# Designing a Google Sites-Based Web Portal for Socializing Priority Programs: A Case Study of Gayungan Village, Surabaya

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**ABSTRACT**

*Keywords:*
Website Development,
E-Government,
Google site,
Village Priority
Programs

*This study addresses the need for effective digital communication channels at the sub-district level to socialize community empowerment programs. It aims to design and implement a user-friendly website using Google Sites as a centralized information portal for the priority programs of Gayungan Village, Surabaya. Employing a qualitative approach with the System Development Life Cycle (SDLC) method, the research stages included planning, analysis, design, and implementation. Data were collected through observation, interviews with community members and village officials, and literature study. The outcome is a fully functional website featuring key sections such as Homepage, Profile, Priority Programs, WhatsApp Groups, and Public Services. The design prioritizes usability, visual clarity, and intuitive navigation tailored for both residents and village staff. The novelty of this research lies in the practical application of the lightweight Google Sites platform, integrated with principles of User Interface design from Visual Communication Design, to solve a real-world problem of governmental communication and public outreach at the local level. This case study demonstrates a cost-effective and sustainable model for digital socialization that can be replicated by other villages.*

## INTRODUCTION

The digital transformation of public administration has become a global imperative, with local governments increasingly leveraging information and communication technology (ICT) to enhance service delivery, transparency, and community engagement (Elmunsyah et al., 2021). In Indonesia, this shift is aligned with the national e-government initiative and the Village Law, which encourages villages and sub-districts (kelurahan) to adopt digital tools for governance and public communication (Sofyani et al., 2021). An effective official website serves as a fundamental pillar of this digital shift, functioning not only as an information portal but also as a strategic instrument for branding, socialization, and fostering participatory governance (Martini & Sari, 2022; Danang & Mustofa, 2022).

At the city level, Surabaya has actively promoted digital economy and tourism initiatives, creating a conducive environment for its sub-districts to innovate in public communication. In this context, the role of a website transcends basic information dissemination; it becomes a crucial platform for socializing priority community empowerment programs, promoting local potential, and strengthening the relationship between the government and its citizens (Rahmi et al., 2023). However, the development of such websites at the local level often faces constraints, including limited technical resources, budgetary constraints, and the need for platforms that are easy for village staff to manage and update continuously (Sholihin, 2021).

Gayungan Village, a sub-district in Surabaya, exemplifies a local government with numerous commendable priority programs, such as Kampung Madani, Batik SLB, Vanilla Cultivation, and waste management initiatives. Despite these achievements and the existence of a primary governmental website, a dedicated, focused platform for

intensively socializing and promoting these specific programs was identified as a need. Previous studies have explored website development for educational purposes using Google Sites (Dermawan, 2023; Setiawan, 2022) or for institutional branding in schools (Andriyan, 2020). However, a gap exists in the practical application of lightweight, user-friendly platforms like Google Sites—integrated with deliberate User Interface (UI) design principles—specifically for the socialization of village-level priority programs within the Indonesian context.

Addressing this gap, this study focuses on the design and implementation of a web portal for Gayungan Village. Therefore, the objectives of this research are: (1) to conceptualize the design of a website as a tool for socializing and publishing Gayungan Village's priority programs, (2) to describe the development process using the System Development Life Cycle (SDLC) method adapted for the Google Sites platform, and (3) to present the results and implementation of the fully functional website. This project offers a practical model for leveraging accessible digital tools to enhance civic communication and program visibility at the grassroots level.

## RESEARCH METHOD

This study employed a qualitative descriptive approach, aiming to provide a detailed account of the process of designing and implementing a web portal for Gayungan Village. The methodological framework was guided by the System Development Life Cycle (SDLC), a structured process for creating high-quality information systems through sequential phases (Rahmi et al., 2023). The SDLC was selected for its clarity, systematic stages, and widespread application in software development projects. However, the classic six-stage model (planning, analysis, design, implementation, testing, and maintenance) was pragmatically adapted to four core stages—System Analysis, System Design, System Implementation, and Operation & Maintenance—to align with the project's timeframe and the handover strategy to the village staff (see Figure 7 in the main report). This adaptation focused on delivering a functional product with the understanding that testing and refinement would occur iteratively post-implementation.

### Participants and Research Setting

The primary participants in this development process were the stakeholders of Gayungan Village, Surabaya. This included key village officials responsible for communication and community empowerment programs, as well as active members of the local youth organization (Karang Taruna). Their involvement was crucial for requirement gathering, design validation, and ensuring the website's relevance to community needs. The research setting was Gayungan Village itself, with a focus on its administrative processes and existing portfolio of priority programs.

### Instrument and Procedures

Data collection was conducted through multiple methods to ensure comprehensive analysis and design input. The primary instruments and procedures were:
Observation: Direct observation was carried out at the village office and related program sites to understand the operational context, existing communication channels, and the physical/digital infrastructure available (Wau, 2022).

Semi-structured Interviews: Interviews were conducted with village officials and Karang Taruna members. These discussions aimed to gather in-depth information regarding the specific needs for socializing priority programs, content requirements, and desired features for the website (Purwanti, 2023).

