

# M-Kas: Simple Accurate Financial Management Using Web-Based Financial Reporting Application For More Empowered Msmes

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**Abstract.** This study aims to create a financial reporting application that is accessible from computers and smartphones, regardless of location or time. This will make it easier for MSMEs to monitor and manage their finances. This research uses the prototype method, which has four steps: 1. Identify the application's fundamental requirements; 2. design and build application prototypes; 3. test and evaluate application prototypes; and 4. Conclude the successful creation of the financial report application. The design of this app caters to the easy-to-understand needs of small and medium-sized businesses (MSMEs). The testing and review results indicate that the financial report application has successfully processed the entered transaction data, resulting in financial reports that are ready for printing at any time. This research implements the idea of a straightforward and precise financial reporting application, accessible from any location and at any time through a computer or smartphone. In addition, the users are MSMEs.

**Keywords:** Financial Reporting System, prototype, MSMEs

## 1 Introduction

Micro, Small, and Medium Enterprises (MSMEs) are businesses that always grow every year and are a business sector that supports the pace of Indonesia's economic growth [1]. MSME actors to support various aspects such as expanding product or service marketing, increasing sales and finance need to keep up with technological developments. The development of information technology can be utilized for product or service storefronts on social media so that they can market in all directions and as a means to facilitate making financial reports to determine the profit and loss and business development of MSME actors. Therefore, the management of MSMEs by utilizing technological developments covers all aspects, including

financial management, which is important [2]. MSMEs need applicationatic, precise, and fast financial management to monitor their business. This of course cannot be fully implemented by MSME actors. One of the factors that cause this is the lack of knowledge of MSME actors in recording applications, both manual and technology-assisted. This can be seen from the applications used by MSMEs that still use manual applications or have not utilized advances in information technology. Of course, it will be an obstacle for these MSMEs to compete in today's digital era [3]. Cash bookkeeping can also provide information related to historical changes in a company's cash [4]. Cash bookkeeping or financial statements are important in running a business, whether a large-scale business or even a micro business.

**Table 1** The proportion of MSMEs Utilizing Digital Technology by Business Type (August 2022)

No	Name	Finding Suppliers /Percent of Respondents	Reaching Consumers/ Percent of Respondents	Business Digitalizati on/Percent of Respondents	Market Analysis/P ercent of Respondents	Financial Recording/ Percent of Respondents
1	Food Beverages	71	69	26	23	15
2	Trade	70	68	26	21	19
3	Services*	68	63	32	30	18
4	Manufacturing	63	63	29	29	25
5	Agriculture Fisheries	58	52	22	19	11
6	Real Estat	58	54	31	34	16
7	Transportation	56	53	29	30	15

\*including Financial Services, Education, Healthcare, Media, etc.

Based on Table 1, it is known that the use of digital technology by MSMEs in the fields of business digitization, market analysis, and financial recording is low compared to the use to find suppliers and marketing. Even though businesses manage finances is very important to know the development of their business. This explanation is in line with research [5] which explains that the implementation of financial management of MSME actors is still not optimal in terms of budget use, recording, reporting, and control. This results in business continuity cannot be guaranteed. There needs to be improvement by MSME actors in the application of recording or bookkeeping of their business activities. Simple recording or bookkeeping is of course by utilizing advances in information technology so that MSME actors can monitor their business. The bookkeeping application will end in a financial report that can be checked by MSME actors at any time [6]. Financial reports are the recording and reporting of financial information of an

agency that can show the performance of these MSMEs in a certain period. By preparing financial reports, MSME players can pioneer their businesses so that they can develop and succeed in today's digital era. In the era of globalization, MSME financial reporting standards use Financial Accounting Standards for Micro, Small, and Medium Entities SAK EMKM. Application of financial records for MSMEs is needed so that financial reports are more structured. Some MSMEs still do not understand the importance of bookkeeping or financial reporting in their business. MSME actors tend to focus on marketing or product marketing activities as well as product development [7].

Financial reporting in MSMEs is guided by SAK EMKM. According to IAI in SAK EMKM [8] EMKM is a unit that is not significant in its public accountability, which meets the definitions and criteria of micro and SME businesses according to laws and regulations in force in Indonesia for at least two consecutive years [9]. The purpose of financial statements is to provide information on the financial data and financial performance of an entity that is useful for related parties, both internal and external, in making economic decisions to meet these information needs [10].

