

Design, Build and Implementation of The Church Services *Katolik Paroki Hati Santa Perawan Maria Tak Bernoda Putussibau* Web-Based

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ABSTRACT

This research analyzes and develops web-based church services for parishes Hati Santa Perawan Maria Tak Bernoda at Putussibau, using the Laravel framework and the PHP programming language. The purpose of this study is to improve the accessibility and efficiency of information and administrative services in the parish. The research methods used include observation, interviews, system interface design, and implementation evaluation. The result of this research is a parish website that provides various important information such as church profiles, mass schedules, sacrament services, and church contacts, which can be accessed by all parishioners and the general public. This website is expected to support the modernization of church services and make it easier for people to access church information and services. The study also provides recommendations for further development and integration of additional features that can enrich the functionality and benefits of the parish website.

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1. Introduction

One of the existences of the Catholic Church in the context of communion is the servant. So, if the Catholic Church neglects its duties in ministry, then there is no communion in the life of the church. In practice, the ministry in the church is still traditional, so a modernisation of the ministry is needed (Adyatomo, 2023; Pasaribu, 2023; Tawaang et al., 2023).

In the context of ministry, the Catholic church is also required to be transformative in the development of the times (Inriani, 2021; Selatang et al., 2023). Digital platforms are also a means of preaching and serving the people, which aims to provide convenience in service practices. Therefore,

the understanding of digital services must begin to be realized by the parish leaders, in this case, we know as pastors (Afandi, 2018; da Santo, 2019; Irpan et al., 2022; Sitorus & Purba, 2021).

Located in the territory of the diocese of Sintang, the parish church of the Immaculate Heart of the Virgin Mary was founded on June 10, 1939 by the missionaries of the Marian Monfort Union. Before being designated as a parish, the HSPMTB church was included in the parish ministry area of Bika Nazareth and was served by priests from the Capuchin order. Initiated by monfortan missionaries from the Netherlands, the HSPMTB church has changed pastors 3 times: the first area is on Sibau Beach, the second is in the main road area of Putussibau City, and the third (now) rebuilt to coincide with the pastoral dung and the parish secretariat (Dien, 2022). The parish church of HSPMTB has 12 regional wards and 8 stations that are the focus of ministry and have several categorical groups and communities, and in the parish of HSPMTB Putussibau has management called the Parish Pastoral Council.

Currently, all administrative and information affairs are managed and carried out within the parish secretariat, so if there are people related to administrative and information searching affairs, they will usually come to the parish secretariat (Ibu, 2022). The development of information technology is currently a new challenge to make a service innovation in the HSPMTB Putussibau parish. One of them is a web service that can provide convenience in obtaining access to information on the HSPMTB Putussibau church. Internet access that can be reached anywhere positively impacts the church, which is transformative. In this study, the design and implementation of digital services in the HSPMTB parish can positively impact the development of the HSPMTB Putussibau parish (Riko et al., 2023).

Relevant research: Dien, M. E. (2022) conducted research similar to the study on church website design, providing a concrete example of implementing the church information system. Rachmatullah et al. (2021) conducted research showing how church information systems can be implemented in Android-based platforms, providing an alternative perspective on digital solutions for churches.

This research aims to design, build, and implement web-based church services for the Parish of the Immaculate Heart of the Blessed Virgin Mary in Putussibau. By utilising digital technology, this research aims to provide easy access to information for parishioners, improve administrative efficiency, and support the modernisation of church services.

2. Materials and Methods

In the research on the design of the website of the Parish of the Immaculate Heart of the Virgin Mary, the research stage was obtained by:

Observation

The observation was carried out directly at the secretariat *paroki hati santa perawan maria tak bernoda putussibau*, and the daily service practices carried out by the parish secretariat team and data from the faithful who have interests in the parish secretariat.

Interview

The interview process by meeting with the priest/priest, the secretariat team, and the daily management of *the pastoral council paroki hati santa perawan maria tak bernoda putussibau* related to the flow or procedure of services requested by the parish and then collect the data for the needs of features in the design of the parish website.

Interface System Design

Collecting data from points 1 and 2, I designed a simple website interface system and incorporated features based on the data collected from the parish secretariat. The design uses prepared tools, such as PHP with the Laravel framework, and MySQL as a website design database.

Database Design

The database is created with MySQL as a DBMS and serves as a data store managed by the parish admin.

Literature Studies

Literature is obtained by searching for scientific journal resources online and several free e-books that contain topics about creating a church website.

