

Development of a Website-Based Accounting Information System at Balaram Mangrove Heroes Ecotourism, Tanjung Benoa

**Anak Agung Gede Krisna^{1*}, Ni Ketut Lita Patma Dewi²,
Ni Kadek Kristina Yanti³, Ni Luh Riska Yusmarisa⁴, I Putu Arnawa⁵,
Ni Ketut Mareni⁶**

¹⁻⁶Accounting Management Hospitality, Politeknik Pariwisata Bali, Bali, Indonesia

Email: ¹⁾ agunggedekrisna10@gmail.com, ²⁾ litapatmadewi@gmail.com, ³⁾ Kristinayanti19@gmail.com,
⁴⁾ niluhriska@ppb.ac.id, ⁵⁾ putu.arnawa61@gmail.com, ⁶⁾ mareni@ppb.ac.id

Received : 14 May - 2026

Accepted : 18 June - 2026

Published online : 23 June - 2026

Abstract

Balaram Mangrove Heroes Tanjung Benoa Ecotourism faces problems in financial management that is still carried out manually, thus potentially causing recording errors, data loss, and delays in the preparation of financial reports. This study aims to develop a website-based accounting information system to improve the effectiveness, accuracy, and transparency of financial management. This study uses a qualitative method with data collection techniques in the form of interviews, observation, and documentation. Data analysis was carried out descriptively to identify problems and system requirements. The results of the study indicate that the manual recording system causes inefficiency, a high risk of human error, and the unavailability of structured financial reports. Therefore, a website-based accounting information system named ECOFIN was developed, which is capable of recording transactions automatically, storing data in an integrated manner, and generating financial reports in real-time. System testing conducted through functional verification confirmed that all core features of ECOFIN, including ticket sales recording, commission and expense management, and automatic generation of profit and loss statements and balance sheets, operated in accordance with the designed system requirements. Based on these functional test results, the implementation of the ECOFIN system demonstrates improvement in the efficiency, accuracy, and transparency of financial management and supports data-based decision making in ecotourism management.

Kata Kunci: Accounting Information System, Ecotourism, Website.

1. Introduction

Tourism is a strategic sector that plays an important role in supporting economic growth, such as the hotel, transportation, culinary, ecotourism, and other service industries, particularly in the Bali region (Ikhsan et al., 2024). Tourism activities not only focus on providing tourist attractions, but also encompass service management, financial management, and environmental sustainability (Iskandar et al., 2025). Ecotourism is one form of tourism activity that aims to support the creation of sustainable tourism (Dian et al., 2024). Ecotourism has great potential in environmental conservation efforts, such as the development of mangrove ecotourism (Dian et al., 2024).

The Tanjung Benoa area of Bali experienced serious damage to its mangrove ecosystem during the period of 1980 to 1990. Excessive use of mangroves, waste disposal, and other human activities caused a decline in the quality of the coastal environment and the loss of the ecological function of mangroves as a natural coastal protector (Harefa et al., 2024). This condition also threatened the sustainability of nature-based tourism in mangrove ecotourism.



In addition to mangrove degradation, another environmental problem that emerged was the decline in the turtle hatchling population due to the practice of egg collection and turtle hatchling hunting by the community (Suryawan & Tehupeiory, 2023). Environmental problems in mangrove ecotourism encouraged the emergence of community awareness to carry out independent and sustainable conservation efforts. These conservation efforts then developed into more organized activities through the formation of the Balaram Mangrove Heroes Group, which focuses on mangrove rehabilitation and turtle hatchling protection.

An important aspect that cannot be separated from managing ecotourism is the financial management system, particularly from the proceeds of tourist entrance ticket sales (Nababan et al., 2025). Many ecotourism managers still record ticket sales manually (Isnibaiti et al., 2022). Manual recording has the potential to cause calculation errors, loss of transaction data, and delays in the preparation of financial reports (Ivania et al., 2025; Nababan et al., 2025). The financial reports that are important for managers are the profit and loss statement and the balance sheet, because these reports can show the condition of financial performance based on revenue obtained from ticket sales and expenses incurred to support operations and conservation activities (Aberta et al., 2024; Banjarnahor et al., 2025). However, in practice, mangrove ecotourism managers do not yet have a system capable of automatically and systematically generating profit and loss statements and balance sheets. This condition can make it difficult for managers to evaluate revenue, control expenditures, and make data-driven managerial decisions.

The development of information technology provides an opportunity to overcome these problems through the application of a web-based sales information system (Prayetno et al., 2022). This system is capable of recording transactions automatically, storing data in a structured manner, and generating sales reports quickly and accurately (Putra et al., 2024). Point of sale is one form of system that assists in the transaction recording process (Widiastuti et al., 2021). A website-based POS helps maintain data accuracy, simplifies the reconciliation process, and supports financial transparency (Nababan et al., 2025). The implementation of a website-based accounting information system is expected to improve the effectiveness of ticket sales transaction management and simplify the process of preparing financial reports automatically and in an integrated manner. In addition, this system is also expected to help managers in improving the transparency of financial management, thereby supporting the sustainability of conservation activities and ecotourism development.

Previous studies on website-based information systems in tourism have predominantly focused on ticket booking and reservation systems (Prayetno et al., 2022; Putra et al., 2024) or point-of-sale systems for retail and home industry contexts (Isnibaiti et al., 2022; Nababan et al., 2025). However, these studies have not specifically addressed the integrated financial management needs of community-based mangrove ecotourism, which encompasses not only ticket sales recording but also the management of commission distributions, salary expenses, and operational expenditures alongside the automatic generation of profit and loss statements and balance sheets. This gap indicates that existing system development efforts have yet to be tailored to the unique operational and conservation-oriented financial structure of mangrove ecotourism management.

In response to these problems, the authors offer a solution in the form of a website-based accounting information system at Balaram Mangrove Heroes Ecotourism. This study aims to design and implement a website-based accounting information system at Balaram Mangrove Heroes Ecotourism to assist the process of recording ticket sales, preparing financial reports, and improving the effectiveness and transparency of ecotourism financial management. This system is specifically designed according to the needs and capacity of Balaram Mangrove

Heroes Ecotourism so that it can be easily accessed through a computer or smartphone, without the need to install software. With this system, it is hoped that it can help managers improve the effectiveness of ticket sales, improve financial recording in accordance with applicable accounting rules, and support professional, transparent, and sustainable ecotourism management. Therefore, the authors intend to conduct research on a website-based accounting information system at Balaram Mangrove Heroes Ecotourism.

2. Literature Review

2.1. Development

Development can be interpreted as an activity carried out through the process of planning, organizing, and managing steps systematically to achieve certain goals effectively and efficiently (Bara et al., 2024). Development that is carried out well can provide benefits in the form of ease of conveying information, assisting the decision-making process, and supporting the creation of effective and efficient work (Hidayat & Irvanda, 2022). The development was carried out to design a website-based accounting information system that can assist in managing transactions and financial reports at the ecotourism.

