meanwhile, this community service activity targets village government officials and their apparatus as well as the community in Singkir Darat Village. The target participants for this community service activity are thirty (30) people.

This community service activity takes the form of outreach, with the material provided being education regarding managing village assets in a professional, transparent, accountable, efficient and effective manner. The last material given was regarding the inventory of village assets. Hopefully, these materials can motivate counselling participants to understand better the management of assets owned by Singkir Darat Village and practice how to manage the village's assets. The stages of implementing this service activity include initial planning by preparing a proposal, preparatory meetings with the proposing team and partners, the implementation stage and finally, the monitoring and evaluation stage. The following are some of the stages in this service activity for four months, from March to July 2023:

- 1) Planning stages. This stage consists of:
 - a) Prepare proposals for community service by the chairman and proposing members. Data from initial observations are collected and processed to be displayed in community service proposals.
 - b) Conduct preparatory meetings with all team members. This meeting discussed the activity schedule, technical implementation of activities, and the division of tasks of the proposing team and partners in implementing community service.
- 2) Implementation Stages. This stage consists of knowledge transfer in the form of counselling regarding managing village assets in a professional, transparent, accountable, efficient and effective manner.
- 3) Monitoring evaluation stage. This stage consists of:
 - a) Distributed questionnaires as an evaluation instrument for this activity and then analyzed descriptively.
 - b) The service team compared before and after the service was carried out regarding the understanding of the counselling participants to see whether the solutions provided were appropriate.

RESULTS AND DISCUSSION

The results and discussion in this article are presented in several sub-chapters so that the material can be more comprehensive. These sub-chapters include information on the implementation of counselling, counselling materials and the performance of discussions between presenters and counselling participants. Information on the implementation of counselling explains how this service is carried out, including time, place and structure of activities. The extension material

contains the discussion presented to the extension participants. Meanwhile, the discussion explained how participants responded to the material presented, seen from the questions asked.

Information on the Implementation of Service

Community service regarding asset management in Singkir Darat Village, Mukim Singkir, Yan District, Kedah State, Malaysia, was carried out over four (4) months, namely from March to July 2023, starting from the planning stage to the monitoring and evaluation stage. Participants in the community service activities were Singkir Darat Village Government officials and the community, totaling thirty (30) people. The activity began with an opening from the School of Government (SoG), University of Utara Malaysia, which the Dean, namely Assoc. Prof. Dr. Halimah Abdul Manaf (Figure 1). On this occasion, the SoG Dean expressed his appreciation for the activities held in their target villages. Through this activity, it is hoped that Singkir Darat Village Government officials can improve the competency of human resources in managing assets in their village and that the community can supervise the implementation of asset management in the village. The next activity is conveying the objectives of the activity to the participants. On this occasion, it was stated that this activity is part of the contribution the academic sector can make to support the implementation of asset management. In particular, this activity aims to provide the essential understanding to Singkir Darat Village government officials on how to manage village assets properly and correctly so that neat asset data collection can be realized. After this activity, the next is the core activity, namely, the delivery of counselling material.



Figure. 1. The SoG Dean gave a speech and opened international service collaboration activities

Counselling Materials

Initially, the discussion of the management of village assets to be carried out in a professional, transparent, accountable, efficient and effective manner took place (Figure 2). Asset management is one of the important elements that form the basis for preparing regional financial reports. Therefore, asset management must be carried out properly, orderly, and systematically (Setiabudhi, 2019). Indonesia is a case study of this service collaboration because there are several problems related to asset management. Asset management can be implemented using an integrated system (Mardinata et al., 2023). The village asset management system is a system that aims to optimize the management of assets owned by the village in a professional, transparent, and accountable manner (Kustono, 2021). Village assets include various forms, such as buildings, roads, parks, fields and so on (Manan & Muda, 2021). Good management of village assets can help the community improve their welfare and improve village infrastructure. The village asset management system also functions as a tool for managing the village budget well. Village assets that are managed appropriately will produce great benefits for the community. This system also helps build partnerships between the village government, community and the private sector in managing assets (Taufik et al., 2019).

In principle, the village asset management system involves all residents in decision-making and program implementation. This aims to optimize asset management to provide more benefits for society (Sudiarsa & Anom, 2020). In this system, the village government acts as a facilitator in decision-making and ensures that the programs implemented are to community needs. The village asset management system has several stages, including asset inventory, asset condition assessment, maintenance and development planning, implementation of maintenance and development, and monitoring and evaluation (Nikmatuniayah et al., 2020). These stages are carried out on an ongoing basis to ensure optimal management of village assets. In conclusion, the village asset management system is a system that is very important for the development of village infrastructure. Therefore, commitment and participation from all related parties are needed to develop a good and appropriate village asset management system.

The village asset management system has several benefits for the village government and community. Some of these benefits include: (1) makes asset management easier: a village asset management system makes asset management more organized and efficient; (2) minimize asset loss: a village asset management system can help the village government supervise and monitor assets, thereby minimizing the risk of asset loss; and (3) increase asset utilization: with a village asset management system, village assets can be utilized more optimally and, at the same time, provide greater benefits for the community.

With a village asset management system, the village government is expected to manage village assets better and provide greater benefits to the community. Managing village asset inventory sometimes uses process stages that have negative impacts. These activities involve data collection and reporting that still uses conventional systems. If the data contained in an agency or institution increases, it will give rise to new, more complex problems. Meanwhile, technological advances are increasingly rapid, so agencies, institutions or organizations are expected to develop themselves from conventional methods to the digital era (Pratama et al., 2023). Therefore, it is necessary to reconsider creating an asset management information system in the current technological era. The problems usually faced by agencies in terms of asset management are related to the difficulty of the agency, institution or organization in knowing the existence of asset data, the number of assets that are still available, the condition of assets or moving assets from one place to another (Supriyono et al., 2017).

The manual system still used at the Singkir Darat Village Office is still using Microsoft Office, namely, Microsoft Excel. The use of Microsoft Office Excel in recording expenditures and entry of goods can be categorized as a process that is still manual because the application has not been used, so there can be discrepancies between the information obtained and data loss caused by human error (Azbihardiyanti, 2020). An application-based information system can be an innovation created for smooth asset management in the village. The village asset management system can be an application that records the administration of village fixed assets, from planning, holding, and administering to submitting complete reports with codification and labelling of fixed assets based on predetermined rules. The aim is to regulate asset ownership to minimize the risk of loss of village assets and make it easier for the village head to present reports on fixed assets owned by the village office, as well as an information system that helps village officials in carrying out fixed asset management which records the administration of village fixed assets from planning, holding, administering to submitting complete reports with codification and labelling of fixed assets based on the rules set by the government.



Figure 2. Counseling participants enthusiastically listened to the presentation material presented by the service team

The next material provided is regarding the inventory of village assets. Village asset inventory is an activity to collect data, record and report the results of village asset data collection. The village asset inventory aims to determine the type of goods, identity, origin, date of acquisition, and the actual condition of the goods (good/lightly damaged/heavily damaged), both those under the control of the village government and those under the control of other parties so that all assets can be recorded properly to realize orderly administration and accountable asset management. This inventory is carried out on all assets belonging to the village, including physical assets, records and other source documents. Inventory is carried out by registering village assets one by one, which are recorded and registered in the asset inventory book by including the code of goods. Carrying out an inventory of village assets is one of the duties and responsibilities of the village government, which is then coordinated by the village secretary as assistant village asset manager. This village asset inventory activity is also a form of asset security effort. The results of village asset inventory activities are outlined in the village asset inventory book and village asset report.

In practice, an inventory of village assets can be accompanied by an asset assessment if necessary. The village asset inventory stages consist of data collection, recording and reporting. At the data collection stage, it is very important to codify each type of asset. Codification of village assets generally consists of 10-digit numbers for codification and 6-digit numbers for Registration Serial Number. Inventory is carried out periodically every 5 years by checking village asset records with the physical existence of assets. The benefit of carrying out a periodic inventory of village assets is that you can immediately identify the existence of missing inventory items, the existence of inventory items that are in a condition of serious damage which will immediately be proposed for deletion, the existence of village fixed assets in the form of vehicles/other inventory items that are in the control of other parties, or the existence of assets the village remains in the form of land/buildings under the control of another party.

Discussions

After the counselling material is delivered, the next activity is a discussion (Figure 3). On this occasion, participants were asked to submit their questions. The questions submitted by the participants were responded to by the presenters and members of the service team interactively. The questions asked by the participants showed that the extension participants had sufficient knowledge and were even interested in managing assets owned by Singkir Darat village in general. However, there were obstacles in asset management experienced by the Village Government. One of the obstacles experienced is that the capacity of government officials to carry out administration still needs to be improved. Next, manual asset management has information that is not integrated, so assets are not presented comprehensively. This situation causes asset management officers in the village government to experience difficulties in carrying out the administrative data collection process and limitations in utilizing assets efficiently and economically.



Figure 3. Discussion session between the service team and extension participants

With the response given by the participants, there is optimism that the participants can manage village assets properly with the knowledge that has been given and after the material is delivered. The success of this service activity is ensured by the participants' increased understanding of efficient and sustainable asset management. Participants understand that excellent and correct asset management can create opportunities to improve community welfare, strengthen the economy, protect the environment, and maintain cultural diversity. In addition, participants also understand all information related to their position as the person in charge of managing village assets. Managing assets correctly and adequately can ultimately realize the Sustainable Development Goals (SDGs), the eighth point regarding Decent Work and Economic Growth. Therefore, this service activity has achieved the expected results. However, further action still needs to be taken so that the benefits of the service program can be maximally felt. Before presenting counselling material on asset management was delivered, the Singkir Darat Village Government and its apparatus completed a pre-test questionnaire. This aims to ensure that the next service activity will be carried out better. The post-test questionnaire was completed after the service activity was completed (Figure 4). This pre-test and post-test aim to determine the extent of knowledge of the Village Government and its apparatus before and after counselling on village asset management. The results of the pre-test and post-test can be seen in Figure 5.

The pre-test questionnaire consists of questions ranging from the level of understanding of the Village Government and its apparatus of the asset management mechanism. The post-test questionnaire consists of questions regarding the capacity of the service team, the relevance of the knowledge provided, expectations, whether this service is a solution, the active response of the service team to each question, the direct benefits obtained by participants from service activities, and the increase in participants' independence through the service activities, and overall participant satisfaction with this service.



Figure 4. The head of the service team helps one of the counseling participants fill out the post-test questionnaire

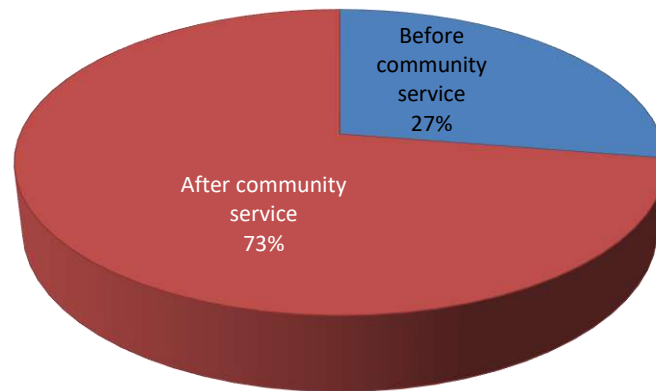


Figure 5. The increase in participant's knowledge of asset management

From the diagram data in Figure 5, it can be seen that the average Pre-test score of the Singkir Darat Village Government and its apparatus at the time of counselling on asset management is relatively low at 27%, which indicates that the initial level of understanding of the Singkir Darat Village Government on asset management is still low. Then, the average Post-test value after implementing counselling on asset management in this community service is 73%. In conclusion, the Singkir Darat Village Government's knowledge after being given asset management counselling ultimately increased. Based on the evaluation carried out by the service team, the plan or follow-up of this service is to make this activity a routine agenda. It can be carried out continuously in Singkir Darat Village with different counselling themes each year. For the following year, village asset management assistance can be carried out, which will be more focused on three things, namely: (1) village asset planning; (2) use and utilization of assets; and (3) administration of village assets in the form of village asset books in Singkir Darat Village.

CONCLUSION

Based on the background and discussion previously explained, it can be concluded that the understanding of Singkir Darat Village Government officials and the community regarding managing village assets in a professional, transparent, accountable, efficient, and effective manner, as well as asset inventory, has increased after participating in this activity. Participants understand more about the importance of village asset management and village asset inventory to carry out excellent and neat asset management. With appropriate assistance and support from the village head and the development of information and communication technology, asset management in Singkir Darat Village can be carried out professionally, transparently, accountably, efficiently, and effectively. Participation and support from the community are also crucial in ensuring the success and sustainability of asset management. Continuous evaluation needs to be carried out to improve asset management according to the needs and context of the village community. Through this activity, asset management by Singkir Darat Village can be carried out optimally in order to provide quality services to the people of Singkir Darat Village, Yan District, Mukim Singkir, Kedah State, Malaysia.

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An exploration of digital marketing, financial literacy, and website empowerment for small enterprises in Melaya Village, Bali

Made Ayu Jayanti Prita Utami ^{a,1}, I Putu Okta Priyana ^{a,2}, I Wayan Eka Dian Rahmamu ^{a,d,3,*}, Ni Nengah Lasmini ^{b,4}, Ni Kadek Herna Lastari ^{c,5}

^a Business Administration Department, Politeknik Negeri Bali, Jl. Bukit Jimbaran, Kuta Selatan, Badung, Bali 80364, Indonesia

^b Accounting Department, Politeknik Negeri Bali, Jl. Bukit Jimbaran, Kuta Selatan, Badung, Bali 80364, Indonesia

^c Tourism Department, Politeknik Negeri Bali, Jl. Bukit Jimbaran, Kuta Selatan, Badung, Bali 80364, Indonesia

^d Doctoral School of Education, University of Szeged, 13 Dugonics square, Szeged, Hungary

¹ prita.utami@pnb.ac.id; ² oktapriyana@pnb.ac.id; ³ rahmanu.eka@pnb.ac.id*; ⁴ nengahlasmini@pnb.ac.id; ⁵ hernalastari@pnb.ac.id

* Corresponding author

ARTICLE INFO	ABSTRACT
<p>Article history Received: 2023-10-12 Revised: 2024-06-28 Accepted: 2024-07-01 Published: 2024-08-01</p> <p>Keywords Small enterprises using website Digital marketing Financial pedagogy</p>	<p><i>This study aimed to empower small businesses in Melaya village, Jembrana Regency, Bali, through a program focusing on website training, digital marketing strategies, financial education, and product enhancement. Initiated by Politeknik Negeri Bali's Business Department, the research engaged stakeholders through workshops covering website development, SEO, social media marketing, and financial literacy. Participants included small business owners, employees, and local government representatives, fostering a collaborative approach tailored to community needs. Beginning with an observational phase in June 2023, the program assessed local demand for digital marketing and financial management. Practical workshops facilitated by experts addressed these needs, alongside efforts to enhance local products such as ginger, coffee, perfume, and cricket farming. Politeknik Negeri Bali oversaw the development of a digital platform to promote these businesses, supported by hands-on activities. Evaluation methods included participant feedback and business performance assessments, revealing improvements in digital presence, product quality, and financial management. This initiative highlights its contribution to market reach, decision-making, and overall business sustainability in Melaya village. By bridging knowledge gaps and effectively utilizing digital tools, this program offers a replicable model for empowering local businesses, fostering sustainable growth and community development.</i></p>
<p>Kata Kunci Situs web UMKM Pemasaran digital Pengajaran keuangan</p>	<p>Ekplorasi pemasaran digital, literasi finansial, dan pemberdayaan website untuk usaha kecil dan menengah di Desa Melaya, Bali. Studi ini bertujuan untuk memberdayakan usaha kecil di Desa Melaya, Kabupaten Jembrana, Bali, melalui program yang berfokus pada pelatihan <i>website</i>, strategi pemasaran digital, pendidikan keuangan, dan peningkatan produk. Diinisiasi oleh Departemen Bisnis Politeknik Negeri Bali, studi ini melibatkan para pemangku kepentingan melalui <i>workshop</i> yang mencakup pengembangan <i>website</i>, SEO, pemasaran media sosial, dan literasi keuangan. Peserta mencakup pemilik usaha kecil, karyawan, dan perwakilan pemerintah daerah, untuk menguatkan pendekatan kolaboratif yang disesuaikan dengan kebutuhan masyarakat. Dimulai dengan fase observasional pada Juni 2023, program ini mengevaluasi permintaan masyarakat lokal terkait pemasaran digital dan manajemen keuangan. <i>Workshop</i> praktis yang dipandu oleh ahli mengatasi kebutuhan ini, bersama dengan upaya untuk meningkatkan produk lokal seperti jahe, kopi, parfum, dan budidaya jangkrik. Politeknik Negeri Bali mengawasi pengembangan platform digital untuk mempromosikan usaha-usaha ini, yang didukung oleh kegiatan langsung. Metode evaluasi meliputi umpan balik dari peserta dan penilaian kinerja bisnis, yang menunjukkan peningkatan dalam kehadiran digital, kualitas produk, dan manajemen keuangan. Inisiasi ini berkontribusi utama terhadap jangkauan pasar, pengambilan keputusan, dan keberlanjutan bisnis secara keseluruhan di Desa Melaya. Dengan mengurangi kesenjangan pengetahuan dan mengoptimalkan alat digital secara efektif, program ini menawarkan model yang dapat direplikasi untuk memberdayakan usaha lokal, mendorong pertumbuhan berkelanjutan, dan pembangunan komunitas.</p> <p style="text-align: right;">Copyright © 2024, Utami, et al This is an open access article under the CC-BY-SA license</p> <div style="text-align: right;">  </div>

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INTRODUCTION

Small business website training is essential in today's digital age. Having a strong online presence and using websites for marketing, customer engagement and business growth can benefit small businesses. However, several factors influence the adoption of websites by small businesses. One of the most important factors is the marketing orientation of the small enterprise. A marketing orientation allows small enterprises to use their websites to maintain a competitive advantage by facilitating information about their customers, market and technology. In other words, a market-oriented small business will see the value in having a website and using it effectively to gather information on its customers and their industry (Simmons et al., 2008). Website adoption can also be influenced by the characteristics of the industry in which a small business operates. In addition, industry characteristics, such as value chain or product information intensity, may affect small business enterprises' (SMEs') sales growth. This suggests that SMEs in information-intensive industries are more likely to adopt websites as part of their business strategy (Saridakis et al., 2018). The visibility and success of small businesses can be positively influenced by online marketing activities such as search engine visibility. Small businesses can benefit from training programs focusing on online marketing strategies and techniques (Kovalenko & Kuzmenko, 2020). Training programs should emphasize the potential benefits and ease of use of website for small businesses rather than focusing solely on the technical aspects of website development (Daryanto et al., 2013). It is important to use websites to maintain a competitive advantage and gather customer and market intelligence (Simmons et al., 2008). Using websites to maintain a competitive edge and gather vital customer and market intelligence is critical in today's fast-paced business environment. As well as showcasing products and services, a well-designed website is a powerful tool for businesses to engage with customers, understand their needs and build lasting relationships. With functionality such as contact forms, chat and analytics, websites provide valuable insights into customer preferences, browsing patterns and demographics, so businesses can better tailor what they offer. And by monitoring web traffic, social media and online reviews, companies are able to stay on top of market trends and competitive strategy, allowing for rapid adaptation and decision making. In this way, the investment in an informative, user-friendly website is becoming an indispensable asset for staying competitive and ensuring long-term success in today's digital age.

Implementing digital marketing is another strategy to elevate the small business' quality and income. Digital marketing is becoming increasingly important for small businesses in today's business landscape. It allows businesses to reach out to a broader audience, increase the visibility of their brand, and improve customer engagement. However, several factors can impact small businesses' adoption and success of digital marketing strategies. Compared to larger companies, small businesses are less likely to participate in digital marketing (Ritz et al., 2019). Digital marketing positively impacts small enterprises' business performance and contributes to developing more effective business systems (Brzakovic et al., 2021). The relationship between business strategy and digital marketing tactics is important, especially for small companies (Goldman et al., 2021). Digital marketing is a dynamic field that adapts to changes in technology and consumer behavior, ensuring businesses can effectively connect with their online audiences. These include search engine optimization (SEO) to increase website visibility in search results, content marketing to engage and inform through different types of content, social media marketing to interact with audiences, email marketing for targeted communication, pay-per-click advertising for immediate traffic and influencer partnerships for wider reach. In addition, mobile and video marketing cater to different user preferences, while data analytics is critical in measuring campaign performance. Thus, the participation of small businesses is significant in developing digital marketing strategies to reach their target markets and stimulate sales growth (Ritz et al., 2019). Underlining the importance of digital marketing for small and medium enterprises, online services have a greater impact on consumers than traditional communication methods (Omar et al., 2020). This has the potential to benefit increase for the small company.

The importance of digital pedagogy for small enterprises has led to significant improvements in financial stabilization and income. Digital financial inclusion provides access to financial services and expansion opportunities for small and micro-enterprises, positively impacting their sustainable growth (Yang & Zhang, 2020). Higher levels of financial literacy among small and micro-enterprise owners were associated with more responsible borrowing behavior and a greater likelihood of participation in formal credit markets (Liu et al., 2023). Strong supply chain networks and operational capabilities positively influence small enterprises' ability to secure working capital finance (Song et al., 2020). The impact of training courses on the financial management skills of the owners of small enterprises has also been studied. It is important to provide training programs that address the specific needs of small entrepreneurs and help them improve how they manage their financial affairs (Kirsten, 2013).

Furthermore, financial education for small businesses goes beyond learning basic literacy skills. It also includes managing risk, complying with taxes, accessing finance, and long-term business planning. Experts can provide guidance on how to identify potential financial risks, access different sources of finance, optimize tax strategies and plan for retirement or business succession. This comprehensive approach enables entrepreneurs to not only preserve the business, but it also enables the business to grow and compete strategically. Financial education and expert advice provide a solid foundation upon which small businesses can build the financial stability and resilience critical to long-term success. For instance, the financial leverage of small businesses in India is influenced by factors such as growth, performance, total assets, turnover, taxes and family. This suggests that small business financial leverage and performance may be influenced by financial pedagogy, which includes financial management education and training (Gill et al., 2012). Financial education has the potential to improve the financial literacy of entrepreneurs, with a positive impact on managing finances and making informed financial decisions (Abad-Segura & González-Zamar, 2019). Financial

education can play a role in educating small business owners about financial management, access to finance and financial planning. This can increase their chances of survival and success (Bates & Robb, 2014). Finance education equips small business owners with the knowledge and skills necessary to understand financial products and services, make informed financial decisions, and manage finances effectively. This includes financial literacy tools and technologies specifically designed for small business owners. Financial literacy education can provide these tools and resources, equipping small business owners with the financial knowledge and skills to improve their business performance and help grow the economy (Rachapaettayakom et al., 2020). In addition, financial literacy equips individuals and organizations alike with the knowledge to make informed financial decisions, mitigate risk, plan for the long term, and contribute to economic stability.

However, these facilities cannot be afforded by the Melaya village. The village may have problems with essential services and amenities, such as education and marketing issues. The residents of Melaya village have restricted access to financial literacy programs and high-quality education. The capacity of small business proprietors to effectively manage their finances, make informed decisions, and access credit markets is impeded by the absence of educational resources. Consequently, numerous small businesses encounter obstacles in their pursuit of sustainable growth and financial stability. In addition, the absence of digital marketing infrastructure and expertise presents challenges for small businesses in Melaya village in their efforts to expand their market reach. These businesses are unable to effectively compete in the market, engage with consumers, or increase their visibility without an online presence. The absence of digital marketing strategies results in reduced competitiveness and limited sales growth. The village's economic landscape is characterized by limited access to financial services, poor infrastructure, and a lack of external support and funding. These constraints make it challenging for small business owners to invest in the necessary tools and technologies to grow their businesses and improve their operations. The economic challenges also impact the overall well-being of the community, leading to a lower quality of life for its residents. Therefore, there is an urgent need for external support, funds and assistance to improve the infrastructure of the village of Melaya and provide a better quality of life for its residents. A market-oriented approach can greatly advantage small enterprises by offering a competitive edge through enhanced customer and market insights (Simmons et al., 2008). Implementing digital marketing strategies can lead to increased sales and improved performance for small businesses, particularly in information-intensive sectors (Saridakis et al., 2018). Developing a website will allow businesses to collect valuable customer data, track market trends, and interact more effectively with their target audience, fostering sustainable growth. Training programs that focus on the potential benefits and ease of use of websites, rather than solely on technical aspects, can empower small businesses to leverage digital marketing effectively (Daryanto et al., 2013). Digital marketing techniques such as SEO, content marketing, social media marketing, and data analytics can enhance business visibility, customer engagement, and overall business performance (Omar et al., 2020; Ritz et al., 2019). By equipping small business owners with digital marketing skills, the program will enable them to reach a broader audience, increase brand visibility, create decent work opportunities, improve economic growth, and enhance customer engagement. Financial education programs can enhance financial management skills, leading to better borrowing behavior, increased participation in formal credit markets, and improved business performance (Abad-Segura & González-Zamar, 2019; Gill et al., 2012). By providing financial literacy tools and resources, the program will help small business owners in Melaya village build financial stability, resilience, and achieve long-term success.

