

ENHANCING DIGITAL SAFETY KNOWLEDGE INDONESIAN MIGRANT WORKER IN MALAYSIA

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ABSTRACT

This community service activity at Universitas Mercu Buana focuses on enhancing the digital literacy of Indonesian migrant women in the PERMAI community in Malaysia. Recognizing the unique challenges faced by this marginalized group, the program aimed to improve participants' knowledge, skills, and confidence in navigating digital spaces, particularly in the context of online security and data privacy. Through a thorough needs assessment, targeted training sessions were developed to address common digital challenges such as cyber threats, online scams, and safeguarding personal information. The study's findings demonstrated a significant increase in participants' digital literacy and their ability to protect themselves online, showcasing improvements in both knowledge and self-assurance when dealing with digital tools. This initiative highlights the importance of equipping vulnerable populations with the necessary skills to safely and effectively engage in the digital world, promoting greater inclusion and empowerment. The program's success not only strengthens the digital capabilities of these migrant women but also contributes to the broader conversation on digital inclusion, security, and access for marginalized communities.

Keywords: digital literacy, digital safety, permai, univeritas mercu buana

INTRODUCTION

The internet has revolutionized how we live, work, and communicate. However, the digital age has also brought new challenges, such as the spread of misinformation and online threats. To navigate this digital world effectively, individuals need digital literacy skills (Pratiwi Agustini, 2021; Sammons & Cross, 2016). These skills go beyond basic computer use and involve the ability to critically evaluate information, create digital content, and protect oneself online. Indonesia has made significant strides in improving digital literacy, as evidenced by the 2021 Digital Literacy Index (Kominfo RI, 2020). While the country has shown progress, there is still room for improvement, particularly in the area of digital safety. By collaborating with other nations, Indonesia aims to establish a global standard for measuring digital literacy and ensure that its citizens are well-equipped to thrive in the digital age (APJII, 2024; Kominfo RI, 2022).

The importance of understanding digital security is also related to the nature of the internet, which connects users widely and anonymously (kompas.com, 2024; Syafuddin, 2023). Digital interaction involves various groups, including children and the elderly, who need higher digital resilience and literacy. Understanding digital literacy competencies is key to facing digital security challenges (Kominfo RI, 2021; Marino, 2015). Users need to develop skills in mediating digital media productively and responsibly. Thus, efforts to strengthen digital literacy are important to protect themselves and others in the digital era (indonesia.go.id, 2022; Sidiyawati et al., 2021). In this case, the government and related institutions are responsible for providing the latest information on digital security practices to all communities in welcoming the digital era 5.0, including Indonesians abroad such as those in the Indonesian migrant worker community in Malaysia, namely PERMAI. In this Community Service implementation, the community service team from Mercu Buana University strives to build cooperation and provide support for the Indonesian community in Malaysia through the NGO PERMAI.

PERMAI stands for Indonesian Community Organization in Penang, Malaysia. An NGO engaged in Social Education and Culture. Experts consist of Indonesian people domiciled in Malaysia, among others: Expatriates, Businessmen, Lecturers, Teachers, Students, Students, and Workers residing in Malaysia. PERMAI also seeks collaboration with parties willing to synergize/transfer knowledge in eCommerce, Fintech, Digital Technology, and other appropriate special skills to establish socio-cultural cooperation relations between the people of Indonesia and Malaysia. PERMAI strives to be an incubator to create communities that have special skills and skills so that they can get jobs in higher or minimum positions and salaries equivalent to other nations.

The PERMAI Indonesia community in Malaysia is currently in quite good condition. Its members continue to grow, and they are increasingly active in various social and cultural activities. Based on data from the Indonesian Ministry

of Foreign Affairs, as of December 31, 2023, the number of Indonesian migrant workers in Malaysia reached 1.6 million. Of these, about 10,000 people are members of the PERMAI Indonesia community in Malaysia. They were founded in 2018 by a group of Indonesian migrant workers in Malaysia. The aim is to strengthen the brotherhood between Indonesian migrant workers and promote Indonesian culture in Malaysia. Based on the initial survey and interview with the coordinator of PERMAI, Mr. Agung, which was previously conducted online, problems were identified, namely the lack of awareness of women in the PERMAI community on the importance of safeguarding personal data, how to protect themselves from information chaos to the importance of maintaining digital traces and the limited ability of the community, especially women in the PERMAI community to operate digital technology safely. Therefore, this activity aims to literate women in the PERMAI community on security in digital media, among others, by introducing and providing an understanding of the importance of safeguarding personal data, how to protect themselves from information chaos, the importance of maintaining digital footprints and encouraging the improvement of people's ability to operate digital technology safely.

This involves raising awareness about online threats such as phishing and malware attacks, equipping individuals with protective measures like strong passwords, two-factor authentication, and regular software updates. Additionally, it aims to safeguard personal information by educating people on secure password practices, the importance of two-factor authentication, and responsible online information sharing. Lastly, this activity seeks to bridge the digital divide by providing resources and training to those with limited technology access, ensuring everyone can participate safely and effectively in the digital world.

