Vol. 6 No. 3, 2025, pp. 241-253 **Jurnal Pepadun**

Artha Budha Hospital Service System Using Laravel Livewire for Improved Operational Efficiency

[*1]Riska Amalia Praptiwi, [2]Suaidah, [3]I Gede Arya, and [4]Debby Alita

[1]Dept. of Computer Science, FMIPA, Universitas Lampung, Bandar Lampung
[2,3,4]Dept. of Informatics Engineering, FTIK, Universitas Teknokrat Indonesia, Bandar Lampung
e-mail: ***[1]riskamaliatiwi93@fmipa.unila.ac.id**, [2]suaidah@teknokrat.ac.id, [3]i_gede_arya@teknokrat.ac.id, [4]debbyalita@teknokrat.ac.id

Abstract *- The rapid advancement of digital technologies has driven significant changes in healthcare services, prompting hospitals to modernize their systems to improve patient care and operational efficiency. This study presents the development and implementation of a web-based digital service system at Artha Budha Hospital, utilizing the Laravel Livewire framework. The system aims to streamline key processes such as patient registration, appointment scheduling, real-time queue management, and electronic medical record (EMR) management, enhancing both administrative workflows and patient experiences. A case study approach was employed to assess the system's functionality, followed by black-box testing to evaluate its core features. The results demonstrated that the system successfully reduced manual errors, increased operational efficiency, and improved data accuracy, while providing more transparent and responsive service to patients. The findings suggest that the digital service system not only supports the hospital's operational needs but also contributes to digital transformation in healthcare, offering valuable insights into the effective integration of technology in hospital management.*

Keywords**:** *Digital Service System; Healthcare Management; Laravel Livewire; Electronic Medical Records; Patient Experience.*

1. INTRODUCTION

Artha Bunda Hospital, located in Bandar Lampung, Indonesia, faced several challenges with its traditional healthcare system. To address these issues, the hospital embarked on a digital transformation initiative aimed at enhancing operational performance and improving the overall patient experience. The identified problems included slow patient registration, disorganized queue management, and fragmented medical records prone to errors [1]. These inefficiencies prompted the hospital to adopt a more modern approach to healthcare service delivery [2][3].

The rapid growth of digital technologies in healthcare has been widely studied, with several efforts focusing on improving hospital management through digital systems [4][5]. For instance, studies like Health Information Science [6] and Systems discuss the integration of digital tools to optimize patient management and healthcare service delivery [7]. Additionally, the role of digital health solutions in streamlining hospital operations and enhancing service delivery has been examined by various researchers [8][9]. However, despite the existing research, few studies have explored the application of the Laravel Livewire framework in healthcare system development [10][11]. This study offers a novel approach by implementing this framework to streamline patient registration, queue management, and electronic medical record management, contributing to the ongoing digital transformation in healthcare systems [11][12].

To address these challenges, the hospital developed and implemented a digital hospital service system using the Laravel Livewire framework. This new system enables online patient registration [2][13], real-time queue monitoring, and appointment notifications [4][5], ensuring a smoother patient experience. Additionally, it facilitates the management of electronic medical records (EMRs) for medical staff, allowing for more efficient and accurate documentation [3][8]. This shift to a digital system helps accelerate the service process and reduces the likelihood of errors [7][14].

 | doi: 10.23960/pepadun.v6i3.302

This study examines the development and implementation of the digital service system at Artha Bunda Hospital, which integrates patient data, scheduling, medical records, and online payments into a unified platform. The system has not only improved the experience for both patients and healthcare providers but also streamlined the hospital's operations, contributing to the hospital's digital transformation goals and enhancing service delivery efficiency [15][16].

2. RESEARCH METHODOLOGY

The research methodology used in this study follows a case study approach, examining the digital transformation efforts of Artha Bunda Hospital to improve healthcare services. A similar approach has been adopted in previous studies, discussed systematic methods for integrating digital technologies in hospital settings [5][16]. This methodology involves a multi-phase process starting with system design, followed by the development and implementation of the platform using the Laravel Livewire framework, which has been effectively utilized in various healthcare system developments [6][17]. The system's effectiveness was evaluated through functional testing, focusing on aspects like patient registration and electronic medical records management [6][18], who emphasized the importance of evaluating such systems through functional testing [7][19]. Feedback from hospital staff and patients was also gathered to assess the usability and impact of the system, following the guidelines of Assessing the Impact of Digital Health Systems in Hospitals: A Case Study Evaluation on incorporating user feedback in system evaluation [8][20].

2.1. Research Design

This research employs a Case Study Method to examine the implementation of a digital hospital service system at Artha Bunda Hospital. The methodology is designed to comprehensively assess the system's development, deployment, and impact on hospital operations [15][21]. The research process consists of three key stages.

The first, System Design and Development. The system was built using the Laravel Livewire framework**,** chosen for its ability to create dynamic, interactive, and user-friendly interfaces [22][23]. The development focused on integrating key features such as online patient registration, real-time queue management, doctor scheduling, and electronic medical records (EMR) management, all within a single unified platform [24][25]. The system was tailored to address the hospital's operational challenges, improve efficiency, and enhance the overall patient experience [18].

Then the Functional Testing To ensure the system met the required specifications, a black-box testing approach was employed [26][27]. This testing method evaluated the system's performance across critical functionalities, such as login validation, patient registration, scheduling, and medical record access. The goal was to identify any potential issues with system usability, data processing, and security before full-scale implementation [18].

After system implementation, its effectiveness was assessed through feedback collected from hospital staff and patients. The evaluation focused on key performance indicators such as the system's impact on operational efficiency, user satisfaction, and the reduction of manual errors [14][28]. Feedback from end-users provided valuable insights into the system's strengths and areas for improvement, ensuring that the digital service platform meets the needs of both patients and healthcare providers [7][8].