The program can potentially elevate the quality of education in Melaya village. The program's impact extends beyond individual business success; it has the potential to elevate the quality of education in Melaya village significantly. As business owners achieve more excellent financial stability, they are more likely to invest in their children's education, ensuring that the next generation has access to better learning opportunities. Financially secure families can afford school fees, books, and other educational resources, reducing dropout rates and improving academic performance. This investment in education creates a positive feedback loop, where educated individuals contribute to the community's development and economic prosperity. The expertise and guidance from Politeknik Negeri Bali enhance the program's effectiveness, ensuring that participants receive high-quality education and training. This collaboration not only strengthens the financial stability of households but also leads to better educational facilities and infrastructure in Melaya village. As such, the initiated programs promote the global Sustainable Development Goals (SDGs) number four and eight, which are ensuring equitable quality education and establishing decent work and economic growth.

From the elaboration above, this study aims to explain comprehensively: (1) how the website was created to provide digital marketing of Melaya village; (2) what kind of digital marketing explanation was suggested to improve the sustainability of small businesses in Melaya village; and (3) how the financial education elaborated to assist small business owners managing their small companies in Melaya village.

METHOD

The research took place in Melaya village, located in the Jembrana regency of Bali, and was initiated by lecturers from the Business Department at Politeknik Negeri Bali. A descriptive qualitative approach was utilized to elaborate on the use of digital platforms for promoting small businesses. The study involved a detailed observation to understand the demand for digital marketing among small businesses. This process included inputs from two speakers from Politeknik Negeri Bali who specialized in digital media marketing, and two experts who discussed management and financial pedagogy. Participants included small business owners, employees, and government staff. The research aimed to provide digital

marketing media for Melaya village by developing a website to promote local small businesses. The website creation and its use for marketing were managed by a team from Politeknik Negeri Bali. Alongside this, digital marketing strategies and financial education for small business owners were elaborated upon.

The initial phase of the research involved a field survey and direct observations conducted in June 2023. Researchers, small business owners, local government staff, and employees participated in this phase. The observations helped identify the specific needs and challenges faced by the small businesses in Melaya village regarding digital marketing and financial management. Direct interviews with community members and leaders further clarified these issues. The program, titled "Website Training, Digital Marketing, and Financial Management in Supporting MSME Business Growth in Melaya Village, Jembrana Regency, Bali," was implemented in several key stages. Initially, an observation phase conducted in June 2023 involved understanding the demand for digital platforms through direct engagement with stakeholders. Following this, a series of interactive workshops were held to train participants on website development, digital marketing strategies, and financial management. These workshops included practical demonstrations and hands-on activities, covering topics such as website creation and maintenance, SEO, social media marketing, content marketing, financial literacy, and risk management. Each session lasted approximately 2-3 hours and was spread over multiple days, involving small business owners, their employees, and local government staff. Additionally, experts from Politeknik Negeri Bali delivered in-depth presentations on digital marketing and financial management. These presentations aimed to align digital marketing initiatives with broader business objectives, helping small business owners effectively market their products to consumers. The success of these website development activities was measured through participant feedback, website traffic analytics, business performance evaluations, and follow-up interviews, ensuring long-term impact and effective implementation of the training.

RESULTS AND DISCUSSION

Provide the Information of Melaya Village Through Website

With regard to the observation conducted by the researchers, a central hub for residents and visitors alike is the systematic website developed for Melaya village. The website provides an area where residents can access important information about local events, government updates, and community initiatives. This digital platform fosters a sense of belonging and civic responsibility by encouraging residents to stay informed and involved in village affairs. It also fosters a strong sense of unity and cooperation by providing a platform for community members to connect, share ideas, and collaborate on projects (Barab et al., 2001). The creation of the Melaya village website was a key element of the initiative. The team from Politeknik Negeri Bali played a crucial role in both the planning and implementation stages of the creative process. The planning phase encompassed several crucial steps: initially, delineating the website's aims, including disseminating information about local events, government updates, and fostering the growth of small enterprises. Subsequently, a comprehensive project timeline was created, delineating the duration for design and development, which extended over multiple months. Throughout this period, the team organized workshops and training sessions aimed at providing local company owners with the essential skills required to effectively manage and update the website.

The site acts as a virtual tour guide, presenting these assets and providing detailed information on sites, local traditions, and tourist activities. By providing a well-curated guide to the village's attractions, the website not only promotes tourism, but also helps to preserve and promote the village's unique heritage. This, in turn, can be a catalyst for economic growth through the attraction of more visitors and the support of local businesses. Supporting local businesses is vital to the economic development of any community. The site includes an easy-to-use business directory which makes it easy for residents and visitors to discover and support local businesses. This directory may include contact information, opening hours and descriptions of each shop, making it easier to trade within the municipality. By encouraging residents to shop locally, the community website contributes to the sustainability and growth of the local economy. The website can integrate online services such as bill payment, permit applications and event registration to increase convenience for residents and streamline government processes. These digital solutions save citizens time as well as improve the overall efficiency of the municipality. By embracing technology and offering these online services, Melaya village demonstrates its commitment to modernization and effective governance, benefiting the government and the community it serves.

Figure 1 and Figure 2 represent the Melaya village site which is essential to provide the user with comprehensive and specific information about the village and the area. Most importantly, it serves as a virtual gateway to Melaya, enabling individuals around the world to glimpse this unique and dynamic community. Detailed and up-to-date information about the history, culture, and traditions of Melaya village is one of the key features of the website. This information helps users to understand better Melaya's rich heritage and to appreciate its unique identity. The users will discover how the village was founded, how it has evolved over the years, and the cultural practices handed on from generation to generation. This insight will be invaluable to those who wish to understand Melaya and its inhabitants as a whole. The website also provides essential practical information for visitors, including where to stay, local attractions, and how to get around. This ensures a smooth and enjoyable experience for tourists planning their trip to Melaya. Users can rely on the website to simplify their travel preparations, from booking accommodation to planning their itinerary. In addition, the Melaya village website serves as a platform for engagement and connection with the community. It allows residents to stay informed and involved in village activities by frequently posting updates on local events, festivals and initiatives.



Figure 1. Front page of Melaya Website

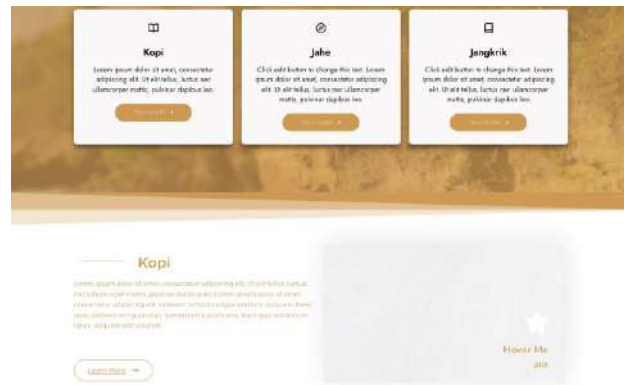


Figure 2. Extra information about Melaya Village

The introduction of the Melaya village website to the Melaya community is shown in Figure 3. Residents participated enthusiastically in the presentation given by lecturers from Politeknik Negeri Bali during this session. The goal and functioning of the website needed to be communicated clearly and simply since the community was not acquainted with digital notion. Small company owners, representatives from the local government, civic leaders, and other locals curious about the new digital platform were among the attendees. To guarantee full comprehension and participation from the community, the presentation of the Melaya village website was carefully organized. The first section, which covered the basics of websites, was led by digital media experts and instructors from Politeknik Negeri Bali. Using clear analogies and visual aids, participants learned about the components, structure, and practical uses of websites in a 30-minute workshop that set the groundwork for the conversations that followed.



Figure 3. Internship discussion with small business enterprises



Figure 4. Overview from the mentor

With regard to Figure 4, Politeknik Negeri Bali instructor with experience in community involvement discussed the advantages of the Melaya village website. In forty-five minutes, participants discovered how the website acts as an essential center of information, providing news, events, and community resources as well as fostering relationships amongst the villages. Projector-based demonstrations allowed attendees to see the features of the website, encouraging participation and providing answers to any questions. Participants saw practical demos for 45 minutes on how to use the website to increase exposure and customer interaction, advertise events, and create company profiles. Participating company owners' real-world examples offered helpful insights into efficient internet marketing tactics catered to the requirements of the community. The 60-minute interactive training and practical practice session was conducted by a group of specialists from Politeknik Negeri Bali. Participants used computers and tablets to explore the website's company directory and virtual tour guide, among other features. Experts provided one-on-one supervision to ensure that every participant became proficient in utilizing these tools, enabling them to explore and use the website's contents on their own. Finally, a 30-minute feedback session was led by Politeknik Negeri Bali's program coordinator. Here, participants spoke about difficulties they had throughout the course, expressed their perspectives, and offered recommendations for improvements. In addition to assessing participant satisfaction, this interactive conversation provided guidance for the next training sessions, guaranteeing ongoing support and improvement of digital literacy in the Melaya village community. Overall, the session's organized methodology promoted thorough learning and active participation, creating a solid foundation for further community empowerment via digital platforms.

In addition to the organized training session, it was essential to provide them with real-world examples of other websites fulfilling comparable functions. For participants to use the website efficiently, it was essential that fundamental

navigation terminology like "home," "menu," and "links" were explained. Accessibility was stressed throughout the training, making sure that participants knew that the website could be viewed on computers, tablets, and phones, among other devices. Users were given a tour of the website's interactive features and made to feel comfortable using it on their own by seeing demonstrations of how to access the website, search for information, and click on links. In addition, consumers may find contact details and other resources to help them in the event that they run into any problems.

There were some difficulties with the session, mostly because the participants were not used to using internet platforms at first. At first, some residents had trouble using the website and comprehending its capabilities, which emphasizes the need for continued assistance and extra training sessions catered to different degrees of digital literacy. Nonetheless, the hands-on practice and participatory format of the workshop greatly increased participants' confidence and comprehension. The session's effects on the expansion of Melaya village's small businesses are encouraging. The workshop immediately contributes to economic growth by giving local company owners a platform to advertise their brands online and digital marketing abilities. Thanks to the website's company directory and promotional tools, small companies may now be more visible, which might lead to an increase in clients and sales. Furthermore, the website's function in endorsing regional gatherings and neighborhood projects cultivates community involvement and solidarity, both of which are necessary for long-term development. In the future, it will be essential to provide continual feedback and support systems in order to resolve persistent issues and maximize the efficiency of the website. To further empower small companies and improve community connectedness, future workshops may concentrate on advanced digital marketing methods, website upkeep, and increasing online offerings. All things considered, the meeting was a big step toward using digital tools for Melaya village's inclusive growth and development and making sure its citizens are prepared to prosper in a world that is becoming more and more digital.

Digital Marketing Explanation to Improve the Sustainability of Small Businesses in Melaya Village

Melaya village's entrepreneurs have the ability to use their vision and core principles to uplift others and maintain motivation during the highs and lows of starting a company. Important information on how their product or service may meet client wants was given, highlighting the significance of data-driven decision-making in entrepreneurship and how it can have a beneficial influence on the launch of a product or business.

Participants in the digital marketing discussion thereafter obtained basic training to improve their capacity to promote goods online. The significance of having a distinct corporate vision and passion was underlined in this part. Entrepreneurs in Melaya villages were urged to use their vision and core principles as a means of motivating and inspiring others. Important information on how their goods and services may meet consumer wants was given, with a focus on how data-driven decision-making could have a beneficial effect on the launch of new items. Introduction to websites, fundamental navigation, and comprehension of digital platforms were the main topics of the morning session. Small business entrepreneurs, representatives of the local government, civic leaders, and interested citizens attended the four-hour event. This seminar was given by lecturers from Politeknik Negeri Bali, who specialize in digital media and community participation (Figure 5). The afternoon session discussed the fundamentals of digital marketing, such as its advantages, how to create company profiles, and how to use basic methods. Along with the instructors, there was a digital marketing specialist for the duration of this three-hour event. The objective was to provide an overview of digital marketing ideas and provide examples of useful online company promotion strategies.



Figure 5. Digital marketing presentation

A four-hour advanced digital marketing and hands-on training session preceded the next events. Experts in digital marketing and financial management educated participants—who included small company owners, employees of the local government, and leaders in the community—how to make data-driven decisions by using analytics tools and sophisticated marketing techniques. The last three-hour class covered budgeting, risk management, financial management, and access to financing with an emphasis on small company financial education. This seminar, which was delivered by professionals in financial management, focused on teaching management techniques and financial literacy for long-term company development. The participatory format of the workshop—which included talks, real-world examples, and hands-on exercises—greatly increased participants' comprehension and self-assurance. Initial unfamiliarity with digital platforms was a challenge, but extra training sessions and continuous assistance were arranged, with varied degrees of digital literacy being catered to. The workshop's design, which included many sessions with focused themes and goals, guaranteed a thorough educational experience and equipped Melaya village business owners with the know-how and abilities required to prosper in the digital era.

Figure 6 illustrates the establishment of an agreement between academics from Politeknik Negeri Bali and small business firms in Melaya village, specifically focusing on enterprises involved in coffee, cricket, and ginger production. The collaboration aims to tackle the unique challenges and seize the opportunities that these small enterprises encounter. By fostering close cooperation, the agreement is designed to stimulate joint research projects, provide practical solutions to commercial problems, and promote sustainable development within the community.



Figure 6. Internship discussion with small business enterprises

In the coffee sector, Politeknik Negeri Bali researchers will work with local coffee producers to enhance their cultivation techniques, improve product quality, and develop effective marketing strategies. This collaboration includes conducting experiments to optimize growing conditions, introducing innovative processing methods, and exploring new markets. By leveraging the expertise of the academics, coffee producers in Melaya village can increase their yield, maintain consistent quality, and expand their customer base, ultimately contributing to the overall economic growth of the village.

For cricket and ginger enterprises, the agreement focuses on similar objectives of improving production efficiency and market reach. Researchers will assist cricket farmers by implementing best practices in breeding, feeding, and harvesting, ensuring higher productivity and better product quality. In the ginger sector, the collaboration will involve studying soil conditions, pest management, and post-harvest processing to maximize yield and quality. Through these targeted efforts, both cricket and ginger producers will benefit from tailored strategies that address their specific needs, fostering innovation and resilience in their businesses. By integrating academic knowledge with practical applications, the partnership aims to empower small enterprises in Melaya village, driving sustainable development and economic prosperity.

The Melaya community's development is anticipated to be greatly impacted by this relationship. Small enterprises may acquire cutting-edge tactics and solutions to improve their operations, boost productivity, and raise the calibre of their products by using academic knowledge. Furthermore, by facilitating knowledge transfer, the alliance will provide local businesses the tools they need to succeed in a cutthroat market. Incorporating data-driven decision-making procedures with the engagement of university academics would also help firms make well-informed decisions and maximize their marketing expenditures. The ultimate goal of this agreement is to provide a favourable environment that will enable small enterprises to thrive and advance Melaya village's overall economic growth and prosperity.

In analysing the market trend digitally, Melaya village is suggested to boost the use of Google Analytic actively. It can help tracking key performance indicators (KPIs) and monitoring marketing campaigns effectiveness (Clifton, 2009). Entrepreneurs can refine their strategies and optimize their businesses by continuously analysing data. Building a successful business requires a customer-centric approach. Business owners should use tools like Google Analytics to gain a deep understanding of their target audience's preferences and behaviours (McGuirk, 2023). This information can guide product development and marketing efforts. Business owners should be adaptable and be open to adjustments in their strategies on the basis of market trends and customer feedback. Google Analytics can help to stay agile by providing real-time data.

By providing a cost-effective platform for marketing, increasing brand awareness, and engaging with potential customers, social media can significantly boost the bottom line of small businesses (Sivarajah et al., 2020). Without the large advertising budgets required for traditional marketing channels, social media allows small businesses to reach a wider audience. By creating compelling content and using targeting tools, businesses can connect with specific demographic groups, thereby increasing the chances of converting social media users into customers. In addition, platforms such as Facebook and Instagram offer advertising opportunities which allow businesses to target audiences based on location, interest and behaviour. Social media increases brand visibility and awareness (Capitello et al., 2014). Small businesses can establish a strong online presence through consistent and engaging content on Instagram, Twitter and LinkedIn platforms. The strong benefit is to build a sense of community and trust around your brand through regular updates, interaction with followers, and user-generated content. Consumers are more likely to remember and choose a brand when purchasing if they see it consistently in their social media feeds. Social media provides a direct channel for customer engagement and feedback (Wibowo et al., 2021). Small businesses can communicate with customers, address their concerns and gain valuable insights through platforms such as Facebook, Twitter and Instagram. Businesses can build loyalty and turn happy customers into repeat buyers by actively participating in discussions and providing excellent customer service. Furthermore, social media analytics tools allow businesses to track how their campaigns perform, better understand their audience and make data-driven decisions to further optimize their marketing strategies (Fan & Gordon, 2014).

The outcomes of the digital marketing workshops in Melaya village went beyond recommendations. The workshops included a process to help put these recommendations into practice in addition to offering fundamental information and practical insights. Participants received continuous assistance from Politeknik Negeri Bali researchers, who helped them implement the new techniques in the real world. This support includes social media marketing campaign creation, tracking results, and setting up Google Analytics for firms. Ensuring that the participants could effectively apply these digital tools and strategies to improve their business operations and growth was the aim. This direct assistance was essential in assisting Melaya Village's small enterprises in navigating the intricacies of digital marketing and making appropriate use of these resources for long-term economic growth.

Financial Education Elaborated to Assist Small Business Owners Managing the Small Company

The session commenced with a presentation on fundamental financial principles, including budgeting and cash flow management, delivered by a finance specialist from Politeknik Negeri Bali (Figure 7). The inaugural session had a duration of two hours and involved interactive exercises in which participants engaged in the creation of their own budgets and cash flow statements. After a brief pause, the second session centered on comprehending financial statements, such as the income statement, balance sheet, and cash flow statement. The segment of the seminar was presented by a different lecturer from Politeknik Negeri Bali and had a duration of three hours. Attendees were given exemplary financial statements and instructed on how to scrutinize and decipher these records.



Figure 7. Financial pedagogy

Following the lunch break, the seminar recommenced with a session focused on financial ratios and their significance in evaluating corporate success. The purpose of this event was to provide participants with hands-on experience in calculating and analyzing different financial ratios using their own business data. The concluding segment of the day consisted of a panel discussion involving two financial experts. During this session, the experts fielded questions from the attendees and offered tailored guidance on the particular financial obstacles encountered by the enterprises in Melaya village (Figure 8).



Figure 8. Interactive session with an audience from Melaya village

All of the participants, including small business owners, employees, and local government staff, attended the session. The comprehensive approach, which included separate workshops on various financial themes, ensured that participants acquired a broad grasp of the basics of financial management. This framework additionally facilitated focused instruction and prompt implementation of ideas, thereby augmenting the financial acumen and administrative proficiencies of small business proprietors in Melaya village.

The workshops taught participants how to create a well-structured budget that serves as a financial roadmap. Participants learned how to forecast income and estimate expenditure. They explored how important it is to monitor financial performance versus budget and make necessary adjustments to remain in line. Budgeting workshops focus on the practical aspects of creating and managing budgets, enabling participants to make informed decisions about their financial resources. For small businesses to survive, understanding and managing cash flow is essential. Beginners were introduced to the concept of cash flow and how it differs from profitability in Cash Flow Management workshops. Participants explored the cash flow statement and learned how to track cash movements within their business, including operating, investing and financing activities. These workshops provided newcomers with the tools and strategies for forecasting cash flow, managing cash flow challenges and ensuring that the business has sufficient liquidity to cover day-to-day operations and take advantage of growth opportunities. Financial statements are the language of business, and those starting out need to learn how to decipher them. In the Financial pedagogy session, participants explored the profit and loss account, balance sheet, and cash flow statement, and gained an in-depth understanding of these essential documents. The focus was on the demystification of financial jargon and the presentation of these statements in a way that is accessible to beginners. In addition, participants learned the calculation and interpretation of key financial ratios that provide insight into profitability, liquidity and solvency. It enables them to evaluate the business's health and make informed decisions to grow and sustain it.

The benefits of a website for small businesses can be very significant. Websites offer small business a means of staying ahead of the competition because they make it easier to learn about clients, markets and technologies (Simmons et al., 2008). Through a website, small businesses can gather information about the preferences and attitudes of their clients, enabling them to adapt their products or services to meet the needs of their clients. In addition, websites allow small enterprises to gather market intelligence by analyzing the traffic and user behavior on the website, which can be used to inform marketing strategies and decision-making. Websites also play a crucial role in helping small businesses to grow and develop. The web presence pyramid model proposes that websites can be categorized into different adoption levels, which represent the different features and functionalities that can be incorporated into a small business's web presence (Burgess, 2016). In recognition that small businesses may have different levels of web presence, this model provides a framework for understanding the different stages of website adoption. In addition to the benefits of having a website, small businesses can also use social media platforms to enhance their online presence. Social media platforms and a website can increase awareness and inquiries, strengthen relationships with clients, attract new clients, and extend business reach worldwide (Jones et al., 2015). Through social media platforms, small and medium-sized enterprises can engage with their target audience, share updates and promotions, and build a community of loyal customers. There are

also opportunities for small businesses to improve their operations and efficiency through the internet of things (IoT). The internet of things refers to the network of interconnected devices that are able to collect and share data. Small businesses can take advantage of IoT technologies to streamline their processes, monitor their inventory, and improve their customer experience (Jones et al., 2015). For instance, IoT devices can track inventory levels in real-time, automating order processing, and providing personalized recommendations to customers based on their preferences.

In terms of digital marketing, it has become vital to small businesses because of its many benefits and opportunities to grow. Small businesses have significant advantages in reaching their target customers, increasing brand awareness and boosting sales by adopting digital marketing strategies (Ritz et al., 2019). Traditional methods of marketing, such as printing advertisements or running TV commercials, can be expensive and may not produce the desired results. Digital marketing, on the other hand, allows small businesses to reach a wider audience at a fraction of the cost of traditional marketing. Like social media or search engine marketing, online advertising platforms offer targeted advertising opportunities, tailored to particular demographics or customer tastes (Omar et al., 2020). Digital marketing also allows small businesses to measure and track their marketing efforts. Through various analytics tools, small businesses can gather data on website traffic, customer behavior and conversion rates. With this data, marketing campaigns are optimized, areas that needing improvement are identified, and data-driven decisions are made to increase overall marketing effectiveness. In addition, digital marketing allows small businesses to have a more personal level of engagement with their customers (Omar et al., 2020). For example, social media platforms allow businesses to communicate directly with their customers. Small businesses can build relationships with their audience through social media by responding to customer queries and addressing concerns. This level of engagement can foster customer loyalty and lead to repeat business.

Furthermore, digital marketing allows small and medium-sized enterprises to compete on a more level playing field with their larger counterparts. By implementing an effective digital marketing strategy, small businesses can boost their online visibility and attract more customers. This enables them to compete in the digital space for customers regardless of their size or budget (Pollák & Markovič, 2021). Digital marketing platform enables rapid changes and updates to a campaign. Small businesses can test different strategies, analyze the results, and adjust accordingly. Based on market trends and customer feedback, small businesses may need to pivot their marketing approach, and this agility and flexibility is particularly beneficial (Mohamad, 2022).

Smaller companies tend to be resource-constrained and budget-constrained. Business owners may find it difficult to manage their finances effectively without the proper financial education. Financial education provides knowledge and skills to create and maintain budgets, track expenses, and make informed financial decisions. In addition, they should know how to manage risk. From market fluctuations to unexpected expenses to economic downturns, small businesses face a variety of financial risks. Financial literacy helps entrepreneurs understand these risks and develop mitigation strategies, such as building an emergency fund or diversifying income sources. In addition, the business needs to increase its knowledge of financial planning. Financial education helps small business owners define clear financial objectives and plan the business and strategy for achieving these objectives. This involves preparing for both immediate and long-term financial needs, such as capital spending, retirement, and succession planning.

By identifying areas for cost reduction and revenue enhancement, a strong foundation in financial literacy can help small businesses improve profitability. It also supports sustainable growth by providing insight into when and how profits can be reinvested in the business. The challenge for small businesses is addressed through specific cash flow management analysis. Managing cash flow is a major challenge for small businesses. Financial education provides business owners with strategies to monitor and maintain a healthy cash flow, ensuring that they are able to meet their financial obligations and invest in growth opportunities. As a result, small business owners' personal finances are often closely linked to their business finances. By effectively managing business income and expenses, planning for retirement, and protecting assets, financial education helps them achieve personal financial security.

The training program designed for small businesses aims to address several critical problems within the community, primarily focusing on enhancing digital literacy and financial education. Many small business owners in the community struggle with limited resources and knowledge, particularly in areas such as digital marketing, website management, and financial planning. The training program's objective is to equip these entrepreneurs with the skills necessary to leverage digital tools effectively, thereby increasing their competitiveness and sustainability. By providing education on managing websites, utilizing social media, and understanding IoT, the program addresses the need for modern business practices. Additionally, financial education components help business owners better manage their finances, understand risks, and plan for future growth. Based on the successful outcomes of the training program, several practical recommendations can be made for future initiatives and policymakers. Firstly, ongoing support and advanced training sessions should be provided to ensure continuous learning and adaptation to new technologies and market trends. Policymakers should consider funding and supporting similar programs that focus on digital and financial literacy, as these are crucial for the growth and resilience of small businesses. Additionally, integrating mentorship components, where experienced business owners can guide new entrepreneurs, could enhance the practical application of the training. For example, pairing businesses that successfully increased their sales through digital marketing with new participants can create a supportive community of practice. Policymakers could also incentivize participation by offering grants or tax breaks to businesses that complete such training programs, encouraging broader participation. By adopting these recommendations, the positive impacts of the training program can be extended, fostering a more robust and dynamic small business environment within the community.

