

Implementation of a Web-Based Information System in Karang Taruna Parangloe

Implementasi Sistem Informasi Berbasis Web di Karang Taruna Parangloe

Dolly Indra¹, Muh. Haerdiansyah Syahnur^{2*}, Lilis Nur Hayati³

^{1,2,3}Universitas Muslim Indonesia, Makassar, Indonesia

e-mail: dolly.indra@umi.ac.id¹ haerdiansyah@umi.ac.id^{2} lilis.nurhayati@umi.ac.id³

Abstract

This study explores the implementation of a web-based information system for Karang Taruna Parangloe, a youth organization in Kelurahan Lanna, Parangloe District. The initiative was driven by the need to improve information dissemination, which previously relied on traditional methods like WhatsApp groups. While convenient, this approach had limitations in reaching a broader audience and effectively promoting organizational activities. To address these challenges, a Community Partnership Program (PKM) was carried out in four key stages: observation, socialization and training, technology implementation, and evaluation. During the observation phase, it became clear that the organization lacked an official platform for sharing updates and announcements. This was followed by socialization and training sessions, aimed at improving digital literacy among members, equipping them with the skills needed to manage and utilize a web-based system. The technology implementation phase focused on developing and launching the organization's official website, <https://karangtarunaparangloe.com>. Designed as a comprehensive information hub, the website includes a user guide to help administrators manage content effectively. The evaluation phase showed significant improvements in members' understanding and technical skills, with average post-test scores rising from 62 to 85. More than just a tool for sharing information, the website has helped enhance the organization's image and boost community engagement. This initiative demonstrates the power of digital transformation in empowering youth organizations and strengthening communication within communities. It also serves as an inspiring example for other organizations looking to adopt digital solutions to streamline operations and enhance their outreach efforts.

Keywords: *Web-Based Information System, Karang Taruna, Digital Literacy, Digital Transformation, Community Engagement, Information Dissemination, Youth Organization*

Abstrak

Penelitian ini membahas penerapan sistem informasi berbasis web untuk Karang Taruna Parangloe, sebuah organisasi kepemudaan di Kelurahan Lanna, Kecamatan Parangloe. Inisiatif ini muncul dari kebutuhan untuk meningkatkan penyebarluasan informasi, yang sebelumnya masih mengandalkan metode konvensional seperti grup WhatsApp. Meskipun praktis, cara ini memiliki keterbatasan dalam menjangkau audiens yang lebih luas dan mempromosikan kegiatan organisasi secara efektif. Untuk mengatasi tantangan tersebut, dilakukan Program Kemitraan Masyarakat (PKM) melalui empat tahap utama: observasi, sosialisasi dan pelatihan, penerapan teknologi, serta evaluasi. Pada tahap observasi, ditemukan bahwa organisasi ini belum memiliki platform resmi untuk menyebarkan informasi. Selanjutnya, tahap sosialisasi dan pelatihan bertujuan untuk meningkatkan literasi digital anggota Karang Taruna, membekali mereka dengan keterampilan dalam mengelola dan memanfaatkan sistem berbasis web. Tahap penerapan teknologi berfokus pada pengembangan dan peluncuran situs web resmi organisasi, <https://karangtarunaparangloe.com>. Situs ini dirancang sebagai pusat informasi yang komprehensif, dilengkapi dengan panduan pengguna untuk membantu administrator dalam mengelola konten. Hasil evaluasi menunjukkan adanya peningkatan signifikan dalam pemahaman dan keterampilan teknis anggota, dengan rata-rata nilai post-test meningkat dari 62 menjadi 85. Lebih dari sekadar alat untuk menyebarkan informasi, situs web ini juga berkontribusi dalam meningkatkan citra organisasi dan memperkuat keterlibatan masyarakat. Inisiatif ini membuktikan bahwa transformasi digital dapat memberdayakan organisasi kepemudaan serta memperkuat komunikasi dalam komunitas. Selain itu, program ini dapat menjadi contoh inspiratif bagi organisasi lain yang ingin mengadopsi solusi digital untuk meningkatkan efisiensi operasional dan jangkauan mereka.

Kata kunci: *Sistem Informasi Berbasis Web, Karang Taruna, Literasi Digital, Transformasi Digital, Keterlibatan Masyarakat, Penyebarluasan Informasi, Organisasi Kepemudaan*

1. INTRODUCTION

The development of human resources, particularly among the younger generation, plays a strategic role in shaping a nation's future (Surawijaya et al., 2022). Youth empowerment is aimed at fostering individuals who are resilient, creative, and competitive (Saneba et al., 2021). One of the key approaches to youth empowerment is through the development of youth organizations, such as Karang Taruna (Suprayogi et al., 2022), which play a significant role in supporting social activities and community empowerment.