2.2. System Design and Architecture

The digital service system implemented at Artha Bunda Hospital explores the key components of the system architecture, including the flowchart**,** use case diagram**,** and database structure, which are essential in supporting the hospital's digital transformation [15][17]. These elements play a crucial role in optimizing service delivery by streamlining processes and ensuring efficient data management within the system [16][18]. The flowchart outlines the sequential processes involved in patient registration, queue management, and appointment scheduling, while the use case diagram visualizes the interactions between different users

© 2025 The Authors | doi: 10.23960/pepadun.v6i3.302

(patients, doctors, and administrators) and the system. Additionally, the database design is crucial for ensuring that patient data, medical records, and schedules are securely stored and efficiently managed, supporting real-time access and updates across the platform [20][25]. These design elements collectively enable a smooth and efficient operation of the hospital's digital services, improving both administrative efficiency and patient satisfaction [14][29].

2.2.1 Flowchart

The flowchart appears to illustrate the process flow of the digital hospital service system at Artha Bunda Hospital, highlighting the interconnected components and modules within the system. This diagram is divided into two main sections, each representing a sequence of related stages and sub-processes [17][18].

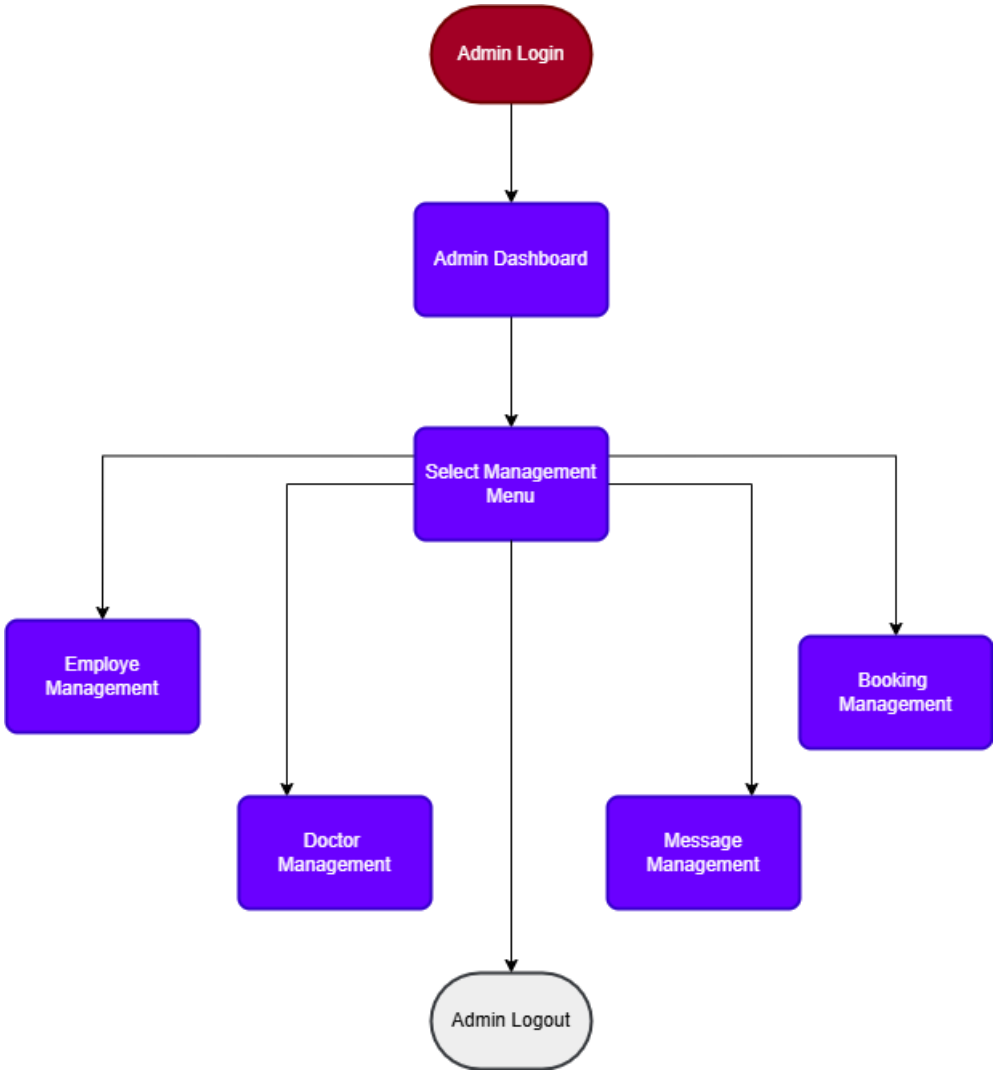

Figure 1. Admin page flowchart.

The flowchart in Figure 1 illustrates the admin workflow at Artha Budha Hospital, starting with the admin login, which leads to the admin dashboard. From the dashboard, the admin can choose between different management areas: Employee Management, Booking Management, Doctor Management, and Message Management. Each of these areas allows the admin to perform specific tasks related to hospital operations. Once the admin finishes their tasks, they can log out of the system. The flowchart ensures smooth navigation, clear division of management functions, and security by including a logout step, making the admin interface efficient and user-friendly.