2.2. Accounting Information System (AIS)

An Accounting Information System (AIS) is an information system designed to manage all activities related to the accounting process, which includes collecting and storing data on activities and transactions, processing data into useful information to support the decision-making process, and providing adequate control mechanisms to safeguard and protect organizational assets (Endaryati, 2021), in line with that, according to Rahmawati (2018). An Accounting Information System is a system composed of various components, such as forms, records, and reports, which are systematically integrated to produce the financial information needed by management. The implementation of an accounting information system can help managers in improving the accuracy of transaction recording, minimizing manual recording errors, and generating financial reports that are faster and more accurate.

2.3. Website

A website is an internet-based medium that functions as a means of delivering information and services digitally (Asmara, 2019). Through a website, users can input transaction data, view sales reports, and monitor ticket sales activity in real-time through any device, at any time, and from anywhere (Apisca et al., 2024). A website is used as the primary medium in the accounting information system because it is capable of supporting the processing of transaction data in real-time, improving recording efficiency, and simplifying the presentation of financial reports for ecotourism managers.

2.4. Flowchart

A flowchart is a diagram that uses symbol notation to describe an existing system or a new system to be developed logically, without considering the physical environment in which the data flows or the physical environment in which the data will be stored. An accounting system can be explained through a document flowchart. This flowchart uses standard symbols to describe the flow of documents in an accounting system. These symbols help systems analysts understand and prepare document flowcharts systematically and consistently (Mulyadi, 2018). A flowchart is used to illustrate the flow of the designed system in order to simplify the process of analyzing and developing a website-based accounting information system.

2.5. Financial Statements

Financial statements are the result of the accounting process used as a means of communication between a company's financial data and interested parties (Prastiwi & Pamikatsih, 2025). The main components of financial statements include the balance sheet, profit and loss statement, statement of changes in financial position (such as the cash flow statement), and notes to the financial statements (Afifah, 2025). The purpose of financial statements is to provide information about the financial position, performance, and changes in the financial position of a company that is useful for users in making economic decisions.

2.6. Profit and Loss Statement

The profit and loss statement is one of the main components of financial statements that presents information regarding a company's revenues and expenses during a certain period so that it can be determined whether the company earned a profit or incurred a loss. The profit and loss statement serves as a tool for assessing the operational effectiveness of a company in generating profits. The purpose of the profit and loss statement is to provide information about the company's performance during a certain period, which can be used as the basis for evaluation and economic decision-making (Banjarnahor et al., 2025). A profit and loss report is needed to determine the level of profit from ecotourism management so that it can serve as a basis for operational evaluation and management decision making.

2.7. Ecotourism

Ecotourism is a concept of sustainable tourism development that combines tourism activities with efforts to conserve the environment and preserve culture, as well as encouraging active participation of local communities (Webliana et al., 2023). In the context of mangrove forests, the development of ecotourism aims to improve the local economy through direct or indirect involvement in area management, and the development of mangrove ecotourism is expected to be able to maintain environmental sustainability because it is not exploitative, but rather utilizes natural services and the role of the community to meet the knowledge, physical, and psychological needs of tourists.

3. Methods

This study uses a qualitative research method with a descriptive approach to analyze the needs for developing a website-based accounting information system at Balaram Mangrove Heroes Tanjung Benoa Ecotourism. The qualitative method was chosen because this study aims to obtain an in-depth understanding based on the situation occurring in the field regarding the transaction recording system, the obstacles faced, and the needs of managers in managing financial information at Balaram Mangrove Heroes Tanjung Benoa Ecotourism. According to Sugiyono (2023), qualitative research is a research method used to examine the condition of objects naturally, with the researcher as the main instrument, data collection techniques carried out through triangulation, and data analysis that is inductive in nature and places greater emphasis on understanding meaning rather than generalization.

The informants involved in this study consisted of three people, namely the supervisor, chairperson, and secretary of Balaram Mangrove Heroes Ecotourism, who were selected because they have direct involvement in and understanding of the financial management and transaction recording process at the ecotourism site. The research instruments used in this study consisted of an interview guide containing a list of questions regarding the transaction process, financial recording system, obstacles in managing transaction data, and information

system requirements, as well as an observation guide used to record the operational process and transaction flow directly in the field.

Research data were obtained through interview, observation, and documentation techniques. These data collection techniques refer to the opinion of Sugiyono (2023), who states that in qualitative research, data collection can be carried out through observation, interviews, and documentation. Interviews were conducted in depth with the supervisor, chairperson, and secretary of Balam Mangrove Heroes Ecotourism to obtain information regarding the transaction process, financial recording system, obstacles in managing transaction data, and the expected information system requirements. Furthermore, observation was carried out by directly observing the operational process and transaction recording, particularly in ticket sales, cash receipt recording, salary expense expenditures, and other operational expenditures, so that the researcher obtained a real picture of the transaction flow and the currently running recording system. This study also uses documentation techniques to supplement the research data. Documentation was carried out by collecting supporting documents, such as transaction records, payment receipts, simple financial reports, as well as documentation of operational activities in the form of photos and field notes. Documentation data were used to strengthen the results of interviews and observations so that the information obtained becomes more accurate.

The data analysis technique used in this study goes through several stages referring to qualitative data analysis techniques. The first stage is data collection through interviews, observations, and documentation to obtain information regarding the transaction recording system at Balam Mangrove Heroes Ecotourism. The second stage is data reduction by sorting, focusing, and simplifying data relevant to the research needs. The third stage is descriptive data presentation to simplify the process of understanding and analyzing data. The final stage is drawing conclusions based on the results of data analysis to determine the website-based accounting information system requirements that are appropriate to the conditions and needs of the ecotourism managers. The results of this analysis will be used as a basis for developing a website-based accounting information system that is expected to improve recording accuracy, simplify the preparation of financial reports, and support the efficiency and transparency of financial management at Balam Mangrove Heroes Ecotourism.

4. Results and Discussion

4.1. Research Results

4.1.1. Problem Identification

The results of the identification carried out by the authors together with the management of Balam Mangrove Heroes Ecotourism, located in Tanjung Benoa, indicate several problems in financial management, namely:

- a) In the financial recording process, the system used is still carried out manually, meaning that all transactions are recorded conventionally without system support. This causes the recording process to be less efficient and requires a relatively longer time in data processing.
- b) There is a potential for human error in the recording process, such as errors in writing numbers, inputting data, or calculations, which can affect the accuracy of the financial information produced.

- c) The unavailability of structured and systematic financial reports results in financial information not being presented clearly and in an organized manner, making it difficult for management to conduct analysis or make decisions.
- d) This condition also causes difficulties in conducting financial monitoring and control, because scattered and non-integrated data creates obstacles.