EMKM financial reporting consists of various transactions, including cash receipts and disbursements. The cash receipt and expenditure transaction activities of a company are activities that must occur and can come from various sources. To facilitate the identification and management process for future business evaluation, every cash receipt & expenditure transaction needs to be recorded in a cash logbook or cash accounting report. The main purpose of implementing financial statements is to produce information related to the entity's finances, related to recording cash in a period where transactions result in inflows and outflows [11]. Cash bookkeeping can also provide information regarding historical changes in a company's cash. Cash bookkeeping or financial statements are important in running a business, whether a large-scale business or even a micro business.

Financial reports for MSME actors, namely among MSME actors, can make financial reports that have been prepared as business planners, and can also be used to determine the financial position each month. Used to determine the financial position every month. Then in addition to that, MSME actors can control costs easily, also get easy access to funds from creditors, and make it easy to make business decisions [12]. The importance of bookkeeping applications and financial reports for MSME actors, MSME actors need a simple application that is easy to operate and does not require high costs. M-KAS application planning is designed to meet the needs of MSME actors. The application is certainly easy and affordable when applied to MSME actors. Applications are designed by utilizing technological advances. The utilization of simple technology that is easy to apply is by using a web that can be operated on a computer, laptop, or smartphone. The preparation of this financial report application was prepared using a prototyping model. The prototype method is one of the methods where there is interaction between researchers as application developers and application users so that the information objectives needed by users are in line with the applications built by researchers.

This section contains some previous research results related to the research to be conducted. The following are the results of these studies:

1. Khotimah, Herawati, and Rusli Amrul conducted research with the title "Application of Accurate Applications in the Preparation of SME Financial Statements" using the research method of interview data and documentation. The results of his research are accurate applications applied to the Company's operational cycle. After testing the

system in the sales and purchasing section. Accurate can help the section in the recording process.

2. Windyani, Luh Putu, Nyoman Trisna Herawati conducted research with the title "Analysis of the Application of the LAMIKRO Android-Based Accounting Application to Help Micro Enterprises Prepare Financial Statements following SAK EMKM (Study at Toko Bali Bagus)". By using quantitative research methods, data collection techniques in this study are in-depth interview observations and documentation studies. The results of the research are based on the results of the application of the LAMIKRO android-based accounting application for 30 days at Toko Bali Bagus, it can be concluded that the preparation of financial reports for Toko Bali Bagus is following SAK EMKM by using the Lamikro application.

## **Literature review**

### **Financial Report**

Based on PSAK No. 1 (2015: 1), financial statements are structured presentations to show the financial situation and performance of an entity. Financial statements present the history of financial transactions of a company or agency that are quantified in monetary value. Complete financial statements include balance sheets, income statements, statements of changes in financial position (can be presented in various ways, for example, fund flow reports or cash flow reports), notes, and other reports. and explanatory documents are an integral part of the financial statements [13].

### **Apps**

An application is a collection of subapplications or elements related to each other and connected applicationatically and harmoniously to achieve a specific goal[14]. Information is data that has been processed in the form of certain parts that are useful for the decision-making process of a company or organization[15]. Accounting is the process of identifying, recording, and communicating events chronologically and applicationatically regarding information in the form of financial reporting that describes the financial situation of the agency to parties who need and are interested[16]. The application is designed according to the needs of MSME actors to make it easier to compile practical and informative financial reports to find out the development of their business and other interests.

### **Website**

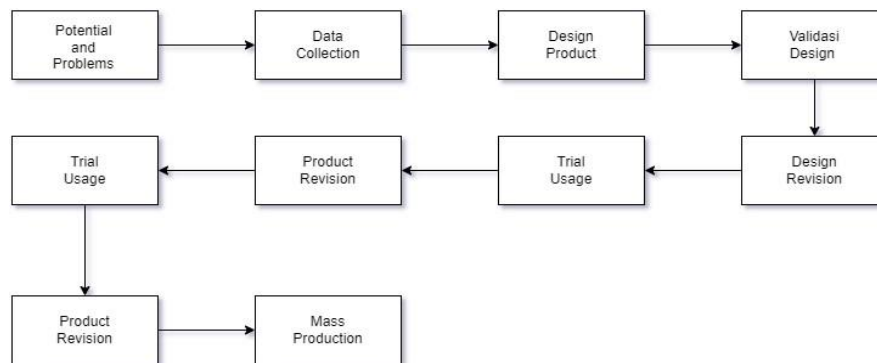
A website is a collection of pages that display various information in the form of text, static or moving images, animation, sound, or a combination of all, both in static and dynamic form. These pages have a structure that is interconnected and connected by a network of pages[17]. Each website page is part of a building that is interconnected through the page network.