CONCLUSION

The activities led by experts addressed these needs and focused on improving local products such as ginger, coffee, perfume, and cricket farming. Politeknik Negeri Bali supervised the creation of a digital platform to promote these businesses, supported by hands-on activities. Evaluation methods included gathering feedback from participants and assessing business performance, which demonstrated enhancements in digital presence, product quality, and financial management. This initiative underscores its impact on expanding market reach, facilitating decision-making, and enhancing overall business sustainability in Melaya village. By closing knowledge gaps and effectively using digital tools, this program provides a replicable framework for empowering local businesses, fostering sustainable growth, and community development. The digital landscape has revolutionized how small businesses operate and thrive in today's competitive marketplace. Websites and social media introductions have enabled businesses in Malaya to understand their customers and markets better, adapt to changing customer needs and drive growth. Operational efficiencies streamlined processes, and personalized customer experiences are further enhanced by the internet of things (IoT). Because of its low cost, precise targeting, and data-driven decisions, digital marketing is quickly becoming a must-have approach for small companies in Melaya village looking to enhance brand awareness, grow sales, and establish long-term customer connections. Furthermore, financial education is emerging as a critical component of small business success. Financial literacy equips entrepreneurs with essential skills to manage their finances effectively in a world where resource constraints are common. It enables them to manage financial risks, to set clear goals and to plan for their financial needs in both the short and the long term. Financial literacy becomes a cornerstone for improving profitability and supporting sustainable growth by identifying areas for cost reduction and revenue enhancement. In addition, managing cash flow effectively, a constant challenge faced by SMEs, becomes much easier through financial education, ensuring that they can meet financial obligations and invest in future opportunities, which contributes significantly towards both business and personal financial stability. By embracing the opportunities offered by the digital landscape and becoming financially literate, small businesses will not only be able to remain competitive but will also pave the way for long-term viability and prosperity. These businesses are positioning themselves for growth and resilience in an ever-evolving business landscape by continuing to adapt, engage with customers and make informed financial decisions. Research might focus on the long-term viability and resilience of small and medium-sized businesses that have implemented digital strategies and financial education. It could look at how these businesses weather economic cycles, adapt to changing market conditions and contribute to local economies over time. Furthermore, future research might investigate how to tailor digital strategies and financial education to the various types of small businesses, whether they are commercial, service-oriented, or technology-oriented.

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The social impact analysis of "Rise a Voice, Airlangga Got Talent" program with social return on investment approach

Zalfa Karina ^{a,1,*}, Gancar Candra Premananto ^{a,2}

^aFaculty of Economics and Business, University of Airlangga, Jl. Airlangga No.4 Surabaya, East Java 60286, Indonesia

¹zalfa.karina-2022@feb.unair.ac.id*; ²gancar-c-p@feb.unair.ac.id

* Corresponding author

ARTICLE INFO	ABSTRACT
<p>Article history Received: 2023-08-28 Revised: 2024-02-05 Accepted: 2024-07-22 Published: 2024-08-01</p> <p>Keywords Orphanage Social Return on Investment Social Impact</p>	<p><i>This study aimed to evaluate and calculate the social impact value from the "Rise A Voice, Airlangga Got Talent" Program. The program was a Creating Share Value activity carried out by Master of Management students at Airlangga University for orphanages in Surabaya. It was held to provide a platform for the orphanage children's creations and direction related to good orphanage management. However, after the implementation of the program, there were no measurement results related to the social impact received. Therefore, this research was conducted to calculate the value of the social impact using the Social Return on Investment (SROI) approach as a research method. The result showed that the Program produced an SROI value of 36.04. It can be inferred that every 1 Rupiah invested in the "Rise A Voice, Airlangga Got Talent" Program was able to generate return of Rp. 36.04. Meanwhile, the payback period can be gained in 1.7 months. This program can be categorized as successful because it is able to exceed a ratio of 1 in SROI. The calculation of SROI is important to evaluate and develop strategies for the program sustainability as an illustration for investors who are willing to invest in the same program.</i></p>
<p>Kata Kunci Dampak Sosial Panti Asuhan Social Return on Investment</p>	<p>Analisis dampak sosial program "Rise a Voice, Airlangga Got Talent" dengan pendekatan social return on investment. Penelitian ini memiliki tujuan untuk mengevaluasi dan menghitung nilai dampak sosial yang dihasilkan dari program Rise a Voice, Airlangga Got Talent. Program tersebut merupakan kegiatan Creating Share Value (CSV) yang dilakukan oleh para Mahasiswa Magister Management Universitas Airlangga untuk anak-anak panti asuhan yang ada di daerah Surabaya dan sekitarnya. Program tersebut diselenggarakan untuk memberikan wadah kreasi anak-anak panti serta memberikan arahan terkait dengan manajemen panti asuhan yang baik. Namun setelah terselenggaranya program, tidak ada hasil pengukuran terkait dampak sosial yang diterima oleh panti asuhan maupun pelaksana kegiatan. Sehingga dilakukanlah penelitian ini untuk menghitung nilai dampak sosial (timbal balik) yang terjadi menggunakan pendekatan Social Return on Investment (SROI) sebagai metode penelitian. Hasil penelitian menunjukkan bahwa dari program tersebut telah menghasilkan nilai SROI sebesar 36,04. Hal ini dapat diartikan bahwa setiap 1 Rupiah yang diinvestasikan pada program Rise a Voice, Airlangga Got Talent maka mampu menghasilkan timbal balik sebesar Rp 36,04. Sedangkan lama waktu nilai timbal balik (payback periode) tersebut dapat dirasakan selama 1,7 bulan. Program ini dapat dikategorikan berhasil karena mampu melebihi rasio 1 dalam SROI. Perhitungan SROI penting dilakukan untuk mengevaluasi dan menyusun strategi keberlanjutan kegiatan sebagai gambaran bagi para investor yang ingin berinvestasi menanamkan modalnya pada program yang sama..</p> <p style="text-align: right;">Copyright © 2024, Karina, et al This is an open access article under the CC-BY-SA license</p> 

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INTRODUCTION

Welfare is the individual right to live and accomplish their needs. A nation future is determined by the condition of citizen, especially the younger generation who will become the successors of the nation. The success depends on the character, creativity, morals and intellectual intelligence of the successors. But as we all know, not all children are born with the same luck. Many of the children have been abandoned by their parents and have no family. The orphanage is a place for them to get housed. Based on the data from Surabaya City Social Service, there were 219 orphanages spread in

31 sub-districts on 2020. The entire orphanage had a total number of 3,124 orphans. Gubeng Subdistrict had the largest number of orphanage in Surabaya City, with 18 orphanages that become home for 20 orphans (Statistik Sektor Kota Surabaya, 2021).

Nevertheless, the opportunity and rights of these children to obtain welfare in education or develop their talent and creativity are not lost. Based on the Undang-Undang Hak Asasi Manusia Pasal 60 No.39 Tahun 1999, every child has the right to access education and schooling as befits his interests, talents, and intellectual capacity. Hence, the citizens role and support to build a harmonious environment for them are really needed. The existence of orphanage is crucial for the orphans to live like the other children, so they can have the opportunity and motivated to achieve their goals.

However, the results of Rahmah's research (2016), showed that the amount of children living in orphanages who face difficulties in adapting to the community is around 27.78%, while the amount who have difficulty in adapting to the school environment is 30.83%. This condition can happen because the average orphanage in Indonesia has not been able to accomplish development and service standards to optimize children's growth and development. Various limitations that show up in the education and development of children's talents are caused by orphanage's financial factor that do not have a steady income. The government's concern is also still minimum. Instead of entirely funded by the government, the funding usually comes from the donors.

These limitations and inequalities are in line with one of the issues raised by the Sustainability Development Program (SDGs). SDGs is a sustainable development goals that has been compiled by the United Nations (UN) to solve various economic and social problems in the world. The Sustainable Development Goals (SDGs) have 17 points, one of which is the 10th point, namely "Reduce Inequality" which means reducing inequality/gaps. This point is raised by SDGs because it occurs in both developed countries and developing countries. Inequality seems to create clear boundaries between people in different economic status, different social status and so on. There are many kind of inequalities that must be eliminated, so that everyone has the same rights and opportunities to progress and develop themselves in order to create a prosperous country (Bolatito, 2023).

The "Arise Voice, Airlangga Has Talent" program can provide various benefits that directly or indirectly support the achievement of SDG number 10, namely Reducing Inequality. This program can provide orphanage children with the opportunity to show their abilities in various fields such as arts, sports or academics. This gives them equal opportunities to develop and achieve, reducing gaps in access to extra-curricular education or talent development. Participation in talent competitions helps build the self-confidence and social skills of orphanage children. This is important in reducing inequality because they can feel more confident in interacting with others and exploring their full potential. Talent competitions often allow children to develop new skills outside the academic curriculum, such as public speaking, technical skills, or creativity in self-expression. This can increase their competitiveness in the future job market, which indirectly helps reduce economic inequality. Through participation in competitions, orphanage children can expand their social networks. This can give them the opportunity to engage with people from different backgrounds and build valuable relationships, which is important for expanding their opportunities in the future.

Based on these reasons and considerations, the "Rise A Voice, Airlangga Got Talent" Program was finally held to raise the voice or creativity of the orphanage children so they could be more developed. Their ideas and creativity which are only displayed in their orphanage so far, could be performed in a big show that will be assessed, guided and appreciated by many people. There will be also a talk show conducted by expert presenters who will discuss matters related to the orphanage management and the orphanage children mentoring. This Corporate Social Responsibility (CSR) program is expected to help these children become more enthusiastic, motivated, and develop their talents and skills. Meanwhile, the wider community and the art activists can give more appreciation, provide space for development and guide these talented orphanages to achieve their goals.

Corporate Social Responsibility is a business model of company activities that aims to achieve balance between economic, environmental and social factors. Thus, CSR can be interpreted as external activities that are beneficial to company performance. In addition, various studies prove that CSR is a key factor for improving community and other stakeholder relations, which automatically leads to higher profitability (Ruan et al., 2022). Procurement of Corporate Social Responsibility (CSR) is functioned to maintain a harmonious balance between the company and the community around the company's location. CSR is also marked to help companies in achieving sustainable development goals as well as promoting environmental-friendly in the wider community (Lu et al., 2021).

SROI is one of the most well-known methods for measuring social impact because it can represent the industry standard for project- or organization-level reporting (Corvo, 2021). Social Return On Investment (SROI) is an instrument to measure and report social, economic and environmental values known as the triple bottom line that can be drawn from a program, organization or policy (Maldonado, 2016). It can also be used as a recognized evaluation of an activity that is closely related to the stakeholders. SROI becomes efficiency indicators in an investment value (given value) by comparing the benefit's value with the resources invested's value (Teo et al., 2021). Indicators are needed to prove the changes that have occurred, by explaining the impact produced and how much benefit is generated. An indicator can be subjective when it comes from someone's experience or opinion which are used as facts of change or objective, or objective when it relates to the attendance of participants and the evidence of providing financial assistance (Nielsen et al., 2021).

The main purpose of SROI is to find the changes that have occurred in terms of social, environmental and economic aspects. The calculation begins to be widely used for analyzing and calculating the benefits and welfare generated from a program (Edwards & Lawrence, 2021). SROI can be proven by using a monetary value to represent the social value, created by the intervention from the entire range of values result, so as enabling the calculation of the benefit to cost ratio. For example, a 2:1 ratio indicates that a \$1 investment value generates \$2 social value (Gosselin et al., 2020).

There are several challenges and obstacles in calculating SROI, that are caused by none standard or definite measure in determining impact, monetization, or proxy value. Therefore, each calculation and analysis of SROI could be different, but there is no right or wrong calculation. There are two types of SROI; an evaluation for a program's assessment that has been completed and SROI before the program to predict how much social value will be gained when the desired outcome created. This study aims to calculate the social impact of this program by using SROI, which will shows the value generated for every rupiah. A few researchers focused on The SROI calculation for the Together Grow Stronger activity by dividing the Present Value of Impact with the Value of Input resulted a social impact of 23.60 (Premananto & Watulingas, 2023). It means every rupiah that has been invested in these activities will get a return effect of Rp. 23.60. This study will also calculates SROI along with the calculation of payback period to find out the return on investment's period of the program. SROI calculations are important to measure the level of success of the program through calculating the impact of social value generated. If the SROI results are less than a ratio of 1, then the program must be evaluated or even replaced with another program. SROI helps describe whether a program is running well financially and whether it has short-term or long-term benefits. Apart from that, SROI calculations can also provide investors with an idea of several programs in which they may be able to invest and which they may not. This journal will contains Introduction, Literature Review, Research Methods, Results and Discussion, Conclusions and Suggestions.

METHOD

Scope of the Research

The purpose of this SROI analysis is to calculate the social return value from the "Rise a Voice, Airlangga Got Talent" Program, which had been given in the form of providing a creative platform for orphanage children. The executors of this activity were Master of Management students, Class E2M1 in Airlangga University. Meanwhile, the beneficiaries of this program are 14 orphanages in the Surabaya and surrounding areas who had registered and were willing to take part in this talent searching competition as well as the sponsors who have funded this program. This program was implemented to provide social impact to the orphanage children so as to their companions and caretakers. However after the program took place, there was no measurement related to how big the impact for both the orphanage and the executors of the activities. This condition will causes no evaluation nor further movement as well as immeasurable moral and financial responsibility related to this program. According to these problems, this research aims to determine the social impact value of the program and the period of realization from all resources that have been invested in this program.

Research Design

This study uses a quantitative approach with SROI calculation based on "The SROI Network UK," that uses secondary data (Watson, 2017). This method is the most suitable for the object of this research, namely the social impact value that can be felt and the period of all investments can be realized. This research has several stages to simplify the process of impact identification and monetization calculations as in Figure 1.

1. **Establishing Scope & Identifying Stakeholder**
Boundaries related to program scope, goals, and desired outcomes should be established at the outset. Then, the stakeholders in this program need to be explained and their functions known. To identify stakeholders, it is necessary to create a list of all potential groups that may be impacted or impacted by program activities (Roberts, 2023).
2. **Mapping Outcomes**
Carry out mapping related to engagement between stakeholders, impact, and theory of change, which shows the relationship between input, output, and results developed. This mapping can help assess whether the data or stages are needed or not and describe the results using the Theory of Change. The use of a Theory of Change allows this research to uncover realistic short-, medium-, and long-term narratives that ultimately reveal results that are easily verifiable by stakeholders (Leon, 2021).
3. **Evidencing Outcomes & Giving them a Value**
This stage involves exploring data to demonstrate whether the programme yields outcomes and then valuing them in a monetary term. Perform a data search to show whether the outcome has occurred. Then the results are monetized by giving financial value to the data, including data that has no price (Kadel, 2022).
4. **Establishing Impact**
After collecting evidence of results and monetizing them, aspects of the changes that will occur are linked to their impact in the future (Laing, 2017).

5. Calculating The SROI

The calculation is carried out by dividing the overall impact value and the input value. SROI calculations enable business managers and investors to understand, compare, and analyze impacts for better decision making (Oshimi, 2022). Based on research of Fujiwara (2015), Principles of calculate SROI involve some aspects including stakeholders, understand what changes, value the things that matter, only include what is material, don't overclaim, be transparent, and verify the result.

6. Reporting, Using, & Embedding

The last stage involves sharing findings with stakeholders, embedding good outcomes processes, and verifying the report. The results and conclusions of SROI calculations can serve as recommendations for stakeholders, and instill a process of good results in the organization (Laing, 2017).

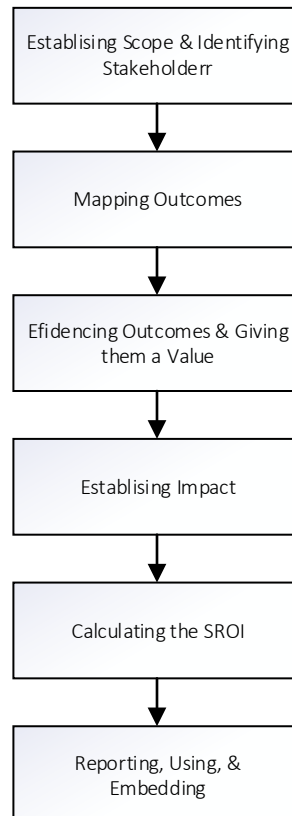


Figure 1. Stages of Identification SROI

RESULTS AND DISCUSSION

Rise a Voice: Airlangga Got Talent Program

The "Rise a Voice: Airlangga Got Talent" activity contains two main events, First is The Got Talent program which will presents talent shows and actions from orphanage children who have had a lot of talents and skills but have received little attention. Second is a talkshow to discusses talent management and orphanage management toward the assistants and the orphanage administrators that hosted by the expert speakers. This event will be attended by 14 orphanages spread across Surabaya and its surroundings who have registered and are willing to take part in various series of events. The characteristics of the participation of the program include having talent that can be demonstrated in public, does not contain elements that can lead to bad thing, can be done individually or in groups, orphanages located in Surabaya and surrounding areas. The program is held on Sunday, May 28th 2024 and taken palce in Ciputra World Surabaya, V Junction, 3rd Floor. The number of participants is 113 children from 14 orphanages across Surabaya which is summarized in Table 1.

Table 1. List of “Rise a Voice: Airlangga Got Talent” Participant

LIST OF ORPHANAGES	CATEGORY OF CONTEST				Number of Performance	Total Contestant
	Singing		Dancing			
	Single	Group	Modern	Traditional		
Sola Gratia		6			1	6
Yesstoya	2		5		2	7
Kasih Agape	1				1	1
Putri A'isyiyah II Kebonsari				11	1	11
Yatim Putri Aisyiyah 1 Baratajaya	1				1	1
Orphanage of Rumah Bersinar				12	1	12
Orphanage of Al Mustaqim				13	2	13
Yayasan Harpa Berkah Bersama		10			1	10
Baitun Ar Rahman Ar Rahim				17	2	17
Orphanage of Insanul Kamil Al-Khaer				11	1	11
Orphanage of Al Amal	1			5	2	6
Muhammadiyah At-Taqwa Sambikerep		4			1	4
Yayasan Fajar Shodiq		6			1	6
Orphanage of Mitra Arofah				8	1	8
TOTAL PERFORMANCE & CONTESTANT					18	113

The first program was Got Talent program of singing, dancing, patrol and banjari performances (Figures 2 & 3). The competition participants were very enthusiastic in preparing interesting costumes and musical instruments. There were many viewers from interested mall visitors. The second program was Talk Show that hosted by two expert presenters who have experienced in the talent field and orphanage management.



Figure 2. The Performance of “Rise a Voice, Airlangga Got Talent” Participants



Figure 3. Talk Show

The sustainability of this program also involved sponsors and media partners who support the implementation of the program. This program was financially supported by PT Pos Indonesia as the main sponsor. 13 media partners have also been engaged in sharing the program activities in both print media and social media (Table 2).

Table 2. Media Partner Details

No	Print Media & Social Media	Publication
1	Info Surabayans	https://www.instagram.com/p/CshhtCdSDLW/?utm_source=ig_web_copy_link&igshid=MzRIODBiNWFIZA==
2	Ciputra World Surabaya	https://www.instagram.com/p/Csk8Tzrpa1P/?utm_source=ig_web_copy_link&igshid=MzRIODBiNWFIZA==
3	Eventjawatimur	https://www.instagram.com/p/CslywyHxYcD/?utm_source=ig_web_copy_link&igshid=MzRIODBiNWFIZA==
4	Analisa Post Pre Acara	https://www.analisapost.com/post/pencarian-bakat-tersembunyi-hima-unair-akan-gelar-airlangga-got-talent
5	Analisa Post Post Acara	https://www.analisapost.com/post/lewat-airlangga-got-talent-magister-management-e2m1-asah-bakat-anak-panti-asuhan
6	Berita Jatim	https://beritajatim.com/pendidikan-kesehatan/mahasiswa-magister-manajemen-unair-surabaya-gelar-kompetisi-bagi-anak-panti-asuhan/
7	Kompas TV	https://jatim.kompas.tv/article/410838/lomba-seni-tari-dan-musik-anak-panti-asuhan
8	Batas Media Youtube	https://youtu.be/drFkit-GlGI
9	Berita Bangsa	https://beritabangsa.id/2023/05/29/inilah-rise-a-voice-airlangga-got-talent-ala-unair/
10	Beritahu.co	https://beritahu.co/rise-a-voice-unair-jadi-wadah-adu-bakat-anak-panti-asuhan/
11	Eventsurabaya	https://twitter.com/eventsurabaya/status/1661150035764027393?s=20
12	Pojok Madura Raya	

Rise A Voice Airlangga Got Talent Bentuk Nyata Kepedulian Mahasiswa Magister Manajemen FEB Unair Terhadap Anak Yatim Piatu



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STAGE I

The first stage of SROI calculation is determining stakeholders and mapping their impacts. There were 10 stakeholders in this program who gave different impacts and reasons. The description of stakeholders and their identification is detailed in Table 3.

Table 3. The Stakeholders Details

No.	Key Stakeholder	Role	Involvement	Reason
1.	Organizing Committee (Master of Management Student, Airlangga University)	Conceptor, Motivator, Organizer	Yes	The Primary Beneficiary Program planners and implementers
2.	Master of Management Study Program, Airlangga University	Institution that oversees the program implementation	Yes	The Primary Beneficiary Student learning and development partners
3.	Contestants from 14 Orphanages in Surabaya	Contest Participants	Yes	The Primary Beneficiary Competition participants as well as program beneficiary targets
4.	Facilitators and Administrators of 14 Orphanages	The Assistance and Caretaker of the Orphanage	Yes	Talk show participants as well as program beneficiary targets
5.	Judges and Speakers	Assessors and Material Providers	Yes	The Beneficiary As a material providers and assessors of the participants performance and education related to orphanage management
6.	Sponsor	Financial Support	Yes	The Beneficiary Receiving existence and social support related to the program
7.	Surabaya City Social Service	Supporters of Social Programs	Yes	Assisted in implementing social programs and responsibilities
8.	Media Partner	Media of information and promotion	Yes	Not receiving significant benefits except for information to be reported, because only involved in the program for a few hours
9.	MC	Host	Yes	Not receiving significant benefits, but needed in guiding the event
10.	Visitors of Ciputra World Mall	Viewers	No	Get entertained and informed but cannot contribute directly to the program

STAGE II SROI

The second stage is the calculation of monetization for each stakeholder and each impact. This calculation will be summarized and accumulated in Tabel 4.

Table 4. The Calculation of Monetization

No	Impact	Proxy	The Calculation of Monetization (Rp)	Rational Basis
Program planners and implementers				
1.	Education of CSV	Cost of attending "CSV" classes and certification	Rp 3.000.000	The "Rise a Voice, Airlangga Got Talent" program is a form of CSV implementation
2.	Leadership	Cost of attending "Leadership" classes and certification	Rp 2.000.000	To improve the ability to lead committees, lead divisions, and lead oneself to produce useful programs
3.	Ability to startegic thinking & critical	Cost of attending "Ability to startegic thinking & critical" classes and certification	Rp 500.000	Teaches critical thinking in dealing with problems of social differences in orphanage children and how to think strategically in preparing programs for orphanage children
4.	Creative and Innovative	Cost of attending "Creative and Innovative" classes and certification	Rp 500.000	To improve committee to create creative and innovative programs
5.	Time Management	Cost of attending "Time Management" classes and certification	Rp 500.000	This program needs to always hold discussions and meetings on the sidelines of lectures and work activities, so that we are taught to do regular time management

No	Impact	Proxy	The Calculation of Monetization (Rp)	Rational Basis
6.	Problem solving	Cost of attending "Problem solving" classes and certification	Rp 500.000	To improve skill to solve problems with the best solutions both in program preparation and during implementation
7.	Ability to tolerate and express opinions well	Cost of attending "Ability to tolerate and express opinions well" classes and certification	Rp 500.000	To improve skills in discussions and meetings, tolerance and differences of opinion must always be prioritized
8.	Ability to design & documentation	Cost of attending "Ability to design logos, posters and content on social media and Phography" classes and certification	Rp 2.000.000	To improve skills in designing logos, posters, video bumpers, and social media content and to shoot video and program documentation for reports, publications, to inform programs, and attract the attention of the public
10.	Ability to interact, socialize, and work together	Cost of attending "Ability to interact, socialize, and work together" classes and certification	Rp 500.000	To improve skill in the ability to socialize with various groups and how to work together
11.	Ability to negoization & networking	Cost of attending "Ability to negoization & networking" classes and certification	Rp 500.000	To improve skills in negotiating and establishing good relations with vendors, sponsors, media partners
Master of Management Study Program, Airlangga University				
12.	Increase interest to new students	Entrance fee for Magister Management Unair new students	Rp 27.500.000	Increasing to the interest of new students who will take the Masters that the courses taught are not only theoretical but also practical
13.	Publication	Promotion and publication costs on social media and print media	Rp 2.000.000	This program was published in 13 social media and print media using the identity of the Airlangga University Master of Management as the organizer
14.	CSV Learning	Class and learning costs	Rp 3.000.000	Additional practicals carried out directly to improve students' ability to socialize
15.	Cooperation & Interaction with other parties	Meeting and cooperation costs	Rp 1.000.000	Add connections and partners
Contestant from Orphanages in Surabaya				
16.	Talent search competition	The cost of participating in competitions and experiencing new things	Rp 100.000	As a place and form of support for orphanage children to be motivated to develop their talents and creativity
17.	Relations with other orphanages, investors, and management talent	The cost of getting multiple relationships at once	Rp 100.000	As a meeting place for orphanages, investors, and management talent in developing children's talents and skills
18.	Management Talent	The cost of management talent classes	Rp 500.000	The ability of the orphans to manage and display their talents and creativity
19.	Consumption	The cost of consumption	Rp 37.000	Consumption needs during the program
Facilitators and Administrators from Orphanages				
20.	Orphanage Management	The cost of orphanage management classes	Rp 1.000.000	Good orphanage management capabilities by utilizing existing resources
Judge & Speaker				
21.	Judge	The cost of judge	Rp 5.000.000	As judge of each appearance
22.	Speaker	The cost of speaker	Rp 5.000.000	As an educator to orphanages on how to manage orphanages and good talent management
Sponsorship				
23.	Sponsorship	The cost of sponsorship	Rp 48.013.000	As the main sponsor of the program

STAGE III SROI

The third stage is the accumulation of all monetization results with the addition of several other factors to get the Adjusted Value (AV) Calculation results, this calculation is not intended to be one-sided and reductive (Klemelä, 2016). Adjusted Value is the Impact Value (proxy value) which will be reduced from several factors such as Deadweight, Attribution, Displacement and Drop-off (Farr & Cressey, 2019). Deadweight (DW) is the percentage of the total results that will occurs even when the program is not carried out, or also can be said that the percentage of other programs/activities that contribute in the program. Attribution is the percentage of the other stakeholders' contribution (Ariza-Montes et al., 2021). Displacement is the percentage of the other activities that were replaced due to the implementation of the program (Jones et al., 2020). Drop-off (DO) is the reduction percentage of the subsequent years after implementing the program (Anam et al., 2022). SROI calculations are specific to the application of the principle where the assessment of results uses financial proxies to monetize results. So SROI cannot be shown using just one digit number which cannot explain how much

value has been created, because SROI is "a story about change" (Nicholls, 2017). Furthermore, the identification and calculation of the impact of the existence of the program will be calculated and identified in Table 5.