Literature Study: A review of relevant literature, including previous studies on website development, e-government at the village level, and the use of Google Sites in educational and institutional contexts, was performed to inform the theoretical and practical framework of the project (Handayani et al., 2018).

Data Analysis and Development Stages

The analysis was integrated into the SDLC stages, as follows:

Stage 1 - System Analysis: Data from observations and interviews were analyzed to conduct a feasibility study and identify system requirements. This involved assessing technical infrastructure, user needs, and defining the core objectives and functional specifications of the website (Nurfaizah, 2024; Zen & Iswavigra, 2023).

Stage 2 - System Design: Based on the analysis, the conceptual and physical design was created. This stage involved creating verbal concepts for site structure, followed by wireframing and visual design mock-ups using graphic design software (Adobe Photoshop). The design prioritized usability, intuitive navigation, and a visual identity consistent with the village's profile (Pratama, 2024).

Stage 3 - System Implementation: The approved designs were translated into a functional website using the Google Sites platform. This involved structuring pages, embedding multimedia content, implementing navigation menus, and publishing the site online.

Stage 4 - Operation & Maintenance (Handover Planning): While full long-term maintenance falls to the village, this stage involved preparing administration tools, conducting basic operational training for designated staff, and documenting the management process to ensure sustainability.

This methodological approach, combining qualitative data collection with a structured development lifecycle, ensured that the final website product was both user-centered and technically viable, meeting the specific socialization needs of Gayungan Village.

## RESULTS AND DISCUSSION
### Results
The primary outcome of this research is the fully developed and published website, "Gayungan Web - Pusat Informasi Program Unggulan," accessible at https://sites.google.com/unesa.ac.id/gayungan. The implementation followed the adapted SDLC stages, yielding concrete outputs in each phase.

1. System Analysis Results
The feasibility analysis confirmed the project's viability. Gayungan Village possesses adequate technological infrastructure, including stable high-speed internet and computers, and staff with basic digital literacy evident from their active social media management. The needs analysis identified key requirements: a simple, informative, and communicative platform targeting both Gayungan residents and the general public to increase participation in priority programs, coupled with the necessity for easy management by village staff.

2. System Design Results

The design phase produced two conceptual drafts for the homepage layout. After validation with stakeholders, Draft 1 was selected for its superior use of white space, clearer visual hierarchy, and better readability, aligning with principles of effective visual communication to avoid user confusion from information overload (see Figure 8 in the main report). The final information architecture comprised six main menus: (1) Homepage (featuring village profile video and leadership introduction), (2) Profile (demographics, tourism, governance), (3) Priority Programs (descriptions of 8-10 core initiatives), (4) WA Citizen Groups (links to verified community forums), (5) Services (forms for program registration, donations, and complaints), and (6) Contact (official addresses and integrated social media links). The visual design employed a professional color scheme of navy blue and gold accents, custom icons, and a balanced layout to project a credible, modern image (Pratama, 2024).

3. System Implementation Results

The approved design was successfully built using Google Sites. The platform enabled efficient insertion of text, images, and interactive elements like navigation menus and embedded forms. The resulting website features a minimalist, professional interface that presents information about programs like Kampung Madani, Batik SLB, and Vanilla Cultivation. The Google Sites backend provides an intuitive administrative panel (see Figure 15 & 16), allowing authorized village staff to easily update content, modify layouts, and manage the site without requiring advanced technical skills.

**Table 1.** Website Structure and Core Functions.

| Menu/Section | Primary Content & Function |
|---|---|
| Homepage | Introductory video, welcome message, guide to site navigation. |
| Profile | Brief on demographics, governance, and local tourism potential. |
| Priority Programs | Detailed descriptions and objectives of key community programs. |
| WA Citizen Groups | Curated links to WhatsApp groups for various RT/RW units. |
| Services | Forms for public engagement and administrative requests. |
| Contact | Integrated official contact details and social media channels. |
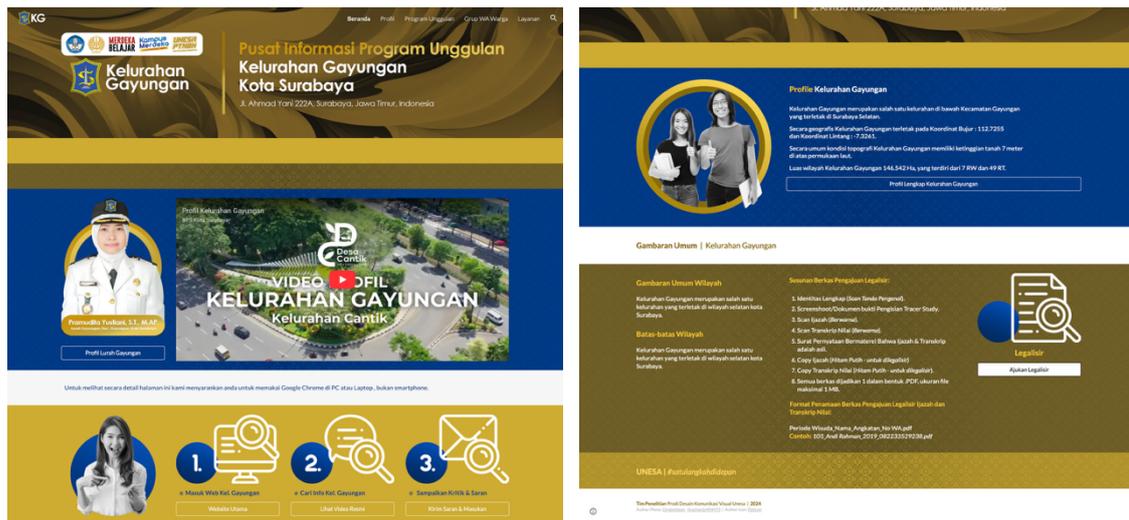
**Figure 1.** Kelurahan Gayungan Website.