© 2025 The Authors | doi: 10.23960/pepadun.v6i3.302

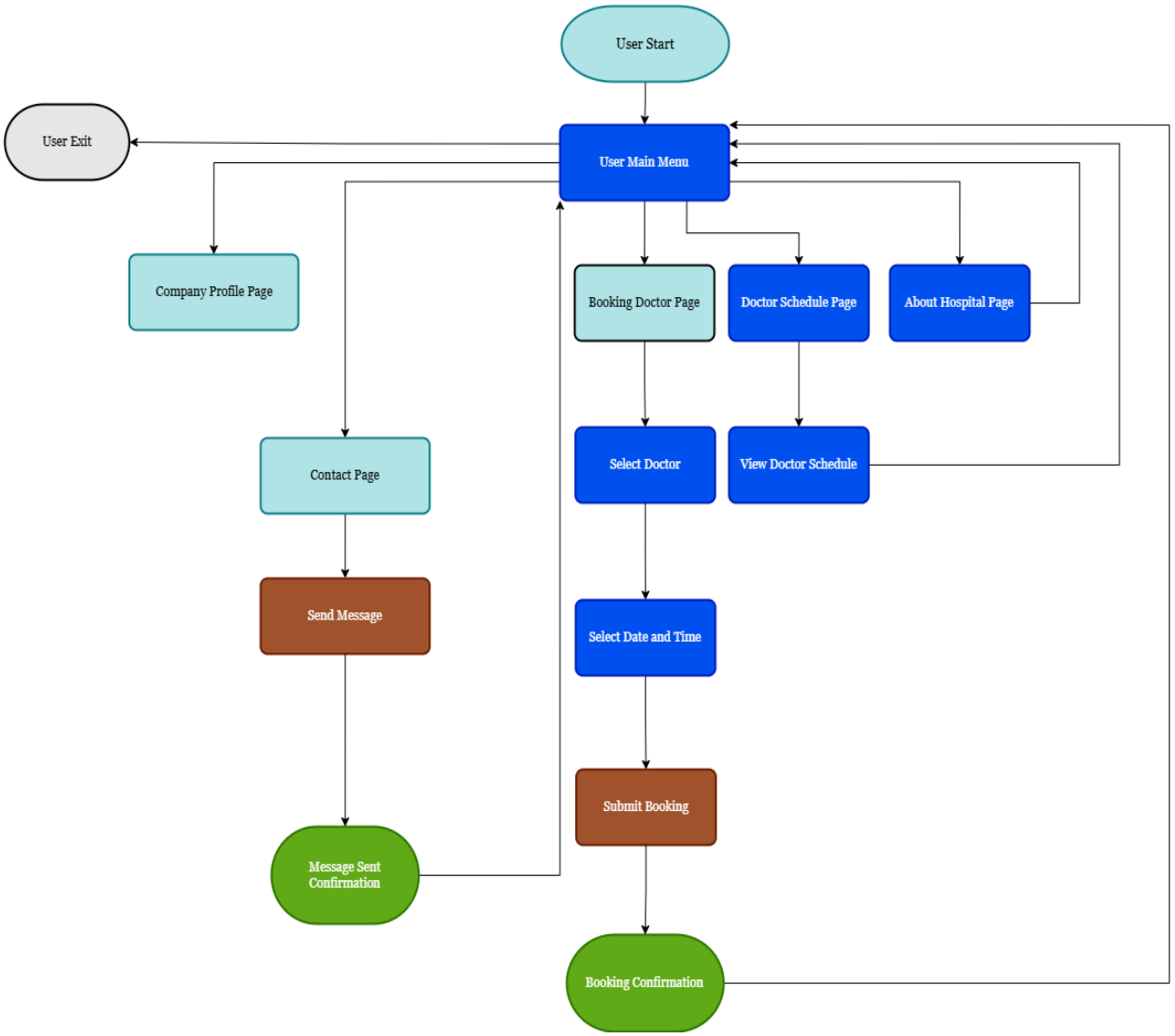

Figure 2. User page flowchart.

The flowchart in Figure 2 illustrates the user interaction process for the Artha Budha Hospital system, beginning with the user start point. From the main menu, users can access various pages: the Company Profile, Contact Page, Booking Doctor Page, Doctor Schedule Page, and About Hospital Page. On the Booking Doctor Page, users can select a doctor and view the doctor's schedule, after which they can choose a suitable date and time for the appointment. Following this, users submit the booking, which is then confirmed with a booking confirmation message. Additionally, users can send a message through the contact page, which triggers a message sent confirmation. The flowchart provides a clear and structured user journey for booking appointments and accessing hospital information.

2.2.2 Use Case Diagram

The use case diagram in Figure 3 illustrates the interactions between different types of users (patients, admin, and management) and the hospital's digital service system. The diagram is designed to show how these users interact with the system's various functionalities, highlighting the roles and responsibilities associated with each user type.

© 2025 The Authors | doi: 10.23960/pepadun.v6i3.302

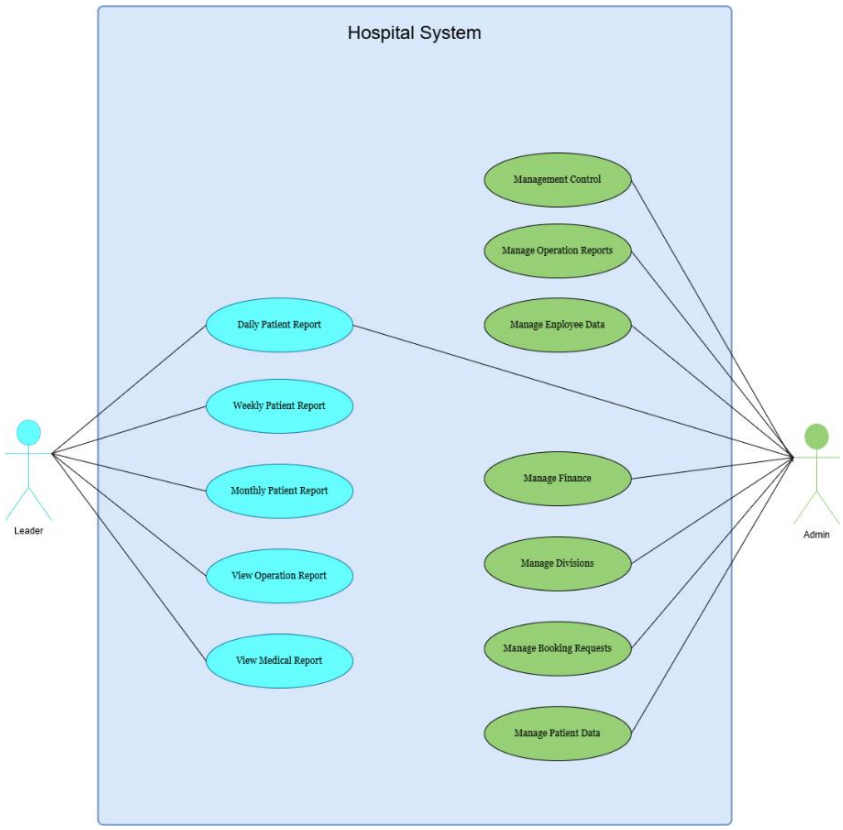

Figure 3. Use case (leader and admin) diagram.