### **Web-based Application**

Web applications are programs that can be viewed via the internet with a browser. The purpose of this research is to create a web-based financial reporting application for MSME players to help make it easier for MSME players to make financial reports to monitor their business. Application design with revenue and expenditure transactions which later applicationatically can be obtained journal reports, income statements, and balance sheets easily for MSME actors.

## Hypothesis Development

In this descriptive qualitative research, information or data from interviews with MSME owners and application experts is compared and verified through triangulation procedures. To compare interview, observation, and documentation data, three different methodologies are used[18]. This was done by researchers to ensure that the data obtained did not conflict. This research data uses a population of MSME owners in Magelang City who have made computer-aided records of 200 with a sample of MSME owners from the same culinary and service business fields representing as many as 20 business actors. Researchers compared the data for validity obtained with the results of observations, interviews, and documentation during the data collection process and stated that the data obtained followed the results of interviews conducted by researchers[19]. While developing software with a prototype model. Development researchers use a procedural model because it is considered under the development objectives to be achieved, namely making a product and testing the feasibility of the resulting product. To achieve this goal, certain steps must be followed to produce a particular product. The development model is explained in the chart below:



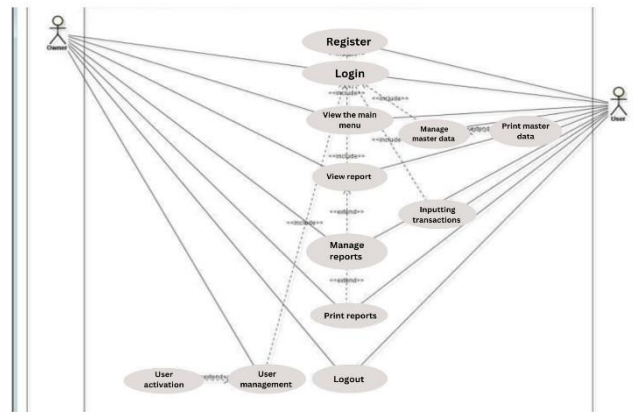
**Figure 1:** Research Development Method (R&D) Model

Source: Sugiyono (2018)

The R&D research development model begins with several stages: a) Potential and problems, this stage is the initial stage, namely how the potential and the existing problems are to be identified; b) Collecting information that can be done through literature studies and field studies; c) Product design to determine the concept of the application to be made; d) Design validation is the development of a design for making financial information applications with programming languages; e) Design improvement is a process carried out for design testing by product validation testers whether it is feasible to develop or still needs improvement; f) Product testing is carried out by experts or supervisors. This product validation program or test aims to find out whether the product developed is feasible to implement, and whether the product to be developed still has obstacles or not. R&D research and development is a series of methods and steps that aim to create new products or improve existing products for review[20]. Researchers build applications according to the needs of MSME owners as application users and conduct joint discussions to determine the objectives and initial design in making application applications for the preparation of recording receipts, expenses, and financial reporting using web-based applications.

## 2. Method

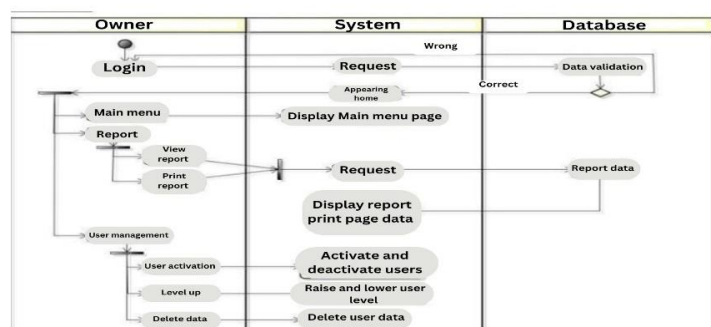
The following includes Use Case diagrams and activity diagrams to illustrate the relationship between MSME actors and the activities they can carry out through existing applications. In the use case diagram and activity diagram, various actions and functions related to the application are identified and explained, thus providing a clear picture of how MSME actors can interact with the existing system. This application is set to use Indonesian language