Table 5. The Calculation of Impacts

No	Indicator	Quantity	Proxy Value (Rp)	Deadweight	Attribution	Displacement	Drop-off	Adjusted Value
Program planners and implementers								
1.	Education of CSV	31	Rp 3.000.000	0%	0%	0%	50%	Rp 46.500.000
2.	Leadership	31	Rp 2.000.000	0%	25%	0%	50%	Rp 23.250.000
3.	Ability to startegic thinking & critical	31	Rp 500.000	0%	20%	0%	50%	Rp 6.200.000
4.	Creative and Innovative	31	Rp 500.000	0%	10%	0%	50%	Rp 6.975.000
5.	Time Management	31	Rp 500.000	0%	25%	0%	50%	Rp 5.812.000
6.	Problem solving	31	Rp 500.000	0%	10%	0%	50%	Rp 6.975.000
7.	Ability to tolerate and express opinions well	31	Rp 500.000	0%	10%	0%	50%	Rp 6.975.000
8.	Ability to design & documentation	5	Rp 2.000.000	0%	35%	0%	50%	Rp 3.250.000
9.	Ability to interact, socialize, and work together	31	Rp 500.000	0%	25%	0%	50%	Rp 5.812.500
10.	Ability to negoization & networking	31	Rp 500.000	0%	15%	0%	50%	Rp 6.587.500
Total								Rp 118.337.500
Magister Manajemen Program Study								
11.	Increase interest to new students	31	Rp 27.500.000	0%	85%	0%	70%	Rp 38.362.000
12.	Publication	13	Rp 2.000.000	0%	40%	0%	50%	Rp 7.800.000
13.	CSV Learning	31	Rp 3.000.000	0%	10%	0%	50%	Rp 41.850.000
14.	Cooperation & Interaction with other parties	17	Rp 1.000.000	0%	35%	0%	50%	Rp 5.525.000
Total								Rp 93.537.500
Contestant rom Orphanages in Surabaya								
15.	Talent search competition	113	Rp 100.000	15%	35%	0%	50%	Rp 3.121.625
16.	Relations with other orphanages, investors, and management talent	113	Rp 100.000	5%	10%	0%	50%	Rp 4.830.750
17.	Management Talent	113	Rp 500.000	0%	0%	0%	50%	Rp 28.250.000
18.	Consumption	113	Rp 37.000	0%	0%	0%	0%	Rp 4.181.000
Total								Rp 40.383.375
Facilitators and Administrators from Orphanages								
19.	Orphanage Management	28	Rp 1.000.000	0%	0%	0%	50%	Rp 14.000.000
Total								Rp 14.000.000
Judge & Speaker								
20.	Judge	3	Rp 5.000.000	0%	0%	0%	0%	Rp 15.000.000
21.	Speaker	2	Rp 5.000.000	0%	0%	0%	0%	Rp 10.000.000
Total								Rp 25.000.000
Sponsorship								
22.	Sponsorship	1	Rp 48.013.000	0%	0%	0%	0%	Rp 48.013.000
Total								Rp 48.013.000

STAGE IV SROI

The fourth stage is the NPV calculation stage which is projected for the next 5 years using an interest rate of 5.75% based on Bank Indonesia in 2023. Then the results of the NPV calculation are reduced by the Value of Input which will produce a Net Present Value value and inputted to the SROI formula. The result is shown in Table 6.

Table 6. The NPV Calculation

Stakeholder/Year	0	1	2	3	4	5	Total of Present Value
Program Planner & Implementer	Rp 118.337.500	Rp111.903.073,29	Rp105.818.509,02	Rp100.064.783,94	Rp94.623.909,16	Rp89.478.873,91	Rp501.889.149,32
Magister Management Program Study	Rp 93.537.500	Rp88.451.536,64	Rp83.642.115,03	Rp79.094.198,61	Rp74.793.568,42	Rp70.726.778,65	Rp396.708.197,36
Contestant Facilitators from Orphanage	Rp 40.383.375	Rp38.187.588,65	Rp36.111.194,94	Rp34.147.702,07	Rp32.290.971,23	Rp30.535.197,38	Rp171.272.654,28
Judge & Speaker	Rp 14.000.000	Rp13.238.770,69	Rp12.518.932,09	Rp11.838.233,66	Rp11.194.547,19	Rp10.585.860,23	Rp59.376.343,85
Sponsorship	Rp 25.000.000	Rp23.640.661,94	Rp22.355.235,88	Rp21.139.702,96	Rp19.990.262,84	Rp18.903.321,84	Rp106.029.185,45
Total of Present Value	Rp 48.013.000	Rp45,402,364.07	Rp42,933,677.60	Rp40,599,222.32	Rp38,391,699.59	Rp36,304,207.65	Rp251,644,171.24
Total of Present Value	Rp 339,271,375	Rp 320,823,995	Rp 303,379,665	Rp 286,883,844	Rp 271,284,958	Rp 256,534,240	Rp 1,778,178,076
Net Present Value (NPV) : Total of Present Value – Value of Input; Rp 48.013.000							Rp 1.703.165.076

Then the calculation of SROI and Payback Period are as follows:

$$\text{SROI} = \frac{\text{Present Value of Impact}}{\text{Value of Input}}$$
$$\text{SROI} = \frac{\text{Rp } 1.703.165.076}{\text{Rp } 48.013.000}$$
$$\text{SROI} = 36,04$$

$$\text{Payback Period} = \frac{\text{Value of Input}}{\text{Present Value}/12}$$
$$\text{Payback Period} = \frac{\text{Rp } 48.013.000}{\text{Rp } 320.823.995/12}$$
$$\text{Payback Period} = 1.795 \text{ bulan}$$

The results of the SROI ratio calculation shows a value of 36.04. It can be inferred that every 1 Rupiah invested in the Rise A Voice Airlangga Got Talent program, is able to generate a return of Rp. 36.04.

CONCLUSION

SROI can shows efficiency indicators on an investment value (value provided) by comparing the value of the benefits with the value of the resources invested. These indicators prove the changes that have occurred. The results of the SROI ratio calculation shows a value of 36.04. It can be inferred that every 1 Rupiah invested in the Rise A Voice Airlangga Got Talent program, is able to generate a return of Rp. 36.04, while the reciprocal value return (payback period) can be gained in 1.7 months. The resulting social impact value is quite high so this program is proven in capability to provide positive benefits and benefits for the wider community. This is supported by an evaluation of the success of the program which was carried out through direct observation which showed the enthusiasm of the contestants in preparing for their performances with the various costumes and musical instruments. Evaluation of program success and the resulting social impact value can provide an overview to investors and activity implementers who are willing to invest in conducting similar programs.

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Increasing knowledge and skills in processing orange peel waste into eco enzymes for senior high school students

Wilda Amananti ^{a,1*}, Aldi Budi Riyanta ^{a,2}, Inur Tivani ^{a,3}, S. Susiyarti ^{a,4}

^a Politeknik Harapan Bersama, Tegal, Central Java 52193, Indonesia

¹ amanantiku@gmail.com* ; ² aldi.kimor@gmail.com; ³ tiva.nie40@gmail.com;

*Corresponding author

ARTICLE INFO	ABSTRACT
<p>Article history Received: 2024-03-07 Revised: 2024-07-03 Accepted: 2024-07-16 Published: 2024-08-02</p> <p>Keywords Ecoenzymes Knowledge Skills</p>	<p><i>Environmental education and awareness of sustainability are becoming a major focus in educational curricula around the world. This article discusses an innovative approach to environmental learning for high school students through the creation of ecoenzymes. Ecoenzym, is a mixture of fermented organic materials that has the ability to clean and recycle organic waste, as well as improve soil and water quality. The results of ecoenzyme training activities for high school students based on the pretest and posttest results are that the training has a positive impact on students' understanding of ecoenzymes and their ability to apply them in practice. The posttest results showed a significant increase in students' knowledge and skills after participating in the training, compared to the pretest results. In this training, students are given a deeper understanding of ecoenzymes. Students get the opportunity to participate in practical activities involving the use of ecoenzymes, which can increase their understanding of the concept. In conclusion, ecoenzyme training is an effective strategy in increasing the knowledge and skills of high school students in this regard. This suggests that practical, hands-on approaches such as this training can be an effective method in educating students about complex scientific concepts such as ecoenzymes.</i></p>
<p>Kata Kunci Ecoenzym Keterampilan Pengetahuan</p>	<p>Peningkatan pengetahuan dan keterampilan pengolahan limbah kulit jeruk menjadi eco enzim bagi siswa SMA. Pendidikan lingkungan dan kesadaran akan keberlanjutan menjadi fokus utama dalam kurikulum pendidikan di seluruh dunia. Artikel ini membahas pendekatan inovatif dalam pembelajaran lingkungan untuk siswa SMA melalui pembuatan ecoenzym. Ecoenzym, adalah campuran fermentasi bahan organik yang memiliki kemampuan membersihkan dan mendumur ulang limbah organik, serta memperbaiki kualitas tanah dan air. Hasil kegiatan pelatihan ecoenzym untuk siswa SMA berdasarkan hasil pretest dan posttest adalah bahwa pelatihan tersebut memiliki dampak positif terhadap pemahaman siswa tentang ecoenzym dan kemampuan mereka dalam menerapkannya dalam praktek. Hasil posttest menunjukkan peningkatan signifikan dalam pengetahuan dan keterampilan siswa setelah mengikuti pelatihan, dibandingkan dengan hasil pretest. Dalam pelatihan ini, siswa diberikan pemahaman yang lebih mendalam tentang ecoenzym siswa mendapatkan kesempatan untuk berpartisipasi dalam kegiatan praktis yang melibatkan penggunaan ecoenzym, yang dapat meningkatkan pemahaman mereka tentang konsep tersebut. Kesimpulannya, pelatihan ecoenzym ini merupakan strategi yang efektif dalam meningkatkan pengetahuan dan keterampilan siswa SMA dalam hal ini. Ini menunjukkan bahwa pendekatan praktis dan langsung seperti pelatihan ini dapat menjadi metode yang efektif dalam mendidik siswa tentang konsep-konsep ilmiah kompleks seperti ecoenzym.</p> <p style="text-align: right;">Copyright © 2024, Amananti et al. This is an open access article under the CC-BY-SA license</p> <div style="text-align: right;">  </div>

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INTRODUCTION

Environmental education has become the main focus in efforts to maintain environmental sustainability (Ardoin & Bowers, 2020). In this context, providing young people with understanding and practical skills about environmentally friendly practices such as making ecoenzymes has a significant impact (Sun et al., 2024). High school students, as future agents of change, have great potential to apply this knowledge in their daily lives and influence their communities (Ertekin & Yüksel, 2014). Ecoenzyme production training is an innovative and effective method for empowering high school students to take real action for the environment. Ecoenzymes, which are made from organic materials such as food waste, have great potential to reduce waste and environmental pollution, as well as provide an environmentally friendly alternative resource (Tan et al., 2020).

Ecoenzymes, derived from organic materials such as food waste, hold significant potential to mitigate waste and environmental pollution (Ochoa-Hueso et al., 2021). These naturally occurring enzymes can serve as an eco-friendly alternative resource, contributing to sustainable waste management practices and reducing the environmental footprint (Ikbal et al., 2024). By converting organic waste into valuable products, ecoenzymes not only promote a circular economy but also help in minimizing the adverse effects of waste disposal on the environment (Behrooznia & Nourmohammadi, 2024). Their application can lead to cleaner ecosystems, improved waste recycling processes, and a reduction in the reliance on chemical-based solutions, making them a promising innovation for a greener future (Kunjiraman et al., 2024). In this training, students will not only learn about the process of making ecoenzymes, but will also understand their impact on the environment and the importance of reducing carbon footprints (Benny et al., 2023).

In this article we explore the importance of ecoenzyme production training for high school students. We will look at how such training can provide a deep understanding of environmental issues, stimulate creativity and innovation, and encourage active participation in environmental conservation efforts. Thus, this article will not only explain the practical benefits of making ecoenzymes, but will also highlight the important role of high school students in maintaining environmental sustainability (Das et al., 2024). The Merdeka Curriculum in High School is an initiative that allows students to have more freedom in determining the course of their learning (Mufanti et al., 2024). Regarding the manufacture of ecoenzymes, this could be part of the Independent Curriculum program which emphasizes practical and applied learning (Rósa, 2024). Ecoenzyme is a mixture of organic ingredients such as water, sugar and other ingredients that can be used for various household and agricultural purposes (Ben Hmad & Gargouri, 2024).

In the context of the Independent Curriculum, making ecoenzymes can be used as a practical activity or student project. The process of making ecoenzymes involves an understanding of basic chemistry, fermentation reactions, and ecological principles (Qiu et al., 2021). Students can learn about the ingredients required, the fermentation process, and the environmental and economic benefits of ecoenzymes. Apart from that, making ecoenzymes can also teach important values such as environmental awareness, practical skills and social responsibility (Yusuf et al., 2018). Students can learn about the importance of processing organic waste into useful and environmentally friendly products. Thus, making ecoenzymes can be an example of how the Independent Curriculum in high school can provide space for students to learn through direct experience and practical application of science (van Reeuwijk et al., 2023).

Project-based learning is a learning approach that involves students in projects or assignments that require problem-solving, collaboration, and practical application of learned knowledge and skills (Kaushik, 2020). Project-based learning is an educational approach that actively involves students in hands-on projects or assignments (Kogtikov et al., 2016). These projects require problem-solving, collaboration, and the practical application of knowledge and skills acquired during the learning process (Kong et al., 2024). This method encourages students to engage deeply with the subject matter, fostering a more profound understanding and retention of the material. Through project-based learning, students not only gain academic knowledge but also develop critical thinking, teamwork, and real-world problem-solving abilities (Cheng et al., 2024).

By implementing project-based learning, SMA 2 Tegal aims to increase student engagement, understanding of concepts, and develop critical and collaborative thinking skills (Alemneh & Gebrie, 2024)). Through project-based learning, students can learn in a more relevant and holistic way because they are involved in real projects that require creative thinking and practical solutions (Chueh & Kao, 2024). Additionally, they can also gain additional skills such as communication, time management, and teamwork (Marnewick, 2023). The implementation of project-based learning at SMA 2 Tegal involves curriculum adjustments, the development of interesting and meaningful projects, teacher training, and measuring student learning outcomes. This approach aligns with the United Nations' Sustainable Development Goals (SDGs), particularly Goal 4: Quality Education, by promoting inclusive and equitable quality education and lifelong learning opportunities for all. By engaging students in real-world projects, SMA 2 Tegal helps them develop skills that contribute to sustainable development and prepares them to face future challenges with confidence and competence (Gomez-del Rio & Rodriguez, 2022).

METHOD

Figure 1 is a detailed flowchart that represents the procedure for the PKM training activities on making ecoenzymes.

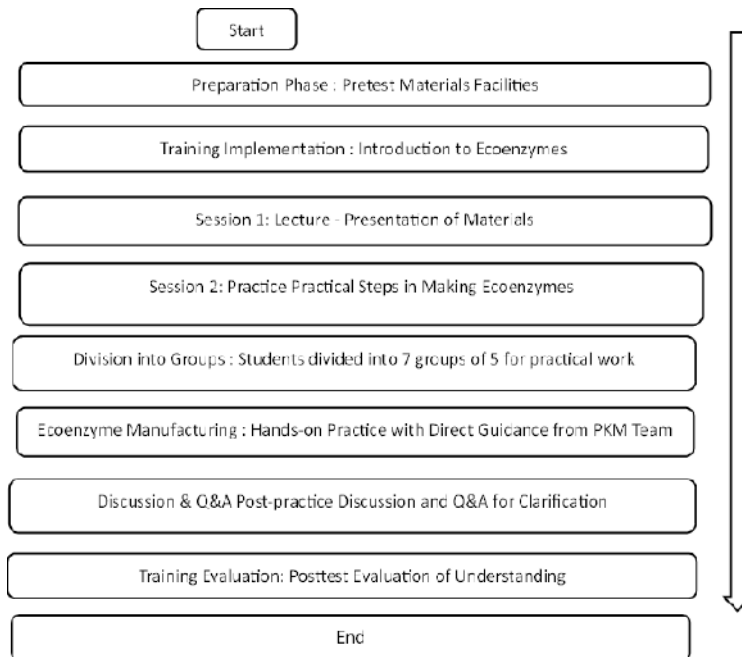


Figure 1. detailed flowchart that represents the procedure for the PKM

Selection of Training Methods

PKM activities will be carried out on December 11, 2024. The training methods used in this activity are lecture and practice methods. PKM activities are divided into 2 sessions. The first session was presentation of material and the second session was practice in making ecozymes. The PKM team provided material about ecoenzymes. The PKM team directly gathered the material and showed the steps in making ecoenzymes to the training participants. In practical activities, students are divided into 7 groups. Each group consists of 5 students. This approach was chosen because it allows direct interaction between the PKM team and students, making it easier to understand and consolidate skills. Before carrying out PKM activities, the PKM team gives a pretest first. The purpose of the pretest is to test students' initial abilities regarding ecoenzymes.

Provision of Materials and Facilities

Before carrying out the training, the materials and tools used to make ecoenzymes are prepared. Materials such as orange peel waste, sugar, water, and containers for making ecoenzymes. Apart from that, facilities such as classrooms and manufacturing equipment are also prepared to support the implementation of training.

Implementation of Training

The training begins with an introduction to the concept of ecoenzymes and their benefits for the environment. After that, the PKM team introduced the materials and tools used in making ecoenzymes. Students are then guided to carry out the steps for making ecoenzymes directly by the PKM team.

Ecoenzyme Manufacturing Practices

Students are given the opportunity to practice making ecoenzymes independently with direct guidance from the PKM team. During practice, participants are given direction and input to ensure that they can produce good quality ecoenzymes.

Discussion, Q&A

After the practice was completed, a discussion and question and answer session was held to ensure that students understood the concept and steps in making ecoenzymes. Students are given the opportunity to ask questions about things they don't understand and get further explanations from the PKM team.

Training Evaluation

Training is evaluated through an evaluation method, participants are given a posttest. The posttest was conducted to evaluate participants' understanding of the training material and the effectiveness of the training methods used.

RESULTS AND DISCUSSION

Increased awareness of the need for environmental conservation has encouraged people to seek environmentally friendly solutions in everyday life. One of the efforts taken is to develop ecoenzym, an environmentally friendly solution that can be used in various contexts, such as household cleaning, organic fertilizer, and so on. In an effort to educate the public, especially the younger generation, about the importance of ecoenzymes and how to make them, training in making ecoenzymes in schools is a very relevant step. (Moore et al., 2017).

This training was held at SMA N 2 Tegal involving class XII students. The methods used in this training include conveying basic theory about ecoenzymes, practical demonstrations of making ecoenzymes directly, and active participation of students in the manufacturing process. Apart from that, discussions were also held about the benefits of ecoenzymes for the environment and how to use them in everyday life.

Making Ecoenzyme, counseling and outreach regarding making Ecoenzyme from orange peel which is suitable for use in making Ecoenzyme has been carried out directly with the target audience, namely SMA 2 Tegal students. The activities are divided into 2, namely the introduction and socialization of ecoenzymes and the practice of making ecoenzymes. Before carrying out the activity, students were given a pretest about the introduction of ecoenzymes and about making ecoenzymes. Based on the pretest results, in general, students in this ecoenzyme introduction and socialization activity did not know about Eco Enzyme. The average student score based on the pretest results regarding the introduction of ecoenzymes is 68. Meanwhile, the average score from the pretest results regarding making ecoenzymes is 54.5. The low pretest results were caused by students not knowing, never hearing, seeing, how to make and knowing the benefits of ecoenzyme. This is natural because the science of Ecoenzymes has only been known in the Tegal area for 2 years.

The next activity is the introduction and outreach about ecoenzymes. This activity was carried out with a presentation about ecoenzymes. material delivered by the PKM team. The material discussed in this activity includes:

1. Understanding eco enzymes
2. Discoverer of ecoenzymes
3. Benefits of eco enzyme
4. Material for making ecoenzymes
5. How to make eco enzyme
6. Manufacturing steps
7. Eco enzyme storage
8. Eco enzyme harvesting

This training succeeded in attracting students' interest in environmental issues and ecoenzymes. They not only understand the basic concept of ecoenzymes, but are also able to make them independently with teacher guidance. Students' active participation in the process of making ecoenzymes shows a good level of understanding of the material. Apart from that, the discussions held also provided a deeper understanding of the benefits of ecoenzymes and how they are used in everyday life (Figure 2).



Figure 2. Practical activities for making Eco Enzyme

The next activity is the practice of making ecoenzyme. making ecoenzyme using orange peel waste. Eco enzyme is a fermented liquid made from organic ingredients such as fruit, vegetables or other food waste. In this PKM tradition,

orange peel is used. The manufacturing process is relatively simple and can be done at home. The following are the general steps in making eco enzyme (Septiani et al., 2021). Choosing organic materials can use various types of fruit, vegetables, or other organic food waste as raw materials. Commonly used examples are orange peel, pineapple peel, or vegetable scraps. In this PKM activity, orange peel is used as the organic material. Wash clean the organic materials that will be used. Cut the ingredients into smaller pieces to speed up the fermentation process. Place the chopped organic materials in a large container. Make sure the container is clean and sterile to avoid contamination. Add sugar to the container containing the orange peel. Sugar functions as an energy source for microorganisms that will carry out fermentation. The ratio between organic ingredients and sugar is usually around 1:3 (Indraloka et al., 2023). After that, add clean water into the container until all the ingredients are submerged. Close the Container and Allow Fermentation to Take Place: Cover the container with a cloth or a loose lid so that air can enter but insects do not enter. Place the container in a place that is not exposed to direct sunlight and room temperature. The fermentation process will last for several weeks to several months, depending on temperature and environmental conditions. stir the mixture periodically to ensure even distribution of nutrients and avoid the growth of unwanted bacteria. After the fermentation process is complete, filter the mixture using a sieve or clean gauze to separate the liquid from the solid ingredients. The resulting liquid is eco enzyme which is ready to be used. Store ecoenzyme in an airtight bottle or container in a cool, dark place to extend its life (Budiyanto et al., 2022).

Ecoenzyme production training at school has many benefits. First, it increases environmental awareness among students, which is a long-term investment in the formation of environmentally responsible attitudes and behavior (Wu et al., 2024). Second, through this training, students learn to become agents of change in their environment by empowering them to make environmentally friendly decisions in their daily lives (Liu et al., 2024). Third, this training also facilitates the integration of scientific concepts in practical life, helping students understand the relationship between science and the environment (Rumayor et al., 2024). However, there are several challenges that need to be overcome in implementing this training, such as limited resources and perhaps limited understanding among students (Presberger et al., 2023). Therefore, there needs to be strong support from schools, teachers and the government in facilitating this kind of training on an ongoing basis (Anokye et al., 2024). Overcoming these challenges necessitates robust support from schools, educators, and government bodies. Continuous investment in training programs, teacher development, and access to resources is crucial for sustaining the impact of such initiatives (Cheng et al., 2024). By addressing these challenges collaboratively, schools can effectively nurture a generation of environmentally conscious individuals equipped to tackle global environmental issues (Cao, 2022)

The next step in PKM activities is posttest activities. Based on the posttest results, it shows that there is an increase in students' knowledge about introducing ecoenzymes and making eco enzymes. This can be seen from the results of the pretest and posttest scores (Table 1).