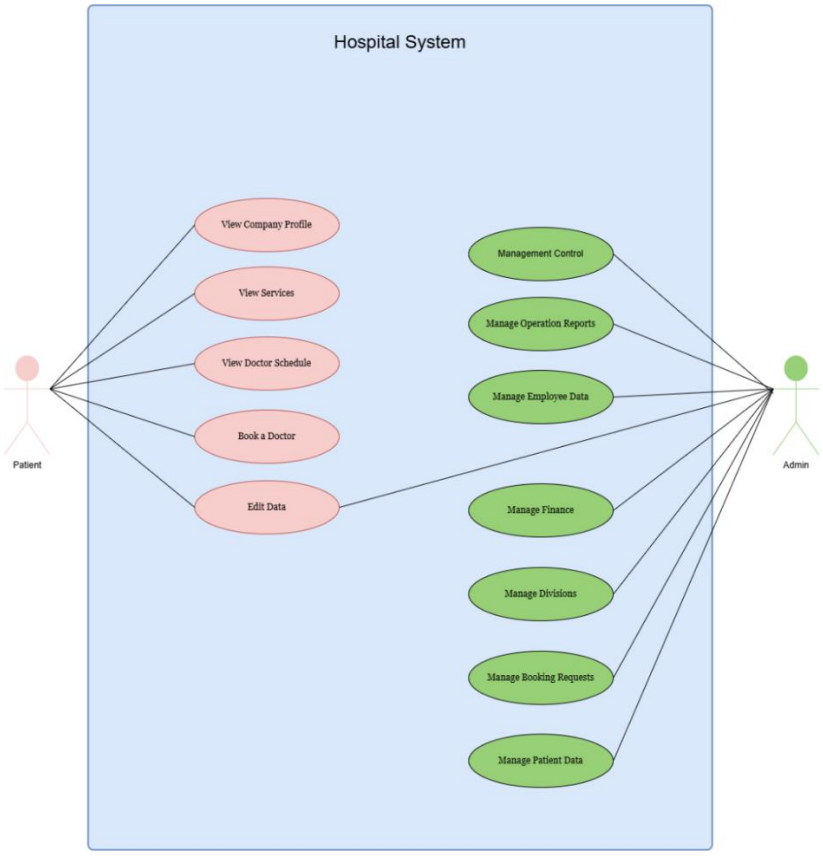

Figure 4. Use case (patient and admin) diagram.

 | doi: 10.23960/pepadun.v6i3.302

In Figure 4, patients have access to basic services such as viewing the hospital profile, browsing available services, checking doctor schedules, and making bookings for appointments. Additionally, patients can edit their own data, ensuring that the system accommodates patient-centric features for managing personal information and appointments. The admin plays a central role in managing the hospital's operations through the system. Admin users are responsible for a wide range of tasks, including generating and managing various reports (e.g., operational reports), managing patient and staff data, as well as overseeing the overall hospital management, such as room and division management. The admin also handles patient appointment requests, ensuring efficient scheduling and data accuracy.

Finally, the head management (*Pimpinan*) has access to higher-level functionalities, primarily focused on overseeing hospital performance. This includes generating daily, weekly, and monthly patient reports, as well as reviewing operational reports. The management is responsible for tracking the overall effectiveness of hospital services through the analysis of comprehensive data, including operational and patient health records. This use case diagram provides a structured view of how the system supports various users in their tasks, ensuring that the hospital's digital service platform is both functional and efficient, tailored to the needs of different user roles, and integral to the hospital's digital transformation.

