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BUSINESS PROCESS OF RESERVATION, INCOME, AND EXPENSES IN WEBSITE-BASED HOMESTAY: CASE STUDY IN UTAMA HOME

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Abstract
This research aims to design a web-based integrated system to optimize the reservation, income, and expense process at Utama Home, a homestay business in Jember. The method used is qualitative with a case study approach, through direct observation and interviews with operational staff. The results of the analysis showed a number of inefficiencies in the manual system, such as overlapping bookings, delay in confirmation, and inconsistent financial records. To overcome these problems, this study uses Business Process Modeling Notation (BPMN) in designing a new system that is able to simplify operational processes, automate transaction recording, and improve real-time data access. The proposed system is designed to improve financial accuracy, accelerate decision-making, and be a sustainable digital transformation strategy for homestay operations. With the implementation of this system, Utama Home is expected to manage business processes more efficiently and professionally, while providing a better service experience for customers.

Keywords: SIA, Business Process Modelling, Web-Based Reservation, Income Management, Expense Tracking

1. Introduction

Information systems are an important element in business because they provide accurate and real-time data to support decision-making (Leyla & Juhriah, 2023). The use of information technology is now a major factor in increasing operational efficiency and competitiveness (Cahyaningtyas et al., 2019). Therefore, information systems must be designed according to the specific needs of the business to be more effective and efficient (Syefira Ramadhani et al., 2024). In the digital era, the demand for technology-based services is increasing, including in the tourism and hospitality sectors. Homestays are a popular choice for tourists because they offer more personalized experience at affordable prices. This encourages homestays to continue to innovate, including in daily financial management to ensure effectiveness and alignment with business goals.

Utama Home Jember is a homestay business that provides accommodation for guests. In this industry, an integrated reservation system is essential to ensure smooth operations and customer satisfaction. However, manual reservation recording risks errors, delay in confirmation, and lack of transparency in room availability information. Therefore, an information system that can overcome these obstacles is needed to improve service efficiency. Currently, Utama Home Jember faces challenges in managing reservations and room information because it does not have an integrated system. Business owners have difficulty monitoring the status of rooms in real-time, while recording transactions and booking data is still done manually, which makes it difficult to recapitulate financially and potentially leads to inaccurate reports. This poorly organized logging system has an impact on operational efficiency and data-driven decision-making (Ramadan & Mubarok, 2024).

Computerized Reservation Information Systems can improve business management by speeding up and improving the accuracy of booking and financial transactions (Romney, 2015). This system allows for more secure storage of reservation and financial data, as well as facilitates the creation of daily income and expense reports (Siahaan & Chandra, 2022). The system includes several main cycles, namely reservations, guest payments, revenue recording, operational expenses, and financial reporting. According to (Kurniawan et al., 2022) Each cycle is interconnected to ensure operational efficiency as well as financial transparency of the homestay. Many homestay managers still rely on manual recording in managing reservations and financial transactions, including Utama Home Jember. All transactions, whether cash, bank transfers, or digital wallets, are recorded manually using Microsoft Excel to create daily financial reports. However, reliance on manual systems poses challenges, such as recording delays, input errors, and financial reconciliation difficulties, especially as booking volumes increase. In addition, the absence of a structured shift system leads to a lack of coordination in transaction recording, which impacts cash flow, profit and loss calculations, and operational efficiency. Physical document-based recording also increases the risk of data loss and makes financial audits difficult.

To overcome this problem, a system that is easy to use and can improve operational efficiency is needed. The system must be able to manage booking data, set schedules, and provide real-time information for users and administrators for better decision-making (Nayak et al., 2012). Technology-based reservation systems play an important role in ensuring a smooth process from booking to guest check-out (Muliadi et al., 2020). Thus, accurate business processes become the main link between homestay operations and the technology used in the Accounting Information System (SIA). The implementation of Business Process Management (BPM) can transform manual operations into digital, especially in managing reservations and financial records (Supit & Pratasik, 2021). Process modeling helps identify system needs and improve transaction efficiency in the hospitality industry (Yu, 2021). However, research related to reservation modeling and homestay financial management, especially in Utama Home Jember, is still limited.