Based on the research conducted by the authors at Balaram Mangrove Heroes Ecotourism located in Tanjung Benoa, improvement efforts are needed through structured recording of cash system procedures and the development of a digital-based accounting information system to improve financial effectiveness and accuracy. The solution that can be offered to the management is the development of a website-based accounting information system called ECOFIN (Ecotourism Financial). Further, the provision of a user guide (manual book) containing operating instructions for ECOFIN is intended to make it easier for managers to understand and operate the implemented system with effective and real-time monitoring.

4.1.2. Ticket Sales System at Balaram Mangrove Heroes Ecotourism Tanjung Benoa

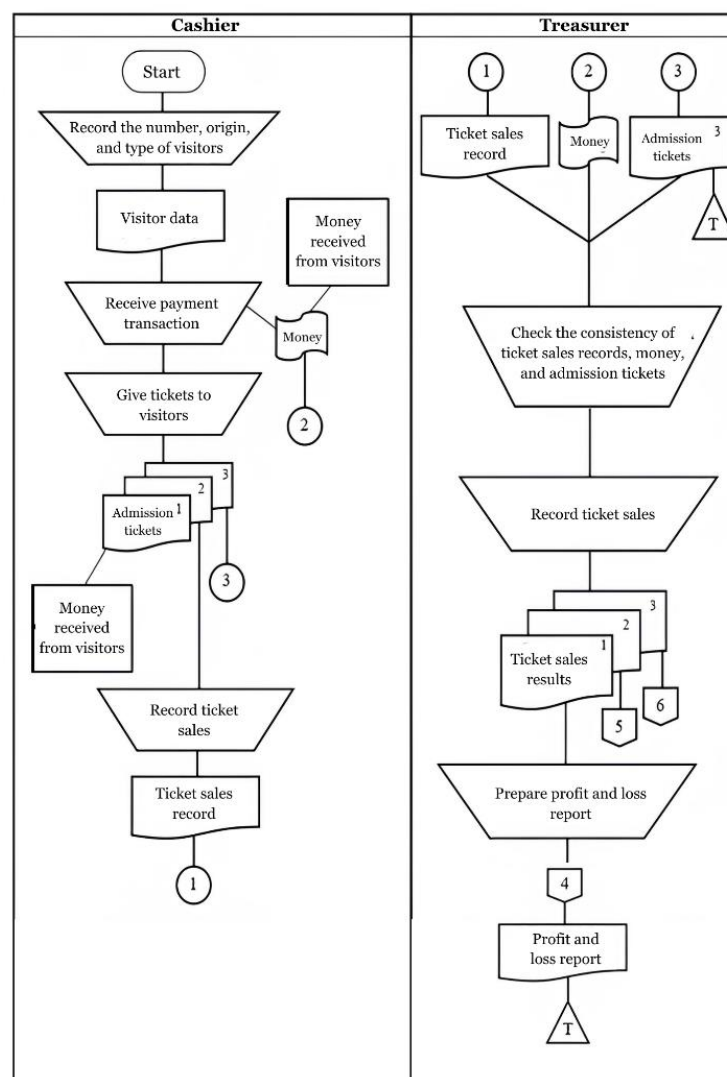


Figure 1. Ticket Sales System at Balaram Mangrove Heroes Ecotourism

Source: Research data, 2026

The ticket sales procedure at Balaram Mangrove Heroes Ecotourism in Figure 1 is described as follows. The cashier initiates the process by recording the number, origin, and type of visitors, producing visitor data as the basis for the transaction. The cashier then receives the payment transaction and money from the visitor as the proceeds from ticket sales, and provides an entrance ticket according to the type of ticket purchased, which serves as proof of payment. Based on the transactions that occur, the cashier records the ticket sales and creates a ticket sales record accompanied by visitor data. This record is then submitted to the treasurer along with the sales proceeds and the entrance tickets sold.

The treasurer receives the ticket sales record along with the sales proceeds from the cashier, as well as the sold entrance tickets as supporting documents. The treasurer then checks the correspondence between the ticket sales record, the money received, and the entrance tickets to ensure there is no discrepancy. Based on the verification, the treasurer records the ticket sales results and creates a record of ticket sales results, which is subsequently used as the basis for preparing the profit and loss statement. The profit and loss statement is then stored as an archive.

4.1.3. Cash Expenditure System at Balaram Mangrove Heroes Ecotourism Tanjung Benoa

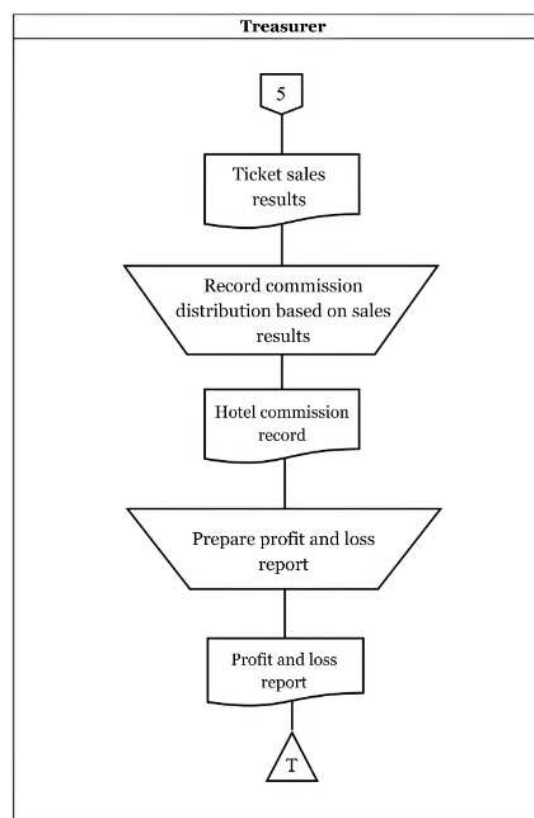


Figure 2. Cash Expenditure System at Balaram Mangrove Heroes Ecotourism

Source: Research data, 2026

The cash expenditure procedure at Balaram Mangrove Heroes Ecotourism in Figure 2 is described as follows. The treasurer initiates the process by receiving ticket sales data in the form of an Excel file. Based on the sales results, the treasurer calculates and records the commission distribution in accordance with the provisions. The treasurer then prepares the profit and loss statement, which is subsequently stored as an archive.