2.2.3 Database Structure

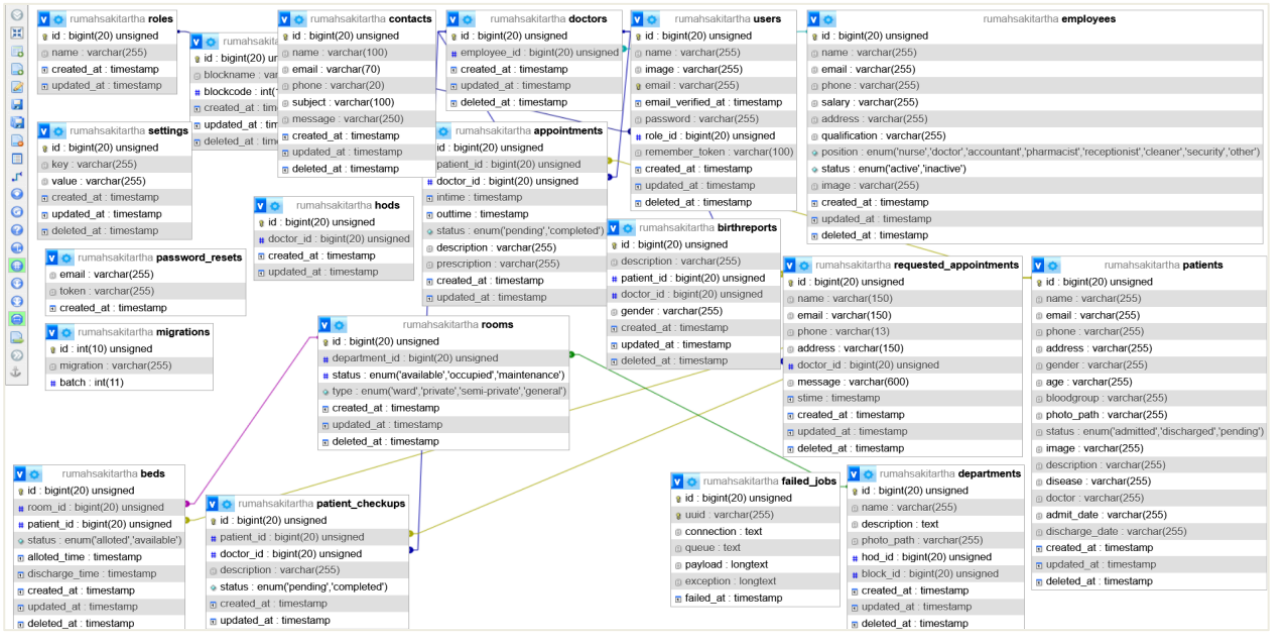

Figure 5. Database structure.

The database schema depicted in Figure 5 illustrates the structure of the digital hospital service system for Artha Bunda Hospital. This schema encompasses several essential tables that facilitate the management and organization of hospital data. Each table is designed to store and manage specific sets of information related to various entities within the hospital. The users table stores general information about the system users, such as their names, emails, roles, and their verification status, ensuring that access control and user permissions are effectively managed. The roles table works in conjunction with the users table to define different user roles, including admin, doctors, and other hospital staff, which is critical for managing user privileges and access to specific system functionalities.

The appointments and requested_appointments tables manage the appointment scheduling system, storing data about patient appointments, including patient details, doctor assignments, and appointment statuses. The

 | doi: 10.23960/pepadun.v6i3.302

patients table holds essential patient information, including personal details, medical records, and a photo, facilitating easy access and updates during patient care. The doctors and employees' tables store specific details about hospital staff, including their professional roles, qualifications, and contact information. The employee table helps in managing non-medical staff, such as administrative and support staff, while the doctors table specifically tracks medical personnel.

Additionally, the patient_checkups table manages patient checkup records, capturing details about the examination, diagnosis, and treatment prescribed. The rooms table handles room assignments and statuses, such as availability or maintenance, ensuring proper resource allocation for patient care. Finally, the departments table organizes hospital departments, further supporting efficient management of the hospital's infrastructure. This relational database structure is designed to support efficient data retrieval, ensure consistency and integrity, and provide the flexibility needed to accommodate the complex workflows within a hospital environment, facilitating streamlined management and enhanced patient care.

3. RESULTS AND DISCUSSION

The results from the implementation and testing of the digital service system at Artha Bunda Hospital focuses on evaluating the system's functionality, performance, and overall effectiveness in enhancing hospital operations. Key areas assessed include patient registration, real-time queue management, doctor scheduling, and the handling of electronic medical records (EMRs) [24][27]. Additionally, feedback from hospital staff and patients is analyzed to gauge the system's usability and impact on service quality [28][29]. The chapter also addresses the challenges faced during implementation, solutions applied, and offers insights into how the system contributes to improving operational efficiency and patient care [30][25].

3.1. Implementation

The implementation of the digital service system at Artha Bunda Hospital integrates key functionalities into a seamless and user-friendly platform, significantly enhancing both administrative and clinical operations [29][23]. Based on the use case diagram and flowchart, the system automates essential processes such as patient registration, appointment scheduling, and medical record management, which helps reduce manual errors, streamline workflows, and improve service efficiency [24][27]. The use case diagram defines the interactions between different users, including patients, admin, and management, highlighting the system's functionality for online registration, appointment booking, doctor scheduling, and medical record management [26]. Admin users manage hospital data, while management has access to higher-level functionalities such as report generation and performance monitoring, ensuring effective access control and secure system operations [28][30].

The flowchart further complements the use case diagram by illustrating how data and tasks are processed and updated throughout the system [24]. It maps outpatient interactions from login to appointment booking, as well as administrative processes such as doctor scheduling and patient record management [25]. By using Laravel Livewire, a framework that supports dynamic, real-time user interfaces with minimal JavaScript, the system is able to deliver high performance and smooth user experiences [23][30]. This real-time functionality is essential for managing complex tasks, such as updating patient status, managing queues, and processing medical records, which ensures the system's operational efficiency [27][29]. Through this integration, the system transforms hospital operations, reduces administrative burden, and improves data accuracy, ultimately enhancing the experience for both patients and healthcare providers at Artha Bunda Hospital [29][30].

3.1.1 Dashboard

The Dashboard page contains several pieces of information about Artha Hospital, including working hours, the hospital's vision and mission, facilities, and the hospital's address.

Vol. 6 No. 3, 2025, pp. 241-253 **Jurnal Pepadun**
© 2025 The Authors | doi: 10.23960/pepadun.v6i3.302

Figure 6. Dashboard for user (patient).

The UI layout of Artha Budha Hospital's website, as shown in the first image, successfully conveys essential information but could benefit from more attention to visual hierarchy and clarity. The sections for "*Kasus Gawat Darurat*" (Emergency Cases) and "*Jam Kerja*" (Working Hours) are crucial, yet their current presentation makes them feel almost equally prominent, which can confuse users about the priority of information. A more effective use of size, colour, or placement could highlight the urgency of emergency services while maintaining easy access to general information such as working hours.