Several studies highlight the benefits of web-based information systems in improving accuracy, real-time information access, and efficiency. The novelty of this research lies in the development of a web-based information system that not only facilitates the online booking process of customers but also provides integrated room inventory management features and income statements. This is a differentiator from previous research, which generally only focused on one aspect, such as reservation systems or the management of financial data separately. The system proposed in this study is designed to provide a comprehensive solution, which can improve operational efficiency while supporting data-driven decision-making by homestay owners.

Therefore, this study aims to design a business process that focuses on the reservation cycle as well as recording daily income and expenses using the BPM approach to overcome the challenges in Utama Home Jember. The main goal is to identify obstacles and propose solutions that suit the operational needs of the homestay. Based on this analysis, an integrated SIA system will be developed to improve accuracy, transparency, and efficiency in recording financial transactions in Utama Home Jember. As a homestay business, Utama Home Jember has adopted an online system to manage reservations and daily financial records. This study aims to analyze how web-based solutions are transforming financial management, improving operational efficiency, and customer experience. By evaluating the implementation of this system, this study provides insight

into the benefits and challenges faced by homestay businesses that adopt a similar approach.

2. Theoretical Background

2.1 Accounting Information System

A system is a series consisting of two or more components that are interconnected and interact with each other to achieve a goal where the system is usually divided into smaller subsystems that support the larger system (Dwi Poetra, 2019). Systems generally consist of smaller subsystems, each of which performs a specific function but still supports the system as a whole. In an organizational or business context, systems are used to create a structured, efficient, and well-monitored workflow.

SIA is a system created to collect, record, store, and manage information with the intention of generating the data needed to support decision-making (Scott, 2016). By using information technology, SIA can automate various recording and reporting processes that were previously done manually, thereby improving data efficiency and accuracy.

2.2 The Role of Information Systems in Business Operations

According to (Zhou & Liu, 2022) SIA plays a very important role in supporting business operations, especially in terms of transaction recording, budget management, and preparation of financial statements. These systems can help reduce human error, speed up the record-keeping process, and provide real-time data access for management. This is especially important for businesses like homestays, which must handle the reservation, income, and expense processes efficiently in order to maintain service quality and profitability.

2.3 Reservation Information System

A reservation information system is a software application designed to manage booking-related data, organize schedules, and provide real-time information to users and administrators for better decision-making (Nayak et al., 2012). This system is commonly used in various service sectors, such as hospitality, transportation, restaurants, and tourism, to manage service availability, record customer demand, and set service schedules or capacity in real-time. According to (Muliadi et al., 2020) A homestay or hotel reservation information system is a technology-based solution designed to efficiently manage various aspects of bookings. By using a reservation information system, the risk of double bookings, manual recording errors, and late confirmations can be significantly minimized.

2.4 Cash Receipts and Expenditures

Cash receipts are an important part of the homestay business process because they are directly related to financial inflows from customers. According to (Tangon et al., 2021), cash receipts are funds received by the company in the form of cash or securities that can be used directly, derived from transactions such as cash sales or debt payments. (Desy Ismah Anggraini et al., 2023) adding that cash receipts are the result of transactions that increase the company's assets in the form of cash. In the context of homestay operations, cash receipts mainly come from the payment of room reservations and other services. Factors that affect cash receipts include market competitive conditions, the company's competitive position, the payment terms set, and the effectiveness of receivables

management (Rahim & Tan, 2024). According to (Syaputri et al., 2024) The stronger the position of the homestay market and the more active the management in collecting payments, the cash receipts tend to increase. Aside from operational transactions, cash receipts can also come from non-operational sources such as facility rental income, interest, or dividends.

