

Web-Based Financial Information System at Digimizu Digital Management

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Abstract: Digimizu Digital Management specializes in Software and Photography as well as Digital Content while delivering on-demand services. The company operates without a computerized information system for managing both transactions and financial reports. The company handles orders manually via WhatsApp or face-to-face interactions while transaction records are kept on paper and within Microsoft Excel files. Data loss becomes possible alongside human errors and inaccurate reporting while real-time data access and monitoring face constraints. The company needs a web-based financial information system which should combine transaction automation with customer data management functions alongside quick and accurate financial report generation. The development of the financial information system utilizes the SDLC method with the Waterfall model and system weaknesses analysis through the PIECES method with UML (Unified Modeling Language) support. This system implementation will bring efficiency to Digimizu Digital Management's business procedures while decreasing errors in recording and enabling real-time financial activity tracking which will enhance overall company performance.

Keywords: System; Information; Financial; Waterfall; PIECES; UML.

1. Introduction

Digimizu Digital Management operates within the fields of Software Development, Photography, and Digital Content, providing services primarily on a custom (by order) basis. Despite its broad range of services, the company faces significant challenges related to the management of its financial and transactional data. Currently, Digimizu Digital Management does not use a computerized system for managing its financial transactions and reports. The ordering process is handled manually, with customers placing orders via WhatsApp or in person. Upon the completion of orders, customers proceed with payments. However, all transaction records are maintained manually. Receipts or invoices are stored as physical documents (hardcopies), and the order records are logged on paper. Financial reports are generated manually, typed into Microsoft Excel, and shared via a WhatsApp group involving the admin and the owner. This traditional method of managing orders and financial records poses several risks. One of the primary issues is the possibility of data loss, as records are stored solely in physical form or on Excel spreadsheets. This not only makes data retrieval difficult but also increases the chances of human error in record-keeping. The absence of a centralized and computerized system for managing transactions leads to inefficiencies, as it limits real-time data access and requires considerable time to input and process information. Furthermore, the lack of automation in the reporting process introduces significant risks of inaccuracies in financial reports, as well as delays in accessing and consolidating financial information. Without a unified database, the records are disconnected, making it more challenging for the owner to monitor the business's financial performance in real-time.

The manual preparation of financial reports, including daily, monthly, and yearly summaries, further complicates the business operations. Since the current system does not integrate the records into a central database, generating consolidated financial reports becomes a time-consuming process. The increased workload for the admin and the possibility of inconsistent and inaccurate reporting are considerable drawbacks. These inefficiencies can affect the overall business decision-making process, as real-time data and accurate reports are essential for ensuring that the company operates smoothly. Considering these challenges, Digimizu Digital Management needs to implement a comprehensive and automated financial information system that can streamline its operations. A financial information system (FIS) is a technology platform that automates the recording and management of an organization's financial data. It helps streamline the financial reporting process by integrating financial transactions into a unified database, ensuring accuracy and reducing human error. The benefits of adopting such a system are substantial, as it would allow for real-time monitoring of financial activities, quicker generation of reports, and more accurate data consolidation. By using a computerized system, the company can minimize data discrepancies and ensure that its financial information is more reliable.

Implementing a web-based financial information system offers several advantages. Web-based systems are accessible from various devices, providing flexibility and ease of use for users in different locations. Furthermore, such systems can be easily integrated with existing software applications, enhancing the business's overall operational efficiency. According to Rahmatika and Martyas Edi (2022), web-based financial information systems are particularly effective for managing financial records in small to medium-sized businesses because they offer both affordability and scalability [1]. They noted that web-based platforms are capable of handling various financial tasks, such as managing revenue and expenses, tracking accounts payable and receivable, and generating reports automatically, all of which can greatly benefit Digimizu Digital Management.

Moreover, the system must be designed to accommodate multiple users and roles, ensuring that the relevant personnel have access to the necessary data. Such a system could include functionalities such as client database management, income and expense tracking, managing accounts payable and receivable, and financial report generation. One critical feature would be its ability to consolidate financial reports in real-time, providing a comprehensive view of the company's financial health. This would enable the owner and other stakeholders to make informed decisions quickly, thus enhancing overall business performance. The application of the Waterfall model for the development of this system, as discussed by Haniva, Ramadhan, and Suharso (2023), would allow for a structured and phased approach [2]. The Waterfall methodology emphasizes a step-by-step process where each phase must be completed before moving on to the next. This model's linear nature makes it an ideal choice for developing a financial information system, as it ensures that each component is carefully planned, executed, and tested before proceeding to the next phase. The system can be developed iteratively, with continuous feedback from the company's management to ensure it meets the specific operational needs of Digimizu Digital Management.