Table 1. Table of Pretest and Posttest Results

Pretest Value for Introduction to Eco Enzyme	PostTest Value for Introduction to Eco Enzyme
68	87
Practical Pretest Value for Making Eco Enzyme	PostTest Value for Practical Production of Eco Enzyme
54.5	92

CONCLUSION

The conclusion of the ecoenzyme training activities for high school students based on the pretest and posttest results is that the training has a positive impact on students' understanding of ecoenzymes and their ability to apply them in practice. The posttest results showed a significant increase in students' knowledge and skills after participating in the training, compared to the pretest results. In this training, students are given a deeper understanding of ecoenzymes. students get the opportunity to participate in hands-on activities making ecoenzymes which can increase their understanding of the concept. In conclusion, ecoenzyme training is an effective strategy in increasing students' knowledge and skills. This suggests that practical, hands-on approaches such as this training can be an effective method in educating students about complex scientific concepts such as ecoenzymes.

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Enriching of society’s understanding of command-oriented leadership through an interactive virtual discussion

Mirad Fahri ^{a,1}, Elva Stiawan ^{a,2,*}, Rahmat Basuki ^{a,3}, Dita Ariyanti ^{a,4}, Anggi Khairina Hanum Hasibuan ^{a,5}, Yusuf Bramastya Apriliyanto ^{a,6}, Tedi Kurniadi ^{a,7}, M. Sulthon Nurharmansyah Putra ^{a,8}, Dewi Septaningsih ^{a,9}, Ersha Mayori ^{a,10}, Sekar Ilma Tiarani ^{a,11}, Regita Andriani ^{a,12}, Amalia Yunita ^{a,13}, Naufan Nurrosyid ^{a,14}, Riyanti Putri ^{a,16}, Agus Eko Prasajo ^{a,16}

^a Department of Chemistry, Faculty of Military Mathematics and Natural Sciences, Republic of Indonesia Defense University, Kawasan IPSC Sentul, Bogor, West Java 16810, Indonesia

¹ miradfahri@gmail.com; ² elvastawan@gmail.com; ³ rhmtbsq@gmail.com; ⁴ ditafansuri@gmail.com; ⁵ anggi.khairina@gmail.com; ⁶ yusuf.bramastya@gmail.com; ⁷ kurniadi75@gmail.com; ⁸ sulthonp30@gmail.com; ⁹ dewi.2986@gmail.com; ¹⁰ mayormayori40@gmail.com; ¹¹ sekartiarani@gmail.com; ¹² regitawiana27@gmail.com; ¹³ amaliayunita56@gmail.com; ¹⁴ naufannurrosyid@gmail.com; ¹⁵ riyantiputri1105@gmail.com; ¹⁶ prasajo.aguseko@gmail.com

*Corresponding author

ARTICLE INFO	ABSTRACT
<p>Article history Received 2023-07-15 Revised 2024-04-18 Accepted 2024-05-24 Published: 2024-08-03</p> <p>Keywords Defense Awareness Digital Platform Leadership National Defense Virtual Learning</p>	<p><i>In the post-pandemic era, many interactive activities have been flexibly generated through virtual conditions. Accordingly, some problems could appear in terms of leadership, such as difficulties in maintaining the audience’s attention during the event. Thus, the utilization of a command-based leadership style that could straightforwardly maintain audience focus ought to be considered to be adopted. However, both the command-based leadership style and its prospective aspects have not been widely understood by society. This community service aims to deliver a proper understanding of the command-based leadership style through interactive virtual discussion between experts in teaching activities of defense-based science and society consisting of Indonesian teachers, high school students as well as academics. Statistical results of pre-test and post-test scores showed enhancement of the participants’ understanding of command-based leadership. Hopefully, some relevant aspects of their new perspective of command-based leadership can be properly adopted and effectively implemented to answer current challenges, such as in terms of managing people in virtual conditions.</i></p>
<p>Kata Kunci Kepemimpinan Kesadaran Pertahanan Pembelajaran Virtual Pertahanan Nasional Platform Digital</p>	<p>Pengayaan pemahaman masyarakat tentang command-oriented leadership melalui diskusi virtual interaktif. Di era pascapandemi, sejumlah aktivitas yang dituntut untuk diselenggarakan secara interaktif akhirnya terbiasa untuk dikemas secara fleksibel dalam fitur virtual. Namun, beberapa permasalahan dari kegiatan virtual mungkin muncul dari segi kepemimpinan, seperti kesulitan dalam menjaga perhatian audiens selama acara atau kegiatan interaktif berlangsung. Oleh karena itu, penggunaan gaya kepemimpinan berbasis perintah yang dapat menjaga fokus audiens menarik untuk dipertimbangkan. Sejauh ini, baik gaya kepemimpinan berbasis perintah maupun prospek terkait guna diterapkan di lingkup umum belum banyak dipahami masyarakat. Pengabdian masyarakat ini bertujuan untuk memberikan pemahaman mengenai gaya kepemimpinan berbasis komando melalui diskusi virtual interaktif antara personel dari latar bidang pertahanan dengan masyarakat yang terdiri dari guru, siswa sekolah menengah, mahasiswa, serta akademisi. Hasil statistik skor pre-test dan post-test menunjukkan peningkatan pemahaman peserta tentang kepemimpinan berbasis perintah. Harapannya, beberapa aspek relevan dari perspektif baru mengenai kepemimpinan berbasis perintah dapat diadopsi dengan baik dan diterapkan secara efektif untuk menjawab tantangan saat ini, seperti dalam hal mengelola audiens dalam kondisi virtual.</p> <p style="text-align: right;">Copyright © 2024, Fahri, et al This is an open access article under the CC-BY-SA license</p> 

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INTRODUCTION

The COVID-19 pandemic, which began to spread in 2020, has had an impact on human activities in the world, especially in gathered-type activities, e.g., classroom learning, office meeting activities, and various types of sport (Burki, 2020; Caraka et al., 2020; Sparrow et al., 2020). During the Covid-19 breakout, activities that cause crowds are strictly prohibited (Olivera-La Rosa et al., 2020). Mass gatherings provide conditions for the transmission of infectious diseases and pose complex challenges to public health (Murphy et al., 2023). Faced with the COVID-19 pandemic, governments and health experts called for the suspension of gatherings to reduce social contact via which the virus is transmitted (Zhu et al., 2023). The COVID-19 pandemic has led to a surge in electronic devices and smartphones in education (Kang, 2021; Zancajo et al., 2022), causing students to spend more time on screens. The mobile game market in Indonesia has grown significantly, with 3.45 billion downloads in 2022. Online games can be addictive and psychologically impactful, making it crucial to instill literacy and parental supervision to prevent addiction.

In Bengkalis, Indonesia, a community service activity was conducted to foster online game literacy among students, teachers, and parents. Online learning process using mobile phones (gadgets) and the internet is one of the strategies implemented to keep the learning process going even during the COVID-19 pandemic (Aduba & Mayowa-Adebara, 2021; Azhari & Fajri, 2021). Online learning is a method of learning that involves interaction and uses the internet as its platform and a method of education that leverages internet access to provide several benefits such as accessibility, connectivity, flexibility, and the ability to facilitate different types of interactive learning experiences (de Jong et al., 2014; Singh & Thurman, 2019). Similar to traditional learning systems, online learning also depends on devices like smartphones, laptops, or computers, enabling users to access educational materials anytime and anywhere (Erna et al., 2022; Haleem et al., 2022). This method increases the use of gadgets and the internet in elementary school students which can cause a gadget addiction. However, the policy to study at home is decided to inhibit the spread of COVID-19, it is necessary to refer to the implementation of the national curriculum (Churiyah & Sakdiyyah, 2020). Dependence on these gadgets causes obesity problems, sleep pattern disturbances, decreased brain and eye function, growth and development disorders, and even mental problems. In Addition, many features or applications on mobile devices are not suitable for use by people of an early age. This is exacerbated by the lack of application of norms, ethics, education, and religious values, which can lead to deviant behavior in individuals (Duke & Montag, 2017; Ramjan et al., 2021).

Psychoeducation is a strategy that can be applied to reduce gadget addiction. Psychoeducational activities are carried out by providing material for 45 minutes which is adjusted to the tendency of the five senses used in receiving student information with the Primary System instrument. The goal of psychoeducation is to increase understanding of the use of technology, particularly in an educational context so that students can use devices responsibly and not become overly dependent on them (Iramadhani et al., 2021). Psychoeducation can play an important role in supporting the use of virtual-based activities by providing a better understanding of how to utilize technology effectively. The program aimed to increase student knowledge and critical thinking in interacting with smartphones, fostering understanding between students and parents (Suyanto et al., 2024). As a consequence, virtual-based activities are widely selected by many people who require intense interaction to achieve their targeted goals. Consequently, long-distance meetings are essential tools to efficiently accomplish many tasks. The use of technology in the learning process is referred to as education 4.0, where the learning approach is tailored to the needs of students and makes maximum use of technology in the learning process (Subagiyo et al., 2022). On the other hand, findings related to problems in implementing online meetings are starting to emerge. One of the problems that is often encountered in almost all formal online meeting implementations, is the participants who do not focus on listening, or even pay no attention at all, to the discussion conveyed by the leader or speaker. The process of online learning is a learning process whose success will be greatly influenced by the speaker's ability to use technology to convey information (Assidiqi & Sumarni, 2020).

As a result, the speaker demanded the full attention of all participants, it had difficulty giving instructions that the participants should immediately obey and implement. One of the examples is an online meeting leader who asks participants to turn on their respective video features, sometimes being ignored by the participants. This illustrates that the community needs to be equipped with leadership knowledge to guide them in acting as leaders and parties being led, namely leadership science that has special features that can be implemented in managing the compliance and behavior of participants in remote meetings. The term of "influence" is the essence of leadership, especially in military scope. Leadership is recognized as the act of influencing and motivating others to take action toward achieving objectives (Vuacar, 2015). Leadership is the process of directing and influencing the task activities of an individual in a group (Mulyono, 2018). One way to define leadership is a complex process whereby an individual leader influences the group to carry out and achieve goals, objectives, and tasks, which in turn makes the organization more mature and focused (Syahril, 2019). In other words, leaders should have control in influencing the actions or thoughts of the people they lead, both controlling subordinates to be willing to act to carry out instructions and giving directions to subordinates to imagine the same thing at least close to the thoughts of the leader. Leaders and leaders need to have a comprehensive awareness and understanding to identify the changes taking place and their impact on the organization (Rehardiningtyas et al., 2022). Meanwhile, leaders who are in control in the military realm, or generally called commanders, have authority in leadership in the military realm. A commander must strive to improve his leadership qualities to support the performance

of the soldiers (Yudistyo et al., 2020). Leadership with military characteristics can have an impact on the behavior of its subordinates. This is by the results of research conducted by Boney (2015) which found that military leadership can increase the motivation of subordinates which has an impact on performance (Fitriani et al., 2020).

If a commander exercises his leadership appropriately, regularly, fairly, and civilized, the unit he leads will be on its way to achieving organizational goals. Military leadership can increase the motivation of its subordinates which has an impact on performance (Boney, 2015). Military discipline is defined as a set of attributes that enhance a soldier's individual and collective combat effectiveness known as 'The Anatomy of Discipline' authored by MAJ. Those functions are Obedience, Synergism, Attention to Detail, Restraint, Stress Resistance, Courage, Identification, Internalization, Initiative, Respect and Societal Benefit (Amarasinghe, 2023). The authority of military leaders is based on the principle of being killed or killed in military areas, which is regulated by law covering aspects of loyalty, discipline, unity, and span of command (Yogaswara et al., 2023). These values are not only relevant in a military context but can also be adapted and applied in online meeting activities. For example, the authority possessed by the leader or speaker in an online meeting requires participants to comply with established procedures and ethics, even though the interaction is carried out virtually (P. Mallick, 2020). This emphasizes the need for compliance and discipline in maintaining smooth and effective communication and collaboration in an increasingly dominant digital environment. In this session, we can also assess that a leader in military leadership also takes part in the development progress of each member, such as developing systems thinking and capabilities. Apart from that, leaders in military leadership must develop mental, psychological, and physical agility durability (P. K. Mallick, 2020).

Based on the problems, the Military Chemistry Department, Faculty of Defense Science and Technology, Republic Indonesia Defense University proposed alternative solutions related to the management of participant compliance in online meetings of community service activities in the form of exposure to knowledge of military leadership to the general public. The presentation of military leadership knowledge to the general public aims to add insight into military leadership to form individuals who are not only scientifically dynamic but also individuals who have authority in leading as well as individuals who have integrity as the party being led in all conditions and forms of activity. Therefore, the purpose of writing this article is to evaluate the effectiveness of community service activities aimed at increasing community leadership capacity in achieving Sustainable Development Goals (SDGs). Apart from that, this article can provide references for readers and researchers to enrich their understanding of the dynamics of community leadership and develop a better conceptual framework.

METHOD

This activity was conducted in three hours of interactive discussion. The subjects of this community service were targeted as people from various regions that are spread evenly in Indonesia from Aceh to Papua. Before the main session, the respondents filled out the pre-test to display a basic understanding level of their general leadership knowledge and understanding of national defense-related activities. The pre-test is a non-graded assessment tool used to determine participants' pre-existing knowledge (Berry, 2008). The respondents then listened to a learning material of command-oriented leadership delivered by an experienced expert in the teaching activities of applying science to strengthen national defense. Afterwards, a comprehensive and interactive Q&A session with the participants was conducted to broaden insight regarding command-oriented leadership and related aspects. This is an important skill for all students to acquire because real-life problems are transdisciplinary and do not come with labels (Ying, 2020).

Afterward, the posttest was carried out by the respondents. The posttest questions are the same as the pretest questions. The test instrument contained questions that must be answered by the participants during the pre-test and post-test in the form of multiple-choice questions that integrate insights related to defense-based activities, general leadership, and command-oriented leadership. Quantitative data was obtained from the results of the pre-test and post-test. Quantitative data analysis techniques include assessing test instruments in the form of percentage values followed by data analysis on defense-based insights, general leadership, and command-oriented leadership. Furthermore, statistical tests were carried out using the t-test on the measured indicators with a 95% confidence level.

RESULTS AND DISCUSSION

In this section, we explain the findings according to activity and discuss them for further study. 177 people attended this community service with a diverse distribution of expertise, including high school students and teachers as well as students and lecturers of higher education institutions from various regions that are spread evenly in Indonesia from Aceh to Papua. Figure 1 shows that 177 participants actively listened to the speaker who explained the importance of military leadership, participants showed high interest in the material presented by actively participating in the session.

This forum discusses various aspects of military leadership, including strategy, tactics, ethics, and the challenges faced by leaders in military organizations. Some of the topics discussed in this Zoom meeting on military leadership were Military strategy, Leadership Ethics, Leadership Development, Communication and Collaboration, Crisis Management, Transformational Leadership, Case Studies and Practical Experiences, and Technology Adaptation. Military leadership is critical in keeping the community of military leaders connected, exchanging ideas, and increasing knowledge and

leadership skills in the face of ever-evolving challenges in the modern military environment (Wong et al., 2003). There were 122 participants fully involved in pre-test and post-test sessions. The result of the tests shows the score profiles of the three indicators after giving the webinar material to the participants. Figure 2 shows a score comparison graph between the results of the pre-test and the results of the post-test from the webinar participants.



Figure 1. (a) Appearance of organize committees; and (b) participants of the virtual meeting (bottom)

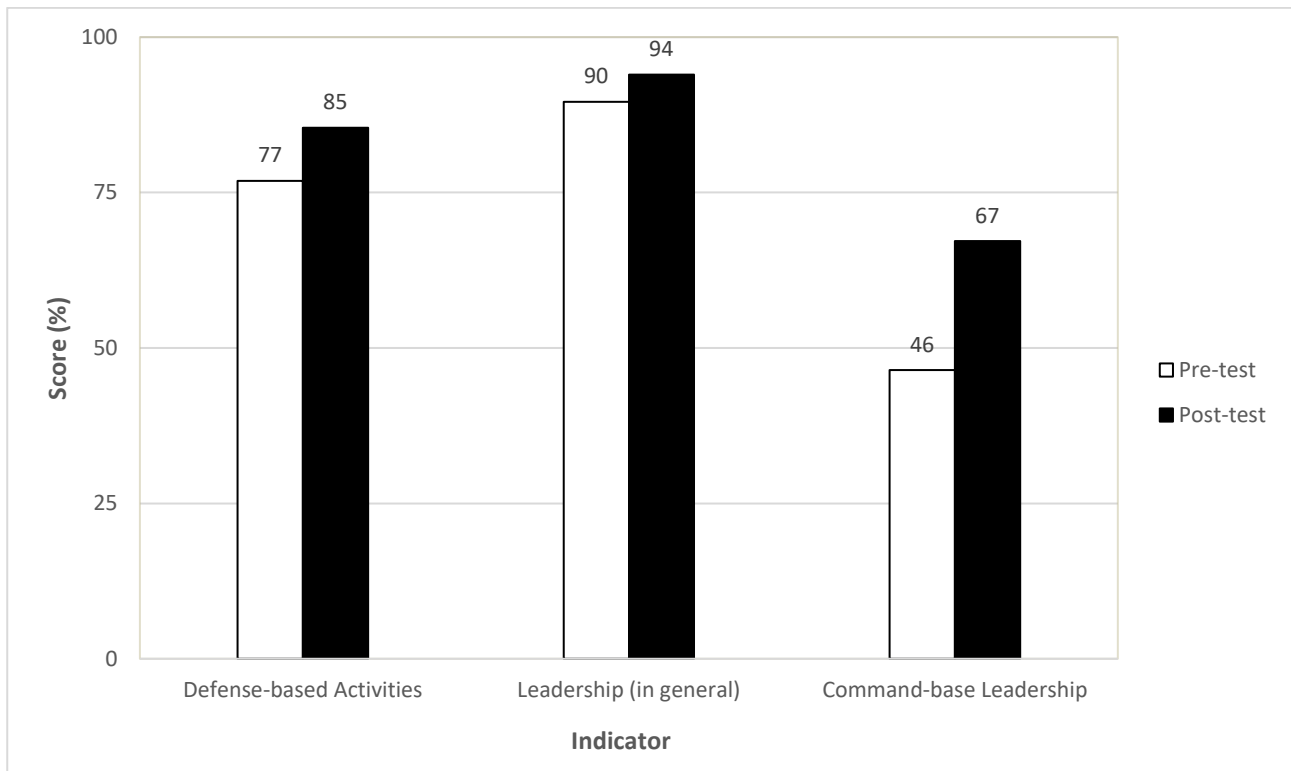


Figure 2. Pre-test and post-test scores

Based on the graph in Figure 2, the participants tended to have relatively high leadership insights, while the participants' initial military leadership insights reached half of the achievements. In indicator 1, participants initially had a sufficient understanding of defense-based defense activities after the post-training test, there was an increase indicating a better understanding of the ability to face challenges in the defense field. In addition, on the second indicator, almost all participants already had a good understanding of leadership. However, on the third indicator, initially, participants did not fully understand the insights of military leadership. After the material was delivered, there was a significant increase, indicating a better understanding of designing and responding related to defense strategies that will support advanced Indonesia. At a glance, it appears that there has been an increase in scores on all three indicators. To obtain valid findings regarding the impact of the webinar on the participants' understanding, statistical tests were carried out to information on indicators that were categorized as experiencing an increase. Table 1 displays the results of statistical tests on the insight indicators studied. The results of the pre-test and post-test showed that the participants'

interest also showed positive results regarding the material presented for future learning. Of course, this will be a solution to the basic problems that occur and will affect the understanding of participating students later.

Table 1. Statistical significance of the understanding at each level

Aspect	Score (Mean)		p-value (95% of significance level)
	Pre-test	Post-test	
Military Understanding	3.84	4.27	0.00 (significantly different)
Leadership Understanding	2.69	2.82	0.06 (not significantly different)
Military Leadership Understanding	1.39	2.02	0.00 (significantly different)

Based on Table 1, only two indicators significantly increased, i.e., national defense-related activities insight and command-oriented leadership insight, while the general leadership insights obtained by webinar participants did not significantly increase. Abundant participants who were predominantly composed of high school students showed that the use of Zoom Meetings could increase self-motivation (Katkar et al., 2022). The results found that the training program had a positive effect on students' knowledge. After attending the training, there will be a significant increase in students' knowledge regarding the importance of information regarding command-oriented Leadership. The training program will provide speakers with the opportunity to inspire students about leadership. They can apply this knowledge through innovative and effective teaching methods. If students already know about leadership, especially in the increasingly complex era of globalization that demands the presence of national leaders who have the credibility and integrity to prioritize national interests over personal or group interests (Nurdika, 2019), then Indonesia will soon realize an advanced Indonesia.

The science of leadership is important to be mastered by all levels of society so that community service content that raises the theme of leadership needs to be carried out periodically and consistently. Within the scope of professionalism, the science of leadership plays a vital role in one's performance commitment, as studies show that transformational leadership has a positive effect on work behavior (Sisdiyanto, 2021). Concerning the scope of resilience, these findings indicate that dissemination through virtual meetings can help convey a message and information optimally to support aspects of national resilience, for example, as studies have been conducted on information dissemination to support water resource resilience (Yunita & Sekarningrum, 2021). The findings on community service also indicate that education on military leadership insights is greatly facilitated by the existence of Zoom Meetings to raise awareness to hone leadership skills and provide awareness to the public in terms of original and elegant obedience to a leader that massively has prospects in supporting system stability. national defense.

CONCLUSION

Community service activities that have penetrated the scope of digital technology of society. It has proven to be able to introduce and provide more comprehensive insights regarding command-oriented leadership for society which in this study were mostly experienced by people with secondary to higher education backgrounds with many already having sufficient stock of knowledge and leadership skills. Continuous community service activities are needed in providing education and improving knowledge and skills related to leadership both to professional staff and to the community in general so that the improvement in attitudes and quality of society can be measured more comprehensively.

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The effort to prevent stunting by training in making vegetable nuggets at Gombang, Boyolali

Fitria Dwi Rahmawati ^{a,1}, Ahmad Riziq Maulana ^{a,2}, Candra Tika Putri Maharani ^{a,3}, Dwi Sukma Permadi Rini ^{a,4}, Kelvin Matthew Richardo ^{a,5}, Irvia Resti Puyanda ^{a,6,*}

^a Faculty of Technology and Food Industry, Slamet Riyadi University, Jl. Youth Pledge No.18, Kadipiro, Surakarta, Central Java 57136, Indonesia
¹ fitriarahma1220@gmail.com; ² ahmadriziq03@gmail.com; ³ candratika4@gmail.com; ⁴ dwisukma02@gmail.com; ⁵ kelvinmatthew575@gmail.com; ⁶ irvia_resti@yahoo.com
***Corresponding author**

ARTICLE INFO	ABSTRACT
<p>Article history Received 2023-06-28 Revised 2023-12-06 Accepted 2023-12-20 Published: 2024-08-03</p> <p>Keywords Community training Stunting Vegetable nugget</p>	<p><i>The prevalence of stunting under five in Boyolali Regency was still unstable in 2018, at 10%; in 2019, it decreased to 7.2%, and until October 2020, it was 9.26% by looking at the height/age of each toddler. Nutrition is the main factor for forming the body's immune response, and malnutrition can cause a decrease in body immunity. The active participation approach in this community service is based on community independence. It aims to provide education about the importance of fulfilling nutrition needs through the consumption of nutritious food for Family Welfare Programme/Pemberdayaan Kesejahteraan Keluarga (PKK) Gombang Village mothers, especially in fulfilling daily family nutrition needs. The socialization is about making vegetable nuggets that can become local food creations while at the same time being able to fulfill daily food fiber needs. This activity is implemented through several stages: 1) Observation and request for willingness to cooperate with partners; 2) Formulation of Solution Steps; 3) Socialization; 4) Focus Group Discussion. The PKK's participation in this community service activity was very enthusiastic. This activity can provide knowledge about producing organic vegetable nugget processed products to form new entrepreneurs.</i></p>
<p>Kata Kunci Nugget sayur Pelatihan komunitas Stunting</p>	<p>Upaya pencegahan stunting dengan pelatihan pembuatan nugget sayur di Gombang, Boyolali. Prevelensi balita stunting di Kabupaten Boyolali masih labil pada tahun 2018 10% pada tahun 2019 mengalami penurunan menjadi 7,2% dan sampai dengan bulan Oktober 2020 sebesar 9,26% dengan melihat tinggi badan/usia masing-masing balita. Nutrisi merupakan faktor utama pembentuk respon imun tubuh dan kekurangan gizi dapat menyebabkan menurunnya imunitas tubuh. Pendekatan partisipasi aktif dalam pengabdian masyarakat ini dilandasi oleh kemandirian masyarakat dan bertujuan untuk memberikan edukasi tentang pentingnya pemenuhan gizi melalui konsumsi makanan bergizi bagi ibu-ibu PKK Desa Gombang khususnya dalam pemenuhan gizi keluarga sehari-hari. Sosialisasi yang dilakukan adalah pembuatan nugget sayur yang dapat menjadi kreasi pangan lokal sekaligus mampu memenuhi kebutuhan serat pangan sehari-hari. Pelaksanaan kegiatan ini dilakukan beberapa tahapan, yaitu: 1) Observasi dan permohonan kesediaan bekerja sama dengan mitra; 2) Perumusan Langkah Solusi; 3) Sosialisasi; 4) Diskusi Kelompok Terfokus. Partisipasi PKK dalam mengikuti kegiatan pengabdian masyarakat ini sangat antusias. Kegiatan ini dapat memberikan pengetahuan tentang pembuatan produk olahan nugget sayur organik sebagai salah satu cara untuk membuat wirausaha baru.</p> <p style="text-align: right;">Copyright © 2024, Rahmawati, et al This is an open access article under the CC-BY-SA license</p> 

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INTRODUCTION

Indonesia is a rich country with a variety of natural resources (Rahayu, 2021). Indonesia has a very abundant biodiversity, both on land and in water (Keong, 2015; Sanka et al., 2023). The potential for biodiversity diversity in Indonesia is sufficient to become a food source for the people of their own country if appropriately managed (Rintelen et al., 2017). However, with a variety of biodiversity and animal sources, Indonesia is still faced with the problem of



malnutrition (De Silva & Sumarto, 2018). In Indonesia, cases of stunting or malnutrition are still high among children during their growth period (Arini et al., 2022).