Cash expenditure in the homestay system reflects the outflow of company funds used to support business operations and development. (Syaputri et al., 2024) Declares that cash expenditure is the event of distributing goods or services to other entities accompanied by payment. Meanwhile, (Arifin, 2022) Explains that cash expenditure is a financial transaction that reduces the company's assets in the form of cash. In practice, cash expenditures are recorded through an electronic system based on proof of transactions such as invoices, purchase orders, or purchase notes, then entered into the accounting system through a cash expenditure journal. For homestays such as Utama Home Jember, this expense includes payments to vendors, facility maintenance, and other operational expenses. According to (Final, 2023) Expenses can also arise from external factors such as interest fluctuations or exchange rate differences recorded in the form of a memo. In addition, investment plans in the form of fixed asset upgrades, such as room renovations or facility additions, can also significantly affect the volume of cash expenditures.

2.5 Business Process Modelling Notation (BPMN)

Business Process Modeling Notation (BPMN) is a graphical standard used to model business processes in the form of diagrams that are easy to understand by various parties, both technical and non-technical. According to (Supit & Pratasik, 2021) BPMN is a standard business process model that provides comprehensive graphical notation to describe business processes. Business process management (BPM) requires expertise in methodology, information technology (IT), organizational culture, human resource management, and synchronization of company strategies to model and evaluate business processes, as well as adopt innovations and change the way things work to be more efficient (Kosidin et al., 2020). BPMN describes a technology-based business process flow diagram that is compiled to provide a graphical model of an organization with operational flows and controls that determine the work cycle.

3. Methods

This study uses a qualitative methodology with a case study approach to design and build a web-based reservation information and financial evaluation system that can support the operational and financial performance of a homestay business. The qualitative method was chosen because it was able to provide a deep and thorough understanding of the real context in the field, without separating reality into separate variables (Scott, 2011). This study focuses on Utama Home Jember, a homestay engaged in accommodation services, which faces obstacles in the manual reservation process and financial recording that has not been systematically integrated.

Primary data was obtained through direct observation of daily operational activities and interviews with the owners and staff of Utama Home Jember who were involved in the reservation process and recording financial transactions. This observation aims to understand the current workflow of the reservation system, the types of transactions that occur, and the challenges faced in the financial evaluation process. Secondary data was obtained from relevant literature studies on information systems, business financial management, and web-based technologies, including scientific journals, articles, and

reference books. In addition, internal documents such as guest books, room booking records, monthly transaction reports, equipment purchase notes, and Utama Home Jember financial archives are used as supporting materials to design the system. All this data is the basis for system modeling using a BPMN-based approach (Business Process Model and Notation) as a reference in information system development.

4. Results and Discussion

4.1 Business Process Modeling

When designing new business processes, it's important to use tools that can visualize process flows, which is why Business Process Modeling Notation (BPMN) was chosen. BPMN effectively describes the sequence of processes from start to finish, outlining the roles of the various system components and actors involved. This clarity is important to ensure a smooth exchange of information as well as facilitate the implementation of a more efficient information technology-based reservation system.