In addition, using PIECES analysis (Performance, Information, Economic, Control, Efficiency, and Service) as suggested by Klara, Butar, and Yoraeni (2022), would provide a structured framework for identifying the system's weaknesses and areas for improvement [3]. By performing a thorough PIECES analysis, the company can ensure that the financial information system addresses all relevant aspects of the business's needs. The PIECES methodology helps in identifying performance issues, economic constraints, control weaknesses, and

service inefficiencies, all of which are important for ensuring the system's effectiveness and efficiency. A financial information system is particularly crucial for the company's growth, as it facilitates accurate and timely reporting, helping to prevent mismanagement of funds. The introduction of an automated system will reduce the reliance on manual processes, thereby increasing operational efficiency and allowing the admin to focus on other essential tasks. Suharni, Susilowati, and Ma'rif (2023) argued that financial management systems, especially those that utilize automated reporting and monitoring features, are essential for small and medium enterprises (SMEs), as they help to maintain financial stability and boost confidence among investors and creditors [4]. By ensuring that financial data is managed effectively, such systems can enhance decision-making and improve financial outcomes. The implementation of a financial information system in Digimizu Digital Management will help the company transition from a manual and error-prone approach to a streamlined, automated, and accurate system. This transition will not only reduce human error and increase the accuracy of financial reporting but also provide real-time insights into the business's financial health, contributing to better management and more informed decision-making.

2. Related Work

The application of information technology in financial reporting has proven to improve the quality of financial data management by enabling stakeholders to access and manage financial information efficiently and accurately. Automated systems help businesses process large amounts of data more quickly, reduce errors, and provide timely reports that support decision-making [7]. Manual data input in financial systems presents various vulnerabilities, including inaccuracies and duplication of transactions. These errors can result in unbalanced financial reports and delays in processing financial information. Reliance on paper-based processes or spreadsheets makes these issues more pronounced, as human error is more likely. Automation eliminates these challenges by ensuring data integrity and real-time updates, significantly reducing the risk of missing or incorrect information [8]. As organizations grow, the need for more robust systems capable of handling complex operations and delivering real-time data becomes increasingly essential [15].

Automated financial systems provide more transparency in reporting by structuring data in a way that is easier to interpret. These systems facilitate faster and clearer financial reporting, which is crucial for stakeholders to understand a company's financial health and performance. The structured presentation of data improves the accessibility of financial information, making it easier for users to analyze and make informed decisions [10]. An efficient system not only supports financial reporting but also enhances the business's overall management capabilities, enabling better resource allocation and more strategic decision-making [12]. Web-based information systems have become particularly useful for businesses seeking flexibility in accessing data from any location. These systems facilitate the seamless integration of diverse business functions across different geographical locations. By providing real-time data sharing and collaborative tools, they support more agile decision-making and improve operational efficiency [13]. The ability to access financial data anytime, from anywhere, is a significant advantage for businesses seeking to maintain competitive advantage in a dynamic market.

Financial information systems play a critical role in managing cash flow and providing stakeholders with actionable insights. These systems help businesses manage their finances more effectively by offering detailed reports and analyses. Although these systems are an improvement over traditional methods, ongoing advancements are needed to address emerging challenges and ensure continuous improvement in system performance [16]. As financial systems evolve, automation increasingly supports the creation of accurate reports without manual data entry, reducing the likelihood of errors associated with traditional systems [14]. When automated systems manage processes like recording sales transactions and consolidating them into reports, the need for manual data transfer is eliminated. Financial reports can be generated efficiently in multiple formats, including graphs and PDFs, which enhances the clarity of documentation and supports quicker decision-making. This automation streamlines financial management and reporting, significantly improving business operations [9]. Ongoing monitoring of a company's financial performance is crucial for long-term success. The integration of automated financial systems allows businesses to assess their financial status in real-time, ensuring that they can make adjustments promptly. These systems provide detailed financial analysis that contributes to informed decision-making, helping businesses stay competitive and respond effectively to changing market conditions [11].

Financial reports, which reflect the company's financial position and performance, are vital for decision-making. However, to be truly useful, these reports must be accurate and represent the company's actual financial health. The quality and clarity of financial reports are fundamental to making informed decisions, and automation plays a significant role in improving these aspects by ensuring consistency and accuracy in financial data [17]. Recent developments in the automation of financial systems have shown considerable promise in improving both the speed and accuracy of financial reporting. Intelligent systems, such as artificial intelligence,

reduce processing times and error rates while facilitating the efficient generation of reports. These innovations in automation allow businesses to handle increasing volumes of financial data more effectively [17]. Furthermore, the integration of automated systems into financial control functions enables businesses to make more accurate decisions, optimizing resource management and ensuring operational stability [18].

The use of modern computing technologies for managing financial and accounting information has transformed how businesses process and analyze data. Automation ensures the real-time processing of large data sets, improving decision-making and the efficiency of financial operations. With systems capable of handling these tasks, businesses can significantly reduce manual effort and improve their financial transparency [21]. Small and medium-sized enterprises (SMEs) have particularly benefited from these systems, as they improve financial management efficiency and increase transparency by automating previously manual processes [19]. In specialized industries like forestry, automated accounting systems offer timely solutions and more effective financial management. These systems ensure that financial data management is both compliant with industry regulations and optimized for greater efficiency, reducing errors and manual workloads [20].