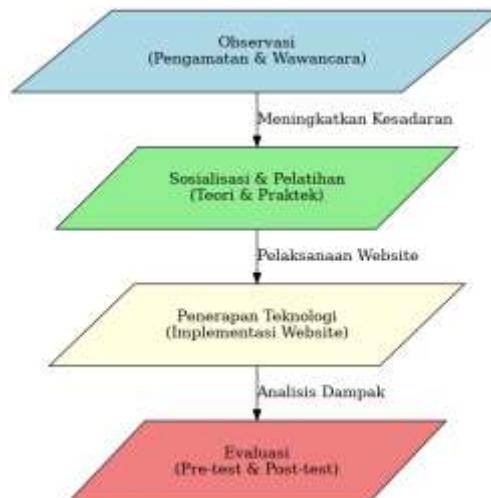
Karang Taruna is a social organization designed to develop young generations by fostering awareness and social responsibility among youth within villages and urban neighborhoods, ultimately benefiting the surrounding community (Fibriana et al., 2024). The organization serves as a platform for youth development and capacity building (Purnomo, 2023).

One of the active Karang Taruna chapters is located in Parangloe District, specifically on Pengayoman Parang Street, Lanna Village, under the leadership of Mr. Muh Rusdy Alamsyah, S.Pd. However, a major challenge they face is the lack of digital infrastructure for information dissemination. Currently, information is shared manually through WhatsApp groups, which limits its reach and effectiveness. With the rapid advancement of telecommunication and information technology, digital solutions have significantly impacted various aspects of human life (Lubis, 2021; Fauzi et al., 2022). One of its greatest benefits is the ease of sharing information via the internet (Lubis & Nasution, 2023). In today's digital era, the need for a web-based information system has become increasingly relevant, offering an efficient way to enhance communication and organizational outreach.

A web-based information system can serve as a centralized platform for Karang Taruna to share updates about their activities, ensuring that the community can easily access information about their initiatives (Amanda & Ramadani, 2021). To address these challenges, this Community Partnership Program (PKM) aims to develop an official web-based information system for Karang Taruna Parangloe. This platform will function as a dedicated information hub, enabling more effective communication and promotion of the organization's activities within the community.

2. METHODS

The Community Partnership Program (PKM) we designed to address the challenges faced by our partner follows four key stages: observation, socialization and training, technology implementation, and evaluation. The following is a flowchart that describes the stages of implementing the Community Partnership Programme (PKM) for Karang Taruna Parangloe:



1. Observation is an essential step in gathering accurate information and understanding the current situation (Titijanti et al., 2022). At this stage, our PKM team conducted direct observations of Karang Taruna Parangloe and interviewed its chairman, Mr. Muh Rusdy Alamsyah, S.Pd, as shown in Figure 1. From this discussion, we identified a significant challenge: the organization does not yet have an official digital platform to share information. Instead, they still rely on traditional methods such as sharing updates via WhatsApp groups, which limits their reach and effectiveness in communicating with the broader community.



Figure 1. PKM Team with Chairman of Karang Taruna Parangloe

2. Socialization and Training – This stage was all about introducing Karang Taruna Parangloe members to the importance of a web-based information system for their organization (Yulistyanti et al., 2021). We started by explaining how such a system could improve communication and outreach. The training sessions combined theory and hands-on practice (Herawati et al., 2021), ensuring that both administrators and members could confidently manage and update the platform.
3. Technology Implementation – Once the members were familiar with the concept, we moved on to implementing the Karang Taruna Parangloe website. This official platform, accessible at <https://karangtarunaparangloe.com>, serves as a hub for sharing news, event updates, and other important information with the community.
4. Evaluation – To measure the impact of this initiative, we conducted pre-test and post-test assessments to evaluate the participants' skills and understanding before and after the training (Yoerani et al., 2021). The results showed a significant improvement, highlighting how the digital platform empowered the organization to manage its information more effectively and reach a wider audience.

3. RESULT and DISCUSSION

In this service we as a team of servants designed a website-based Karang Taruna Parangloe information system shown in Figure 2.