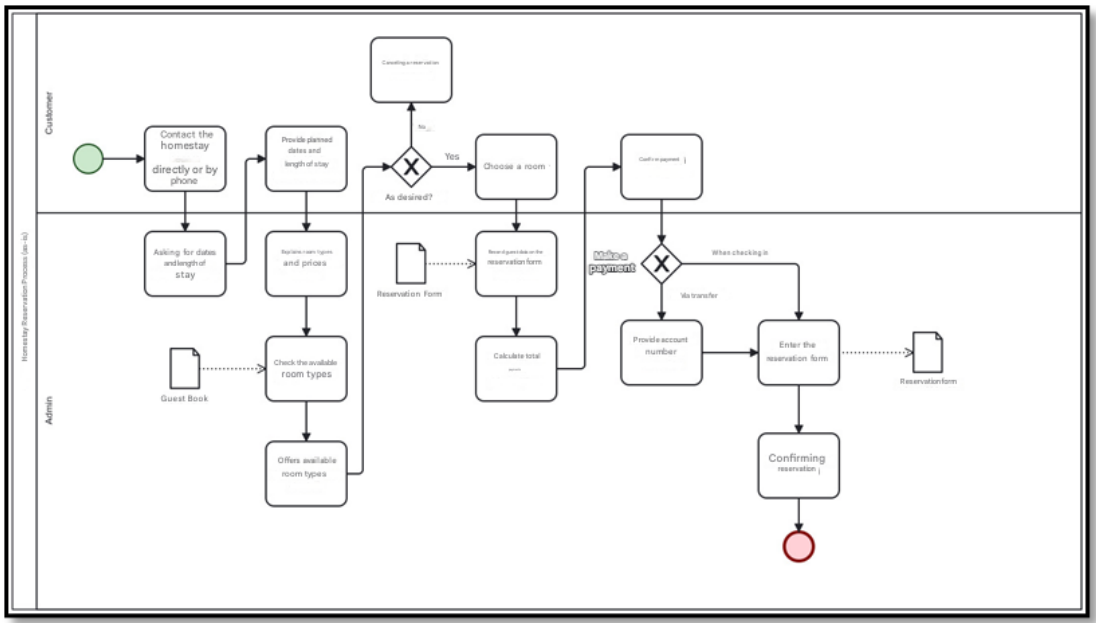

Figure 1. Ongoing Reservation Process (as-is)
Reference: Prepared by the researcher

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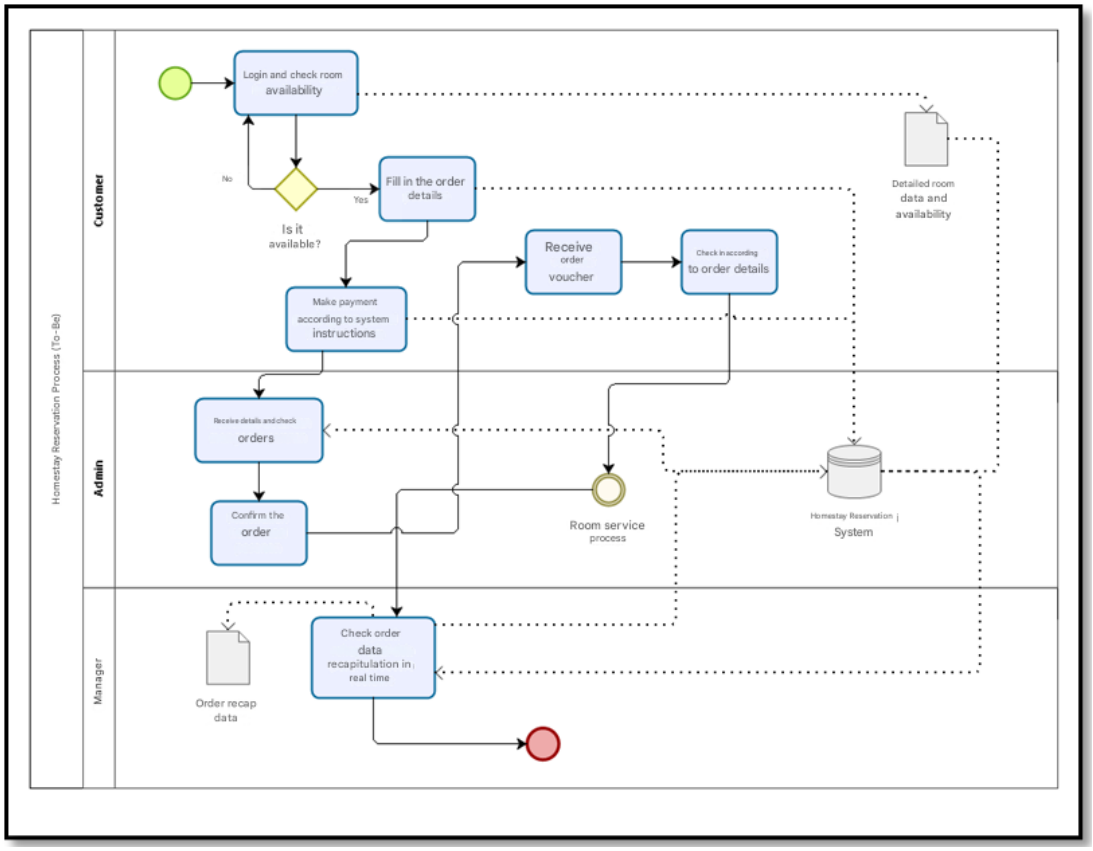