## Discussion

The successful development of the Gayungan Village web portal validates the pragmatic application of a tailored SDLC approach integrated with user-centered design principles for local e-government projects. The findings demonstrate that a lightweight, cost-effective platform like Google Sites can be strategically leveraged to address the common challenge of limited technical and financial resources at the sub-district level (Sholihin, 2021). This aligns with the broader goal of inclusive digital governance, where ease of use for both citizens and administrators is paramount (Elmunsyah et al., 2021).

The stakeholder-driven selection of the simpler, more spacious design (Draft 1) over the denser alternative underscores the critical importance of usability and visual clarity in public-facing government websites. A clean layout with ample white space reduces cognitive load, facilitating faster information retrieval and a more positive user experience, which is essential for encouraging community engagement (Pratama, 2024). This deliberate design choice moves beyond merely having an online presence; it focuses on creating an effective communication tool that respects the user's time and comprehension.

Furthermore, the website's structure addresses multiple dimensions of modern local governance. The "Priority Programs" section acts as a dedicated channel for socialization, directly fulfilling the research's primary objective. The inclusion of interactive "Services" forms and curated "WA Citizen Groups" links extends the website's function from a static information board to a dynamic platform for potential two-way communication and community networking, fostering greater transparency and participation (Sofyani et al., 2021). This multifunctionality is a key strength, positioning the site as a central hub for civic interaction.

However, the project's adaptive methodology, which condensed the traditional SDLC by integrating testing into post-handover maintenance, presents both a practical solution and a limitation. While this allowed for rapid deployment within constraints, it places a significant emphasis on the forthcoming training and capacity-building for village staff. The long-term effectiveness and content relevance of the website hinge entirely on the

village's commitment to the Operation & Maintenance phase. This highlights a common critical success factor for e-government projects: technological delivery must be accompanied by institutional capacity development to ensure sustainability (Rahmi et al., 2023).

In conclusion, this case study provides a replicable model for other villages. It proves that leveraging accessible, no-code platforms, when combined with thoughtful UI/UX design grounded in local stakeholder input, can effectively bridge the digital socialization gap for community programs. The novelty lies not in the technology itself, but in its applied integration within a specific governmental communication context, offering a practical blueprint for enhancing public outreach and participatory governance at the local level.

## CONCLUSION

This study successfully demonstrates the design, development, and implementation of a dedicated web portal to socialize the priority programs of Gayungan Village, Surabaya. The research was driven by the need to enhance digital communication and public outreach at the local government level, utilizing an accessible technological solution.

The primary objectives of the research were met comprehensively. First, the conceptual design was formulated as a user-centered website with a clear information architecture featuring six core menus (Homepage, Profile, Priority Programs, WA Groups, Services, Contact), tailored to the specific socialization needs of the village. Second, the development process was rigorously executed using an adapted System Development Life Cycle (SDLC) method, progressing through the key stages of analysis, design, and implementation. Third, the tangible result is a fully functional and publicly accessible website (https://sites.google.com/unesa.ac.id/gayungan) built on the Google Sites platform, characterized by a minimalist, professional design that prioritizes usability.

The novelty of this work lies in its practical integration of a lightweight, no-code platform (Google Sites) with formal User Interface design principles to address a concrete e-government challenge. It moves beyond theoretical discussion to provide a replicable case study on creating an effective digital socialization tool under common constraints of resource limitation. The project underscores that strategic design thinking is as crucial as the technological tool itself in developing public communication portals.

The main implication of this research is the provision of a sustainable and cost-effective model that can be adopted by other villages or sub-districts aiming to improve the visibility of their community programs and foster greater citizen engagement through digital means. However, the long-term success of this initiative is contingent upon the commitment of Gayungan Village to the ongoing Operation and Maintenance phase, including regular content updates and active promotion.

For future research, it is recommended to conduct a formal usability and impact assessment of the website after a defined operational period. Further studies could also explore the comparative effectiveness of different low-code platforms for local e-government or develop integrated mobile applications to complement web-based portals, thereby creating a more comprehensive digital ecosystem for community governance.

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