BARANGAY PABANLAG HUB: ONLINE APPOINTMENT SYSTEM AND NEWS PLATFORM FOR RESIDENTS OF PABALANLAG, FLORIDABLANCA, PAMPANGA

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“Barangay pabanlag hub: online appointment system

and news platform for residents of pabalanlag, floridablanca, pampanga”

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**Introduction**

In the modern era of digital advancements, public service has to be delivered effectively and information made readily available for it to be characteristically good governance as well as community participation. Our capstone project’s objective titled “Barangay Pabanlag Hub: Online Appointment System and News Platform for Residents of Pabalanlag, Floridablanca, Pampanga” aimed at solving important problems faced by Barangay Pabanlag, Floridablanca, Pampanga residence. This project will serve as an official website for our barangay. It will increase community awareness through which administrative procedures are going to be simplified in relation to getting various government papers. It’s also easier for people to locate the barangay hall and other important places in our barangay. This website also contains a news page that provides latest and accurate news information to our barangay.

Among the significant challenges facing our barangay society is the low level of consciousness among its people concerning who their counselors and Sangguniang Kabataan officials are. This knowledge gap hinder community engagement and communication channels from being effective. Moreover, traditional ways of acquiring important government documents, including certificates of indigency and business permits, normally prove quite inefficient due to complications and delays accompanying them. The situation is made worse by the lack of information about where Barangay hall is for those who are new in the area and even visitors therefore becoming difficult to get help from barangay officials.

**Statement of the problem**

The primary issue that the Barangay Pabanlag faces is the inefficiency in the process of obtaining government documents, which poses a significant challenges for both residents and councilors. The lack of manpower often leads to long waiting times and difficulties for residents who have limited free time to visit the barangay hall.

Additionally, there is a concerning lack of awareness among residents about their councilors. Many residents are unfamiliar with the individuals responsible for managing their barangay, which can lead to confusion and mistrust, especially in times of crisis. It is crucial for residents to know their local leaders to ensure accountability and effective governance.

Furthermore, the existing communication channels between the barangay officials and residents are not that much effective. Currently, the primary mode of communication requires residents to visit the barangay hall in person, or through landline and mobile phone call. from residents to barangay hall landline number and mobile number. This type of communication methods is sometimes hinders timely in spreading of important information and updates.

These issues highlight the need for significant improvements in the administrative and communication processes within Barangay Pabanlag to better serve its residents and ensure more effective governance.

**Scope and Limitations**

**Scope**

The researchers will be conducting interviews and product/software testing to determine how the "Barangay Pabanlag Hub: Online Appointment System and News Platform" can improve efficiency and communication for the residents of Barangay Pabanlag, Floridablanca, Pampanga. The primary features and functions of the website and application include:

**User Account Management**:

Residents are required to create an account to access full features such as online government document requests and messaging the barangay. Visitors can still view the website but cannot use these features without an account.

**Online Government Document Requests**:

Residents can request government documents, such as Barangay Clearance and Certificate of Indigency, through the platform. The system facilitates the submission of requests, tracking of their status, and notification to residents once the documents are ready for pickup.

**Resident Communication Portal**:

The platform provides a direct communication channel between residents and barangay officials. Residents can send messages to the barangay, and the admin can read and respond to these messages individually through the admin page, ensuring timely and personalized responses.

**News and Announcements**:

The platform allows barangay officials to post the latest news and announcements, keeping residents informed about important events, updates, and community activities.

**Real-Time Emergency Notifications**:

In case of emergencies such as natural disasters, health alerts, or safety threats, the platform can send instant notifications to residents via the website and SMS.

**Barangay Hub-Help Online Directory**:

This feature helps residents find local services and businesses, such as apartments, sari-sari stores, convenience stores, tailoring shops, and hardware stores. The directory includes the location, image, and directions to these places.

**Limitations**

While the "Barangay Pabanlag Hub" aims to provide a comprehensive and user-friendly experience, certain limitations exist:

**Payment Processing**:

The platform does not support digital wallet or online payment methods for government document requests. Residents must make payments in person at the barangay hall when picking up their requested documents.

**Privacy of Business Listings**:

For the businesses and services listed in the Barangay Hub-Help Online directory, only the location, image, and directions are displayed. Private information such as contact details and owner information is not provided to protect privacy and security.

**Real-Time Chat Limitations**:

The messaging system between residents and admins does not support real-time chat functionality. Responses from barangay officials may not be immediate and depend on their availability.

**Data Security and Privacy**:

Although efforts are made to secure the platform, it is not impervious to potential cybersecurity threats. Users should exercise caution when sharing sensitive information through the platform to mitigate risks associated with data breaches and unauthorized access.

**Limited Access to Emergency Notifications**:

The effectiveness of real-time emergency notifications via SMS is dependent on the availability of residents' mobile numbers and network coverage. Residents without mobile phones or those in areas with poor network reception may not receive timely notifications.