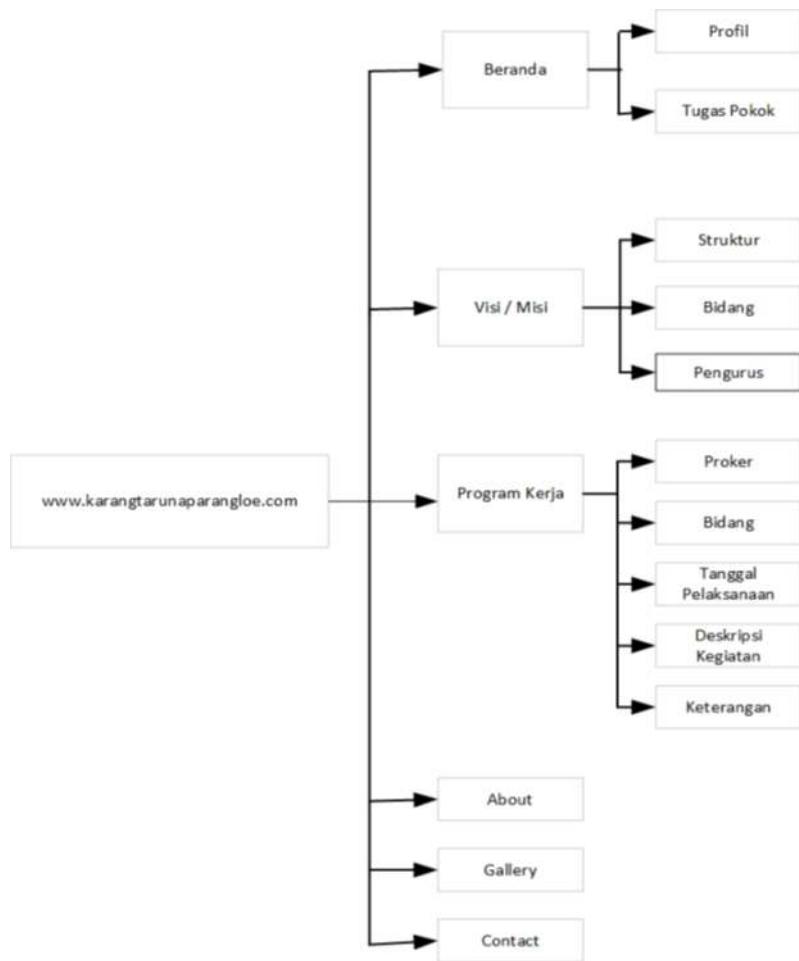


Figure 2. Design of website-based Karang Taruna Parangloe information system

After completing the design phase, we move on to the implementation stage, where we introduce the official website-based information system for Karang Taruna Parangloe. This platform, accessible online at <https://karangtarunaparangloe.com/>, serves as a central hub for information and communication. The interface of the Karang Taruna Parangloe website is presented in Figure 3.



Figure 3 Sample Display of the Karang Taruna Parangloe Web-Based Information System

Another important resource is the website user guide, which provides administrators with clear instructions on how to operate, manage, and update the website efficiently. This guide serves as a helpful tool to ensure smooth website maintenance, as shown in Figure 4.



Figure 4 Figure 4. Karang Taruna Website User Guide

The socialization phase, as shown in Figure 5, introduced Karang Taruna Parangloe members to the benefits of digital technology through the launch of their official website, accessible at <https://karangtarunaparangloe.com/>. This initiative aimed to increase awareness about how the website could support organizational activities and enhance program promotion.

With this platform, Karang Taruna Parangloe now has a more effective way to build a positive image and share information with the community. The session was met with great enthusiasm, as participants actively engaged in discussions on how the website could help improve their outreach and engagement.



Figure 5. Website Socialization for Karang Taruna Parangloe

The training phase, as shown in Figure 6, provided participants with hands-on experience in managing the website effectively. During the session, they received direct guidance from the PKM team, learning essential skills such as website navigation, content management, and optimizing digital features.

The training was highly interactive, with participants eagerly working on their laptops, engaging in discussions, and asking questions about the technical processes involved. This initiative is expected to help Karang Taruna Parangloe make full use of their

website as a valuable tool for sharing information and promoting activities, enabling them to connect with a wider audience in a more professional and structured way.



Figure 6. Website Training for Karang Taruna Parangloe

The evaluation phase aimed to measure the skills and understanding of Karang Taruna Parangloe members through pre-test and post-test assessments. The results revealed a notable improvement, with participants demonstrating a better grasp of website management after completing the training. The average post-test score reached 85, showing a significant increase from the pre-test average of 62, as shown in Figure 7.