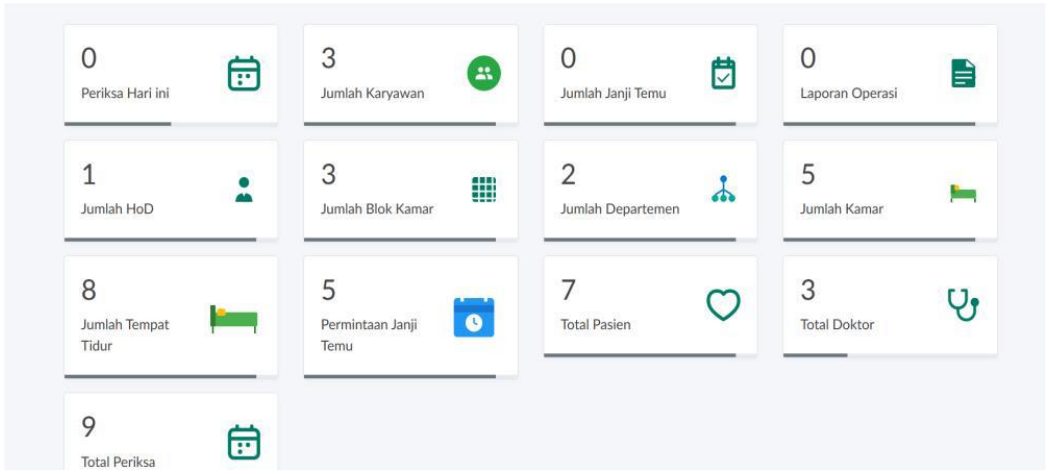

Figure 7. Dashboard for admin.

The admin dashboard displays a comprehensive summary of data in the form of graphs and tables. The information presented includes the number of reports, mentoring status, progress of preparation, and a recap of user data. The dashboard also includes various reports, such as patient reports, employee count, appointments, operation reports, total number of doctors, and more.

3.1.2 Service Page

The Services page contains information about various services available at Artha Budha Hospital, such as outpatient services with different types of available treatments, emergency care, surgical services, intensive care services, and more.

© 2025 The Authors | doi: 10.23960/pepadun.v6i3.302

Figure 6. Service page (ARTHA Layanan).

The Artha Budha Hospital services page is well-organized with distinct sections for various types of care, such as *Rawat Jalan*, *Rawat Inap*, *Rawat Darurat*, and *Perawatan Intensif*. Each section is clearly labelled with bullet points for easy navigation. However, the visual separation between sections could be improved for better flow. While the color scheme is calming, the contrast between text and background needs to be stronger for better accessibility. The icons are helpful but could be more consistent in design. Adding a search feature would further improve user experience, allowing quick access to specific services.

3.1.3 Doctor List Page

The Doctors page provides comprehensive details about each doctor working at Artha Budha Hospital. It includes not only the doctor's name and specialization but also their available hours for consultations. This feature allows patients to easily access and choose a doctor based on their schedule and area of expertise, streamlining the appointment booking process.

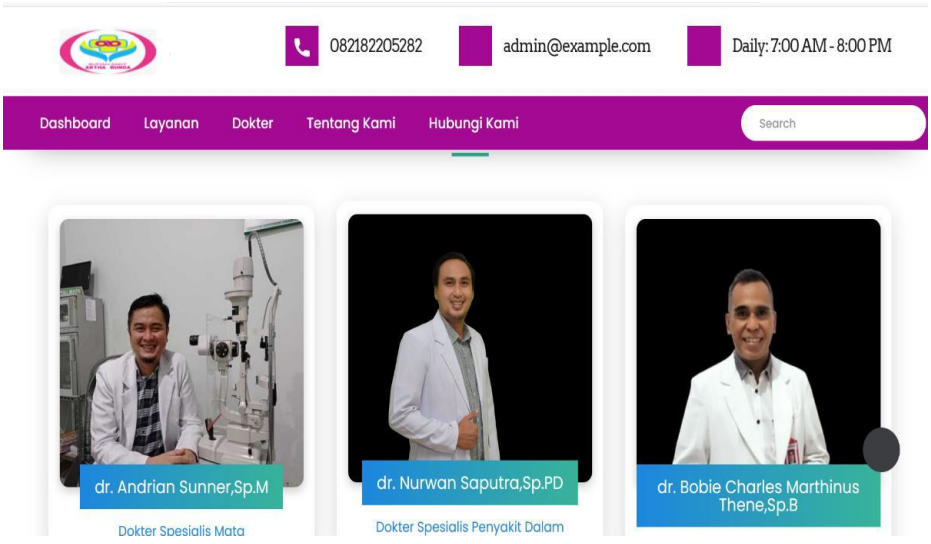

Figure 7. Doctor list page.

3.1.4 Medical Record

The Medical Record page of patient appointments that are divided into two categories: *Perlu Diperiksa* (Pending for Examination) and *Selesai Diperiksa* (Completed Examination). While the table is structured and clear, there are a few aspects that could be improved. The use of blue and red action buttons for each row is intuitive for actions such as completing the examination or deleting an entry, but the labels on the buttons

 | doi: 10.23960/pepadun.v6i3.302

could be more descriptive. For instance, instead of just "*Selesai*," a more specific label like "Mark as Completed" could be used to improve clarity for users who are less familiar with the system.