SDGs are sustainable development agreements based on human rights and equality. In implementing the SDGs, three pillars are the points for grouping SDGs goals, namely the pillars of social, economic, and environmental development (Purvis et al., 2019). Based on the currently developing concept of development, partnership, and empowerment, it is a development model that has received much attention. Partnership and empowerment are separate concepts, although they can complement each other. Under the 17 SDG goals in points 2 and 3, namely End Hunger (Zero Hunger). No more hunger, achieve food security, improve nutrition, and encourage sustainable agricultural cultivation. Good Health and Well-Being (Blesh et al., 2019; Fonseca et al., 2020; Halisçelik & Soytaş, 2019). Guaranteeing a healthy life and cultivating a prosperous life for all ages. Reducing the stunting rate in Indonesia must continue, and all age groups must be educated, especially parents with children in their infancy. The role of health cadres in tackling stunting is very much needed (Mediani et al., 2022; Sufri et al., 2023). Village communities are generally synonymous with education, which is still very low. The low level of education in the village usually impacts the mindset of the village community, which is very ordinary, and it is difficult to accept new input or knowledge.

Data on malnutrition in Central Java was based on the category of height and age (height/age). The first screening is carried out at the integrated health service post/*Pos Pelayanan Terpadu* (Posyandu) by comparing height with age through measurement activities. Suppose a toddler is below the red line or does not rise twice (2T). In that case, confirmation of nutritional status is carried out using the weight-for-height indicator. Suppose it turns out that the toddler is a bad case. In that case, malnutrition treatment is immediately carried out according to the guidelines at the Posyandu and public health centers/*Pusat Kesehatan Masyarakat* (Puskesmas). Suppose it turns out that there are co-morbidities that are severe and cannot be treated at the Puskesmas. In that case, they are immediately referred to the hospital (Badan Pusat Statistik Provinsi Jawa Tengah, 2018).

Boyolali is one of Central Java Province's regencies. The prevalence of stunting under five in Boyolali Regency was still unstable in 2018 at 10%; in 2019, it decreased to 7.2%, and until October 2020, it was 9.26% by looking at the height/age of each toddler. Consisting of 25 sub-districts in one district, the three sub-districts with the highest average stunting cases are Wonosamodro (17.4%), Selo (16.6%), and Musuk (13.7%). Meanwhile, the district with the lowest average stunting cases was Ngemplak District (0.3%) (Dinas Kesehatan Kabupaten Boyolali, 2020).

Immune status or immunity is a system in the human body that protects body cells from various diseases (Nicholson, 2016). Nutrition is the main factor for developing the body's immune response (Childs et al., 2019; Macpherson et al., 2017) and malnutrition can cause a decrease in body immunity (Bourke et al., 2016; Rytter et al., 2014). One of the nutrients that the body needs is protein. Protein in the body functions to regulate metabolic processes in the form of enzymes and hormones and as a defense mechanism for the body against various microbes and other toxic substances that come from outside, as well as to maintain cells and body tissues (Arentson-Lantz et al., 2015; Tang et al., 2018; Wu, 2016). It should be understood that animal protein generally has the most suitable amino acid composition for human needs. To ensure the quality of protein in the daily diet, it is recommended that one-third of the protein consumed comes from animal protein because animal protein has a higher rate (nutritional value) and can contain amino acids that the body cannot produce (Mokoginta et al., 2016).

Vegetables are food sources of vitamins, minerals, and fiber, which are suitable for health. However, the consumption of vegetables by Indonesian people is still relatively low because the taste is not liked, especially by the younger generation. Processing in the food sector is growing in processed products. But not everyone likes vegetables because, according to some people, vegetables taste "strange," and they don't like the texture and smell. Therefore, people make nuggets with the body's enormous needs that may still not be met through the food consumed. Therefore, the author aims to reduce the stunting rate by providing education on making vegetables nuggets that are high in nutritional content. The active participation approach in this community service is based on community independence. It aims to provide education about the importance of fulfilling nutrition needs through the consumption of nutritious food for Family Welfare Programme/*Pemberdayaan Kesejahteraan Keluarga* (PKK) Gombang Village mothers, especially in fulfilling daily family nutrition needs. This is also in line with the SDG's goals in the field of partnerships to achieve goals. This is because vegetable nuggets are local food creations that can meet daily food fiber needs.

METHOD

This community service was implemented to target audiences with interests related to education on fulfilling daily nutrition for 22 PKK mothers. The implementation of this activity is carried out through several stages, namely: 1) Observation and request for willingness to cooperate with partners; 2) Formulation of Solution Steps; 3) Socialization; 4) Focus Group Discussion (FGD).

Community service was carried out in Gombang Village, Boyolali. The location of the village is presented in Figure 1 while Figure 2 is a photo of the village office. Boyolali is one of Central Java Province's regencies at the eastern foot of Mount Merapi and Mount Merbabu. In Boyolali district, 22 sub-districts are subdivided into 261 villages. One of the villages in the Boyolali district is Gombang Village, located in the Sawit District, Boyolali. As with villagers in general, the

people of Gombang Village are included in areas that have never received counseling about food safety. One of them is the use of food additives such as MSG, preservatives, and the use of cooking oil. This community service was conducted from May 1 2023 to May 27, 2023, with 22 PKK women from Gombang Village participating.



Figure 1. The strategic location of the Gombang Village



Figure 2. Gombang Village office

RESULTS AND DISCUSSION

With this plan, a community service activity entitled "Improving Quality and Nutritional Value Through Processing Vegetable Nuggets in Gombang Boyolali Village" was carried out. The details of the activities were carried out as follows.

Observation and request willingness to cooperate with partners

In this activity, the PKM team at Slamet Riyadi Surakarta University visited the village administration on Monday, May 1, 2023, to coordinate the implementation of community service activities. This coordination process is followed up by a willingness to cooperate with partners as a forum for implementing community service activities. This observation activity aims to identify the problems, needs, and constraints the village is experiencing.

Based on the results of this observation, it can be seen that after many visits to activities from other universities, lecturers, or students who attended the Gombang sub-district, no community service activity raised or discussed food processing, quality improvement, increased nutritional value, and made a product. Thus, there is a need for assistance and socialization to broaden the insights of local PKK women so they can maximize something commonplace to become something quite valuable.

Solution preparation and formulation

After a series of discussions with partners, the PKM team formulated and described the activities to be carried out to minimize problems when consuming foods that are very common in everyday consumption, namely nuggets. In this case, the service team refers to Government Regulation of the Republic of Indonesia Number 86 of 2019 concerning food safety to describe the steps and solutions to the problems experienced by implementing them. Therefore, the roles and tasks of each PKM team group in the village were identified, as well as consumers such as local mothers.

Preparation in the implementation of this activity is to prepare a very essential plan. Planning is closely related to program implementation. The function of planning is to facilitate program implementation. The training, coaching, and mentoring in this program are to form PKK women in Gombang Village with the skills to make innovative processed products, namely vegetable nuggets.

Foods such as nuggets are often chosen by the public for consumption. Nuggets are processed meat products that can increase the usability and shelf life of the meat itself (Darmadi et al., 2019). Nuggets are made from the essential ingredients of ground meat and mixed with other additional components to form a dough steamed and coated with bread crumb and fried (Sari & Ayu, 2022). Nuggets are expected to be able to meet nutritional intake, especially for children who generally have difficulty consuming vegetables in fresh form, an alternative to meeting the dietary needs of society in general and especially for children who have problem-consuming vegetables in fresh form. Some of the vegetables that have been added to make nuggets are spinach, broccoli, carrots, and others. One of the vegetables that have the potential to be added to nuggets is Moringa leaves (Hastuti et al., 2016). One of the efforts that can be made to increase household income is to increase the added value of vegetable nugget products (Charina et al., 2016).

Socialization

Furthermore, the team carried out socialization of the results of the formulation that had been formulated (Figure 3). As for the stages of carrying out activities by the team to provide education about the purpose of holding services with related themes, then a presentation about the dangers of long-term consumption of manufactured, processed foods, which can trigger unwanted prolonged effects. Then, an explanation of the nutritional content of vegetables such as carrots, celery, spinach, and broccoli, which contain various types of vitamins, fiber, and minerals rich in antioxidants, and the benefits of consuming these vegetables. The food processing theory used as material in this training is oriented towards innovative processed food. Creative processed food has its charm, where the processing is the same. Innovation in processed food must follow general principles, namely prioritizing consumer safety and health as well as the nutritional feasibility of food (Ayustaningwarno, 2014).

After explaining vegetable nuggets, the event continued with making nuggets directly so that PKK women could witness how they were made. It is hoped that the process of making vegetable nuggets can be understood and understood with direct practice. Afterwards, the question-and-answer session. This is done so there are no misunderstandings about making vegetable nuggets or the information.



Figure 3. Socialization in Gombang Village, Boyolali: (a) presentation from community service team; (b) enthusiasm of PKK members in Gombang Village; and (c) Gathering with the Gombang Village community

After being educated about manufactured processed foods and the benefits of processed vegetables, the discussion went quite effectively; this was seen from the enthusiasm of the community service participants in the partner environment asking for more information about processed food's nutritional content and dangers. They were also very interested in knowing that the vegetables they often consumed had considerable benefits and contained complete nutrition. The exposure to this service becomes an input for these mothers to pay more attention to the intake that should be given to their children. The mothers also promised to start getting used to processing their food.

Evaluation

Community members in Gombang Hamlet, Sawit Boyolali District, welcomed the results of this community service activity. Some of the things that can be obtained from this activity include: (1) Increased knowledge of women members of the PKK, Gombang Village, Sawit District, Boyolali Regency. Regarding the dangers of consuming manufactured, processed foods in the long term. (2) Increase awareness of PKK member mothers to choose and sort out the best intake for their children in the future. (3) Adding to the understanding of women who are members of the Gombang Village PKK to be able to use carrots, broccoli, celery, and green onions as ingredients for processed nuggets because their nutritional content is quite complete and their antioxidants are high enough so they are perfect for children's consumption. (4) Increased awareness of the local community regarding the possibility of a healthy lifestyle starting from the best choice of foods that are sure to have a balanced nutritional content, the processing process of which is more hygienic.

The measurement of the knowledgeability of PKK mothers was not carried out quantitatively using special instruments but only qualitatively from the discussion and question and answer process that took place after the presentation of the

material. Then, it was also assessed using the distributed partner satisfaction questionnaire. Several assessment items showed that PKK mothers as partners felt that this activity was beneficial and hoped that it could continue in the future.

Based on the questionnaire that we distributed to PKK women in Gombang Village before starting this activity, there are still many who don't know what stunting is and how to prevent it. The average value of the right answers only showed 53.36 from 100 point. However, after this activity was carried out, we distributed the questionnaires again and found that there were many correct answers with the average of right answers 87.83 from 100 point. This means that this service activity makes the Gombang Village PKK women know what stunting is and how to prevent it.

CONCLUSION

The conclusions obtained from the results of this service activity are: (1) The participation of PKK mothers in participating in this community service activity was very enthusiastic because the attendance rate of participants according to the target reached 100% (20 target community participants attended this activity according to the proposal); (2) This activity can provide knowledge about producing organic vegetable nugget processed products as a way to form new entrepreneurs. The existence of community groups in Gombang Village, Sawit District, Boyolali Regency, especially PKK mothers who can process and produce vegetable nuggets that can be consumed, can improve family nutrition and increase people's income if they are marketed. The contribution of this service is organic vegetable nugget products that are of high quality, clean, and safe for consumption and marketing.

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Training on statistical applications in structuring village administration in Purworejo

Mustofa Usman ^{a,1,*}, Edwin Russel ^{a,2}, Lidya Ayuni Putri ^{a,3}

^a University of Lampung, Jl. Prof. Dr. Ir. Sumantri Brojonegoro No.1, Rajabasa, Bandar Lampung, 35116, Indonesia

¹ usman_alpha@yahoo.com; ² winrush08@gmail.com; ³ lidyaayuniputri@yahoo.com

*Corresponding author

ARTICLE INFO	ABSTRACT
<p>Article history Received 2023-09-20 Revised 2024-04-17 Accepted 2024-05-24 Published: 2024-08-03</p> <p>Keywords Statistical applications Village administration Village data management</p>	<p><i>In the modern era, statistics has become an integral part of various aspects of our lives, serving as a universal language to understand the world around us. The integration of statistical applications can significantly enhance the process of data and information management in village governance. This community service project aims to assess the potential of statistical applications in supporting village administration officials, contributing to improved village governance and self-sufficiency. Through preliminary studies and tailored SPSS training programs, the practical knowledge and skills of village officials and cooperative members are enhanced. Evaluation after the training indicates a significant improvement in understanding and application of statistical tools. The integration of statistical applications is expected to contribute to better-organized village administration and good governance in Purworejo Village. This initiative underscores the role of statistics as a powerful tool in village administration, bridging various fields of knowledge and providing valuable insights into the world. The successful implementation of statistical applications in Purworejo Village serves as a model for other communities seeking to enhance governance through data-driven decision-making.</i></p>
<p>Kata Kunci Aplikasi statistik Administrasi desa Manajemen data desa</p>	<p>Pelatihan aplikasi statistik dalam penataan administrasi desa di Purworejo. Di era modern ini, statistika telah menjadi bagian integral dari berbagai aspek kehidupan kita, berfungsi sebagai bahasa universal untuk memahami dunia di sekitar kita. Integrasi aplikasi statistik dapat secara signifikan meningkatkan proses manajemen data dan informasi dalam tata kelola desa. Proyek pengabdian masyarakat ini bertujuan untuk menilai potensi aplikasi statistik dalam mendukung pejabat administrasi desa, berkontribusi pada peningkatan tata kelola desa dan swasembada. Melalui studi awal dan program pelatihan SPSS yang disesuaikan, pengetahuan dan keterampilan praktis pejabat desa dan anggota koperasi ditingkatkan. Evaluasi setelah pelatihan menunjukkan peningkatan signifikan dalam pemahaman dan penerapan alat statistik. Integrasi aplikasi statistik diharapkan dapat memberikan kontribusi pada administrasi desa yang lebih terorganisir dan tata kelola yang baik di Desa Purworejo. Inisiatif ini menegaskan peran statistika sebagai alat yang kuat dalam administrasi desa, menyatukan berbagai bidang pengetahuan dan memberikan wawasan berharga tentang dunia. Implementasi aplikasi statistik yang sukses di Desa Purworejo menjadi model bagi komunitas lain yang ingin meningkatkan tata kelola melalui pengambilan keputusan berbasis data.</p> <p>Copyright © 2024, Usman, et al This is an open access article under the CC-BY-SA license</p> 
<p>How to cite: Usman, M., Russel, E., & Putri, L. A. (2024). Training on statistical applications in structuring village administration in Purworejo, Pesawaran Regency. <i>Journal of Community Service and Empowerment</i>, 5(2), 435-441. https://doi.org/10.22219/jcse.v5i2.29316</p>	

INTRODUCTION

In the modern era filled with innovation, the use of statistics has permeated into various aspects of our lives (D.-Y. Li et al., 2024; L. Li, 2016; Xu, 2024). It is not uncommon to come across reports adorned with graphs and statistical data in the morning newspaper or the news on television. From stock market summaries to financial overviews, even percentages reflecting aspects of crime and criminality in our surroundings. More than just displaying numbers, statistics has become a universal language used to understand and describe the world (Dumičić, 2017; Lutz & Le Riche, 2014). However, the role of statistics doesn't stop there. Statistics is a deep science, involving the collection, presentation, and analysis of numerical data. It has come a long way from the initial understanding that was limited to tables and graphs. In the modern context, statistics serves as the foundation of various fields of science and research (Haghighi et al., 2024;



Hanagaki et al., 2022; O'Regan, 2023; Taper & Ponciano, 2016). Statistical scientists not only rely on mathematics but also employ advanced computing. As a result, the concepts of statistics, statistical methods, and the role of computers in statistical analysis have had a profound impact on nearly every discipline (Bina, 2020). Thus, statistics is a language that bridges various branches of knowledge, from sociology to business, providing better insights and understanding of the world we live in (Budiharto, 2015). Besides being a valuable tool in scientific research, statistics also plays a significant role in governance at the local level (Križman & Tissot, 2022; Mikalef et al., 2020; Sharma & Nagar, 2012; Tajulfitri, 2019), as is the case in Purworejo Village, Lampung. This village has a village administration structure that assists the village head in formulating policies and coordinating through the village secretariat. Additionally, there are supporting elements that aid in policy implementation, including technical and regional aspects.

Data and information management play a central role in effective and efficient village governance (Megawati et al., 2023; Prabawati et al., 2023; Prasetyo & Widiyawati, 2022; Putra & Silfiana, 2022). In the effort to achieve village self-sufficiency, one of the main challenges is how to enhance the village administration's ability to manage data and information related to village governance (Sani & Syamsuddin, 2021). One relevant solution is to leverage statistical applications to facilitate data collection, analysis, and presentation (Rijali, 2019). Purworejo Village, located in the Negeri Katon District, Pesawaran Regency, Lampung Province, is an example of a village committed to improving its administrative governance. This village has a village administration that plays a crucial role in assisting the village head in policy formulation, coordination with relevant agencies, and carrying out various essential tasks related to development and community service. Under the framework of village autonomy laws, Purworejo Village has the authority to govern its own affairs.

In the relevant legal framework, such as Law No. 32 of 2004 concerning regional government and its implementing regulations, villages have autonomy to manage their own affairs (Nawawi et al., 2018). This creates opportunities for villages to achieve self-sufficiency. One aspect of this self-sufficiency is well-organized village administration. It involves recording data and information related to village governance in the Village Administration Book, which is divided into several units, including general administration, population, finance, development, Badan Permusyawaratan Desa (BPD), and others, in accordance with Regulation of the Ministry of Home Affairs No. 47 of 2002 (Akhfar, 2019). The implementation of statistical applications in Purworejo Village will be an effective tool in completing various village administrative tasks. This will help create a more structured and efficient information system. Therefore, the presence of statistical applications in Purworejo Village is crucial.

To address these challenges, community service has been conducted in Purworejo Village. The goal is to better understand the potential and needs of integrating statistical applications to support the performance of village administration officials in Purworejo Village, Negeri Katon District, Pesawaran Regency, Lampung Province. Thus, more effective steps can be taken to achieve village self-sufficiency and improve village administrative governance. The gap analysis conducted identifies the need for increased awareness and utilization of statistical applications among officials and cooperative members. Additionally, a structured system for data management and capacity-building initiatives are required to enhance administrative efficiency and achieve village self-sufficiency goals. Integrating technology, including statistical applications, into village administrative practices is crucial for overall effectiveness and efficiency (Anderson et al., 2016). Targeted interventions to address this gap can significantly improve administrative governance in Purworejo Village.

In this context, village administration becomes a key element in achieving village self-sufficiency. Village administration involves various activities, from recording data about the population to managing village finances. With the advancement of technology, the use of statistical applications has emerged as a relevant solution to help village officials manage this data more efficiently. The training on the use of statistical applications conducted in Purworejo Village is a proactive step in enhancing the capacity of village officials in the field of village administration. The main objective of this training is to provide a deeper understanding of statistics as an essential tool in data management and to impart practical skills in operating statistical applications.

The utilization of statistics, which has become integral in various facets of modern life, particularly in village governance as exemplified in Purworejo Village, Lampung, underscores its significance in achieving Sustainable Development Goals (SDGs). Statistics serves as a universal language, bridging diverse fields of knowledge and providing insights crucial for informed decision-making. By leveraging statistical applications, villages like Purworejo can enhance their administrative governance, contributing directly to SDG targets such as good governance (SDG 16) and sustainable communities (SDG 11). The integration of statistical tools aids in efficient data management, facilitating evidence-based policies that promote self-sufficiency and improve overall village administrative governance. Furthermore, initiatives like community service projects focusing on statistical applications training not only empower local officials but also align with SDG 4 (Quality Education) by enhancing their skills and capacity in village administration. Thus, by embracing statistical methods, villages like Purworejo can advance towards achieving the SDGs, ensuring inclusive and sustainable development.

METHOD

This service is conducted in Purworejo Village, Negeri Katon Sub-District, Pesawaran District, Lampung, involving a total of 20 village officials and 30 BUMDes officials. The method used in this service consists of several stages. Firstly, a preliminary study is conducted through field surveys and interviews to understand the current state of village administration, followed by designing appropriate training based on the findings. Subsequently, the actual training is implemented in Purworejo Village with participation from village officials, delivered by instructors proficient in statistics and statistical applications. After the completion of training, its impact is evaluated through questionnaires, interviews, and direct observations of changes in village administration management. Upon receiving positive evaluations, village officials are given the opportunity to implement the learned practices in their daily village administration. Data collected during the practice implementation process is analyzed using statistical applications to generate reports on changes and improvements in village administration organization.

RESULTS AND DISCUSSION

Preliminary study and observation

In this stage, visits and observations were conducted to assess the needs of the community, especially village officials and village cooperative managers, regarding the use of statistical applications. This stage was also used to map the current state of village administration. The preliminary activities took place in April 2023 as the initial phase to implement community service.



Figure 1. The process of brainstorming

Based on the observations, it was found that up to this point, village officials and the management of the Purworejo Village Cooperative still manually utilize the data and information they possess. They lack the ability to utilize statistical applications for data processing. Out of the 50 participants in the community service, comprising 20 village officials and 30 village cooperative members, only two were aware of the existence of statistical applications that could help support the performance of village officials and village cooperative members. The rest were unaware and did not have an understanding of statistical data processing methods or how to use them. As known, the aim of this community service is to enhance the awareness, knowledge, and skills of village officials and village cooperative members regarding the importance of statistical applications in maintaining an orderly and efficient administrative system. This activity also aims to improve the techniques of using statistical applications so that they can be applied to maintain an effective administrative system in Purworejo Village. Based on this, village officials and village cooperative members agreed to conduct community service on the use of statistical applications to help improve village administration. The preliminary activities are shown in Figure 1. In the figure 1, it illustrates the process of discussion and brainstorming with village officials and village cooperative members conducted interactively and enthusiastically.

Training design

After gaining insights from the preliminary study and observations, the community service team formulated the steps to address the identified issues and challenges in line with the needs identified during the preliminary study. In this phase, the community service team defined and identified the roles and responsibilities of each team member to implement the community service project on training in the use of statistical applications for village administration.

Training implementation

After formulating the training stages to provide solutions to the issues and challenges faced by village officials, the community service team conducted awareness and training sessions on the use of statistical applications for village officials and village cooperative members in Purworejo Village, Negeri Katon Subdistrict, Pesawaran Regency, specifically on using SPSS for statistics. The activities are depicted in the Figure 2.



Figure 2. The implementation of community service

In the training activities as illustrated in the figure above, the community service team explained the utilization of statistical applications, particularly SPSS, to help organize village administration more effectively. The community service team encouraged village officials and village cooperative members to compile information based on statistical rules directly and under the guidance of the community service team. Based on the observations, the participants of the community service appeared highly enthusiastic about the training. The community service team provided direct guidance, followed by hands-on data processing by the participants, leading to their experimental understanding of the training content. The community service team also trained the participants to present and draw conclusions from the statistical presentations resulting from data processing.

Training evaluation

Based on the conducted service, it was found that the majority of village officials and the management of Purworejo Village Cooperative still manually utilize the data and information they possess. They lack the ability to utilize statistical applications for data processing. Out of 50 participants in the community service, only two were aware of the existence of statistical applications that could help support the performance of village officials and cooperative members. The main objective of this community service is to increase awareness, knowledge, and skills of village officials and cooperative members regarding the importance of statistical applications in maintaining an orderly and efficient administrative system. The conducted training successfully improved participants' understanding and skills in using statistical applications, especially SPSS, to create a more structured and orderly village administration.