4.1.4. Salary Expense Disbursement System at Balaram Mangrove Heroes Ecotourism Tanjung Benoa

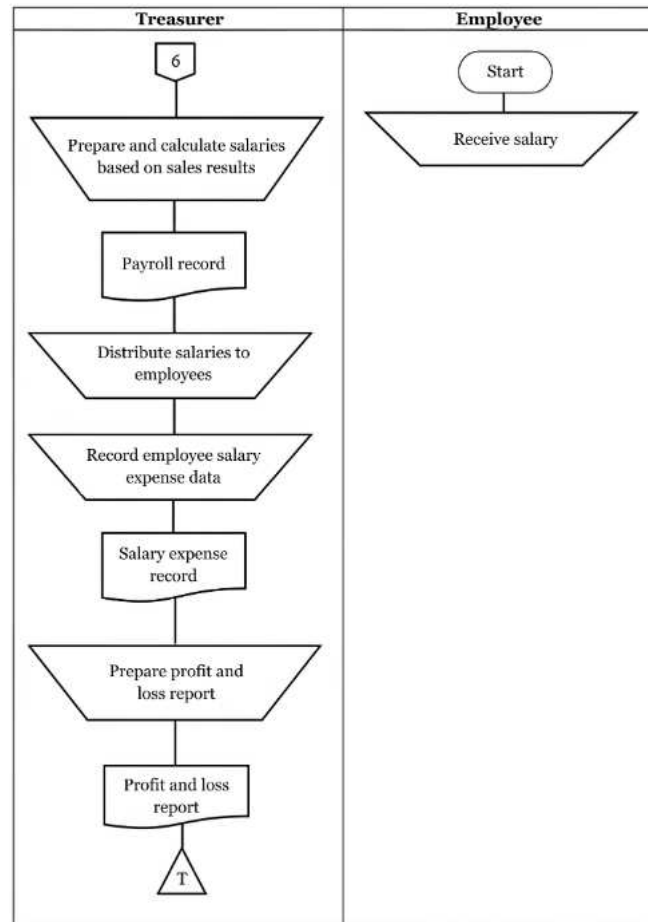


Figure 3. Salary Expense Disbursement System at Balaram Mangrove Heroes Ecotourism

Source: Research data, 2026

The salary expense disbursement procedure at Balaram Mangrove Heroes Ecotourism in Figure 3 is described as follows. The treasurer initiates the process by preparing and calculating employee salaries based on established data, then creates an employee salary list record as the basis for salary payment. The treasurer subsequently distributes salaries to employees in accordance with the salary list that has been prepared. Based on the payments that have been made, the treasurer records the employee salary expense data and creates a salary expense record as the basis for report preparation. The treasurer then prepares the profit and loss statement, which is subsequently stored as an archive. On the employee side, the employee receives their salary from the treasurer, after which the process ends.

4.1.5. Operational Expense Disbursement System at Balaram Mangrove Heroes Ecotourism Tanjung Benoa

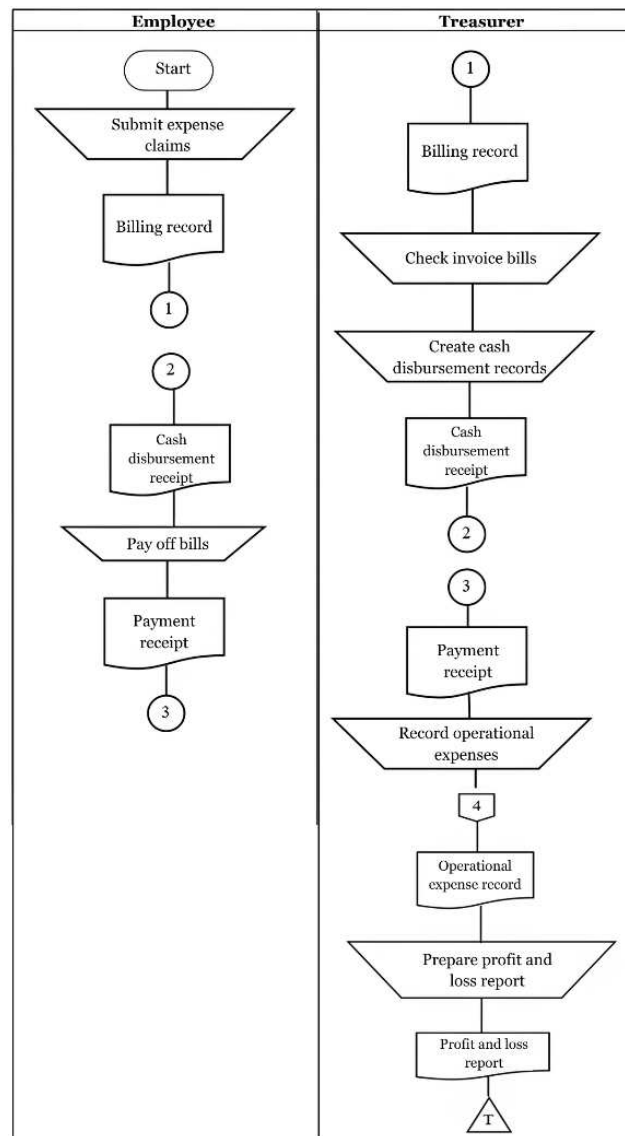


Figure 4. Operational Expense Disbursement System at Balaram Mangrove Heroes Ecotourism

Source: Research data, 2026

The operational expense disbursement procedure at Balaram Mangrove Heroes Ecotourism in Figure 4 is described as follows. The officer initiates the process by submitting a bill to the treasurer and forwarding the invoice accordingly. After submitting the invoice, the officer receives money from the treasurer that has been adjusted to the amount needed. The officer then pays the operational expense bill and collects the receipt for the goods purchased, which is subsequently submitted to the treasurer. On the treasurer's side, the treasurer receives the expense bill record from the officer and checks the correspondence of the payment amount against the receipt received. The treasurer then records each operational expense disbursement and creates a record of money given to the officer. Upon receiving the payment receipt from the officer, the treasurer prepares the profit and loss statement, which is subsequently stored as an archive.

4.1.6. Accounting Information System Features

A. Login Page

As in Figure 5, after the user presses the Login button on the home page, the system will display the Login page. At this stage, the user is asked to enter the email address and password that have been registered in the system.

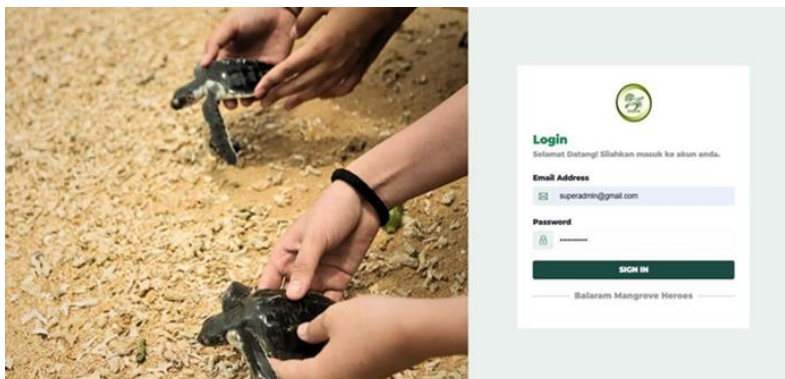


Figure 5. Login Page

In the ECOFIN system, there are two types of users, namely superadmin and staff, each of whom has different access rights according to their role in the system.

B. Dashboard Menu

This main Dashboard (Figure 6) page functions as an information center that displays a summary of data and overall system activity.