**Platform Accessibility**:

Access to most features of the platform requires a stable internet connection. Residents without reliable internet access may face difficulties utilizing the platform's services, limiting its reach and effectiveness within the community.

### Review of Related Literature (RRL)

Our capstone project "Barangay Pabanlag Hub: Online Appointment System and News Platform for Residents of Pabanlag, Floridablanca, Pampanga" is designed to improve the way residents interact with barangay officials. This online platform allows residents to request documents, send messages, get news updates, and receive emergency notifications. This review explores studies and technologies related to the project, focusing on their benefits and challenges.

#### Online Government Document Request Systems

Online government document request systems are valued for their efficiency and convenience. They help reduce the workload for staff, minimize mistakes, and save time for both residents and officials. Digital document management systems also enhance security, ensure compliance with regulations, and make it easier to find and share documents.

**U.S. Government Publishing Office**: Benefits of Online Government Document Request Systems (https://www.gpo.gov/).

**International Journal of Public Administration in the Digital Age**: The effectiveness of digital platforms in streamlining government services (source).

#### Real-Time Emergency Notification Systems

Emergency notification systems are vital for quickly sharing information during crises. These systems, using websites and SMS, can greatly improve community preparedness and response by delivering timely and relevant information to residents.

**Federal Emergency Management Agency (FEMA)**: Real-Time Emergency Notification Systems (https://www.fema.gov/).

**International Journal of Disaster Risk Reduction**: The role of real-time notification systems in disaster management (source).

#### Digital Platforms for Local Governance

Digital platforms for local governance have been shown to improve citizen engagement and transparency. E-governance initiatives allow citizens to access services and information from their homes, leading to better communication and service delivery between local governments and residents.

**United Nations Development Programme (UNDP)**: Impact of E-Governance Initiatives

**Journal of e-Government Studies and Best Practices**: Enhancing local governance through digital platforms (source).

#### Online Messaging and Communication Tools

Online messaging tools on government websites enable direct communication between residents and officials. These tools can lead to quicker issue resolution and higher satisfaction among residents. Studies indicate that such systems improve the efficiency of handling complaints and requests.

**ResearchGate**: Efficiency of Online Messaging Systems in Municipal Websites (https://www.researchgate.net/).

**Government Information Quarterly**: The impact of digital communication tools on public service delivery (source).

#### Local Business Directories and Community Platforms

Platforms that include local business directories help support local economies by connecting residents with nearby services. These platforms promote local businesses and provide residents with easy access to essential services.

**Journal of Community Informatics**: Community Platforms and Local Business Directories

**Local Business Digital Directory Research**: Supporting local economies through digital directories.

**Challenges and Limitations**

Despite the benefits, there are challenges and limitations to digital platforms. Not all residents may have internet access or digital devices, limiting the reach of such systems. Additionally, the need for in-person payments for document requests can be a barrier to fully utilizing online systems.

**Digital Divide Council**: Challenges of the Digital Divide.

**Journal of Digital Divide Research**: Addressing barriers to digital inclusivity

#### Conclusion

This review highlights the potential of digital platforms to enhance local governance, improve service delivery, and engage communities. However, it is important to address the digital divide to ensure all residents benefit from these innovations. The "Barangay Pabanlag Hub" project can significantly contribute to these goals by leveraging technology to easy processes and improve communication between residents and barangay officials.

**Questionnaires**:

We hope this message finds you well. We are a group of students currently working on our capstone project focused on developing the “Barangay Pabanlag Hub” website. As part of our research, we would like to request your permission to conduct an interview with you regarding our project.

Here are the interview questions we have prepared:

1. Paano makakatulong ang Barangay Pabanlag Hub sa pagpapaunlad ng komunikasyon at serbisyo sa mga residente ng Pabanlag?
2. Paano mas mapapadali ang buhay ng mga residente ng Pabanlag gamit ang Barangay Pabanlag Hub?
3. Mayroon bang mga partikular na serbisyo o impormasyon na sa tingin mo ay dapat idagdag sa website?
4. Anong mga tampok sa website ang pinaniniwalaan mong magiging pinaka-kapaki-pakinabang para sa mga residente?
5. Anong mga hamon ang inaasahan mong mararanasan sa pagpapatupad ng website na ito?
6. Sa tingin mo ba magiging kapaki-pakinabang ang website na ito para sa mga residente ng Barangay Pabanlag? Bakit o bakit hindi?
7. Mayroon ka bang mga alalahanin tungkol sa seguridad ng impormasyon ng mga residente sa website? Kung meron, ano-ano ang mga ito?
8. Paano mo sa tingin mapapabuti ng website ang komunikasyon sa pagitan ng mga opisyal ng barangay at mga residente?
9. Ano ang inaasahan mong magiging reaksyon ng mga residente sa pagkakaroon ng bagong website na ito?
10. Ano ang mga pinakaimportanteng impormasyon na sa tingin mo ay dapat laging naka-post sa website?