Figure 2. Proposed Reservation Process (to-be)
Reference: Prepared by the researcher

Figure 1 shows the as-is business process that is still done manually, where the process of communication with customers is done by phone and reservation recording using physical forms. This method tends to cause delays, inefficiencies, and the risk of miscommunication regarding room availability, rates, and customer data.

In contrast, Figure 2 shows the proposed to-be business process. The proposed system is designed to be website-based, allowing customers to log in and view room availability independently. Customers can directly fill in the order details, make payments according to the instructions from the system, and receive the order voucher. Furthermore, the check-in process is carried out according to the details that have been set digitally.

Efficiency improvements are also implemented on the internal side. Admins only need to verify their booking data and confirm reservations through the system, without having to manually process individual requests. The system will automatically update room availability data and present it in real-time to admins and customers. Managers can also directly access booking recap data and monitor room capacity through the system without the need for repeated confirmation from front office staff. With this integrated reservation system, the room service process also becomes more organized, allowing for systematic and well-documented management of customer orders.

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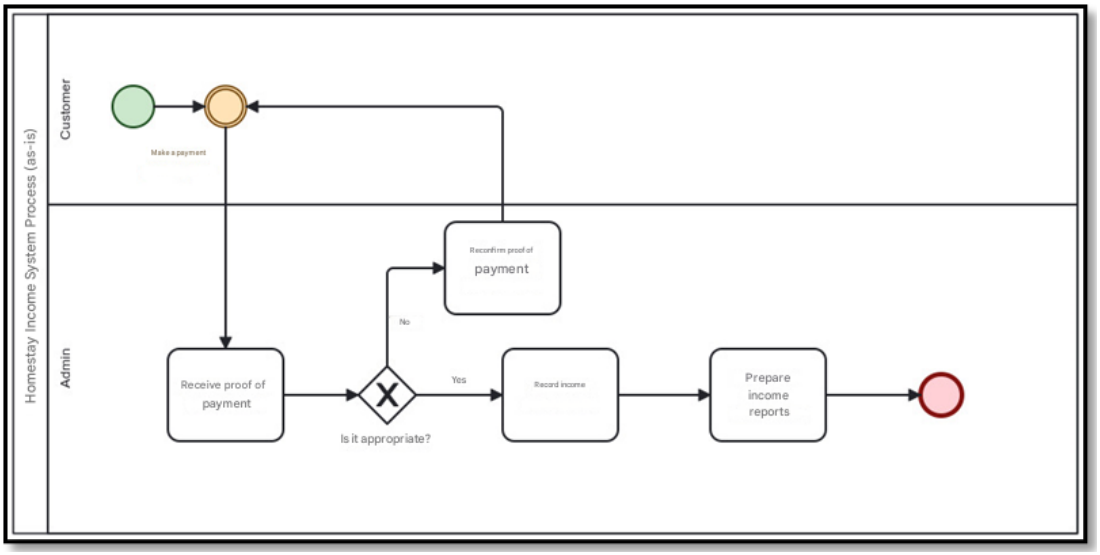