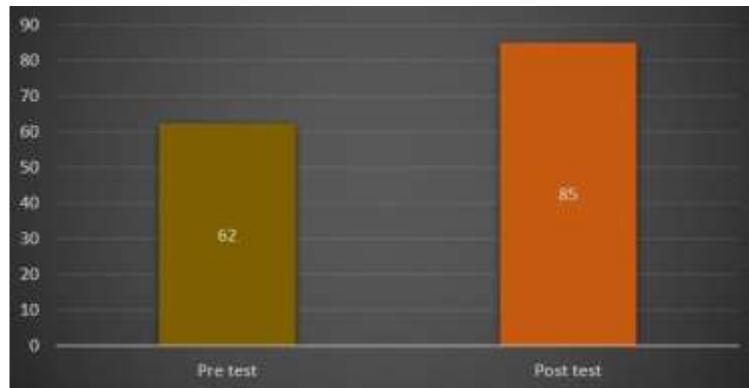


Figure 7. Pre-Test and Post-Test Evaluation Scores for the Information System

Community Service and Its Impact on Society

Community service plays a crucial role in sharing knowledge, technology, and innovation with the public, aiming to create positive change in areas such as economic development, policy improvements, and social behavior. A well-executed community service initiative should bring tangible benefits, both in the short term and long term, for individuals, communities, and institutions.

This section should outline how the activities were carried out to achieve their objectives, explaining the key success indicators and evaluation methods used to measure the impact. It is also important to highlight both the strengths and challenges of the initiative, particularly in terms of how well the program aligns with the real needs and conditions of the target community.

Additionally, discussing challenges encountered during implementation, such as technical limitations, resource constraints, or difficulties in product development, can provide valuable insights for future improvements. Evaluating potential future developments can also help ensure that the program continues to grow and create a lasting impact.

To support the discussion, relevant documentation such as photos of the implementation process, product prototypes, tables, and graphs should be included. These materials will help visually illustrate the program's effectiveness and its contribution to the community, making the impact more concrete and measurable.

4. CONCLUSION

Evaluation of the Community Service Program (PKM) for Karang Taruna Parangloe, The Community Service Program (PKM) at Karang Taruna Parangloe successfully introduced an official web-based information system, accessible at <https://karangtarunaparangloe.com>. This initiative aimed to enhance information sharing, community engagement, and organizational efficiency through digital transformation.

Key Outcomes

- Improved Digital Literacy – After the training, participants showed a significant increase in their understanding of information systems, with knowledge levels rising by 85%.
- Better Organizational Efficiency – The website now serves as a centralized platform for sharing updates, managing activities, and engaging with the community in a more structured way.
- Wider Community Reach – The platform enables broader outreach, making it easier for the public to stay informed about Karang Taruna's initiatives and programs.

Strengths and Advantages

- User-Friendly Interface – Designed to be simple and accessible, allowing administrators to easily update content without advanced technical skills.
- Real-Time Information Access – The website ensures that members and the community can receive timely updates about events and activities.
- Enhanced Organizational Image – A professional online presence boosts credibility and strengthens the organization's reputation.

Challenges and Limitations

- Need for Ongoing Training – While training has helped, some members still require continued guidance to maximize the platform's potential.
- Dependence on Internet Connectivity – The effectiveness of the system depends on stable internet access, which may be limited in certain areas.
- Consistency in Content Updates – Keeping the website regularly updated requires active participation from administrators.

Future Development Opportunities

- Social Media Integration – Connecting the website with social media platforms could further expand engagement and visibility.
- Additional Features – Introducing event registration, discussion forums, or multimedia galleries could enhance user experience and interaction.
- Continuous Training and Support – Providing periodic workshops and technical assistance will help sustain the platform's long-term effectiveness.

ACKNOWLEDGEMENT

We would like to express our sincere gratitude to LPkM Universitas Muslim Indonesia and Lembaga DRTPM for their dedication and generous support in making the 2024 Community Partnership Program (PKM) possible. Their funding and guidance have been instrumental in ensuring the smooth implementation of this initiative, allowing us to carry out activities that bring real benefits to the community. Their commitment to education, research, and community development has provided us with not only the necessary resources but also the encouragement to create a program that has a lasting impact. We deeply appreciate their role in empowering local communities and fostering collaborative efforts that drive meaningful change. Once again, we extend our heartfelt thanks for their trust and unwavering support. We look forward to continued collaboration in developing innovative and impactful programs that contribute to the well-being of society.

REFERENCES

Amanda, I. N. N., & Ramadani, A. H. (2021). Rancang Bangun Sistem Informasi Media Kegiatan Pada Lembaga Karang Taruna Kecamatan Sepatan Timur. *JIKA Jurnal Inform*, Vol. 5, No. 1, p. 104, 2021, Doi: 10.31000/Jika. V5i1. 4017.