3. Research Method

The methodology employed in this research is structured around two main components: data collection and system development. These components are essential for understanding the current operational challenges at Digimizu Digital Management and for designing a suitable financial information system that meets the company's needs.

3.1 Data Collection Methods

To gather the required data for the development of the financial system, a combination of methods was utilized: literature review, observation, and interviews. Each method provided unique insights into the company's existing operations and the theoretical foundation needed for the system's development.

1) Literature Review

The first method involved collecting data from existing journals, books, and scholarly articles. This phase helped the researcher understand the theoretical framework surrounding financial information systems and provided insights into best practices and methodologies for system design. The literature review also contributed to identifying relevant concepts and previous research that informed the approach taken in the system development process. By reviewing sources related to financial management and system implementation, the researcher was able to build a solid theoretical foundation for the project.

2) Observation

In addition to the literature review, observation was conducted at Digimizu Digital Management to gain firsthand knowledge of how financial transactions were managed. The researcher observed the company's current methods for processing financial data, including how records were kept, how reports were generated, and how information was shared among employees. Through this direct observation, the researcher was able to identify inefficiencies and pain points in the current system. Understanding the practical challenges faced by employees helped in designing a system that would improve data accuracy and speed.

3) Interviews

The third method involved interviews with key personnel at Digimizu Digital Management. These interviews were aimed at gathering detailed information about the company's specific needs and expectations regarding the new financial information system. The interviews were conducted with Mr. Krisnawan Arie S., A.Md.Kom, the head of the company, and Mr. Fajar, one of the employees. The questions focused on the limitations of the current system, the difficulties encountered, and the desired features for a new system. Insights from these interviews were crucial for understanding the gaps in the existing system and shaping the design of the new one.

3.2 System Development Methods

The development of the financial information system for Digimizu Digital Management follows the Waterfall model methodology. The Waterfall model, a well-established approach within the Software Development Life Cycle (SDLC), is defined by its structured, sequential process. Each phase in the Waterfall model must be completed before moving on to the next, ensuring that each stage is addressed thoroughly. This approach is particularly effective for projects with clear and well-defined requirements, such as developing a financial system. The Waterfall model's structured nature allows for greater predictability and easier management of the project. According to Haniva, Ramadhan, and Suharso (2023), the method's simplicity and

rigor make it an ideal choice when the project requirements are clear from the outset [2]. The stages of the Waterfall model applied in this research are as follows:

1) System Requirement Analysis

The first phase of the Waterfall model involves a comprehensive analysis of the system requirements. The researcher focused on understanding the specific needs of Digimizu Digital Management in terms of a financial information system. This phase involved gathering data through various methods, including observation, interviews, and literature review. Information collected helped identify both the functional requirements—such as processing transactions, generating reports, and managing financial data—and non-functional requirements, including performance, security, and usability. The researcher also utilized the PIECES framework (Performance, Information, Economic, Control, Efficiency, and Service) to assess the weaknesses of the existing manual system and identify areas for improvement. As noted by Klara, Butar, and Yoraeni (2022), the PIECES methodology is essential for pinpointing system inefficiencies and providing a structured way to address them [3]. The findings from this analysis guided the design phase, ensuring that the system would address the company's critical operational challenges.

2) System Design

After the system requirements were defined, the next step was to design the system. The design phase focused on creating both the system architecture and the user interface (UI). The researcher created Unified Modeling Language (UML) diagrams, including use case diagrams, class diagrams, and sequence diagrams, to represent the structure and data flow of the system. These diagrams served as a blueprint for understanding how the system components would interact. UML diagrams are important tools for visualizing system design and ensuring that all components are well-integrated. Wahyuni (2023) emphasizes the importance of UML diagrams in representing both the logical flow of the system and the user interface's functionality [15]. The researcher also developed wireframes to visualize the system's UI, ensuring that it would be intuitive and user-friendly for the staff at Digimizu Digital Management.

3) System Implementation

The implementation phase was centered around translating the system design into a working solution. In this stage, the researcher used various tools, such as Visual Studio Code for the backend development and XAMPP for setting up the database and server environment. The backend of the system was developed to handle real-time financial transactions and ensure data consistency, while the frontend was designed to provide a user-friendly interface for the employees. The implementation also involved integrating the system's core components, including the database, financial management modules, and reporting functionalities. As highlighted by Suharni, Susilowati, and Ma'rif (2023), selecting the appropriate tools is critical for ensuring smooth operation and performance, especially for web-based systems [4]. The researcher ensured that the system's architecture was scalable and adaptable to future needs.