After completing the training process, the community service team conducted an evaluation process to assess the success of the training. The community service team held open discussions with the training participants and village officials specifically to identify the strengths and weaknesses of the training outcomes, aiming to accommodate suggestions or desires from village officials for future training. The research results revealed that participants who previously had more than 90% unawareness of statistical applications and how to use them now have an understanding and the ability to use statistical applications, especially SPSS, to create a better-organized and more orderly village administration. The hope is that the knowledge and skills acquired can contribute to good governance in Purworejo Village, Negeri Katon Subdistrict, Pesawaran Regency, Lampung.

This community service program is an important initiative in addressing the need for increased awareness and utilization of statistics among village officials and cooperative members. By providing targeted training sessions and

practical guidance on statistical applications such as SPSS, the program aims to bridge the knowledge and skills gap related to data management and analysis. SPSS has several advantages that make it a valuable tool for users performing data analysis. One of its primary benefits is its easy-to-use interface that simplifies the process of data entry, manipulation, and analysis. The simple interface makes the processes accessible to even those with limited statistical knowledge (Mustafy & Rahman, 2024; Rashid, 2016). Apart from its ease of use, various basic to advanced statistical analyses can also be performed in this software (Mustafy & Rahman, 2024; Suresh, 2015; Ye, 2020).

Good data processing by applying statistics has an important role in running village government optimally (Peisker & Dalai, 2015; Satyr et al., 2023). Coaching and understanding of population statistical analysis can support understanding, increase knowledge, and develop soft skills for village operators in managing statistics related to village population data (Hiariy et al., 2023). The use of statistical applications also enables faster, more accurate, and situation-appropriate data processing (Panjaitan & Firmansyah, 2018). Through this initiative, participants can gain valuable insights and practical skills that contribute to more efficient and structured village administration. The success of this program not only improves administrative efficiency but also facilitates the journey towards village self-sufficiency, highlighting the importance of integrating technology and statistical tools in local governance initiatives.

CONCLUSION

The community service conducted in Purworejo Village aimed to address the need for integrating statistical applications into village administration. Through a systematic approach, including preliminary studies, training design, implementation, evaluation, and practice implementation, village officials and cooperative members were equipped with essential skills and knowledge in statistical applications. This initiative seeks to empower village officials to manage data effectively and contribute to better-organized village administration. In summary, statistics plays a crucial role in our modern world, spanning various disciplines and serving as a valuable tool in village governance. The efforts in Purworejo Village represent a proactive step toward improving administrative capacity and ultimately achieving self-sufficiency through the effective use of statistical applications.

It is recommended to conduct comprehensive training on statistical applications, especially focusing on tools like SPSS, for village officials and cooperative members in Purworejo Village. These sessions should be interactive and evaluated regularly to ensure effectiveness. Emphasis should be on practical skills development, with ongoing support provided even after training completion. Encouraging documentation of learning experiences can further enhance village governance practices.

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Developing storytelling for tour guide to build global branding in Desa Wisata Jajar Gumregah

Dwi Wahyuningtyas ^{a,1,*}, Nuriyatul Hamidah ^{b,2}, Wahyu Kyestiati Sumarno^{c,3}, Azzahra Yurenaudia ^{d,3}, Dian Sasmitha Dwi Maharani ^{d,4}, Muhammad Rizqy Trirahardjo ^{d,5}

^a English for Business and Professional Communication, Faculty of Social and Political Sciences, Universitas Pembangunan Nasional "Veteran" Jawa Timur, Jl. Rungkut Madya No.1, Gn. Anyar, Kec. Gn. Anyar, Surabaya, East Java, 60294, Indonesia


^b English Education, Faculty of Tarbiyah and Teacher Education, Islamic State University Sayyid Ali Rahmatullah Tulungagung, Jl. Mayor Sujadi Timur No. 46 Plosokandang, Tulungagung, East Java, 66221, Indonesia

^c College of Community Innovation and Education, University of Central Florida, 4000 Central Florida Blvd, Orlando, FL 32816, United States

^d Law, Faculty of Law, Universitas Pembangunan Nasional "Veteran" Jawa Timur, Jl. Rungkut Madya No.1, Gn. Anyar, Kec. Gn. Anyar, Surabaya, East Java, 60294, Indonesia

¹ dwi.wahyuningtyas.ih@upnjatim.ac.id; ² nuriyahamida15@gmail.com; wahyu.kyestiati.ds@upnjatim.ac.id; ⁴ 21071010265@student.upnjatim.ac.id; ⁵ 421071010012@student.upnjatim.ac.id; ⁶ 521071010076@student.upnjatim.ac.id

*Corresponding author

ARTICLE INFO	ABSTRACT
<p>Article history Received 2023-08-18 Revised 2024-03-22 Accepted 2024-05-24 Published: 2024-08-03</p> <p>Keywords Storytelling Tour guide Tourist village</p>	<p>Trenggalek has more than 30 tourist villages that have been intensively built since 2020, including Desa Wisata Jajar Gumregah. This village was chosen as one of the 300 best tourism villages in Anugerah Desa Wisata (ADWI) 2023. This year, one of the tourist villages proposed by the Trenggalek government was Desa Wisata Jajar Gumregah. This tourist village has much potential for development, including cultural tourism. Cultural tourism in this tourist village can be developed into storynomics tourism. To develop storynomics tourism in Desa Wisata Jajar Gumregah, the community service team from UPN "Veteran" Jawa Timur then initiated and held a program called "Storytelling for Tour Guide" in Desa Wisata Jajar Gumregah, Trenggalek. The program was successfully held on the 25th – 26th of June 2023 at Pendopo Desa Wisata Jajar Gumregah, attended by around 35 participants. They came from diverse backgrounds, from senior high school to undergraduate level. The success was proven by the participation and involvement of the participants in the discussion sessions and the publications made. In the future, the improvement of the storytelling skills of tour guides can boost the tourism sector in the area.</p>
<p>Kata Kunci Bercerita Desa wisata Pemandu wisata</p>	<p>Mengembangkan storytelling bagi pemandu wisata untuk membangun branding global di Desa Wisata Jajar Gumregah. Trenggalek memiliki lebih dari 30 desa wisata yang gencar dibangun sejak tahun 2020, termasuk Desa Wisata Jajar Gumregah. Desa ini terpilih sebagai salah satu dari 300 desa wisata terbaik dalam Anugerah Desa Wisata (ADWI) 2023. Tahun ini, salah satu desa wisata yang diusulkan oleh pemerintah Trenggalek adalah Desa Wisata Jajar Gumregah. Desa wisata ini memiliki banyak potensi untuk dikembangkan, termasuk wisata budaya. Wisata budaya di desa wisata ini dapat dikembangkan menjadi wisata storynomics. Untuk mengembangkan wisata storynomics di Desa Wisata Jajar Gumregah, tim pengabdian masyarakat dari UPN "Veteran" Jawa Timur kemudian menggagas dan mengadakan program yang disebut "Storytelling for Tour Guide" di Desa Wisata Jajar Gumregah, Trenggalek. Program ini sukses diselenggarakan pada tanggal 25 – 26 Juni 2023 di Pendopo Desa Wisata Jajar Gumregah, diikuti oleh sekitar 35 peserta. Mereka berasal dari berbagai latar belakang, mulai dari jenjang SMA hingga sarjana. Keberhasilan ini dibuktikan dengan keikutsertaan dan keterlibatan peserta dalam sesi diskusi dan publikasi yang dibuat. Ke depannya, peningkatan keterampilan bercerita pemandu wisata dapat mendongkrak sektor pariwisata di daerah tersebut.</p> <p style="text-align: right;">Copyright © 2024, Wahyuningtyas, et al This is an open access article under the CC–BY-SA license</p> 

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INTRODUCTION

Trenggalek is one of the regencies in the Southern area of East Java, which is rich in natural potential for a tourist destination, ranging from mountain tourism, hills, plantations, and beaches to arts and cultural tourism, such as dances, traditional ceremonies, and other arts. Recognizing the wealth of natural and cultural tourism potential, the Trenggalek Regency Government has launched a development program for 100 tourist villages or SADEWA. Trenggalek targets to have 100 tourist villages by 2024. A tourism village is a village that presents the characteristics of a village as its attraction (Sudibya, 2018). The characteristics can be found in special culinary souvenirs for typical village residents. Based on this statement, each village with its characteristics can be proposed to become a tourist village, depending on how the local community and government develop the area into an attractive and quality tourist village.

As of 2022, 35 tourist villages have been successfully built in Trenggalek. One of the leading tourist villages in Trenggalek Regency, Pandean Village, located in Dongko District, has even been named one of the best in the 2022 ADWI. In addition, to boost the quality of the tourism village, in November 2022, the Government Trenggalek Regency is again holding a tourism village competition with various categories.

In addition to the various events attended and held by the Trenggalek Regency Government around tourist villages, various pieces of training were also organized by the Trenggalek Regency Government, including English language training for tour guides (English for Tour Guides), photography training for tourism actors, content literacy training, and some other training. Of the several exercises held, the Trenggalek Regency Government, one of the trainings that have not yet been held in English storytelling training, especially for tour guides and other tourism actors in Trenggalek Regency, which includes skills core that tour guides or tour guides must own. (Kovalenko et al., 2024) Many potential tourism objects can be developed through storytelling. Trenggalek is no exception; it has a wealth of natural and cultural tourism potential that can be used as an object in the storytelling technique.

Storytelling is an effective technique used by tour guides because tourists can remember and imagine the visualizations described by tour guides (Kusumah & Andrianto, 2023; Moreira et al., 2024; Risadi, 2021). Storytelling techniques are often used to explain historical or cultural tourist objects (Campos et al., 2023; Ghaderi et al., 2024; Roque, 2022; Stach & Zündorf, 2022). However, not only is tourism about history or culture, but nature tourism can also use storytelling techniques. Storytelling in tourism can increase the attention and interest of tourists toward certain tourist destinations.

The use of storytelling for the attractions of culture is explained by Susianti et al. (2022). Storytelling can also be applied to tourism products through tourist objects, cultural performances, and other promotional tools. Given the importance and usefulness of storytelling, this technique can be developed for media promotion of various other tourism products. So important is the storytelling technique in tourist guiding that Kusumastuti and Purwoko (2023) also raised the storytelling technique in the field of story comics tourism in Banyumas Regency. Meanwhile, according to the Ministry of Tourism and Creative Economy of the Republic of Indonesia, storynomics tourism is a tourism approach that approaches aspects of a living culture's narrative, creative content, and culture. Through this approach, tourists will get information on the intended object and leave a distinct impression or impression for the tourist. This approach can even make related tourists visit the tourist spot again.

Meanwhile, story comic tourism plays a role in introducing tourist attractions through unique and creative content about these tourist attractions (Sukmadewi, 2021). Furthermore, it was explained that storynomics tourism is an effective tourism marketing strategy (Kartika & Riana, 2020). It was also explained that in storynomics tourism, storytelling can come from stories written by experts or even geologists and experts in other fields. It is hoped that tourists get information on the intended object and leave a distinct impression on the tourist. It could even be that this will make related tourists visit the tourist spot again.

Furthermore, it was explained that storynomics tourism is an effective tourism marketing strategy (Kartika & Riana, 2020). It was also explained that in storynomics tourism, storytelling can come from stories written by experts or even geologists and experts in other fields. It could even be that this will make related tourists visit these attractions again.

The problems frequently found in implementing storytelling were the tour guides, especially in Desa Wisata Jajar Gumregah, who needed more storytelling training and workshops. They also rarely use English as they only use bahasa Indonesia and Javanese most of the time. Therefore, this program aims to give storytelling training to the tour guides in Desa Wisata Jajar Gumregah. Later, in the future, the improvement of tour guides storytelling skills can boost tourism development.

The community service activities reported in this paper are also in line with the Sustainable Development Goals (SDGs). One of the goals of the SDGs is to promote inclusive and sustainable economic growth, and provide decent work for all (Goal 8) (Frey, 2017; Hess, 2016). The tourism sector plays an important role in driving economic growth by creating job opportunities and encouraging infrastructure development (Kaleeshwari & Sajjan, 2024; Qamari et al., 2023; Tang, 2022; Uula et al., 2024). Through this community service activity, the local tourism sector is expected to be optimized by increasing the capacity of tour guides in developing interesting narratives. By providing storytelling skills training to tour guides, this program not only helps to increase the attractiveness of the tourist village, but also creates new job opportunities, increases local income, and introduces the cultural richness of the Desa Wisata Jajar Gumregah.

Communication skills are an important competency that must be honed by tour guides because they are essential in facilitating effective interactions and ensuring a positive experience for tourists. Tour guides must have a variety of communication competencies, including the ability to convey cultural, historical, and geographical information clearly and interestingly, and to mediate communication in multicultural spaces (Mihele & Bolog, 2023; Topler & Lukančič, 2024). Communication skills are not only limited to language proficiency but also involve the ability to use simple and easy-to-understand language (Rini & Firdaus, 2022). Therefore, professional training for tour guides emphasizes the development of these communication skills to ensure that they are well prepared to meet the needs of the dynamic tourism market and provide high-quality services (Kovalenko et al., 2024).

METHOD

The target audience for this storytelling training program is tour guides spread across tourist villages and other tourist objects in Trenggalek Regency. Tour guides participating in this program are expected to become more skilled in storytelling skills so that they can be implemented into their profession as tour guides. The method of implementing this program is as follows.

Preparation and debriefing

At this stage, the community service team consists of 2 English lecturers from 2 universities (1 lecturer from UPN "Veteran" Jawa Timur as the team leader and one lecturer from a partner university who acts as a member) and 2 class from class 2021 who were given certain tasks and roles. The lecturers involved in this program were from the English Department. One of the interests of these lecturers is English for Specific Purposes, which is the origin of the English for Tourism field of study, one of which is about storytelling skills. Meanwhile, the two students involved are also taking law studies, where these students have taken courses on village regulatory law related to tourist villages. In addition, the two students involved have also taken and passed Indonesian and English courses very well, where their storytelling skills have been tested in these courses so that the topic of community service is still related to the student's field of study.

Because the service team has obtained an overview of the tour guides' distribution and level of Indonesian and English proficiency, the next stage is coordination with related parties or agencies, namely the Tourism and Culture Office of Trenggalek Regency. The team will also socialize with several representatives from the tour guide and related agencies to find suggestions and input for the smoothness and effectiveness of this storytelling training program. At this stage, data were also collected on the number of tour guides who were able and interested in participating in this program and the materials needed by the tour guides and expected to be taught during the training program. At this stage, the community service team will get an initial description and accurate input from tour guides and related agencies so that the implementation of the next stages can run smoothly.

Implementation

The next stage is implementing a storytelling training program for tour guides in Trenggalek Regency's tourist villages. Assisted and coordinated by the Tourism and Culture Office of Trenggalek Regency, the tour guides will receive storytelling training from 2 lecturers who act as tutors, consisting of 1 chairman and one member of the community service team in June 2023. The training was conducted offline in a tourist village whose location is fairly easy for tour guides from other tourist villages to reach. The storytelling program participants for this tour guide were also equipped with a storytelling technique module. The training lasts around 4 hours and includes material and a question-and-answer session. This program places more emphasis on practice than theory, and participants and tutors can directly discuss the material and practice provided. Students involved will also play a role as tutors who are on duty to help prepare materials and become activity contact persons. Students involved in this program plan to program the MBKM (Merdeka Belajar Kampus Merdeka), a program that enables students to convert their activities outside the campus into their course credits, program in the next semester, and the courses that are planned to be converted according to their activities in this training program are courses in Sociology of Law or Customary Law. In these two courses, students receive material regarding regulations applied in rural areas so that they are still related to the topic of this community training program, which is closely related to life and economic activity in rural areas through tourism.

The role of the Trenggalek Regency Tourism and Culture Office as a partner is as an intermediary. It provides access for the community service team to discuss, interact, and meet directly with the tour guides during preparation, implementation, and evaluation or monitoring. In addition, the relevant agencies will also provide advice and instructions, especially related to field conditions and the ability of tour guides to guide tours.

Evaluation

At the end of this program, an evaluation will be held, where the team, participants, and related agencies will discuss and review the program's implementation, whether it has been running effectively, and what improvements or improvements need to be made. In addition, it is also hoped that the participants and related agencies will provide feedback for developing similar programs in the future so that similar programs can penetrate other strategic areas.

RESULTS AND DISCUSSION

The UPN "Veteran" Jawa Timur PIKAT (Utilization of Science and Technology for Community) community service team held a community program in Jajar Gumregah tourism villages. The opening ceremony was held offline on Sunday, June 25, 2023, at Taman Jajar Gumregah, Jajar Gumregah Tourism Village, Gandusari District, Trenggalek Regency (Figure 1). This village is among the 300 Indonesian Tourism Village Awards (ADWI). Jajar Gumregah Tourism Village still maintains and preserves the culture, which is the legacy of their ancestors, such as Tiban, Megengan Show, jamasan, and others. However, this has created special interest for foreign tourists, especially the handicrafts owned by the Jajar Gumregah Tourism Village, one of which is a whetstone. The participants were Trenggalek local tour guides who also came from villages. This program is also supported by the Tourism and Culture Office of Trenggalek Regency, the ranks of the Pokdarwis of the Jajar Gumregah Tourism Village, and tour guides for tourist villages in Trenggalek Regency. The event was opened with remarks from the Head of the Trenggalek Disparbud Tourism Destinations Division, Tony Widianto, S.Hut., MT., M.Sc., and continued with remarks and opening remarks from the Head of Jajar Village, Mr. Imam Mukaryanto Edy alias Pak IME and also remarks and opening remarks from Dwi Wahyuningtyas, S.Pd., MA as the head of the community service team. In his remarks, the Head of the Tourism Destinations Division, The head of Jajar Village, and the head of the community service team expressed their hope that this program could run sustainably, considering how important this program is to support the English language skills of prospective tour guides as an increase in the ability to use English in introducing their culture to foreign tourists. The event then continued with the presentation of the plaque from the head of the community service team to the Head of Jajar Village.

The activity was carried out through a series of opening events held on Sunday, June 25, 2023. The event started at 9 am and closed at 1.30 pm, which was divided into two sessions: Material and Practice. This event is a form of storytelling training for tour guides in the Jajar Gumregah tourist village, Trenggalek Regency. Overall, the event took place smoothly. In addition to being given interactive and informative materials regarding charts for writing correct storytelling texts, participants were invited to practice speaking English by first writing the script on the paper provided. Then, practicing storytelling directly.



(a)

(b)

(c)

Figure 1. Some documentation of community service activities in Desa Wisata Jajar Gumregah : (a) The UPN "Veteran" Jawa Timur PIKAT Team taking a photo with the Head of the Trenggalek Disparbud Tourism Destinations Division, the Jajar Tourism Village Pokdarwis, the Jajar Village Head, and the Candidate Tour Guide Participants; (b) submission of plaques from the UPN "Veteran" Jawa Timur service team to the Trenggalek Disparbud, represented by the Head of the Trenggalek Disparbud Tourism Destinations Division; (c) presentation of plaques from the UPN "Veteran" Jawa Timur service team to the Head of Jajar Gumregah Village

This event also had an ice-breaking session as a form of appreciation for the community service team for the tour guide candidate participants in the form of games where participants who dare to present their storytelling with confidence and speak English properly and correctly will be given gifts in the form of gifts. The harmony between the community service team and the prospective tour guide participants illustrates the enthusiasm of the tour guide candidate participants in learning storytelling. This makes the community service team enthusiastic about providing Storytelling material and training for prospective tour guides.

Feedback can be provided via the Google form or directly submitted to the community service team. Monitoring during and after the program will be carried out by the community service team and related agencies, so it is hoped that this program will run smoothly and be useful for the parties involved and the wider community. Even though the program has ended, it is hoped that the team will be able to monitor and assist if participants or related agencies need assistance in storytelling. This program can be claimed to be successful if the participants, who are tour guides, experience an increase in storytelling skills. Tour guides can also be more confident in guiding tourists using their storytelling skills. For the long-term target, the number of domestic and foreign tourists visiting Trenggalek, especially the tourist village, will continue to increase along with the increase in the storytelling skills of the tour guides.

From the pre-departure event to the implementation and evaluation, we received support from the UPN "Veteran" Jawa Timur and the Trenggalek Regency Tourism and Culture Office as partners in this community service program. In addition to related institutions and agencies, this program also received support from the Tourism Awareness Group (Pokdarwis) of the Jajar Gumregah Tourism Village, Gandusari, Trenggalek, the Jajar Village government, and, of course, tour guides for tourist villages in Trenggalek Regency. This activity began with the pre-departure program, which was held in June 2023. It was attended by the Head of the Tourism Destinations Division and employees within the scope of the Trenggalek Regency Tourism and Culture Office. After all preparations were completed, starting from determining the location of the training program to preparing program materials, on June 25, 2023, this training activity could take place successfully and smoothly.

Tour guides play a role in improving the tourism sector by acting as a source of information and ambassadors for tourist locations. Tour guides will also contribute to tourist satisfaction which can influence the image of the destination and the possibility of repeat visits (Kamel, 2021; Syakier & Hanafiah, 2022). By providing in-depth information about natural and cultural resources, tour guides will also enhance the visitor experience, thereby extending their stay and having a positive impact on the destination's economy (Bryon, 2012; Melubo & Kisingo, 2022; Nejmeddin, 2020). Continuing education, communication skills, and the willingness of tour guides to adapt to new trends are essential to maintaining their effectiveness and relevance in the tourism sector (Şengöz, 2022; Solomon et al., 2022).

In the community service activities reported in this article, the team has assisted tour guides to improve their storytelling skills. With increased competence, the tourism sector of Jajar Gumregah Village can improve (Ghaderi et al., 2024). The increase in the tourism sector in this village will be positively correlated with the increase in the village economy (Kaleeshwari & Sajjan, 2024; Qamari et al., 2023; Tang, 2022; Uula et al., 2024). In this way, the eighth SDG is expected to be helped to be achieved.

CONCLUSION

The UPN "Veteran" Jawa Timur community service program, which is under the PIKAT scheme, entitled "Storytelling Training for Tour Guides to Develop Storynomics Tourism in Tourism Villages of Trenggalek Regency," focuses on storytelling training for tour guides. This program was successfully implemented. The attention from the tour guides of the Jajar Gumregah Tourism Village, Gandusari District, Trenggalek Regency was also extraordinary. This program's outputs, from modules, textbook designs, and publications in mass media, both online and in print, to participation in the 2023 UPN "Veteran" Jawa Timur International Seminar of Research Month, can benefit a wide audience, especially tourism workers. It is hoped and suggested that this training program continues. This activity starts a series of Storytelling programs for Tour Guides that focus on storytelling training in Trenggalek Regency. In addition, it is also targeted that in the following year, a similar program can be held with a wider and more varied range of participants and areas of community service. Equally important, it is also necessary to pay attention to regular scheduling for training programs so that all tour guides and community service teams can participate in this activity.

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Assisting 10-week CLIL enrichment program for Islamic-affiliated primary school students

K. Khoiriyah ^{a,1}, Rafika Rabba Farah ^{a,2,*}, Puji Sumarsono ^{b,3}

^a English Language Education Department, Faculty of Teacher Training and Education, Universitas Muhammadiyah Malang, Jl. Raya Tlogomas No. 246 Malang, East Java 65144, Indonesia

^b Teaching English as a Second Language, Faculty of Language and Communication, Sultan Idris University of Education, 35900 Tanjung Malim, Perak, Malaysia

¹ kKhoiriyah230693@umm.ac.id; ² rafikarabbafarah@umm.ac.id; ³ p20202001401@siswa.upsi.edu.my

*Corresponding author

Commented [J1]: The names of all authors must be written in full, including when submitting to OJS.