Problem and Solution

The main challenge of modern society today is the use of the internet and digital media, which not only provide benefits for its users but also open opportunities for various problems. Digital space security is one of the main elements of utilizing and developing the digital ecosystem, but the vulnerability of digital security has the potential to leak personal data and digital fraud.

Therefore, a continuous effort is needed to educate the public about the importance of security in the digital space. Community service activities focused on strengthening digital safety and information literacy in the PERMAI community are very important in overcoming this problem. By involving women in the community in this activity, it is hoped that the awareness and resilience in digital security, especially for women in the PERMAI community, can be strengthened. This will help reduce the negative impact caused by fraud and digital data theft.

From the description of the situation analysis above, the various challenges encountered by partners in delivering digital security materials to women in the PERMAI community are evident. Primarily, there is a need to educate women about digital security by emphasizing the significance of safeguarding personal data, navigating information overload, and managing digital footprints. Additionally, enhancing the community's capacity to safely utilize digital technology is a crucial area of focus.

Program Implementation

The UMB Community Service Team initiated a program aimed at empowering women in the PERMAI community through digital literacy. The program commenced with a participatory needs assessment conducted in collaboration with the community to identify specific requirements and challenges. Following the assessment, the team communicated the findings to PERMAI management and secured their input for program development.

The core of the program involved delivering digital security training and IT skills development to women in the PERMAI community. This was accompanied by comprehensive socialization sessions to promote digital literacy. Throughout the program, meticulous documentation was maintained through photos, videos, and reports to capture the program's progress and impact. Upon program completion, a thorough evaluation was conducted to assess its effectiveness. Evaluation instruments were developed and administered to gather feedback. The results of the evaluation were then compiled into a comprehensive report. Building upon the program's outcomes, follow-up activities were implemented. These included knowledge dissemination workshops, program refinement based on community feedback, and exploration of opportunities for program expansion to other communities. Consistent documentation was maintained throughout the follow-up phase to ensure program sustainability and impact measurement.

METHOD

There are three (3) phase that will be taken in this service activity. The first step is the preparation step, followed by implementation, as well as the evaluation stage, and follow-up. The fourth step is important, considering that service programs intended to support national development can have a sustainable nature so that the benefits are appropriate in forming a widely independent society.

Preparatory Phase

The preparation step begins with further discussions with partners, namely the PERMAI community. The discussion included strategies for implementing the program in achieving objectives, technical implementation, administration, and sharing additional information about the situation and conditions of participants. Next, the presenting team compiles a proposal that will be submitted to the university.

Implementation Phase

The socialization activities commenced with the introduction of the socialization team to the PERMAI community. The purpose of enhancing digital safety and information literacy among community women was clearly communicated. Following a formal opening, participants were provided with a comprehensive overview of the program's objectives, benefits, and expectations. The socialization team, along with collaborating partners, introduced themselves and their respective expertise in digital data security. To foster active engagement, participants were divided into focus groups for discussions on digital security and its impact on daily life. Facilitators guided these discussions, encouraging participants to share insights and potential solutions to digital security challenges. Practical exercises were incorporated to enhance participants' ability to identify misinformation. The socialization concluded with a recap on the significance of digital security in the contemporary digital landscape, and participants were given a platform to provide feedback and suggestions.

Evaluation Phase

Following the implementation of community service activities within the PERMAI Community, a comprehensive evaluation process will be undertaken. This process involves establishing performance indicators to measure the achievement of service objectives, both quantitatively and qualitatively. Subsequently, data will be collected through various methods such as surveys, interviews, and observations to assess the program's impact. A thorough analysis of this data will be conducted to determine the success of the activities. Importantly, the evaluation will be participatory, incorporating the perspectives of the community members through their involvement in the process. Additionally, the evaluation will assess the effectiveness of any innovative approaches implemented and identify valuable lessons for future endeavors. Finally, a comprehensive evaluation report will be generated, presenting findings, recommendations, and insights for relevant stakeholders.

Follow through Phase

After carrying out community service activities with the PERMAI Community, a comprehensive evaluation process will be initiated. This process involves analyzing the results obtained from activity reports, discussions with students, school administration, and team members to identify areas requiring improvement. Based on these findings, the service program will be enhanced through material adjustments, refined implementation methods, and innovative approaches. To bolster the team's capabilities, additional training and coaching sessions will be organized to equip them with the necessary skills to address future challenges effectively. Furthermore, establishing collaborations and partnerships with educational institutions, community organizations, and research institutions will be pursued to enrich resources, knowledge, and expertise, thereby optimizing the impact of future service activities.