4) System Testing

Once the system was implemented, it underwent the testing phase. The objective of this phase was to verify that the system met the specified requirements and functioned as expected. Blackbox Testing was employed to test the system's functionality from the user's perspective, focusing on whether the system delivered the correct output for the given inputs. The testing process ensured that the system could handle the core financial operations, such as recording transactions, generating reports, and managing customer data. According to Lestari *et al.* (2023), Blackbox Testing is an effective method for validating system behavior, as it examines the system's functionality without delving into its internal structure [10]. This method allowed the researcher to ensure that the system met the needs of Digimizu Digital Management and was easy for the staff to use. Any issues or bugs identified during testing were resolved before the system was finalized for deployment.

The Waterfall model was applied in this research to guide the development of the financial information system for Digimizu Digital Management. By utilizing structured stages such as system requirement analysis, system design, system implementation, and system testing, the researcher ensured that the system would meet the company's needs and solve the existing operational challenges. The use of UML diagrams, PIECES analysis, and Blackbox Testing ensured that the system was well-designed, user-friendly, and fully functional. The structured approach of the Waterfall model enabled the researcher to develop a solution that would improve the financial management processes at Digimizu Digital Management and provide a more efficient, accurate, and user-friendly system for tracking and reporting financial data.

4. Result and Discussion

4.1 Results

4.1.1 Data Collection Results

Based on direct observation at Digimizu Digital Management, the information gathered indicates that the system currently in use is still manual, relying on Microsoft Excel/Spreadsheet to support the company's operational needs. This was confirmed through interviews with the admin staff and the Owner of Digimizu Digital Management. Below is a depiction of the workflow of the system that is still in operation at Digimizu Digital Management

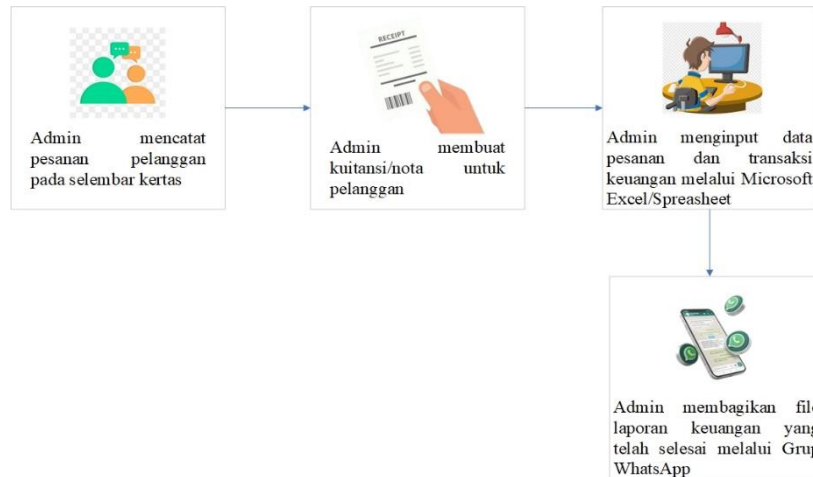


Figure 1. Current Workflow

The financial information management at Digimizu Digital Management still relies on a manual system, where the admin creates receipts/invoices for customers and records transactions on paper. Then, to input the order and financial transaction data, the admin simply enters the information into Microsoft Excel/Spreadsheet. Afterward, the admin shares the completed financial report via a WhatsApp group. It can be concluded that the employees of Digimizu Digital Management require an information system with the following needs, as outlined in the table below.

Table 1. System Requirements Analysis

No	System Requirement
1	Able to manage customer data
2	Able to manage income data
3	Able to manage expense data
4	Able to manage accounts receivable
5	Able to manage financial report consolidation

From this system requirements analysis, it is clear that system analysis is crucial for the company. System analysis is a comprehensive process aimed at identifying and evaluating new problems, obstacles, and anticipated needs so that solutions can be proposed to improve or develop system requirements in line with technological advancements [7]. Below is a depiction of the workflow for the system that will be developed.