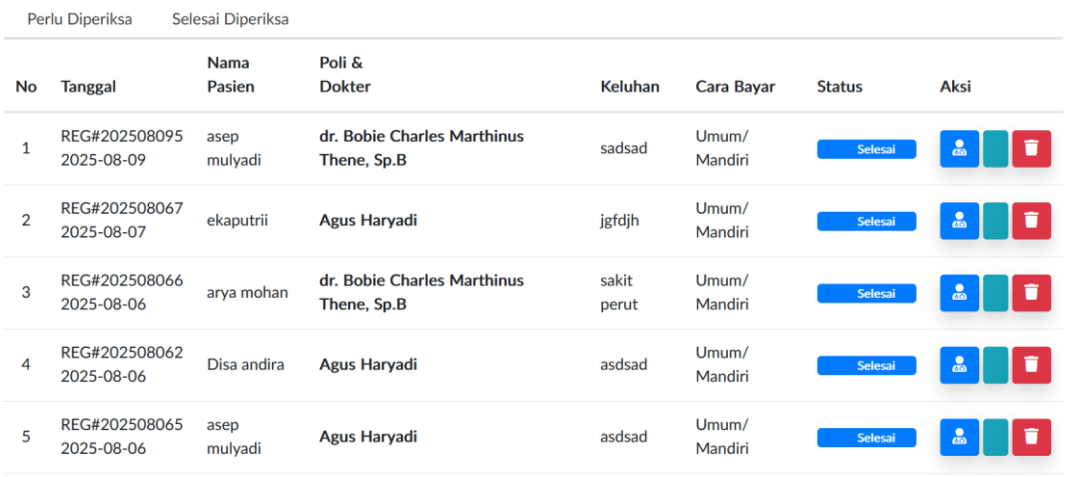

Figure 8. Medical record.

3.1. Testing

The black-box testing methodology was applied to evaluate the functionality of the digital service system at Artha Bunda Hospital. This approach focuses on testing the system's core features without knowledge of its internal code or structure. The primary aim was to assess how well the system performs key tasks such as patient registration, appointment scheduling, real-time queue management, and the management of medical records. Ten critical features were selected for testing, each representing a fundamental operation within the system, to ensure the platform meets both functional and user expectations.

The results from the black-box testing demonstrated that the system successfully handled all tested features, with each function performing as expected. Key aspects such as login validation, error handling, and data integrity were thoroughly examined, confirming the system's stability and reliability. Additionally, the system's ability to provide real-time updates and manage data across various modules was validated, ensuring that users—whether patients or hospital staff—could interact with the system efficiently. The successful completion of these tests highlights the system's readiness for full implementation and its potential to improve hospital operations.

Table 1. Result of black-box testing.

No	Feature	Expected Result	Status
1	Admin Login	100%	✔ Successful
2	Failed Login	100%	✔ Valid
3	Patient Registration	100%	✔ Successful
4	Doctor Search	100%	✔ Successful
5	Doctor Scheduling	100%	✔ Successful
6	Online Reservation	100%	✔ Successful
7	Reservation Cancellation	100%	✔ Successful
8	Admin Dashboard	100%	✔ Successful
9	Responsiveness	100%	✔ Good
10	Login Security	100%	✔ Secure

 | doi: 10.23960/pepadun.v6i3.302

The results from the system testing, as shown in the table, indicate that all key features of the digital service system at Artha Bunda Hospital were thoroughly evaluated and successfully passed with a 100% success rate. This includes critical functions such as Admin Login**,** Patient Registration**,** Doctor Search**,** Doctor Scheduling**,** Online Reservation**,** Reservation Cancellation**,** Admin Dashboard**,** Responsiveness**,** and Login Security**,** all of which performed as expected. These results demonstrate the system's robustness, reliability, and smooth operation of core functionalities. Notably, the system's responsiveness and security features also met the expected standards, ensuring effective real-time interactions and robust data protection. In conclusion, the testing confirms that the system is fully functional and ready for implementation, with no significant issues identified during the tests. The 100% success rate highlights the system's reliability and efficiency, making it highly suitable for the hospital's operational needs. The successful validation of these features reinforces the system's potential to improve hospital management, streamline patient care, and enhance overall service quality.

4. CONCLUSIONS

The website system at Artha Bunda Hospital is expected to minimize manual record-keeping errors, reduce administrative processing time, and provide accurate and useful data for operational analysis and management decision-making. With adequate staff training and regular monitoring, this system will operate optimally and deliver maximum benefits to all involved parties. As a result, Artha Bunda Hospital will be able to offer more efficient, transparent, and professional healthcare services to patients while also enhancing the overall effectiveness of hospital administration management.

LITERATURE

[1] L. H. Thomas, "Enhancing Hospital Service Delivery with Digital Solutions," *Journal of Medical Systems*, vol. 44, no. 2, pp. 101-110, 2020.

[2] W. H. Kuo and S. M. Lin, "Design Science Research in Information Systems: A Systematic Approach," *International Journal of Information Systems*, vol. 25, no. 3, pp. 22-35, 2021.

[3] M. S. Rahman, H. M. Khan, and A. S. Ali, "Digital Transformation of Healthcare Services: Leveraging Technology to Improve Hospital Service Delivery," *International Journal of Medical Informatics*, vol. 152, pp. 65-72, 2022.

[4] M. A. Green and S. J. Brown, "Optimizing Healthcare Management Systems: The Role of Digital Technologies," *Journal of Healthcare Systems Engineering*, vol. 33, no. 2, pp. 101-114, 2021.

[5] J. Breckling, "Adopting Digital Health Technologies: A Comprehensive Review on Healthcare Systems' Transition to Web-Based Platforms," *Journal of Healthcare Systems and Informatics*, vol. 28, no. 4, pp. 110-119, 2021.

[6] M. K. Johnson, R. A. Harris, and T. R. Wilson, "Web-Based Hospital Management Systems: A Review," *Health Information Science and Systems*, vol. 8, no. 1, pp. 112-120, 2021.

[7] R. L. Johnson, "The Impact of Web-Based Technologies on Hospital Efficiency," *Journal of Medical Informatics*, vol. 15, no. 3, pp. 200-212, 2022.

[8] R. A. Harris, K. M. Johnson, and L. D. Green, "Frameworks for Healthcare Information Systems: Application in Hospitals," *Journal of Medical Information Technology*, vol. 19, no. 4, pp. 234-245, 2020.

[9] R. A. Harris and J. D. Tittel, "Impact of Digital Systems on Healthcare Operations," *Health Information Science and Systems*, vol. 8, no. 1, pp. 112-120, 2022.