**Figure 2.** Use Case Diagram

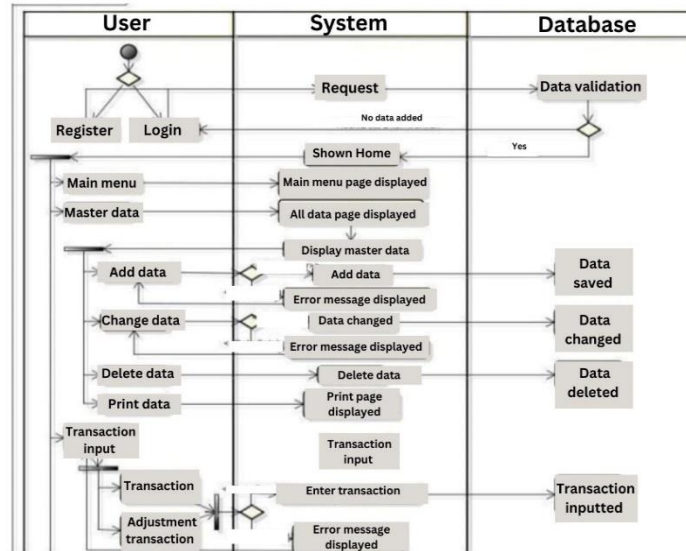
Figure 2 above explains the process of displaying information. It starts with the owner turning on the network. The system then displays the login page, where the user registers and logs in. If this is unsuccessful, it will return to the login form, but if successful, it will enter the panel page, where the user selects the information to be displayed, and the system will display it. Activity Diagram is a graphical visualization that depicts the entire workflow or business process in a system.

The following is an activity diagram for the owner or owner of this M-KAS application. It can be seen that what features can be operated by the owner, including what can be seen in the picture:



**Figure 3.** Activity Diagram Owner

Activity Diagram Owner The following is an activity diagram for users or users of this M-KAS application. It can be seen that what features can be operated by users or users, including can be seen in the picture:



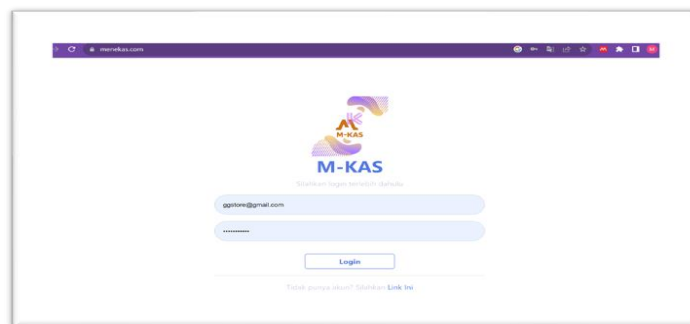
**Figure 4.** Activity Diagram User

In this section there is a review of the application that has been completed and there are several activities that occur until the formation of the application. The following are the results and discussion in the application created. Advantages of the proposed transaction recording application: 1) No need to recap every expense made, just look at the financial statement application based on the account code. 2) Have evidence of each cash expenditure transaction based on the transaction number and stored in the system in the form of a softfile so as to reduce the risk of damage or loss. 3) Based on information on the transaction input process in the database, the application can automatically generate proof of cash expenditure notes as well as final accounting reports and financial statement applications based on account codes. Based on the results of the analysis of the bookkeeping recording application in partner MSMEs, details of the basic needs that will be developed in the R&D application for preparing cash bookkeeping reports can be identified. The following are details of the basic needs of applications in partner MSMEs that will be developed: 1) Processing of cash expenditure transactions; 2) Processing of cash receipt transactions; 3) Processing for the presentation of transaction evidence notes; 4) Processing for cash journal transactions; 5) Processing for the presentation of the final cash accounting report and accounting report based on the account code; 6) software development method through R&D. This approach method researchers as developers and partner MSMEs as users will have interactions in the application development process, starting from determining the main objectives of making applications, designing initial R&D to developing R&D into perfect applications. With the interaction that occurs between developers and users, it will reduce the possibility of incompatibility between the application to be developed with the capabilities and specifications of the needs desired by users to developers; 7) In brief, the activities in this application are to help partner MSMEs prepare financial statement applications