Programme Description

The implementation of PKM activities is carried out based on the steps described earlier. This method of PKM activities is a method of socialization in the form of intensive training and mentoring so that all targets and expected outcomes are achieved through the implementation of this PKM activity. The following describes the operational steps that will be taken to overcome the problems described earlier. Operational steps in this activity include Conducting action programs to increase awareness, knowledge, skills, and involvement of officials and the community through digital security socialization/training to increase community knowledge and skills.

RESULTS AND DISCUSSION

To ensure these programs are relevance, the UMB Community Service Team first conducts a participatory needs assessment with women's groups and village empowerment cadres within the PERMAI community. This assessment's findings are then communicated and submitted as initial data to the PERMAI management during online meetings (as shown at Fig 3. Online Meeting UMB with PERMAI)

Finally, with support from LPPM UMB (the Institute for Research and Community Service), the UMB Community Service Team facilitates a meeting with PERMAI, represented by Mr Agung to discuss and agree upon the program direction based on the assessment results on November 29th, 2023.



Figure 1. Online Pre-Activity Meeting

Following a collaborative needs assessment with the PERMAI community, the UMB Community Service Team builds a comprehensive program to empower women there. This program involves multiple initiatives: first, the PERMAI community creates and approves a work plan (as shown in Fig. 4. Socialization). Then, the UMB team conducts training sessions on both general IT usage and, crucially, digital security literacy (as shown in Fig.5-6. Training Session) Finally, the team facilitates communication between the PERMAI community's women's groups and any PKM (Community Services, or Student Creativity Program) initiatives that might be relevant (as shown in Fig. 6. Closing Session). This multifaceted approach equips women in the PERMAI community with the technological skills and security awareness they need to thrive in the digital age.



Figure 2. Socialization



Figure 3. Training Session



Figure 4. Training Session



Figure 5. The Closing Session

The UMB Community Service Team takes a data-driven approach. This involves compiling and creating evaluation instruments tailored explicitly to the PKM (Student Creativity Program) activities. These instruments gather feedback and assess the program's impact on the PERMAI community (as shown in Fig 8-9. Participant filling out the questionnaire). The collected data is then analyzed and compiled into a comprehensive evaluation report. This report is a valuable tool for future program development, allowing the UMB Community Service Team to refine their approach and maximize their positive influence on the PERMAI community.



Figure 6. Filling out the Registration Form



Figure 7. Filling out the questionnaire form

The questionnaire results were distributed to women in the Permai community following a community service program on digital security literacy.

Demographics

- Number of respondents: 50
- Age range: 25-55 years old
- Education level: (20%) High School Diploma, (80%) Laborer/ Uneducated

Knowledge of Digital Security

- Before the program, 70% of respondents reported feeling somewhat or unconfident in identifying online threats.
- After the program, 90% of respondents reported feeling confident in identifying online threats.

Security Practices

- Before the program, only 40% of respondents reported using strong and unique passwords for all their online accounts.
- After the program, 80% of respondents reported using strong and unique passwords for all their online accounts.

Impact on Behaviour

- 85% of respondents agreed or strongly agreed that the program increased their awareness of the risks associated with social media platforms.
- 70% of respondents reported feeling more comfortable using online banking services after the program.

Overall Satisfaction

- 95% of respondents rated the program as good or excellent.
- 80% of respondents expressed interest in attending future workshops on related topics.

Open-Ended Responses

- "The program provided clear and practical information on how to protect myself online."
- "I feel more confident using technology now and less worried about falling victim to scams."
- "It would be helpful to have follow-up sessions to address specific questions and challenges."

The UMB Community Service Team doesn't stop after initial activities. They prioritize sharing what they have learned by holding socialization sessions or workshops to convey the results of their community service efforts. This transparency fosters trust and collaboration. Furthermore, the team actively solicits input and feedback from the community, using it to update or develop entirely new service programs that better address evolving needs. Finally, successful projects are not simply left behind. The team considers continuing them, expanding their scope to reach more people, or even implementing similar models in other locations, maximizing the program's positive influence.

Based on the feedback received, future programs could consider:

- Offering follow-up workshops to address specific concerns and answer lingering questions.
- Tailoring content to address the specific needs and challenges women in the Permai community face.
- Exploring the use of different socialization methods, such as interactive exercises or case studies.

CONCLUSION

The UMB Community Service Team's collaborative and data-driven approach to empowering women in the PERMAI community has yielded significant results. By closely engaging with community members and tailoring programs to their specific needs, the team has successfully enhanced digital literacy and security awareness. The program's impact is evident in the increased confidence and knowledge among participants. Continuous evaluation and improvement are integral to the program's success. The team's commitment to gathering feedback and adapting to community needs ensures the program's relevance and effectiveness. By sharing program outcomes and exploring opportunities for expansion, the UMB Community Service Team demonstrates a strong dedication to creating lasting positive change in the PERMAI community. Future efforts should focus on building upon the program's successes by offering specialized follow-up workshops, tailoring content to specific community needs, and experimenting with innovative delivery methods. This ongoing commitment to empowerment will enable the PERMAI community to fully harness the potential of the digital age.

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