

Web-Based Information System for Sales Data and Transaction Reports at Gubug Alit MSMES

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Abstract: Many Micro, Small, and Medium Enterprises (MSMEs) still manage sales and financial transactions manually, which may result in recording errors, data loss, and delays in preparing financial reports. This study aims to develop a web-based information system for managing sales data and transaction reports at Gubug Alit MSME. The study employed a qualitative descriptive approach combined with system development activities, including requirements analysis, system design, implementation, and functional testing. The system was developed using the Laravel framework and MySQL database. The resulting system provides user authentication, category management, income and expense recording, budgeting, dashboard monitoring, and financial-report export in PDF and Excel formats. Black Box Testing showed that the main system functions operated according to the specified requirements. The system supports more structured transaction recording, facilitates financial monitoring, and improves the efficiency of preparing transaction reports. In the context of Sharia-based business management, the system may support transparency, accountability, and amanah in managing business financial information.

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Introduction

The development of information technology in the digital era has brought significant changes in various aspects of life, including in the business sector and micro, small, and medium enterprises (MSMEs). The use of information technology is not only a necessity for large companies, but also an important factor that can support the sustainability and competitiveness of MSMEs. One form of application of information

technology that is widely used today is a web-based information system that is able to help the data management process faster, more accurately, and more efficiently.

MSMEs have a strategic role in improving the community's economy because they are able to create jobs and encourage regional economic growth. However, in practice, there are still many MSMEs that carry out conventional operational activities, especially in the management of sales data and financial transactions. Manual recording systems that use books or physical documents often cause various obstacles, such as recording errors, duplication of data, delays in preparing reports, and the risk of data loss. These conditions can hinder the effectiveness of business management and reduce the quality of information needed in business decision-making .

Gubug Alit MSMEs are one of the businesses that still implement a manual recording system in the management of sales data and financial transactions. All activities of recording income, expenses, and preparation of reports are carried out manually so that it takes a relatively long time and has a low level of accuracy. The limitations of the system currently used also have an impact on the ability of business owners to monitor financial conditions in real-time. Accurate and up-to-date financial information is needed to support business planning, cost control, and increase business profitability. To overcome these problems, an information system is needed that is able to integrate the process of managing sales data and transaction reports in one easy-to-use platform. Web-based information systems are the right choice because they can be accessed at any time and from various devices connected to the internet network.

Based on these conditions, this study aims to design and build a Sales Data Information System and Transaction Report in Web-Based Gubug Alit MSMEs using the Laravel framework and MySQL database. The developed system includes user data management, transaction categories, income and expense recording, monthly budget preparation, information dashboard, and the creation of financial reports that can be exported in PDF and Excel formats. With this system, it is hoped that the sales and transaction data management process will be more effective, structured, and able to provide real-time financial information to support more precise and efficient decision-making in business management.

Research Methods

This study uses a descriptive qualitative method to analyze the ongoing system and design a Web-Based Sales Data and Transaction Report Information System for Gubug Alit MSMEs. The descriptive method was chosen because it can provide a systematic overview of the real conditions that occur in the research object, especially related to the process of managing sales and transaction data that is still carried out manually. Through this method, researchers can identify various existing problems, analyze user needs, and formulate appropriate solutions in the form of web-based information systems .

Data collection in this study was carried out through observation and interview methods. The observation method was carried out by directly observing sales and transaction data management activities in Gubug Alit MSMEs. In addition to observation,

this study also uses the interview method to obtain more in-depth information about the needs of the system. The interview was conducted directly with the owner of Gubug Alit MSMEs as a party involved in managing sales and transaction data.

The information system designed in this study was developed in the form of a web-based application using the Laravel framework and MySQL database. The selection of the technology is based on its ability to support the development of applications that are structured, secure, and easy to manage. After the development process is completed, the system is tested to ensure that all features can run according to user needs. Testing is carried out on the main functions of the system, such as managing transaction data, preparing financial statements, managing budgets, and presenting information on the dashboard. Through these stages, it is hoped that the resulting system will be able to help Gubug Alit MSMEs in managing sales data and transaction reports more effectively, integrated, and accurate so that they can support business decision-making more quickly and precisely.

Result and Discussion

1. System Planning

The design of the Sales Data and Transaction Report Information System for Gubug Alit MSMEs was carried out using the Unified Modeling Language (UML) approach to describe the needs and workflow of the system in a structured manner. The design stages include the creation of an Activity Diagram, Use Case Diagram, Sequence Diagram, and Class Diagram. This modeling aims to provide a clear picture of the business processes that run as well as the interaction between users and the developed system. Activity Diagram is used to describe the flow of activities that occur in the system. In this study, Activity Diagrams were created for the process of account registration, user login, and financial report management. The registration diagram describes the stages that the user performs, starting from filling in the registration data until the account is successfully stored in the system. The login diagram shows the user's authentication process before they can access system features. Meanwhile, the financial statement diagram describes the process of processing transaction data to produce reports that can be displayed or exported into a certain format.

In addition to the Activity Diagram, system designers also use Use Case Diagrams to illustrate the relationship between actors and systems. The main actors in this system are MSME owners or administrators who have access rights to manage all data. Through the diagram, it is known that users can register, login, manage transaction categories, manage budgets, record income and expense transactions, view financial statements, and export reports to PDF and Excel formats.

Furthermore, Sequence Diagram is used to describe the sequence of interactions between users and systems in running a process. Sequence Diagrams of users describe the flow of communication from login to transaction data management. Meanwhile, the Sequence Diagram of financial statements shows the process of requesting report data, data processing by the system, to the process of exporting reports into PDF and Excel formats. The system design is also equipped with a Class Diagram which serves to describe the data



structure and relationships between classes in the system. Class Diagrams show the interconnectedness between user entities, categories, transactions, budgets, targets, and reports that are interconnected in supporting the process of managing sales and financial transaction data.