by focusing on recording purchase, sales and capital deposit transactions which will be recorded applicationally. The application for preparing this financial statement application uses the double entry method (Anggreani, 2019). First in the process of designing and building R&D development, starting with creating the database tables needed in the R&D being built, then correlating each existing table.

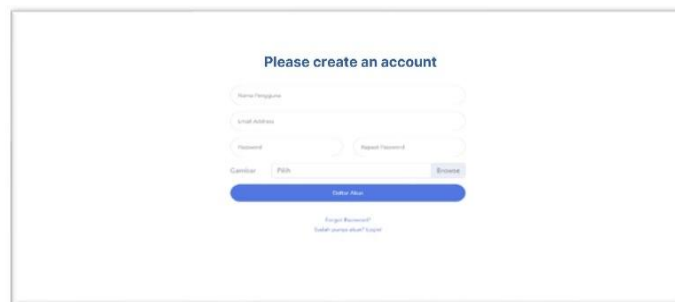
### 3. Results and Discussion

In this section, there is a review of the application that has been completed and there are several activities that occur until the formation of the application. The following are the results and discussion of the application that was created.



**Figure 5.** Log in menu

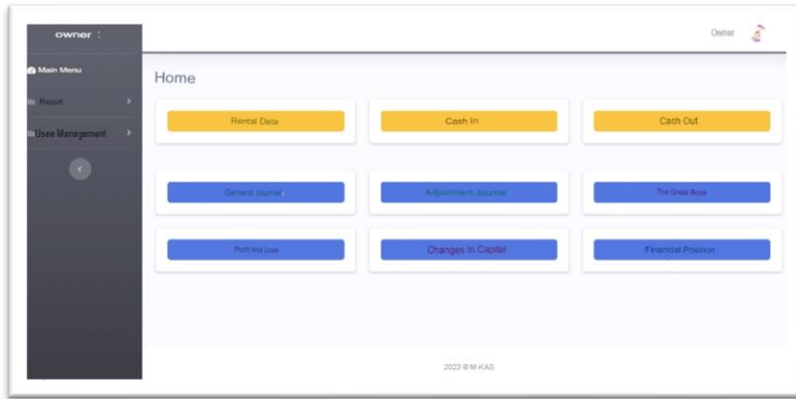
This is the first appearance, namely the login form, where the account owner must log in first to enter the admin application or user or MSME actor.



**Figure 6.** User creates an account

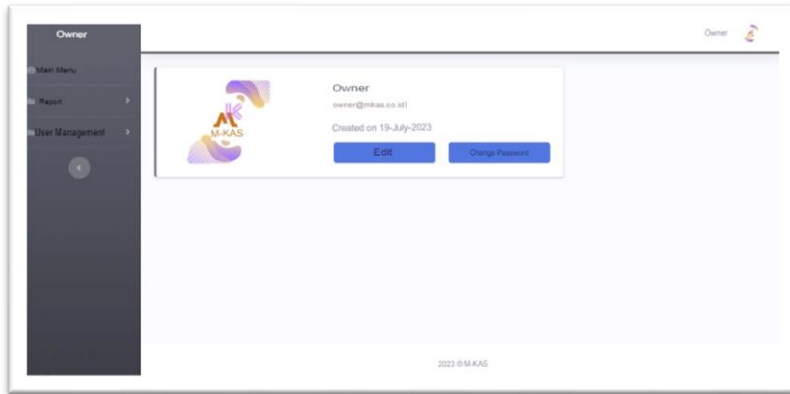
This display shows a page for users, or new users, to register their businesses in the M-KAS application.