Implementation and Evaluation

Conducting a testing process on the interface design that has been created, whether it finds an error system and can display features related to the needs in the *parish Hati Santa Perawan Maria Tak Bernoda* (Ikhlas et al., 2022). The results of the implementation are then evaluated related to the comfort of users while using the parish website.

Document Collection

Obtain documents from the parish secretariat that contain services in the parish according to the needs of the people who will request services in the parish (Hadisoebroto et al., 2022). One example of a document related to ministry in the parish *Hati Santa Perawan Maria tak bernoda Putussibau* is a sacrament service registration form (*Marriage, Charisma, Baptist, and others*).

Research Tools

In this research, the device used is a Hewlett Packard laptop as hardware and as software using the PHP programming language with the Laravel and Mysql frameworks as DBMS specifications will be explained as follows:

1. The hardware used in the study is as follows:

Table 1 Hardware specifications

Hardware	Specifications
Computer Type	HP 14 bw0096tu

RAM	4.00 GB
SSD	256 GB
Processor	AMD A4
Graphic	Radeon R3
Camera	HP TrueVision Cam
Screen Size	14 inch

2. The software used to support this research is:

Table 2 Software specifications

Software	Spesifikasi
OS	Windows 10 64bit
Editor	VS Code
DBMS	MySql
Framework	Laravel
Language	PHP
Library	Composer
Others	XAMPP

System analysis

To create a system design display, namely "Use Case Diagram" using draw.io. here is the use case diagram display (Sigiros, 2020):

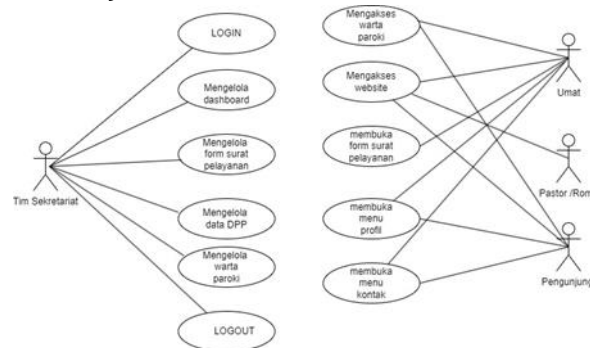


Figure 1 Use Case Diagram

- The Secretariat team serves as an admin and fully manages the data that will be displayed on the parish website
- Visitors are people who have not yet fully joined the parish of HSPMTB Putussibau and can access all menus on the website of the HSPMTB Putussibau parish
- Umat are members of the HSPMTB parish who have been registered in the parish secretariat and can access all display menus
- The priest is a priest who works in the HSPMTB Putussibau parish and monitors the appearance of the parish website and can access all menus on the HSPMTB Putussibau parish website.

3. Result and Discussion

The following is a display of the results and discussion about the parish website Hati Santa Perawan Maria Tak Bernoda Putussibau:



Figure 2 Home page (home view)

In figure 2., (Home Page) is the initial view of the HSPMTB Putussibau parish website which contains a slide of church photos, the HSPMTB Putussibau parish logo, and a menu display (Adyatomo, 2023). On the initial display of the main page, there are several menus, while the menus displayed on the main page are:

- Home as the initial display, which if we click on it, will return to the main page,
- Profiles with submenus (History, Priests, Parish Pastoral Council, Ward and region, and Youth)
- The service contains a download form consisting of (Baptism, Chrismation, Marriage, First Communion, and death certificate)
- Information about parish news or announcements in the format of the parish secretariat.
- Contacts contain emails, locations, and Whatsapp contacts of the parish secretariat



Figure 3 Schedule of Eucharist or Mass

In **figure 3**, on the main page, if we scroll down, a eucharistic schedule will appear that can be seen by non-lay visitors and HSPMTB people who want to know the mass schedule.



Figure 4 Profile Menu History Submenu

In Figure 4, Profile Menu with History submenu, the user will get a brief history of the parish church "The Heart of the Immaculate Virgin Mary of Putussibau".

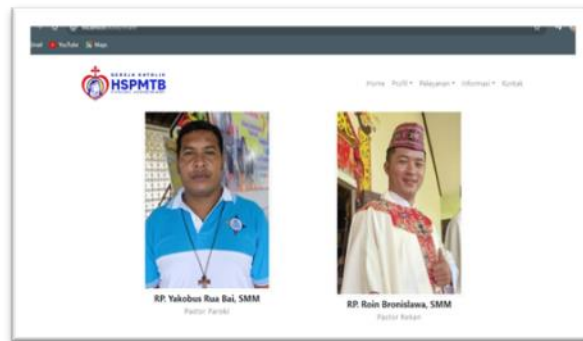


Figure 5 Profil Menu Submenu for Imam

In Figure 5, the Profile Menu with the submenu of priests displays the profiles of priests/priests/priests who serve in the parish "Hati Santa Perawan Maria Tak Bernoda Putussibau".