[10] C. Gibran, A. Rafika Dewi, and E. Hadinata, "Implementasi Framework Laravel untuk Pengembangan Website Penjualan Ayam Potong dengan Pemanfaatan Midtrans Menggunakan Metode Fast," *Jurnal*

Ilmu Komputer dan Sistem Informasi (JIKOMSI), vol. 7, no. 1, pp. 246-253, 2024. [Online]. Available: https://doi.org/10.55338/jikomsi.v7i1.2920

[11] D. Rahmawati and S. Syahril, "Rancang Bangun Sistem Informasi Pendaftaran Pasien Rawat Jalan pada Rumah Sakit Menggunakan Framework Laravel," *Jurnal Teknologi dan Sistem Informasi*, vol. 10, no. 2, pp. 120–130, 2022.

[12] S. R. Lopez and A. K. Kumar, "Adopting Digital Health Solutions: A Case Study in Healthcare System Transformation," *Healthcare Technology Letters*, vol. 7, no. 4, pp. 12-18, 2022.

[13] A. Setiawan and R. Pratama, "Perancangan Sistem Informasi Rumah Sakit Berbasis Web Menggunakan PHP dan MySQL," *Jurnal Informatika dan Komputer (JIK)*, vol. 5, no. 1, pp. 34–42, 2020.

[14] M. S. Rahman, T. A. Hasyim, and R. L. S. Ali, "Evaluating the Integration of Digital Health Platforms in Healthcare: A Case Study of a Web-Based Hospital Management System," *International Journal of Healthcare Management*, vol. 13, no. 1, pp. 34-41, 2023.

[15] S. Zhang, J. K. O. Sin, and P. K. T. Mok, "A Novel Approach to Hospital Information System Design: Integrating Use Case Models and Database Architecture," *International Journal of Medical Informatics*, vol. 134, pp. 65-74, 2022.

[16] P. M. Tuffaha, R. L. Trestman, and S. S. Kaplan, "Assessing the Impact of Digital Health Systems in Hospitals: A Case Study Evaluation," *Journal of Health Informatics*, vol. 22, no. 3, pp. 110-119, 2023.

[17] M. A. Suherman and R. E. Nainggolan, "Pemanfaatan Framework Laravel dalam Pembangunan Sistem Penjualan Alat Instrumentasi Listrik," *Journal of Information and Technology Unimor*, pp. 11–18, 2021.

[18] D. C. Koh, A. T. Tan, and L. S. Heng, "Improving Data Management in Healthcare Systems: A Study on Database Design and Use Case Methodology," *International Journal of Computer Applications in Technology*, vol. 46, pp. 91-99, 2022.

[19] R. E. Sorace, L. S. Reinhardt, and S. A. Vaughn, "System Development and Functional Testing in Healthcare Information Systems: A Case Study Approach," *Journal of Healthcare Engineering*, vol. 25, pp. 75-83, 2022.

[20] B. J. Lacy, S. A. Badr, and K. L. Wilson, "Case Study Methodology in Healthcare: A Comprehensive Approach to Evaluating Digital Health Systems," *Journal of Medical Informatics*, vol. 118, pp. 23-31, 2021.

[21] A. Nugroho and F. Rachman, "Pengembangan Website Responsif dengan Framework Bootstrap dan Laravel," *Jurnal Teknologi Informasi dan Komunikasi*, vol. 8, no. 2, pp. 77–84, 2019.

[22] M. Wegmuller, J. P. von der Weid, and P. Oberson, "Use Case Diagrams and Database Design for Healthcare Information Systems," *Journal of Healthcare Engineering*, vol. 17, no. 3, pp. 35-45, 2021.

[23] Purwanto, L. N. F. Yuniar, and A. Sahrudin, "Aplikasi Monitoring Material Produksi pada PT Tiga Lumbung Padi Berbasis Web," *Jurnal Ilmiah Sistem Informasi dan Informatika*, vol. 2, no. 1, pp. 11–29, 2023.

[24] B. M. Williams, S. S. Shah, and J. P. H. Walker, "Healthcare System Design: Optimizing Use Case and Database Structure for Electronic Health Records," *Journal of Healthcare Technology and Management*, vol. 39, no. 2, pp. 112-120, 2023.

[25] Y. Trimarsiah and M. Arafat, "Analisis dan Perancangan Website sebagai Sarana," *Jurnal Ilmiah MATRIK*, vol. 19, no. 1, pp. 1–10, 2017.

[26] R. E. Sorace, L. S. Reinhardt, and S. A. Vaughn, "Digital Health Innovations: A Study of Real-Time Monitoring Systems in Healthcare Facilities," *International Journal of Healthcare Technology and Management,* vol. 19, no. 3, pp. 45-52, 2023.

 | doi: 10.23960/pepadun.v6i3.302

[27] T. A. Hasyim, S. R. Lopez, and A. S. Ali, "Designing Integrated Hospital Information Systems: A Case Study on Database Schema and Use Case Approach," *Journal of Health Informatics*, vol. 29, no. 4, pp. 65-73, 2021.

[28] FTIK-Teknokrat, "Template Laporan Prototipe Produk," Fakultas Teknik dan Ilmu Komputer, 2024. [Online]. Available: https://ftik.teknokrat.ac.id/wp-content/uploads/2021/06/SOP-Unggah-Karya-Ilmiah-Mahasiswa.pdf

[29] E. Wulandari and T. Handayani, "Penerapan Konsep User Experience (UX) dalam Desain Website Rumah Sakit," *Jurnal Desain Interaksi dan Media Digital*, vol. 4, no. 1, pp. 55–65, 2021.

[30] H. Rahman and D. Kurniawan, "Implementasi REST API pada Sistem Informasi Kesehatan Menggunakan Laravel dan React.js," *Jurnal Sistem Informasi dan Aplikasi Teknologi (JSIAT)*, vol. 6, no. 2, pp. 89–98, 2023.