Figure 3. Ongoing Revenue Process (as-is)
Reference: Prepared by the researcher

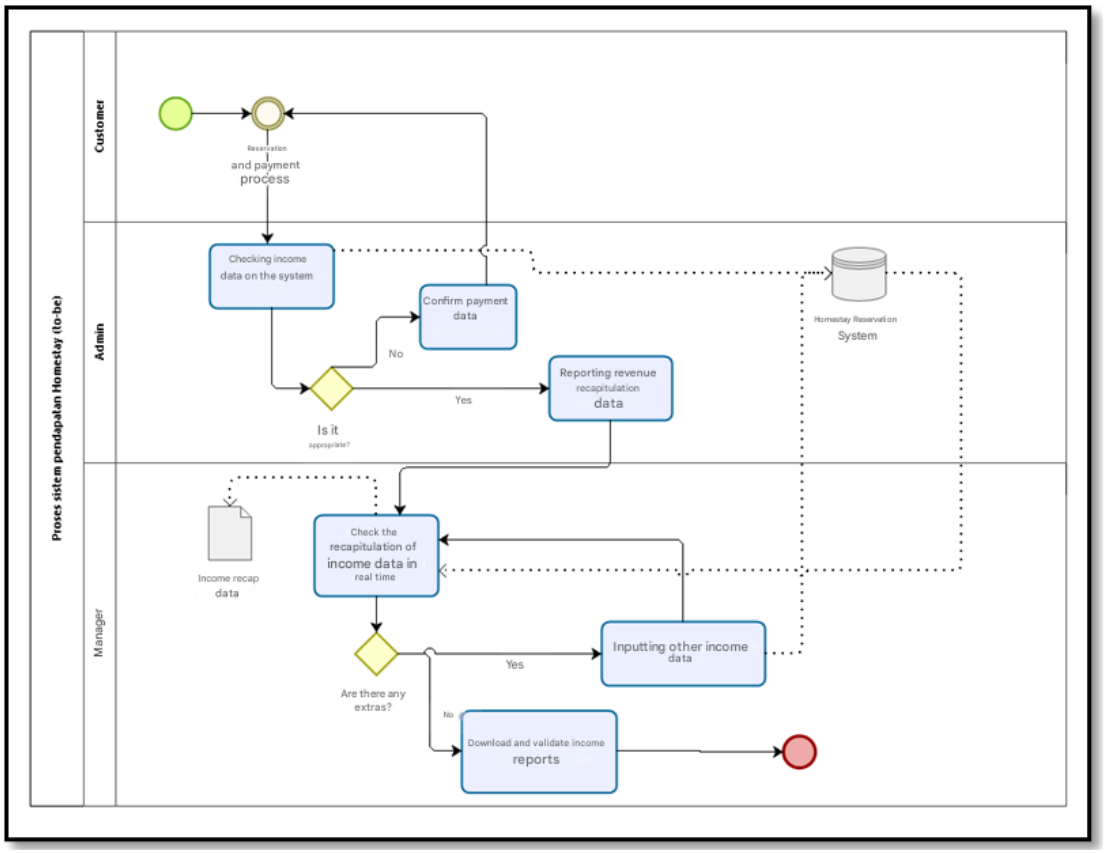

Figure 4. Proposed Revenue Process (to-be)
Reference: Prepared by the researcher

Figure 3 shows the business process of the Homestay income system that is still running conventionally (as-is). In this process, the customer makes the payment and submits proof of payment to the admin. After that, the admin verifies the evidence. If it is not suitable, then the customer must reconfirm the proof of payment that has been provided. Once the evidence is valid, the admin manually records the revenue and compiles the revenue report.

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This process still relies heavily on direct interaction and manual logging, which has a high risk of error logging and delays in reporting and data processing.

As a form of improvement, Figure 4 illustrates the design of a new business process (to-be) that is integrated with the website system. This process prioritizes efficiency and accuracy with the support of a digital system. Customers make reservations and payments through the website, then the payment data goes directly into the system and is checked by the admin. The admin then verifies the data on the system. If the data matches, the system automatically reports the revenue recapitulation to the manager. The manager can then directly check the report in real-time. If there is additional revenue, managers can directly input additional data into the system. All data can then be downloaded and validated to be compiled into a final revenue report.