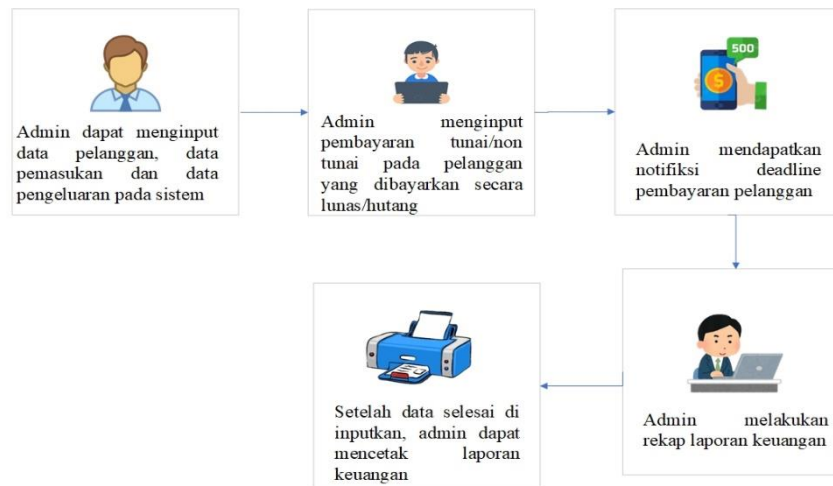


Figure 2. Workflow of the Developed System

The analysis developed for this financial information system focuses on the initial process, where the admin can input customer data, income data, and expense data into the system. The admin can then input payments, either cash or non-cash, from customers who pay in full or have outstanding debts. The admin will receive notifications regarding payment deadlines. The data is stored in the database and updated in the system accordingly. After the data is stored, the financial report is successfully added to the system, and the report can be printed.

4.1.2 System Weakness Analysis

PIECES is an analytical method used as a basis for identifying problems in more detail or focusing on specific issues. This method is often referred to as Parts Analysis (Performance, Information, Economics, Control, Efficiency, and Service) [3]. Based on the PIECES analysis, it can be concluded that there are several weaknesses in the existing system at Digimizu Digital Management, including the following:

Table 2. System Weakness Analysis Using the PIECES Method

No	Analysis	Existing System	New System
1	Performance	The financial report input at Digimizu is still done manually. This leads to missing or delayed recording of receipts/invoices due to the accumulation of receipts, making it difficult for the admin to find the relevant receipts.	The financial information system based on a web platform enables quick, accurate, and precise input and report generation. Any errors can be immediately identified.
2	Information	The process of storing and sharing financial reports is not supported by adequate infrastructure, so the reports are only sent via WhatsApp. As a result, data or files can be lost or deleted from mobile devices.	The new system ensures that financial data is securely stored and protected against data loss or corruption. Data is safely backed up in the system's database, reducing the risk of loss.
3	Economics	The admin writes daily transaction data into a book, requiring additional costs for purchasing books and stationery.	Daily transaction data is stored directly in the system, making it easily accessible and eliminating the need for extra stationery.
4	Control	Financial data is only stored on the admin's local computer storage. If the hard drive fails, the data will be lost and cannot be recovered.	Financial data is stored in the system's database and can be backed up periodically through the hosting service. The security of the hosting environment is guaranteed by the service provider.
5	Efficiency	The admin spends time at the end of each month manually reviewing each receipt and entering it into Microsoft Excel for total income reconciliation.	The financial information system automatically generates transaction summaries at the desired time, saving the admin time and effort.

6	Service	The admin needs considerable time to input receipts into Microsoft Excel, which delays the delivery of necessary information.	The new system is faster and more efficient in generating financial reports, thus improving service delivery.
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4.1.3 Use Case Diagram

A use case diagram models the behavior required and expected from the users of the system. Use cases are used to identify the features available in a system and determine who or what actors are authorized to use those features [4].

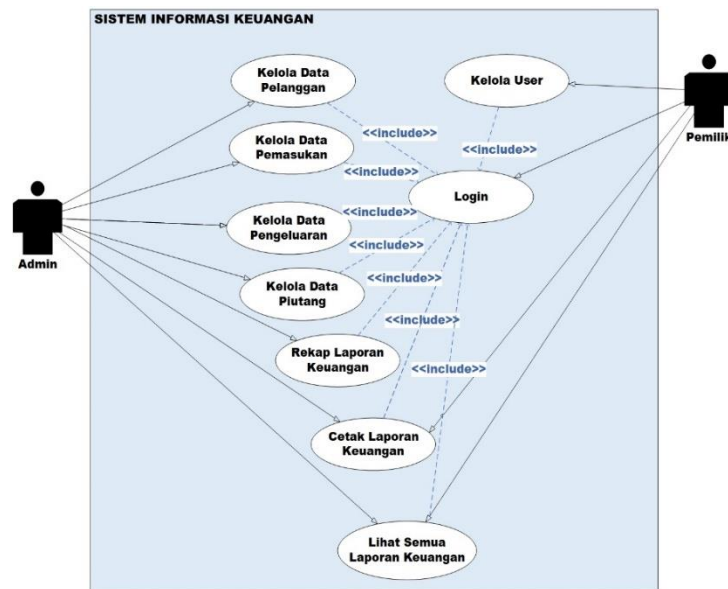


Figure 3. Use Case Diagram

4.1.4 Class Diagram

A Class Diagram is a description of the components within a system. These components include class diagrams, objects, and the interactions between classes and significant objects. A Class Diagram clearly illustrates the structure of the objects, their classes, attributes, and the integration between classes and methods [6]. Referring to the previously conducted requirements analysis, the following class diagram represents a visual model of the conceptual design for the financial information system at Digimizu Digital Management. This diagram serves as the foundation for database design and program code development.