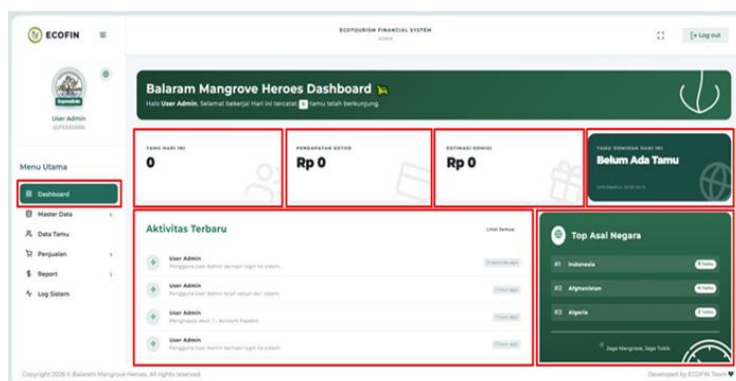


Figure 6. Dashboard Page

On the Dashboard page, several key pieces of information are displayed, namely:

- A. Guests Today: Displays the number of visitors recorded on the current day.
- B. Gross Revenue: Shows the total revenue obtained from operational activities of the system.
- C. Estimated Commission: Presents the estimated commission generated based on transactions that have occurred.
- D. Dominant Guests Today: Presents information on the category of visitors most frequently recorded.
- E. Recent Activity: Displays a history of user activity within the system.
- F. Top Country of Origin: Presents data on the visitor's countries of origin with the highest number of visits.

C. Master Data Menu

Master Data is a menu in the system that functions to manage the basic data used in the operational process. In the Master Data menu there are several sub-menus, namely Country, Chart of Account (COA), Users, Ticket Type, and Products.

1) Country

The Country Data sub-menu (Figure 7) is a part of Master Data in the ECOFIN system that functions to manage and store visitor country of origin data in a structured manner.

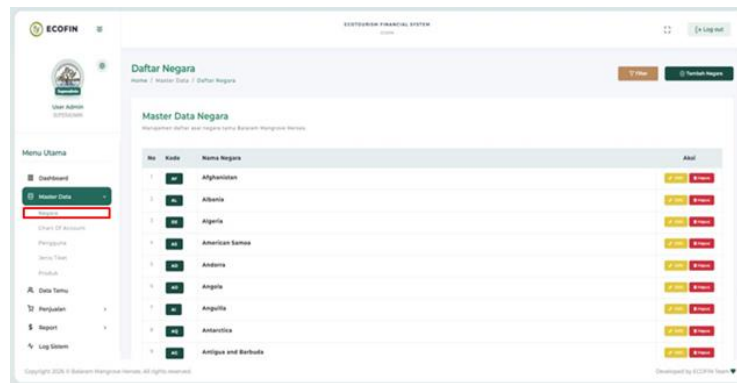


Figure 7. Country Data Page

On this page there are several features, namely number, country code, country name, and action.

2) Chart of Account (COA)

In the Chart of Account (COA) sub-menu (Figure 8), the system is used to manage account data that plays a role in the financial recording and reporting process.

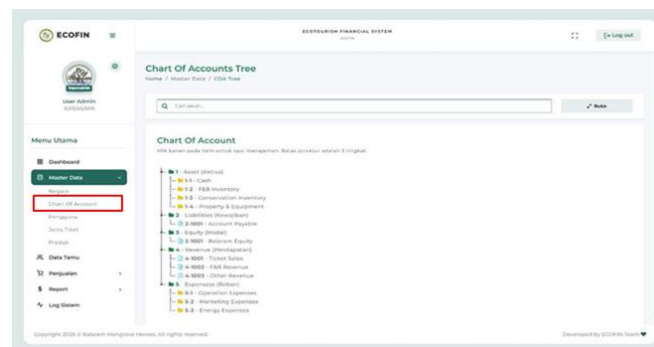


Figure 8. Chart of Account (COA) Page

The Chart of Account is arranged in a tiered structure and grouped into several main categories, such as assets, liabilities, equity, revenue, and expenses, to make it easier for users to classify accounts according to their type.

3) Users

The User Data sub-menu (Figure 9) is used to manage data of users who have access to the system. This data includes user identity information as well as the access rights they hold within the system.

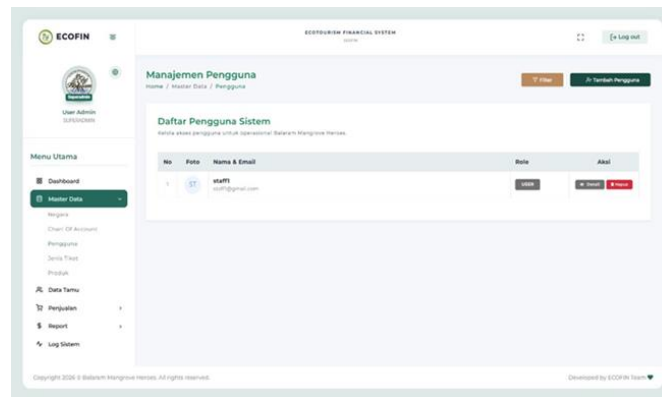


Figure 9. System User Data Page

On this page there are several pieces of information, namely number, photo, name and email, role, and action.

4) Ticket Type

The Ticket Type Data sub-menu (Figure 10) is used to manage ticket data available in the system.

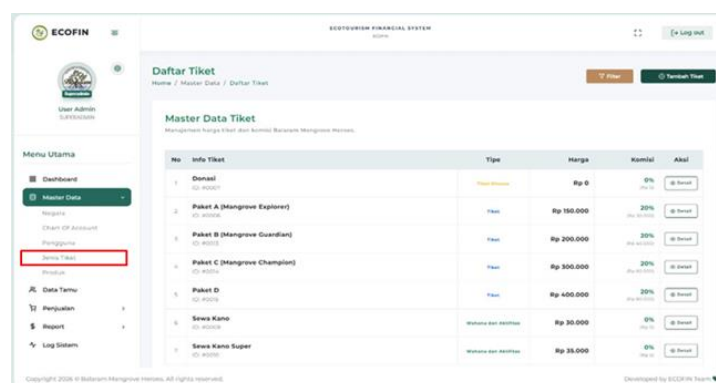


Figure 10. Ticket Type Data Page

On this page there are several pieces of information, namely number, ticket info, type, price, commission, and action.

5) Products

In the Products sub-menu (Figure 11) contained in the Master Data menu, the system provides a feature for managing product data to be sold. Products in this system are classified into food, beverages, and souvenirs.