This system-based business process design provides many advantages, such as minimizing recording errors, speeding up the reporting process, updating data in real-time, and improving work efficiency between customers, admins, and managers. In addition, this process also makes the data more accurate and accessible, making it easier to make decisions based on the right and up-to-date information.

Next, Figure 5 presents the current Business Process Modeling Notation for implemented cash expenditures (as is), while Figure 6 shows the proposed Business Process Modeling Notation designed and proposed (will) for Utama Home Jember.

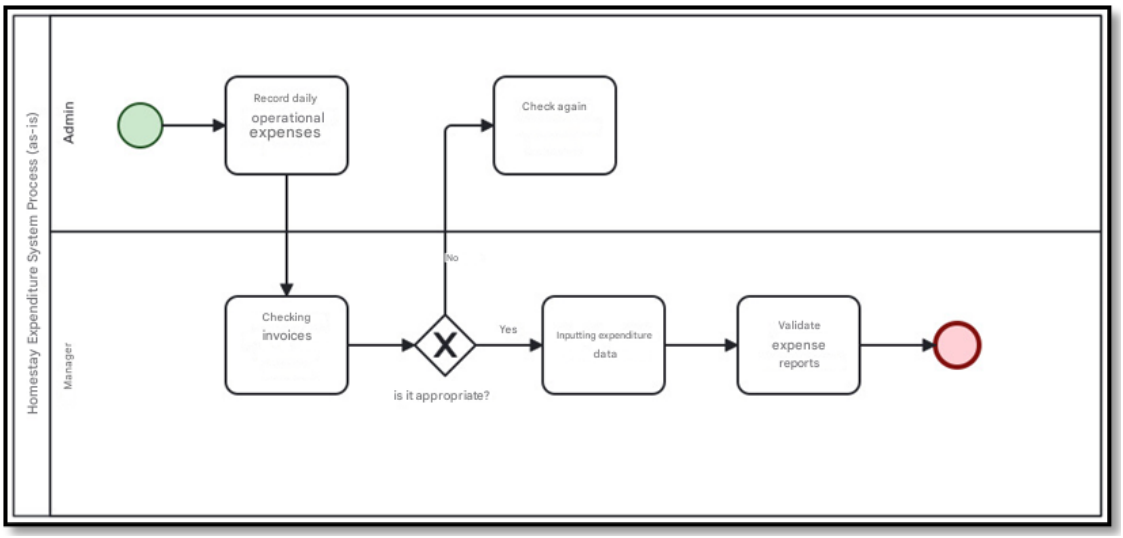

Figure 5. Ongoing Production Process (as-is)
Reference: Prepared by the researcher

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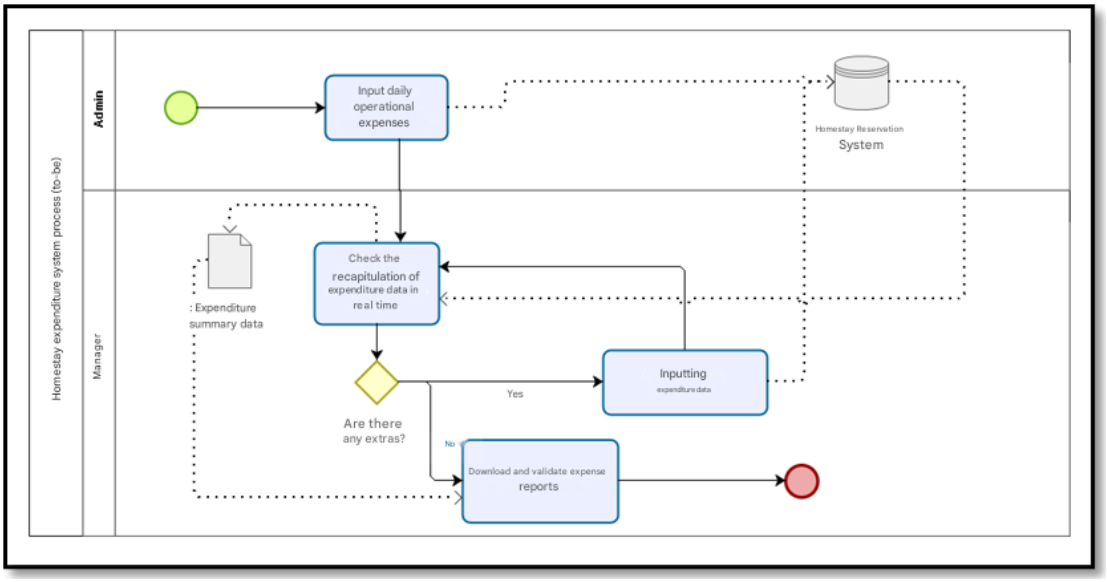