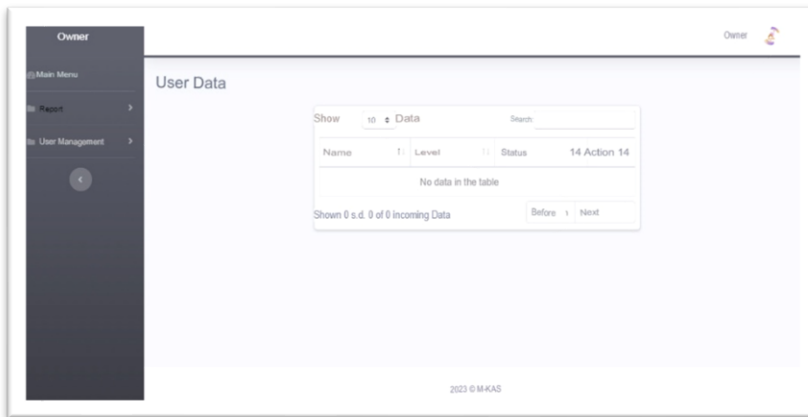
**Figure 7.** Owner's Main Menu

In this owner's main menu display, several sections can be seen. The owner can monitor the activities of each of these sections.



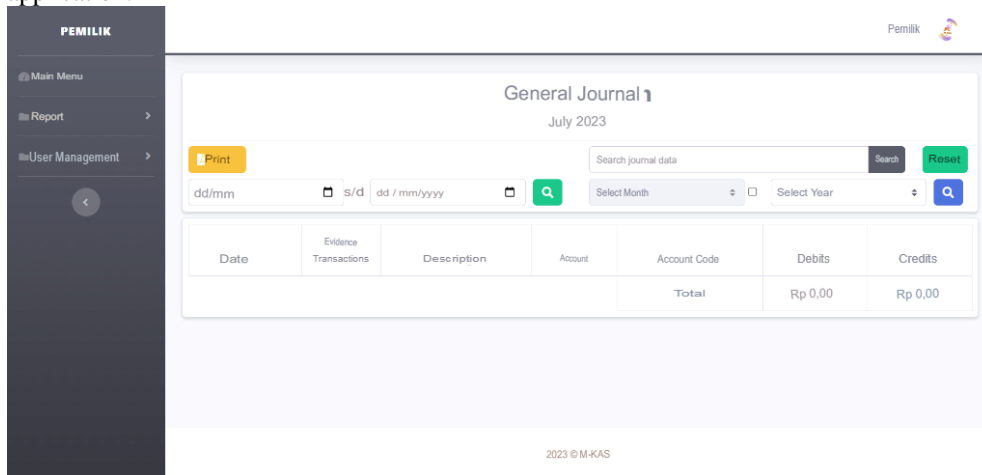
**Figure 8.** Profile Owner

This view displays the owner's profile.



**Figure 9.** User Activation

This display shows the user or user activation page. When the user has registered an account, the owner or admin will activate the registered account, so that the user can use this M-KAS application.



**Figure 10.** General Journal

This display shows the general Journal page, where the user can input transactions on the day, date, and year the user wants.



**Figure 11.** Print page

This view displays the printed report page.

#### 4. Conclusion

This research implies that MSME actors can use the financial reporting system application that has been prepared so that it can facilitate the preparation of financial reports on MSMEs. The

preparation of a web-based financial reporting application is research to develop applications or software as a computer program that is operated to develop application prototypes. The preparation of this financial reporting application is of course programmed with adjustments to the conditions of partner MSMEs so that the application can be used optimally. The adjustment is by applying the double entry recording application in the prototype program, the application is also applied by partner MSMEs with consideration of the transactions that occur relatively simply. The successful preparation of web-based financial reporting applications with case studies in MSMEs is supported by the application of qualitative research with a case study approach and prototype model software development. The process of preparing the financial report application into a web-based application goes through several stages, namely:

1. Analyze the basic needs of the application
2. Design the initial prototype of the application
3. Testing and evaluating the application prototype
4. Draw conclusions

Based on the four main stages, the web-based financial reporting application was successfully created. Determination that the process of preparing a web-based financial report application has been completed and successful, based on the conclusion drawing stage based on the results of testing and evaluation of the operation and ability of the financial report application preparation application in processing data. Suggestions for future research, namely, the development of this financial report application preparation application, can be continued, such as adding tax calculations that need to be paid by MSME actors and developing employee salary slips.

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