Commented [J2]: Author affiliation is written in full starting from department/study program, faculty, university, address (street, number, district, province, postal code, and country)

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ARTICLE INFO	ABSTRACT
<p>Article history Received: 2023-11-04 Revised: 2024-01-17 Accepted: 2024-01-20 Published: 2024-01-25</p> <p>Keywords CLIL EYL Enrichment program Islamic-affiliated primary school</p>	<p><i>Teaching English to Young Learners starts to reach its growth as parents want their children to be competent in one of the 21st century skills, it is being communicative. Having the ability to communicate in one foreign language, particularly English, is considered important for many parents whose children study at Islamic-affiliated schools, other than Arabic skill. However, English teaching at primary school level is still limited in terms of its teaching duration, they learn only for 90 minutes per week. Therefore, this community service aims at providing more opportunities for primary graders at SD Aisyiyah Kota Malang to learn English through Content Language Integrated Learning (CLIL) enrichment program which was done on weekend class that lasted for ten consecutive meetings. The program was conducted in as semester, starting from July up to December 2023. Further, the methods implemented were analyzing students' learning needs, designing science-based topics as teaching material, developing materials, implementing the learning design through 10-week teaching, and evaluating the program. Results show that the content of the subject at the school was taught in English. Some materials designed for this project were about science, thus, in this program students discussed the topic of science in English. Also, the content was designed by integrating Islamic elements, the topics were animals mentioned in the Quran such as camel, whale, bird, donkey, and crow. At the end of the session, this activity has gained a positive response from students, content teacher, homeroom teacher, and also the school principal. This indicates that the community service which was designed in the form of the enrichment program for weekend class was effectively run.</i></p>
<p>Kata Kunci CLIL Pengajaran bahasa Inggris untuk anak-anak Program pengayaan Sekolah Dasar Islam</p>	<p>Program pengayaan CLIL selama 10 pekan bagi siswa sekolah dasar Islam. Pengajaran Bahasa Inggris untuk anak-anak mulai mencapai pertumbuhannya karena orang tua ingin anak-anak mereka kompeten dalam salah satu keterampilan abad ke-21, yaitu keterampilan komunikatif. Kemampuan berkomunikasi dalam satu bahasa asing, khususnya bahasa Inggris, dianggap penting bagi banyak orang tua yang anaknya bersekolah di sekolah Islam, selain kemampuan bahasa Arab. Namun pengajaran bahasa Inggris di tingkat sekolah dasar masih terbatas dalam hal durasi pengajarannya, mereka hanya belajar selama 90 menit per minggu. Oleh karena itu, pengabdian pada masyarakat ini bertujuan untuk memberikan kesempatan lebih luas kepada siswa kelas SD SD Aisyiyah Kota Malang untuk belajar bahasa Inggris melalui program pengayaan Content Language Integrated Learning (CLIL) yang dilakukan pada kelas akhir pekan yang berlangsung selama sepuluh pertemuan berturut-turut. Kegiatan program pengabdian ini diselenggarakan selama satu semester dari Bulan Juli 2023 sampai Desember 2023. Terlebih, Metode yang dilakukan adalah menganalisis kebutuhan belajar siswa, merancang topik berbasis sains sebagai bahan ajar, mengembangkan materi, melaksanakan desain pembelajaran melalui pengajaran 10 minggu, dan mengevaluasi program. Hasil menunjukkan bahwa konten atau mata pelajaran di sekolah diajarkan dalam bahasa Inggris. Di akhir sesi, kegiatan ini mendapat respon positif dari siswa, guru materi, dan wali kelas, serta kepala sekolah. Hal ini merupakan indikasi bahwa pengabdian masyarakat yang merancang program pengayaan kelas akhir pekan berjalan efektif.</p>

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INTRODUCTION

Teaching English since early age has been done by many researchers. However, little attention is put on how it is integrated to other subjects such as science. Teaching English through science can build young learners' communicative competences—the competence about the knowledge and the context of a language is operated. In such notion, the concept of Content and Language Integrated Learning (CLIL) can be a way to support the belief that young learners will successfully learn a second language (Coyle, 2015; Dalton-Puffer et al., 2021; Farah & Khoiriyah, 2023, Marsh & Langé 2000). Eventhough there is a debate whether or not a second language is appropriately taught to young learners, numerous research results reveal that at least a great attainment on language learning is proven to be successful in young learners is in the aspect of pronunciation and grammar compared to their counterpart, adult language learners (Ellis, 2008; Heras & Lasagabaster, 2015; Nugroho, 2020; Xanthou, 2011).

In a similar vein, teaching English to young learners can also be a medium for intercultural communicative competence. Mattson and Norrby (2013) assert that student will gain greater achievement on intercultural communicative competence when enough time is allocated to produce the target language in a communicative context. In this case, teachers in Islamic school context can enrich their students with materials that support the discourse used in that school, i.e Islamic cultures and values. If happens other cultures are infused in the teaching process, the curriculum must be planned very carefully (Byram, 2008; Liao & Li, 2023; Torres-Velasquez et al., 2023). Thus, the idea of integrating science with Islamic content is highly suggested.

This effort supports the implementation of Culturally Responsive Teaching (CRT) that in teaching English, teachers cannot impose the idea of teaching the culture of the center (Western) but they also need to take a serious concern on learners' background and school context. In its implementation, the work of Gay (2018), Gay (2015), and Ladson-Billing (2009) view that English teachers in using the CRT use learners' linguistics and cultural resources to support their learning gain and personal development. CRT teachers value their learners' personal experience and interest to address cultural gap in English learning. The cultural gap in English teaching lies on how Western values can be brought in the textbook and methods. In such a way, teachers in the periphery culture, i.e Asian culture needs to have this awareness.

Some efforts to infuse local cultures into English teaching have been undertaken by number of researchers. Integrating Islamic content into English instruction has become a topic of growing interest, as evidenced by the increasing number of academic works exploring this research area. For example, Indonesian researchers have tried to inculcate Islamic values through chapters in the Quran, Islamic topics, and framework of instilling Islamic values into English instruction (Anshari & Widiantoro, 2020; Asmawati & Riadi, 2022; Madkur & Albantani, 2017). In a larger area, this attempt has also been initiated in other Muslim countries like Malaysia and Jordan through English teaching need analysis of Islamic content for Muslim students (Bataineh et al., 2016; Hassim & Aziz, 2021). The idea of CRT is further highlighted for number of reasons, as it caters inclusive teaching strategy, values students' cultural references, identities, backgrounds, and empowers minority students; thus, CRT can create a meaningful learning environment and help students attain academic success (McKoy et al., 2017; Rhodes, 2017; Villegas & Lucas, 2002).

However, this present study is different from the previous related research in the aspect of its context and methodology. The context where this research takes place is situated in Islamic-affiliated primary school where English is taught for young learners. Secondly, in its method, this study empowers the primary graders with series of simultaneous training on the use of Islamic topics which are derived from students' religious book, the Quran.

To provide more opportunities for students at primary school level with English exposure, enrichment programs need to be conducted. To address this concern, a program of 10-week CLIL enrichment program that infuse Islamic content was done. This community service program was held by involving English teachers, home-room teachers, primary school graders, and pre-service teachers (students of PMM Mitra Dosen program). The program is supported by the Directorate of Community Service and Research Universitas Muhammadiyah Malang (DPPM-UMM). In addition, the program is implemented to support the Sustainable Development Goals (SDGs) number 4 (United Nation, n.d.), it is quality education, mainly to improve students' English competence in receptive and productive skills. The program aims at providing more opportunities for primary graders in operating their English competence so that it prepares them for higher level of education. Thus, this community service can contribute to the improvement on students' English skill acquisition as well as the enrichment of English teaching quality at the school partner.

METHOD

This community services aims to assist student teachers and English teachers in providing an extracurricular for primary school students. The school partner is SD Aisyiyah Kota Malang, located at Jalan Gajayana III D / 570 D Dinoyo, Lowokwaru District, Malang (See Figure 2). This community services are follow-up program from the previous one (Farah & Khoiriyah, 2023; Khoiriyah et al., 2022; Waloyo et al., 2021). Hence, in this year, based on the school's need and demand, the community service program is designed in integrating CLIL (Content and Language Integrating Learning) approach in English classes, named English CLIL program. The students in higher level of primary school, consisting of fourth grade, fifth grade and sixth grade. Further, the total number of students involved in this CLIL program were 45

Commented [J5]: Various community service and empowerment activities must have novelty (have innovation and creativity) so that they do not just replicate the same activities in different places, have measurable results and impacts on society, and support the achievement of the goals set forth in the Sustainable Development Goals (SDGs). SDGs are a global action plan agreed by world leaders, to end poverty, reduce inequality, and protect the environment. [The SDGs contain 17 Goals and 169 Targets](#), so that each article must be linked to these goals and targets (as stated in the contribution statement).

students. To implement weekly program, the project team were collaborated with student teachers of English Language Education Department, Universitas Muhammadiyah Malang for assisting student to learn English. In total, the project team and school partner involved in this community services in Table. 1.

Table. 1 the participants of community service program

No.	Details	Number of people involved
1.	Project team from lecturers of English Language Education Department	2 lecturers with expertise in TESOL, material development and CLIL
2.	English teachers and home-room teachers from school partner	4 teachers (two English teachers and three home-room teachers)
3.	Student teachers from English Language Education Department	6 student teachers (students who join PMM Mitra Dosen)
4.	Primary school students	45 students
Total		57

The community services were conducted in eight months, starting from March 2023 to October 2023. To implement the community services, there were several stages including analysis, design, development, and implementation. The details are in Figure 1.

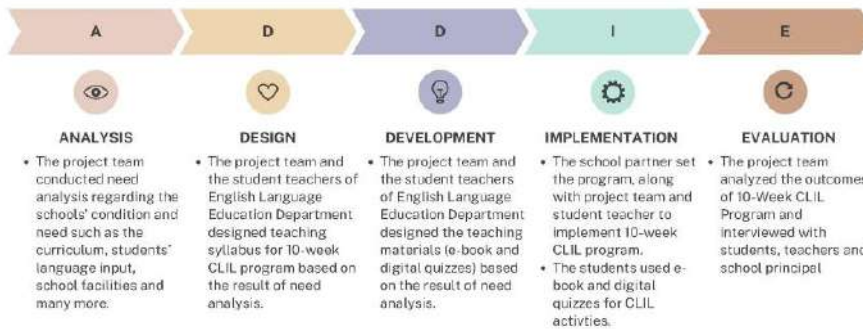


Figure 1. The stages in conducting community service program

As it was illustrated in Figure 1, this community service program was conducted in four stages. Firstly, the project team conducted need analysis regarding the schools' condition and need such as the curriculum, students' language input, school facilities and many more. Secondly, the project team and the student teachers of English Language Education Department designed teaching syllabus for 10-week CLIL program based on the result of need analysis. The project team and the student teachers of English Language Education Department designed the teaching materials (e-book and digital quizzes) based on the result of need analysis. Next, the school partner set the program, along with project team and student teacher to implement 10-week CLIL program. The students used e-book and digital quizzes for CLIL activities. Lastly, after implementing the whole program (10 meetings), the project team conducted evaluation by interviewing the students, the home-room teachers and English teacher, and the school principal of SD Aisyiyah Kota Malang.

RESULTS AND DISCUSSION

Pre-implementation

Analysis

In the pre-implementation phase, the project team conducted three activities namely need analysis, designing, and developing the teaching materials. Based on the result of classroom observation and interview with the school principal, the school partner (SD Aisyiyah Kota Malang, see Figure 2) has encouraged students to learn English by having international collaboration. The international schools that have collaborated with SD Aisyiyah Kota Malang among others are primary schools in India (Lakshya International School Andrapradesh and Vidya Bharati School Ghaziabad) and Korea Selatan (Dajeong Primary School). In the near future, this school is also projected to have collaboration with schools in the US, Japan, and Saudi Arabia. The effort of this international projection is not only aimed at exposing students to improve their English competence but also to increase their Arabic. Thus far, the international collaboration has invited students from 3rd to 6th graders to perform speaking English and storytelling via a virtual platform, zoom.



Figure 2. School visit by the project team to SD 'Aisyiyah Kota Malang

Further, the project team formulated the problems encountered as well as its possible solution in the table 1. The problems encountered were mostly related to the need for international exposure for student, the need for contextual teaching resources based on the school vision and mission (Islamic-affiliated school) and Kurikulum Merdeka, and the need for effective teaching and learning method to improve students' English competence. The project team was in attempt to provide some solutions. One of which is by introducing CLIL program to primary school students in order to enhance their learning process in English and other content subject such as Science, Math and Islamic science (Table 2).

Table 2. The matrix of problems encountered, solutions, indicators, and outcomes

Problems encountered	Solutions	Indicators	Outcomes
The need for international language exposure for students	Mentoring for the implementation of CLIL program as an enrichment program or extracurricular	100 % Mentoring for the implementation of CLIL program as an enrichment program or extracurricular every week (within 10 week)	Teaching syllabus Ready-use teaching materials and worksheet 10-week meeting of CLIL program
The need for contextual teaching resources based on the school vision and mission (Islamic-affiliated school) and Kurikulum Merdeka	Designing student activity book by integrating English, Islamic content and other content lesson	100%In collaboration with students of PMM Mitra Dosen program and English teachers of SD Aisyiyah Kota Malang designing student activity book	Student activity book Digital worksheet
The need for effective teaching and learning method to improve students' English competence	Implementing digital students' workbook and interactive quizzes to enhance students' engagement in learning English	70% English teacher and home-room teachers are able to use and facilitate their students	ready use digital interactive quizzes

Design

Design is the second phase of ADDIE. This phase will begin with the design of digital teaching materials, which will be created in accordance with the findings of earlier needs, curriculum, and student analyses. In the design phase, the project team designed the teaching materials into a digital student workbook. The teaching materials varied based on the result of need analysis. In order to implement CLIL approach, the teaching materials are integration of English, math, science and Islamic value. Since the implementation of CLIL program was divided into 2 phases, based on the school needs, the syllabus also was designed into two parts. The details of the syllabus are presented in Table 3. The syllabus of topic animals stated in the Quran are presented in Table 4, for the second phase of CLIL program. It was implemented starting from meeting 6 to meeting 10.

Table 3. Syllabus for first phase of CLIL program

Chapter	Topic	Activity	Content materials
1	Introduction	Singing a classroom password Self-introduction	Islamic value (starting activity by reciting <i>bismillah</i> , and saying <i>hamdalah</i> – to be grateful in day-to-day activities)
2	Dream jobs	Presenting the future dream jobs Writing a letter to friends in India	Islamic value
3	Gardening	Learning about science (Part of plants) Global warning Gardening	science (Part of plants)
4	My favorite animals	Learning about lifecycle of butterfly Learning math	Science (lifecycle of butterfly) Math (addition and multiplication)
5	Save our earth	Learning about water pollution Presenting a poster	Science (water pollution)

Table 4. Syllabus for second phase of CLIL program

Chapter	Topic	Activity	Islamic Value
1	Whale	Reading Text CROWD Concept Interactive Quiz	Prophet Yunus story and the whale (Al-Anbiya: 87)
2	Birds	Reading Text CROWD Concept Interactive Quiz	Birds are symbol of Allah's power. (Al-Mulk: 19)
3	Donkey	Reading Text CROWD Concept Interactive Quiz	Allah's command of not rising voices like donkey. (Luqman: 19)
4	Camel	Reading Text CROWD Concept Interactive Quiz	Camel is one of the amazing creations that people can take benefit from it. (Al-Ghasiyah: 17)
5	Crow	Reading Text CROWD Concept Interactive Quiz	Allah sent a crow searching in the ground to show the son of Adam how to hide the disgrace of his brother. (Al-Maida: 31)

Development

In this phase, the project team developed the syllabus into teaching materials. The teaching materials were integrated in online quiz and digital student workbook as it was illustrated in Figure 3.

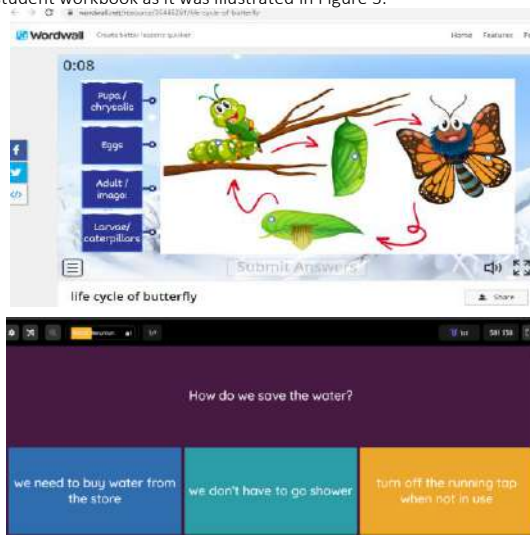


Figure 3. The exemplary of adopted digital learning sources from wordwall.net and quizzes.com

Figure 4 is the sample of material that has been developed by the project team.



Figure 4. an exemplary of digital workbook developed by the project team

Implementation

1. Students were asked to sing a long opening classroom password in every meeting

Students were given a song to open the class. This song is the opening classroom password. This song is an adaptation of a popular children's song with the lyrics changed to English and given Islamic values. In this CLIL program activity, the song chosen was a song from the famous movie "Spongebob Squarepants". The lyrics of opening classroom password are as follows:

Are you ready students? (Aye, aye Teachers)
I can't hear you (aye, aye Teachers)
Ooh
Who are ready to learn today?
(We are Marvelous)
Intelligent and excited are we
(We are Marvelous)
We learn English with so much fun
(We are Marvelous)
Let's start the class with **basmalah**
(We are Marvelous)
We are Marvelous
We are Marvelous
We are Marvelous
We are Marvelous

Meanwhile, the opening classroom password are as follows:

Goodbye my friend,
goodbye teacher,
Let's go home, let's go home,
Don't forget to say thanks,
don't forget to say thanks,
Thanks teacher,
Thanks my friends, **alhamdulillah**

2. Students learned introducing themselves and their dream jobs

The agenda for the second meeting is about dream jobs. In connection with the material at the first meeting, which was introduction, students were asked to introduce themselves and their dream jobs. Students wrote down the introduction to make it into a letter, which later would be sent to pen pal friends in India. The student-teachers (PMM

Mitra Dosen members) facilitated learning with examples of introductory sentences that students can implement, as well as providing paper with attractive designs to use as letters.

3. *Students learned science and got involved in out-door activity (gardening)*

The agenda for the third meeting was part of plants. The students firstly did online interactive quizzes related to parts of plant. After that, the student-teachers explained and drilled the students some words to describe parts of plant. In this activity, students were encouraged to not only learning English but also learning content subject (science). Further, one by one, students presented their speaking activities by explain part of plants in front if the class. The student-teachers gave some hints as presentation starter such as each plant has six important parts called the root, stem, leaves, flowers, fruits and seeds. The students were formed into five groups, and the student-teacher distributed plant seeds to each group. Students learn to plant using the planting media provided. After the gardening activity, the students were asked to talk about their gardening activities on a paper (Figure 5).



Figure 5. After studying science (Part of Plant), students were asked to plan a flower in their school yard

4. *Students learned about science (life cycle of butterfly) and did some online quizzes*

The agenda for the fourth meeting was to learn about the life cycle of butterflies. The students were divided into four groups, each group guided by one of the members of PMM Mitra Dosen. Each group learned about the butterfly life cycle, followed by quiz time using each member's laptop. After the group discussion, students were learning about multiplication with the same theme, the life cycle of butterflies.

5. *Students learned about water pollution and created a public campaign related to environment*

The agenda for the fifth meeting was to learn about water pollution. Students at SD Aisyiyah learned about the causes, impacts, and types of water pollution. Besides that, students also learned various new vocabulary terms regarding water pollution. At the end of the activity, the students made posters with the theme "Save the environment and save our earth". The aim was for the students to be more aware of their surroundings and maintain a clean environment (Figure 6).



Figure 6. The students presented their work under the theme "Save the environment and save our earth"

6. Students learned some animals mentioned in the Quran

In the sixth until tenth meeting, students learned some animals mentioned in the Quran such as camel, whale, donkey, birds, and crow. In those meeting, students were set to read an e-book about those aforementioned animals using a concept of read aloud activity, CROWD (Completion, Repeat, Open-ended question, Wh-question, and Distancing). In its implementation, students were divided into several groups and assisted by one student-teacher in discussing the content of the book. At the end of every topic, students were assigned to complete an interactive quizz designed using online platform such as quizziz, educandy, and wordwall. This activity was also a form of formative assessment that assess students' comprehension of a topic that recently read (Figure 7).



Figure 7. The students learned some animals mentioned in the Quran

Post-implementation

Evaluation

At the end of program, the project team interviewed the school principal, home-room teacher, student-teacher and students to have feedback on its implementation. The school principal responded positively towards the enrichment program as it gives a new direction of English learning at the school.

"I asked the students about the program they joined and they are very happy as the activities designed are new for them such as do gardening in English and they seem to enjoy learning English. That's what we want our students to instill in themselves, love learning English. With this, we are positive that we are able to support our international program at the school, also encourage our students to become part of global citizen."

Similarly, the home-room teacher who enthusiastically supervise the enrichment program feel assisted with the program.

"I observe that the student-teacher from PMM along with the project team have actively and appropriately designed the learning material that is contextualized to our students' English level and importantly the team has also created the content into more specific that is congruent to our school context. I am contended when I see my students were engaged in the activities. I asked them whether they enjoy the class and most of them nodded their head."

In other session, one student-teacher were also invited to share their hands-on experience in teaching English at the school partner.

"Thanks to the project team who supervised us in designing the material and evaluating our day-to-day teaching so that we learn handling primary graders. Also, we learn a lot how to do classroom management and in fact it is practically not that easy teaching young learners. We need to dedicate our energy to the fullest. The use of the designed materials is also helpful to our teaching." (STR1)

"I am actually a bit an introvert person, but I cannot really stand with the kids because they are very inquisitive so that I need to respond their every questions. Therefore, I also try my best to find the answers when they raised a question which I do not know the specific term in English." (STR2)

Finally, one of the students were randomly asked to have their impression joining the enrichment program. "The activity I like the most were gardening, doing some quizzes and games, and participating in group work. I enjoy reading the animals stated in the Quran. I know that birds are toothless, they do not chew their food, they just swallow it right away, that is interesting." (ST-AMR)

"I feel enthusiastic learning English with the student-teachers, they are very kind and helpful. With that, I am keen on completing the activities assigned to me." (ST-ASH)

The enrichment program has attracted school partner's attention. Teachers were all assisted with the material designs and teaching practices, students' enthusiasm in practicing their oral skills by interacting with their peers and teachers is also observed. This community service aims to promote CLIL approach in primary school partner. The educational approach known as Content and Language Integrated Learning (CLIL) facilitates the simultaneous development of content and language (Coyle et al., 2010; Dalton-Puffer, 2011; Meyer et al., 2015). Through implementing CLIL program as an enrichment program for the school partner, the students were expected to gain more language and content knowledge input. This finding is consistent with previous research as well (Agustín-Llach & Canga Alonso, 2016; Castellano-Risco et al., 2020; Fernández-Sanjurjo et al., 2019; Gierlinger & Wagner, 2016; Jafarigohar et al., 2022; Tragant et al., 2016), positing that implementing CLIL approach enabled learners to enrich their vocabulary in target language. Therefore, the framework of 4C CLIL was integrated into the teaching and learning process. This 4C framework consists of Content, Cognition, Communication and Culture. In this CLIL program, take an example, for *Content* and *Cognition*, students were stimulated to improve their higher order thinking skills. By solving some math questions, teachers encouraged students to have more cognitive load. Students also asked to comprehend Science knowledge such as part of plant, ecosystem, water pollution. It was expected that students learned both language and content materials. Meanwhile, for *Communication*, group work and presentation were a mandatory of learning activity in every meeting. By participating in group work and classroom presentation, students were facilitated to improve their speaking skills so that they had more effective communication skills in English. Lastly, regarding *Culture*, the teaching materials were adapted related to the school context. The integration Islamic values in learning materials such as animal named in the Qur'an, was projected to promote more-relevant and contextualized foreign language learning.

Further, teachers use games and CLIL activities to engage students' interests and improve their skills. Using games for young learners were strongly suggested to create stress-free learning environment (Behnamnia et al., 2020; Liu et al., 2021; Sun et al., 2021). This learning activity is relevant to the context of CLIL in primary schools as CLIL centers on using language *with* and *through* content, rather than treating language *as* content (Anderson et al., 2015). Using digital quizzes, the students were more engaged in learning process. They enjoyed to learn the language as well as the content materials unconsciously. According to Prensky (2011), young learners have an innate need to play games. Effectively designed educational games facilitate learning by offering pupils amusement, fervent engagement, inspiration, inventiveness, and interpersonal engagement. Those, in this 10-week CLIL program, the project team provides students with various educational games using quizzes, worlwall.net, canva and other relevant digital learning sources. The provided games were also designed in a group-work. Playing games makes students more willing to communicate both within and outside of the classroom. This is consistent with work of (Liu et al., 2021), asserting that games are very effective and powerful instruments that promote collaborative learning. In a nutshell, this collaborative learning supports the effectiveness of CLIL approach in relation to *Communication* (4C framework).

Lastly, CLIL concept is applicable to be integrated in English teaching at primary school level for two main reasons that CLIL is combining subject and language learning in one go, so learning a language will be more efficient and meaningful; second, another CLIL element is culture, that in English teaching, teachers are supposed to accommodate students' culture. Cultural element is what matters in language learning. Using students' cultural background is highly suggested in language classroom as it becomes a hook for students' brain in associating their background knowledge to the new ones. This idea is supported by Culturally Responsive Pedagogy proponents who assert that English language teachers are encouraged to design their teaching by taking a serious concern on students' cultural and linguistic background which includes their life experiences (Gay, 2018; Ladson-Billing, 2009; Villegas & Lucas, 2007; Ladson-Billing, 2006). Another urgency of infusing students' culture in Islamic-affiliated school is mainly because English teaching has an association to 'other values and ideologies' which is different to Islamic worldview. English teaching is ideology-sensitive as it is not free from political and social condition (Makoni & Pennycook, 2005), it is also linked to Western discourse (Varghese & Johnston, 2007; Pennycook & Makoni, 2005; Pennycook & Coutand-Marin, 2003); whereas students' culture at Islamic school upholds Islamic value and Eastern culture. Thus, this community service implies that teachers at Islamic-affiliated school should be aware of such issues, their main jobs are not only teaching students to be proficient in English but also to teach English in appropriately designed activities.

CONCLUSION

By providing science and Islamic value in learning materials of English enrichment program to primary graders at SD Aisyiyah Kota Malang, this community service highlights the implementation of CLIL approach for young learners. The 10-week CLIL program was implemented well, according to the results, which also shows that both the students and the school partner provided positive remarks. This study also emphasizes the fact that an enrichment program for English exposure such as CLIL program in primary schools, serves a variety of purposes, such as fostering language acquisition, content learning, and cultural awareness. This cultural awareness is crucial to provide more relevant teaching and learning activities at Islamic-affiliated school. Additionally, digital games are also used to encourage entertaining learning and increase student involvement during class sessions. The findings of this study may offer pedagogical guidance to EFL instructors—more especially, primary school teachers at Islamic school context and CLIL practitioners.

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