Figure 6. Proposed Withdrawal Process (to-be)
Reference: Prepared by the researcher

Figure 5 illustrates the conventional business process (as-is) in the ongoing Homestay spending system. The process starts with the admin section that records daily operational expenses. After that, the expense data is verified by the manager by checking the invoice. Furthermore, an evaluation was carried out on the match of expenditure data. If the data is deemed to be inappropriate, the admin needs to double-check and correct it. However, if the data is appropriate, the manager will continue to input the expenditure data into the system. Once all the data is complete and appropriate, the manager will perform a final validation of the expense report before it is stored or used further. This process is still manual and risks causing recording errors or delays in financial reporting.

Figure 6 shows the updated (to-be) expense business processes and integrated into the Homestay information system. This process starts with the admin who inputs the daily operating expenses directly into the system. The data will be automatically stored in the homestay reservation system. Next, the manager will check the recapitulation of expenditure data in real time through an integrated system. The system also provides an option to check if there are any additional expenses. If there are additions, managers can directly input the additional expense data. Otherwise, managers can automatically download and validate the already available expense reports. Expense recap data can now be accessed quickly and accurately because the system records all activities digitally and in real time. This new approach enables work efficiency, reduces the risk of human error, and speeds up the financial reporting process.

5. Conclusion

Based on the analysis above, it can be concluded that a few factors contribute to irregularities in the reservation and financial recording process at Utama Home Jember. The recording process that is still carried out manually poses a risk of data loss, delays in updating information, and inconsistencies between records owned by staff and realizations in the field. The absence of a centralized system leads to overlapping bookings and difficulties in recapitulating income and expenses in real-time. Another factor is the limited ability of staff to conduct a thorough financial evaluation due to the limited digital tools available. All transactions, from room bookings to daily operating

expenses, are recorded separately and are not integrated. This increases the likelihood of human errors in recording, as well as increases the chance of losing supporting documents such as purchase receipts or guest payment receipts. These problems can be addressed through the design of a structured and integrated web-based information system, which can automate the reservation process and recording of financial transactions. The use of this system aims to simplify work processes, improve the accuracy of recording, and provide easy access to data for owners and staff. This system allows transaction recording to be done directly by staff at the time of reservation or at the time of equipment purchase, without the need to wait for a manual recap at the end of the day. Thus, this research aims to transform the current business process (as-is) into a more optimal and efficient process (to-be), which can support the growth and sustainability of the operations of Utama Home Jember in the future.

Based on the findings and discussions that have been presented, the case study at Utama Home Jember shows that the business process of reservation, receipt, and cash expenditure that has been redesigned web-based and integrated with the Accounting Information System (SIA) offers concrete solutions to various problems that previously arose in manual processes. System integration allows for real-time data transparency for authorities, including admins and managers, to verify and validate directly within the system, speeding up workflows and reducing the potential for record-keeping errors. More structured and documented business processes are also very important in supporting more efficient operations and in line with the vision of professional and accountable homestay services.

To overcome the various obstacles that arise due to inefficient business processes, it is essential to apply a business process analysis and redesign approach using business process management and standard notation (BPMN). This approach plays a major role in analyzing, testing, implementing, and continuing to improve the process, to support the growth and competitiveness of Utama Home Jember in the digital era.

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