Figure 6 Profile Menu Submenu of the Parish Pastoral Council

In Figure 6, the Profile Menu with the Parish Pastoral Council submenu contains the management structure of the parish pastoral council for the 2021-2024 period. Users can access the names of the DPP administrators by typing the name of the administrator, then the results will display the names of the DPP administrators.



Figure 7 Profile Menu Environment and region Submenu

In **figure 7.**, the parishioners can access to find out the number of wards, stations and communities under the auspices of the HSPMTB Putussibau parish and can get information about the number of parishes and the number of heads of families (KK) in the HSPMTB Putussibau parish.



Figure 8 One example of a submenu of ministry (the Sacrament of Baptism)

In figure 8, related to the ministry practices in the HSPMTB Putussibau parish, the Ministry Menu contains the submenu of baptism, chrisma, first communion, and death certificate. This page contains an online form that contains services needed by HSPMTB Putussibau parishioners and non-native parishioners in the HSPMTB Putussibau parish. The page also displays the applicable terms and conditions that have been set by the HSPMTB Putussibau parish secretariat.



Figure 9 Contact Menu Display

In figure 9, displays the contact information that can be contacted, as well as the address listed if you want to find the address of the HSPMTB Putussibau church.

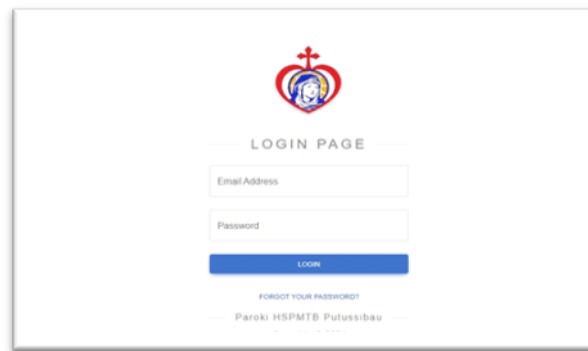


Figure 10 Admin Login Page

In Figure 10, the login page is an admin page used to manage data related to information presented in the parish website menu. The login page directs the admin to the dashboard page of the HSPMTB Putussibau parish.

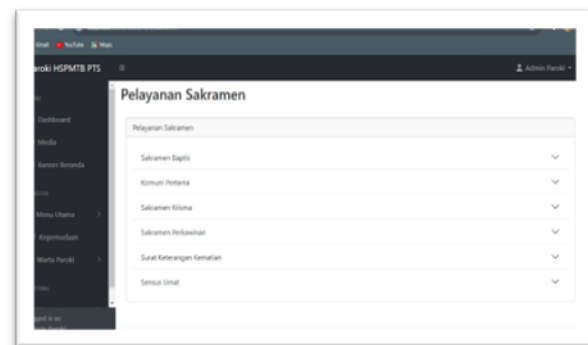


Figure 11 Service Admin Page Dashboard

In figure 11, is an example of the display of the admin page on the sacrament service. this admin view serves to add data from the HSPMTB parish, which will be displayed on the menu page of the HSPMTB Putussibau parish website.

4. Conclusion

Quoting from a journal about efficiency and accessibility, the availability of data obtained from the Catholic Church of HSPMTB Putussibau parish is hopefully able to provide information that can be published on the website. The menu on the website that is displayed, such as the profile of the person, is able to bring the people to attend and get to know the origin of the church and build concern for the environment and the community under the auspices of the HSPMTB Putussibau church. The features offered are probably able to meet the needs of the people, especially sacrament services, where previously the people had to come to the parish to ask for a form, now it can be downloaded through the website. The availability of contact and information also adds to the convenience of the people to be able to communicate directly with the HSPMTB Putussibau parish church.

The design of the HSPMTB parish website is still far from perfect because it is still relatively new and requires very complete data to complete the information provided. If we see that there are still many features that we want to display, but that must be discussed with the priests and the parish Pastoral Council to get approval for displaying the church data. As we know, not all HSPMTB church data can be displayed on the website because it is related to the church's security from irresponsible individuals.

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