Basalamah, J., Syahnur, M. H., Ashoer, M., & Bahari, A. F. (2023). Pelatihan Pembuatan Akun Sosial Media Serta Penjualan Berbasis Elektronik Dalam Meningkatkan Hasil Jual Olahan Produk. *Jurnal Pengabdian Masyarakat Bangsa*, 1(9), 1769-1776.

Fauzi, E., Sinatrya, M. V., Ramdhani, N. D., Ramadhan, R., & Safari, Z. M. R. (2022). Pengaruh kemajuan teknologi informasi terhadap perkembangan akuntansi. *Jurnal Riset Pendidikan Ekonomi*, 7(2), 189–197.

Fibriana, A. H., Rochmaniah, A., & Febriana, P. (2024). Pelatihan Membuat Konten Instagram pada Karang Taruna Sedatigede. *Jurnal ABDINUS: Jurnal Pengabdian Nusantara*, 8(1), 34–41. <https://doi.org/10.29407/ja.v8i1.20862>

Herawati, E., Puspitasari, P., Susanti, M., & Rahmahdani, N. (2021). Pelatihan Kewirausahaan bagi Remaja Karang Taruna di Desa Dayeuh. *Jurnal Pengabdian Masyarakat Madani (JPMM)*, 1(1), 17–21.

Indra, D., Syahnur, M. H., & Hayati, L. N. (2024). Digitalization, Business Potential, and Financial Inclusion: Youth Training in Parangloe Subdistrict, Gowa Regency. *Celebes Journal of Community Services*, 3(2), 68-76.

Lubis, M. S. I. (2021). Teknologi informasi dan komunikasi dalam perspektif islam. *PUBLIK REFORM: JURNAL ADMINISTRASI PUBLIK*, 8(1), 79–88.

Lubis, N. S., & Nasution, M. I. P. (2023). Perkembangan Teknologi Informasi Dan Dampaknya Pada Masyarakat. *KOHESI: Jurnal Multidisplin Saintek*, 1(12), 41–50. <https://ejournal.warunayama.org/index.php/kohesi/article/view/1311>

Puspitasari, A., Syahnur, H., Alimuddin, H., Rifai, D. F., Putra, W. D., & Pelu, M. F. A. (2023). Pemberdayaan Masyarakat Membentuk Kampung Sadar Sanitasi Melalui Pengolahan Limbah Kotoran Ternak Sapi Menjadi Pupuk Kompos dan Biogas di Desa Pucak. *Martabe: Jurnal Pengabdian Kepada Masyarakat*, 6(10), 3852-3857.

Saneba, H., Katuuk, D. A., Rotty, V. N. J., & Lengkong, J. S. J. (2021). Manajemen Organisasi Karang Taruna. *Jurnal Bahana Manajemen Pendidikan*, 10(1), 138. <https://doi.org/10.24036/jbmp.v10i1.112283>

Suprayogi, S., Puspita, D., Putra, E. A. D., & Mulia, M. R. (2022). Pelatihan Wawancara Kerja Bagi Anggota Karang Taruna Satya Wira Bhakti Lampung Timur. *Community Development Journal : Jurnal Pengabdian Masyarakat*, 3(1), 356–363. <https://doi.org/10.31004/cdj.v3i1.4494>

Surawijaya, B., Rajief Azza, M., & Hamidah, N. (2022). Pengembangan Kualitas SDM Karang Taruna Dalam Mewujudkan Kecakapan Literasi Digital. *Jurnal Pengabdian Kepada Masyarakat*, 3(1), 136–149.

Titiyanti, Y., Retnaningdyah, P., & others. (2022). Implementing canva in the digital learning process for Junior High School. *Jurnal Education And Development*, 10(3), 708–712.

Vicki Dwi Purnomo. (2023). The Role of Karang Taruna in the Development of Youth Groups in Bendungan Village, Kulon Progo Regency. *Jurnal Ilmiah Pendidikan Holistik (JIPH)*, 2(1), 105–116. <https://doi.org/10.55927/jiph.v2i1.2652>

Yoerani, A., Yana, A. A., Siregar, J., Syafianto, S., & others. (2021). Pelatihan Desain Produk Dalam Pemasaran Digital Pada Pemuda Karang Taruna Desa Cikaregeman Selama Covid-19. *Aptekmas Jurnal Pengabdian Pada Masyarakat*, 4(3), 31–34.

Yulistyanti, D., Farkhatin, N., & Mustari, D. (2021). Penggunaan aplikasi sebagai media e-Learning remaja di Karang Taruna. *JE (Journal of Empowerment)*, 2(1), 89–100.