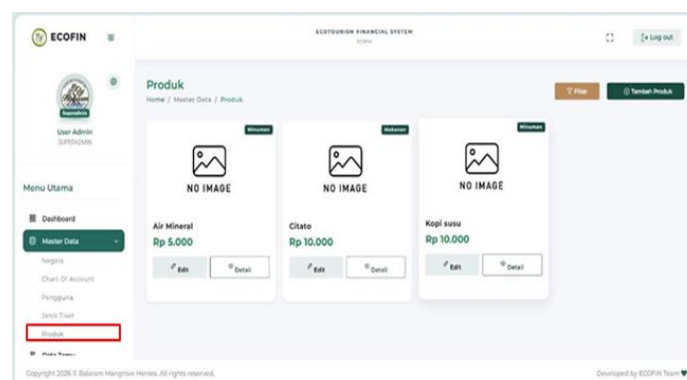


Figure 11. Product Data Page

Products are displayed in a visual box format containing the product name, category, price, and product image.

D. Guest Data

In the main menu, there is a guest data feature that functions to display all information on guests who have previously visited Balaram Mangrove Heroes.

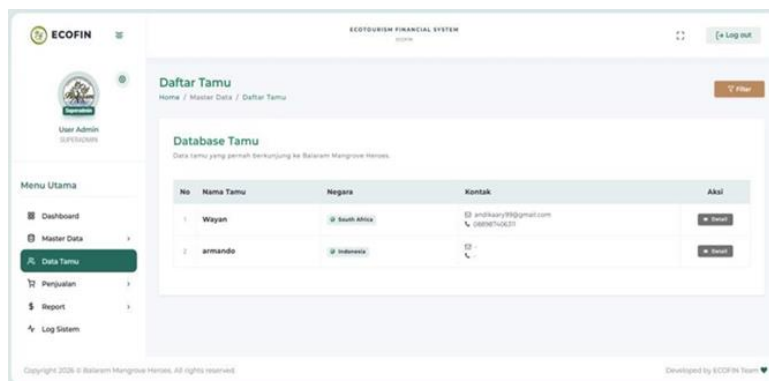


Figure 12. Guest Data Page

In the guest database column as shown in Figure 12, the information contained includes the number column indicating the order of guest data in the system, the guest name column displaying the name of the registered visitor, the country column indicating the visitor's country of origin, the contact column containing the guest's contact information such as a phone number, and the action column containing a Detail button used to view more complete guest information. This menu is used to manage and monitor guest data comprehensively. In the Filter section, users can search for guest data they wish to review. The search can be performed based on name, email address, or phone number, making it easy to find guest data quickly and efficiently.

E. Sales

The Sales page is used to manage transactions that occur within the system. This menu consists of two sub-menus, namely Ticket Sales, and Canteen & Retail.

1) Ticket Sales

In the Ticket Sales menu (Figure 13), the system is used to carry out ticket sales transactions to visitors. This page is equipped with several features that support the process of ticket selection, guest data entry, and transaction completion.

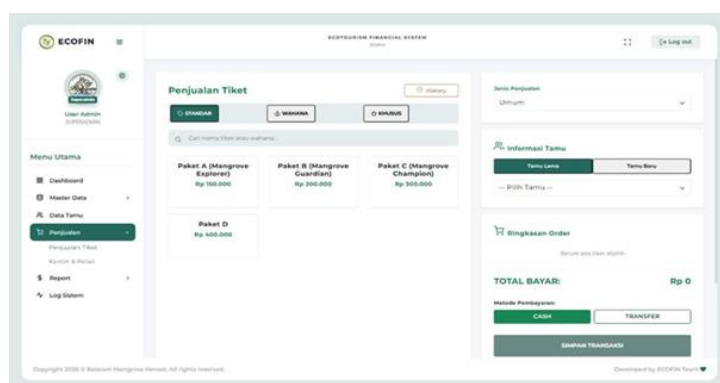


Figure 13. Ticket Sales Page

There is also a History feature (Figure 14) that functions to display the history or report of ticket sales on the current day.

No	Tanggal	Tamu & Tiket	Jenis Penjualan	Qty	Total Bayar	Metode	Aksi
1	14/04/2024 10:40	armando Paket B	Driver	1 Brg	Rp 400.000	CASH	Detail
2	14/04/2024 10:40	armando Paket B	Komunitas	1 Brg	Rp 400.000	CASH	Detail
3	14/04/2024 10:40	armando Paket B	Hotel	1 Brg	Rp 400.000	CASH	Detail

Figure 14. History Feature Page (Sales History)

The Sales History page is used to display all ticket sales transaction data that has been carried out. Data is displayed in tabular form, making it easy for users to monitor sales activity and payment status.

2) Canteen and Retail

In the sales menu, there is a Retail Sales sub-menu (Figure 15) that functions to carry out sales transactions for food and beverage products as well as souvenirs to visitors.

Figure 15. Canteen & Retail Sales Page

Users can select the type of product available, such as all, food, beverages, snacks, and souvenirs. In the Payment Method section, users can select the type of payment available, namely cash and transfer. After all order data has been filled in, press the Process Transaction button. The system will process the transaction and save the sales data into the system.

F. Report

When the user selects the Report menu, the system will display two types of reports, namely Profit and Loss, and Balance Sheet.

1) Profit and Loss

After the user selects Profit and Loss, the system will display the Dashboard page containing information on total income, total expenditure, ending balance, and the latest history, with the following display:

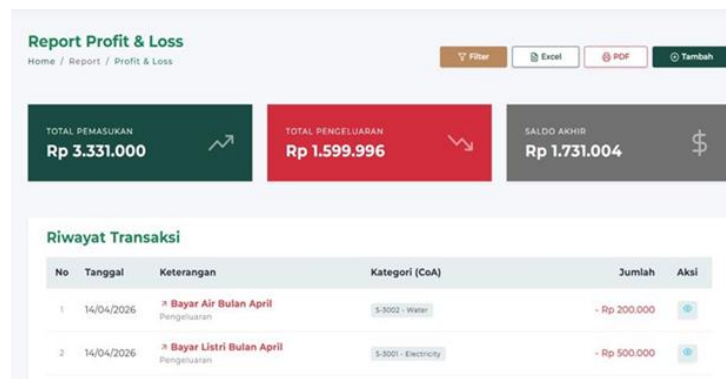


Figure 16. Profit and Loss Report Page

On the Profit & Loss Report page (Figure 16), several key pieces of information are displayed, such as Total Income, Total Expenditure, Ending Balance, and Transaction History.

2) Balance Sheet

When the user selects the Balance Sheet menu, the system will display the Dashboard page containing information on total assets, total liabilities, total equity, and balance sheet transaction history. The page display can be seen in the following figure 17.