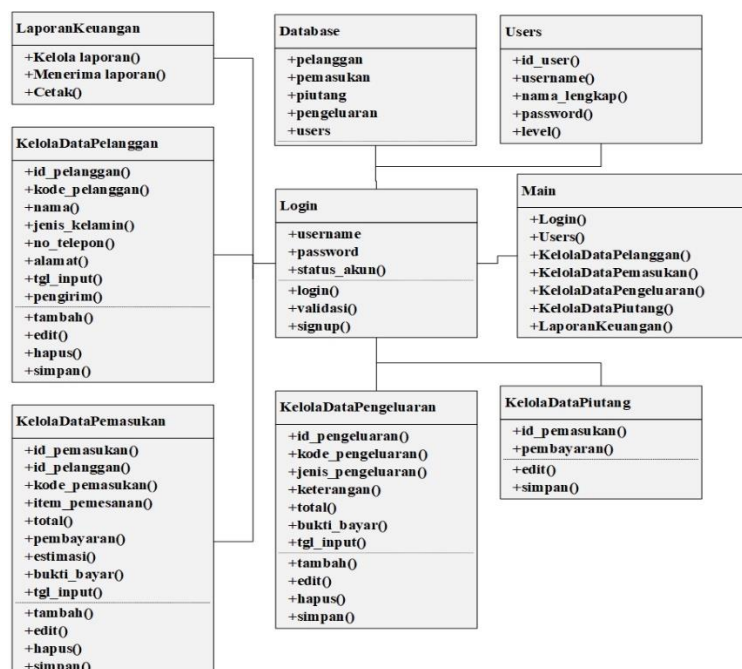


Figure 4. Class Diagram

4.1.5 Implementation

The Admin Login Implementation allows the admin to enter a username and password to access the financial information system of Digimizu Digital Management. The Admin Dashboard Implementation includes features to manage income data, manage expense data, manage customer data, manage accounts receivable, and generate financial report summaries



Figure 5. Admin Login Implementation

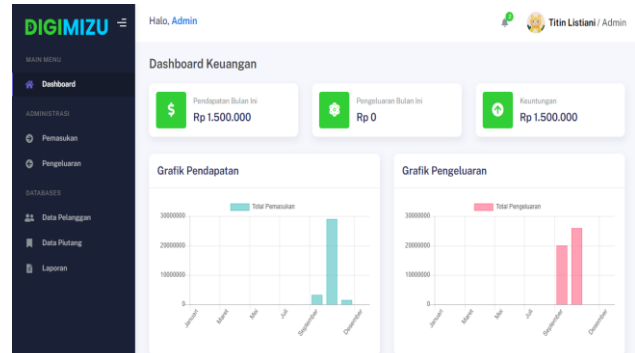


Figure 6. Admin Dashboard Implementation

Implementation of Manage Revenue Data to input revenue data received by Digimizu Digital Management. Then in the Implementation of Revenue Data to add revenue data by including proof of customer payment.

NO.	KODE PEMASUKAN	NAMA PELANGGAN	ITEM PEMESANAN	TOTAL	PEMBAYARAN	AKSI
1	INC005	Aan Android	LCD Xiaomi	Rp 1.500.000	LUNAS	[Status]
2	INC004	Mira Bathum	10 pcs Print AC 230gr	Rp 3.240.000	DP	[Status]
3	INC003	Yenni Towellu	27 pcs Print Stiker	Rp 20.000.000	DP	[Status]

Figure 7. Implementation of Input Data Management

Figure 8. Implementation of Adding Input Data

Implementation of Manage Expenditure Data and Implementation of Add Expenditure Data used by the admin to input expenditure data on Digimizu Digital Management.

NO.	NO. PENGELUARAN	JENIS PENGELUARAN	KETERANGAN	TOTAL	BUKTI BAYAR	AKSI
1	OUT006	Pengam	Biasa	Rp 2.000	1730394972_8484_1607000	[Status]
2	OUT005	Bayar Parkir	Parkir Alhamat	Rp 20.000.000	1730390616_Laporan_Transak 07-08_16_2024-08-25 (1).pdf	[Status]

Figure 9. Implementation of Expenditure Data Management

Figure 10. Implementation of Adding Expenditure Data

Figure 11 Implementation of Manage Customer Data and Figure 12 Implementation of Add Customer Data, where the admin will input customer data with details containing customer biodata and sender name for customer orders.