2. Database Design

Databases are designed to support the storage and management of data in an integrated manner. Database design is done by specifying the tables, attributes, relationships between tables, and the required master keys and guest keys. The database is built consisting of several main tables, namely user tables, category tables, transaction tables, budget tables, budget detail tables, target tables, failed target tables, target batch tables, token password reset tables, and sessions tables. The user table is used to store information about users who have access to the system. The category table serves to manage income and expense categories. The transaction table is used as a storage place for financial transaction data made by users. Meanwhile, budget tables and budget details are used to manage financial plans that have been set by business owners. The existence of relationships between tables allows the data processing process to be carried out faster, more structured, and reduces the possibility of data redundancy.

3. System Implementation

The implementation of the system is carried out after the design process is completed. The system was developed using the Laravel framework as an application development platform and MySQL as a database management system. Laravel was chosen because it has an organized development structure, supports the Model-View-Controller (MVC) concept, and provides a wide range of features that make it easy to develop web-based applications. The hardware implementation is carried out using a laptop with Intel Core i5 processor specifications, 16 GB of RAM, and a 256 GB SSD. The software used includes the Windows 11 operating system, Google Chrome browser, and an internet connection with an average speed of 11.18 Mbps.

The results of the implementation result in several main pages that support the operation of the system. The Dashboard page is used to display a summary of financial information in the form of total income, expenses, and budget conditions. The Registration and Login page is used as a means of authenticating users before accessing the system. The Categories page is used to manage income and expense categories. The Budget page serves to set the financial goals and plans you want to achieve. In addition, the system provides a Transactions page to record all entry and expense activities. Transaction data that has been saved will be processed into financial statements that can be displayed through the Financial Statements page.

4. System Testing

System testing is carried out to ensure that all features can run according to user needs. The test method is carried out by testing each of the main functions of the system based on a predetermined usage scenario. The test results show that all features can

function properly and live up to expectations. The login process successfully redirects the user to the dashboard page after entering valid data. The dashboard feature is able to display a summary of income and expenditure data precisely. The management of categories, budgets, and transactions also runs well, where all input data is successfully stored in the database and displayed again as needed.

The financial statement feature successfully presents information based on the transaction data that has been stored. In addition, the PDF and Excel export features are able to generate report documents that match the data on the system. Tests also show that the signout process is running normally and successfully redirects users back to the login page. Based on the results of the tests carried out on all features, no significant obstacles were found and all functions obtained the status according to the expected results.

The results of the study show that the web-based information system developed is able to overcome various problems that previously occurred in Gubug Alit MSMEs. Systems that previously used manual recording have the risk of recording errors, difficulties in finding data, and taking a long time in preparing financial statements. Once the system is implemented, all data can be managed centrally in the database so that the recording process becomes faster, more accurate, and more organized. The existence of the dashboard feature allows business owners to monitor financial conditions in real-time through income, expenses, and budget information that is displayed automatically. In addition, the financial report feature which is equipped with PDF and Excel export capabilities provides convenience in the preparation and documentation of financial statements. Thus, the information system built succeeds in increasing the effectiveness of managing sales and transaction data and helps MSME owners in obtaining the information needed to support business decision-making more quickly and accurately.

Conclusion

Based on the results of the analysis, design, implementation, and testing that has been carried out, it can be concluded that the Sales Data Information System and Transaction Report at Gubug Alit Web-Based MSMEs has been successfully built and is able to increase the effectiveness and efficiency in managing sales data and financial transactions. This system can help MSME owners record income and expense transactions in a more structured manner, reduce the risk of recording errors, and make it easier to manage transaction categories and prepare budgets. In addition, the dashboard and financial reports feature allows users to monitor financial conditions in real-time, while the report export facility to PDF and Excel formats simplifies the documentation and reporting process. The use of the Laravel framework and MySQL database supports organized, secure, and easy-to-manage system performance. The test results show that all the main features of the system run according to the needs of users without significant problems, so this system is suitable for use as a solution to support business management and help make faster, more precise, and data-based decisions in Gubug Alit MSMEs.

References

Jogiyanto, H. (2005). *Information Systems Analysis and Design: A Structured Approach*

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<https://doi.org/10.61536/ambidextrous.5i02.512>

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- Kadir, A. (2014). Introduction to Information Systems (Revised Edition). Yogyakarta: Andi Offset.
- Cashmere. (2016). Analysis of Financial Statements (Revised Edition). Jakarta: PT RajaGrafindo Persada.
- Nugroho, B. (2013). Basics of PHP-MySQL Web Programming with Dreamweaver. Yogyakarta: Gava Media.
- Otwell, T. (2023). Laravel Documentation. Laravel LLC. Retrieved from <https://laravel.com/docs>
- Pressman, R. S. (2012). Software Engineering: A Practitioner's Approach (7th Edition). Yogyakarta: Andi Offset.
- Rosa, A. S., & Shalahuddin, M. (2018). Structured and Object-Oriented Software Engineering (Revised Edition). Bandung: Informatics Bandung.
- Sugiyono. (2019). Quantitative, Qualitative, and R&D Research Methods. Bandung: Alfabeta.
- Wahyudi, F., Fadliani, A., & Maisun. (2022). New Student Admission Information System Using the Laravel Framework. JUSIFOR: Journal of Information Systems and Informatics, 1(1), 20–26.