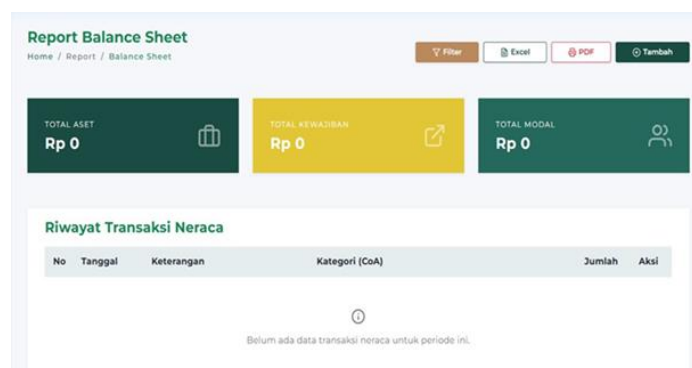


Figure 17. Balance Sheet Report Page

Total Assets is the total amount of assets owned by Balaram Ecotourism. Total Liabilities is the total amount of liabilities or debts held. Total Equity shows the total amount of equity that has been provided by the owner or foundation.

G. System Log

The System Log page is used to display the history of user activity within the system. The page display can be seen in the figure 18.

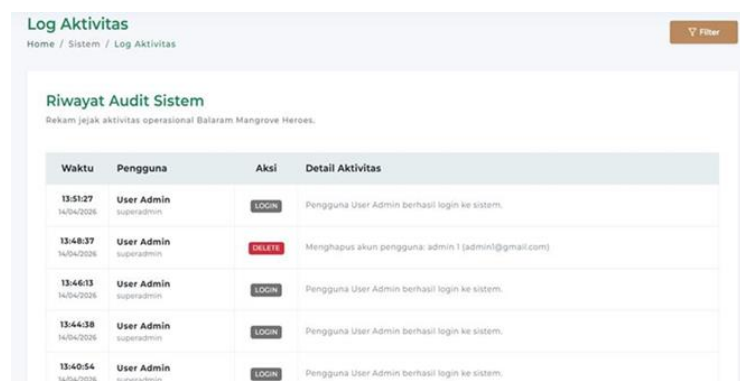


Figure 18. System Log Page

On this page, the system audit history is displayed, which records every operational activity carried out by users. The information displayed includes the time of activity, username, type of action performed, and activity details. The time column shows the date and time the activity occurred. The user column displays the name of the user who performed the activity. The action column shows the type of activity performed, such as Login or data deletion. Meanwhile, the activity detail column contains a complete description of the activity performed.

4.1.7. Implementation of the Website-Based System at Balaram Mangrove Heroes Ecotourism

The implementation of a website-based system at Balaram Mangrove Heroes Tanjung Benoa Ecotourism aims to overcome the weaknesses of financial management that is still carried out manually. The manual process risks causing recording errors, delays in report preparation, and limitations in financial oversight. As a solution, a website-based accounting information system named ECOFIN was developed to improve the effectiveness, accuracy, and integration of financial management.

The ECOFIN system supports digital transaction recording and can be accessed through various devices without requiring additional installation. The main features of the system include a dashboard, ticket sales, cash expenditures, salary expenses, operational expenses, and profit and loss reports. The dashboard presents financial information in real-time, while all transactions are stored automatically in a database to improve data efficiency and security.

Financial management becomes more structured through the recording of commissions, salaries, and operational expenditures equipped with a verification process and digital documentation. The system is also capable of generating profit and loss reports and balance sheets automatically that contain information regarding income, expenditures, and business results quickly and accurately. The implementation of the system is supported by a user guide so that managers can easily understand the operational flow of the system. Overall, the implementation of ECOFIN is capable of improving the efficiency, effectiveness, and accuracy of financial management and supporting more precise data-based decision making.

4.2. Discussion

The findings of this study are in line with the concept of an Accounting Information System proposed by Endaryati (2021), who states that an accounting information system is designed to manage data collection and storage, process data into useful information, and provide control mechanisms to safeguard organizational assets. The ECOFIN system reflects these three functions through its transaction recording features, its automatic generation of profit and loss statements and balance sheets, and its System Log feature, which functions as a control and oversight mechanism. This finding also supports the view of Rahmawati (2018), who describes an accounting information system as a system composed of integrated forms, records, and reports that produce the financial information needed by management, as reflected in the integration between the Master Data, Sales, and Report menus within ECOFIN.

These findings are also consistent with previous studies on website-based information systems in the tourism sector. Putra et al. (2024) and Prayetno et al. (2022) found that website-based systems for ticket sales in tourism contexts are capable of recording transactions automatically and generating reports more quickly and accurately compared to manual processes, a pattern that is similarly reflected in the ticket sales and reporting features of ECOFIN. Further, the findings align with Nababan et al. (2025), who state that website-based point-of-sale systems help maintain data accuracy, simplify reconciliation, and support

financial transparency, consistent with the role of the treasurer's verification process and the Dashboard feature in ECOFIN. However, while these prior studies focus primarily on retail or general tourism ticketing contexts, the present study extends this application to the specific financial structure of community-based mangrove ecotourism, which involves the additional management of commission distribution, salary expenses, and operational expenses alongside ticket sales, a scope not specifically addressed in the previous studies by Isnibaiti et al. (2022) or Nababan et al. (2025).

Overall, this discussion suggests that the development of ECOFIN is theoretically grounded in established accounting information system concepts and is consistent with the direction of prior research on website-based systems in tourism, while addressing financial management needs specific to the mangrove ecotourism context that have not been the central focus of earlier studies.

5. Conclusion

Based on the results of the study, financial management at Balaram Mangrove Heroes Tanjung Benoa Ecotourism is still carried out manually, thus causing risks of recording errors, limitations in the preparation of financial reports, and less than optimal financial monitoring and control processes. This study contributes to the development of a website-based accounting information system (ECOFIN) designed according to the needs of ecotourism managers. This system is capable of integrating transaction recording, data management, and the preparation of financial reports automatically and in real-time.

The implications of the study indicate that the implementation of the ECOFIN system can improve the efficiency, accuracy, and transparency of financial management and support more effective and professional decision making. However, this study has limitations in scope as it was only conducted on a single research object and has not yet tested the system in the long term. In addition, system testing is still limited to functional aspects and does not yet cover a comprehensive evaluation of system performance. Therefore, future studies are suggested to test the implementation of the system over a longer period of time, carry out the development of more complex features, and test the effectiveness of the system on various other ecotourism objects in order to obtain more general results.