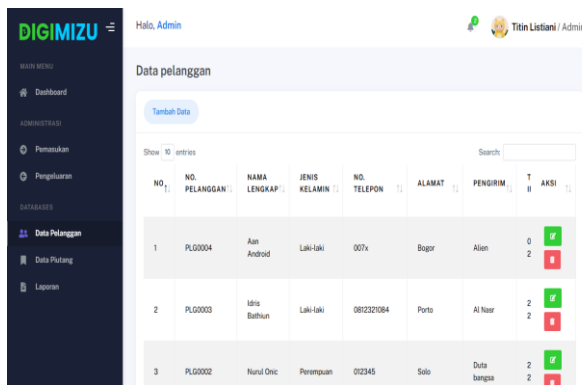


Figure 11. Implementation of Customer Data Management

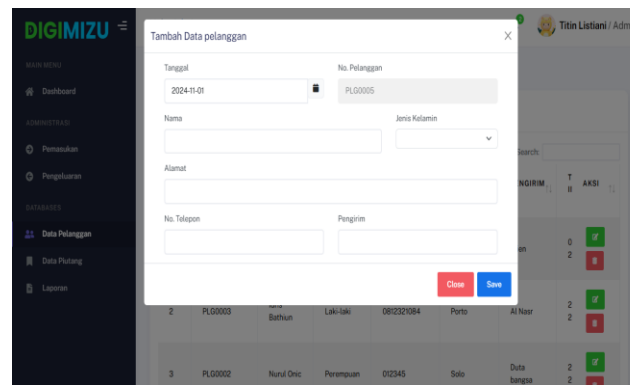


Figure 12. Implementation of Adding Customer Data

Figure 13 Implementation of Manage Receivable Data, where the admin inputs customer receivables. If the customer makes a payment in Full, the payment information will be recorded as Full, but if the customer makes a payment with DP/Not Yet Full, the payment information will be entered into the receivables data. And the admin will receive a notification of the customer's payment deadline in the dashboard notification as a reminder for the admin that there are customers who still have payment obligations as in Figure 14 Implementation of the Payment Deadline Notification Interface.

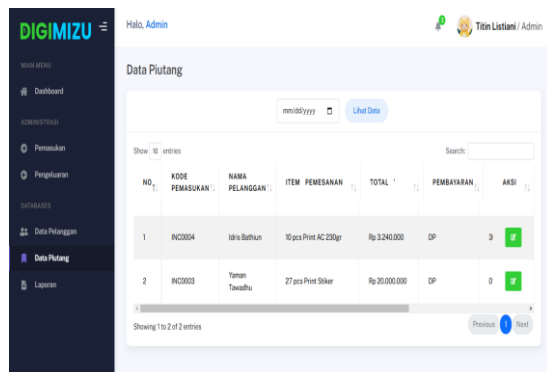


Figure 13. Implementation of the Manage Receivables Data Interface

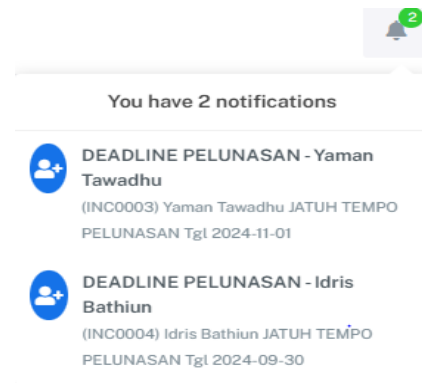


Figure 14. Implementation of Payment Deadline Notification Interface

Figure 15 Implementation of the Manage Data Recapitulation Interface for Financial Reports which is used by the admin to summarize daily, monthly and annual financial reports. And in Figure 16 Implementation of the Print Financial Report Interface is used by the admin to print financial reports needed by the leader or owner of Digimizu Digital Management.

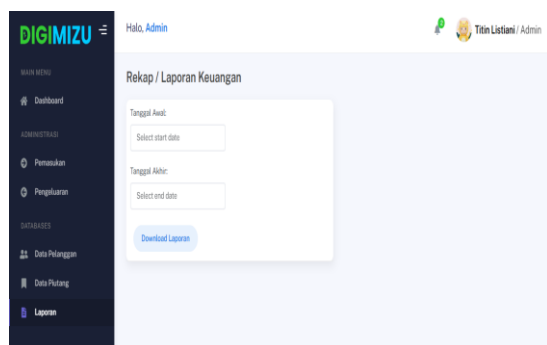


Figure 15. Implementation of the Manage Financial Report Summary Interface

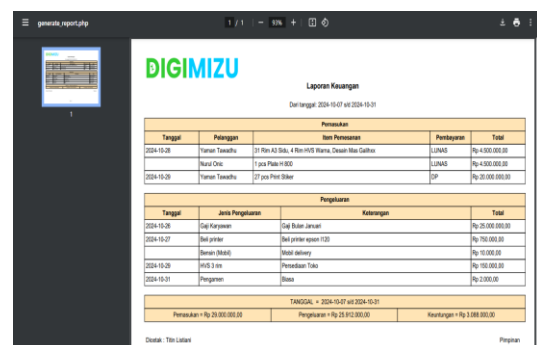


Figure 16. Implementation of the Financial Report Print Interface

4.2 Discussion

Digimizu Digital Management's financial management system reveals the primary obstacle that numerous small and medium enterprises (SMEs) encounter during their technological evolution processes. The existing financial system at Digimizu Digital Management reveals major operational risks through its reliance on manual receipt processing, Excel-based record keeping, and informal communication through WhatsApp which leads

to inefficient financial management. The findings presented here show strong agreement with the conclusions reached by Okeke *et al.* (2024). The research from Okeke *et al.* (2024) demonstrates how essential it is to adopt data-driven financial management systems for eliminating operational inefficiencies and improving organizational performance [19]. Traditional manual data management approaches create systemic weaknesses because they naturally undermine both data integrity and operational efficiency. In their study Ramadhana and Fatmawati (2020) extensively explored how manual data entry systems face numerous risks including errors, data loss and information management inefficiencies [14]. At Digimizu Digital Management the operational system shows these problems because when financial documents depend on personal devices and split storage systems they face significant risks of misplacing records and creating processing delays which could lead to data corruption.

The comprehensive analysis utilizing the PIECES framework revealed multifaceted areas requiring strategic improvement, a perspective strongly supported by research from Lestari *et al.* (2023) [10]. The proposed web-based financial information system addresses critical organizational requirements through a holistic approach. Performance enhancement becomes achievable through automated systems that significantly reduce processing times and minimize human errors, a concept extensively explored by Wang (2023) [21]. The implementation promises improved information accessibility via centralized database solutions, enabling real-time data access and management, a strategy previously validated by Pradini *et al.* (2020) [13]. Economic efficiency emerges as another crucial consideration, with the potential for substantial cost reductions by eliminating manual record-keeping processes. Mayangsari (2022) emphasizes the economic advantages of digital transformation in financial management systems [12]. Furthermore, the proposed system introduces enhanced control mechanisms, addressing data security and tracking requirements—a critical aspect highlighted by Kalchenko *et al.* (2023) [18]. The integration of intelligent reporting technologies, as discussed by Bing (2024), suggests the potential for more sophisticated financial analysis and reporting capabilities [17].

The proposed web-based system incorporates comprehensive requirements designed to address existing operational limitations. These include automated customer data management, real-time income and expense tracking, sophisticated accounts receivable monitoring, consolidated financial reporting, secure data storage, and automated payment deadline notifications. Such features represent a transformative approach to financial management, moving beyond traditional reactive models to establish a proactive, technology-driven operational framework. Polyatykina (2023) reinforces the strategic value of automated accounting systems, emphasizing their capacity to provide timely solutions and enhance financial management across diverse industries [20]. The proposed implementation for Digimizu Digital Management transcends mere technological upgrade; it represents a fundamental reimagining of financial operational processes, potentially catalyzing broader organizational digital transformation. The theoretical and practical implications of this research are substantial. By demonstrating the potential of technology in improving financial management for SMEs, the study provides a practical framework for digital transformation in small businesses. It contributes meaningful insights into the implementation challenges and opportunities associated with web-based financial information systems, offering a nuanced understanding of technological integration strategies.

However, the research acknowledges its limitations. The research remains limited to one organization which restricts how widely its findings can be applied while future investigations could better understand long-term implementation challenges benefits and carry out comparative sectoral analyses. Extended research would offer deeper understanding of digital financial management systems' wider application. The new web-based financial information system functions as a strategic measure aimed at modernizing Digimizu Digital Management's financial operations beyond just technological enhancement. The organization can develop a superior financial management system by methodically resolving current inefficiencies and utilizing new technological innovations. The transformation will deliver operational improvements along with a core upgrade to decision-making abilities which will place the company at a competitive advantage in today's digital-driven market environment. Organizations need to navigate a complex and multifaceted path towards digital financial management which demands detailed planning and stakeholder collaboration along with ongoing adjustments. Digimizu Digital Management can use this opportunity to go beyond conventional operational limits while integrating technology innovations to create a flexible and responsive financial management system.

5. Conclusion

The research produced a successful web-based financial information system for Digimizu Digital Management using the Waterfall development methodology. The study discovered that the system's automation of essential processes results in substantial improvements to both accuracy and efficiency of financial record-keeping. The financial system prevents manual entry mistakes while organizing financial administration more effectively in the company. The system provides essential features including client

database management together with customer data handling and capabilities to manage income and expenses, process accounts receivable and consolidate financial reports. Automating financial transaction inputs enables the system to produce accurate financial reports more rapidly while maintaining their timely delivery. The system enables straightforward monitoring of financial activities and offers an unambiguous cash flow overview which supports effective decision-making. A centralized database integration ensures all financial information remains consistently stored and easily accessible, which plays a crucial role in minimizing errors. The design of the system safeguards data integrity and reliability which prove essential for accurate financial records maintenance. Digimizu Digital Management will achieve improved financial operations through this system which ensures efficiency and transparency while eliminating errors thereby fostering sustained business growth.

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