6. References

- Aberta, F., Hertati, L., Terrtiavini, T., Heryati, A., Cahyani, N., & Puspitawati, L. (2024). Sosialisasi Sistem Informasi Akuntansi Tradisional dan Berbasis Teknologi Terkini Magang MBKM Mahasiswa Indo Global Mandiri. *Journal of Sustainable Community Service*, 4(3), 148–162. <https://doi.org/10.55047/jscs.v4i3.643>
- Afifah, F. N. (2025). Penerapan Standar Akuntansi Keuangan (SAK) terhadap Kualitas Laporan Keuangan pada Perusahaan Manufaktur di Indonesia. *Journal of UKMC National Seminar on Accounting Proceeding*, 4(1), 138–147. <https://journal.ukmc.ac.id/index.php/pnsoa/article/view/1584>
- Apisca, D., Surojudin, N., & . E. (2024). Aplikasi Pencatatan Keuangan Berbasis Website Dengan Metode Rapid Application Development Pada PT Samsriwi Adi Megah. *Jurnal Teknologi Dan Sistem Informasi Bisnis*, 6(1), 212–219. <https://doi.org/10.47233/jteksis.v6i1.1153>
- Asmara, J. (2019). Rancang bangun sistem informasi desa berbasis website (Studi kasus desa Netpala). *Jurnal Pendidikan Teknologi Informasi (JUKANTI)*, 2(1), 1–7. <https://doi.org/10.37792/jukanti.v2i1.17>

- Banjarnahor, A. L., Sunggu, D. W. O., Panjaitan, S., Tanjung, J. P., & Aruan, H. M. G. P. (2025). Laporan Laba Rugi. *EKOMA: Jurnal Ekonomi, Manajemen, Akuntansi*, 4(6), 9739–9746. <https://doi.org/10.56799/ekoma.v4i6.12104>
- Bara, L. H. B., Sibuea, P., Meylani, A., Amanda, D. R., Natasya, A., & Wetty, E. (2024). Strategi Penyusunan Langkah Pembelajaran. *Jurnal Pendidikan Tambusai*, 7(3), 32019–32023. <https://doi.org/10.31004/jptam.v7i3.12229>
- Dian, R., Purba, B. M., Rumapea, N. H. Y., & Pinem, D. E. (2024). Strategi Pengembangan Ekowisata Mangrove Berkelanjutan di Belawan Sicanang Kecamatan Medan Belawan Kota Medan. *Jurnal Darma Agung*, 32(3), 246–258. <https://doi.org/10.46930/ojsuda.v32i3.4437>
- Endaryati, E. (2021). *Sistem Informasi Akuntansi*. Penerbit Yayasan Prima Agus Teknik.
- Harefa, M. S., Arbiansyah, A., Fazera, D., Siboro, L. P. P., Fadilah, R., Nasution, T. W., & Utami, W. A. (2024). Identifikasi Faktor-Faktor Penyebab Kerusakan Wilayah Pengembangan Konservasi Mangrove di Wilayah Pesisir Paluh Merbau. *Jurnal Manajemen Pesisir Dan Laut*, 2(1), 35–42. <https://doi.org/10.36841/mapel.v2i01.4515>
- Hidayat, A., & Irvanda, M. (2022). Optimalisasi Penyusunan dan Pembuatan Laporan untuk Mewujudkan Good Governance. *Jurnal Ilmiah Hospitality*, 11(1), 281–290. <https://doi.org/10.47492/jih.v11i1.1611>
- Ikhsan, R. M., Nofiyanti, F., Febiola, A., Jidan, A. A., Kirani, H. A., Rofiah, A., Anjani, D. T., Rofiah, A., Yuherna, Pattimahu, M. G., Zahroh, N. F., Yusri, A. M. B., & Rainang, D. R. (2024). *Membangun Desa Wisata Marine Tourism*. Penerbit Irfani.
- Iskandar, M. I., Hasibuan, B., Hasibuan, B., & Nahas, A. (2025). Dampak Pembangunan Pariwisata Terhadap Ekonomi dan Budaya Lokal: Tantangan dan Solusi untuk Pengelolaan Berkelanjutan. *EKOMA : Jurnal Ekonomi, Manajemen, Akuntansi*, 4(3), 5778–5782. <https://doi.org/10.56799/ekoma.v4i3.8609>
- Isnibaiti, S., Arwani, I., & Putra, W. H. N. (2022). Pengembangan Sistem Informasi Point of Sales (POS) berbasis Website untuk Manajemen Home Industry (Studi Kasus: Gelsey Real Surakarta). *Jurnal Pengembangan Teknologi Informasi Dan Ilmu Komputer*, 6(4), 1789–1796. <https://j-ptiik.ub.ac.id/index.php/j-ptiik/article/view/10924>
- Ivania, P. S., Luh, N., Yusmarisa, R., & Mareni, N. K. (2025). Enhancing Hotel Financial Reporting through Accounting Understanding and Information System Utilization : A Case Study of a 5-Star Resort in Bali. *Journal Of Management, Accounting, General Finance And International Economic Issues*, 5(1), 166–178. <https://doi.org/10.55047/marginal.v5i1.1942>
- Mulyadi. (2018). *Sistem Informasi Akuntansi* (4th ed.). Salemba Empat.
- Nababan, A. A., Hasugian, P. M., Jannah, M., & Harefa, A. M. L. (2025). Digitalisasi Proses Penjualan Melalui Web Based Point of Sale pada Warung Dek Gam Kuphi. *Multidisiplin Pengabdian Kepada Masyarakat*, 4(1), 6–10. <https://ejournal.seaninstitute.or.id/index.php/pkm/article/view/6657>
- Prastiwi, G. M. I., & Pamikatsih, T. R. (2025). Penerapan SAK ETAP dengan Benar pada Sistem Keuangan PT Damai Gadai. *Jurnal Ilmiah Akuntansi*, 2(1), 39–48. <https://doi.org/10.69714/48fdjjo4>
- Prayetno, A., Yulianto, R., & Hartono, R. (2022). Sistem Informasi Pemesanan Tiket Wisata Alam Berbasis Website di Taman Nasional Baluran dengan PHP & MySQL. *Jikom: Jurnal Informatika Dan Komputer*, 12(1), 1–9. <https://doi.org/10.55794/jikom.v12i1.59>
- Putra, K. N. E. A., Nata, G. N. M., & Suniantara, I. K. P. (2024). Sistem Informasi Pemesanan Tiket Masuk Pada Objek Wisata Wanagiri Heaven Berbasis Website. *Seminar Hasil Penelitian Informatika Dan Komputer (SPINTER)*, 1(3), 275–280. <https://spinter.stikom-bali.ac.id/index.php/spinter/article/view/413>
- Rahmawati, I. D. (2018). *Buku Ajar Sistem Informasi Akuntansi*. Umsida Press. <https://doi.org/10.21070/2018/978-602-5914-07-2>

- Sugiyono. (2023). *Metode Penelitian Kuantitatif Kualitatif dan R&D*.
- Suryawan, I. W. K., & Tehupeior, A. (2023). Strategi Partisipatif Masyarakat dalam Mitigasi Dampak Alami dan Manusia terhadap Konservasi Penyu di Indonesia. *Indonesian Journal of Conservation*, 12(2), 88–100. <https://doi.org/10.15294/ijc.v12i2.47191>
- Webliana, K., Anwar, H., Aji, I. M. L., Sari, D. P., & Sari, N. K. M. (2023). Analisis Kesesuaian Lahan Ekowisata Mangrove Tanjung Batu, Desa Sekotong Tengah. *Journal of Forest Science Avicennia*, 6(1), 65–77. <https://doi.org/10.22219/avicennia.v6i1.22128>