

SILAKSAK Utilization as Support SAK-Based MSME Financial Digital Records

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Received 27 September 2024; Revised 9 October 2024; Accepted 9 October 2024



Abstrak

Tujuan – Pembuatan aplikasi SILAKSAK untuk UMKM Saung Abah Ambu dengan menggunakan standar SAK EMKM.

Desain/Methodologi/Pendekatan – Pengembangan perangkat lunak menggunakan metode Agile Feature Driven Development (FDD). Pendekatan pengembangan perangkat lunak yang memprioritaskan pengembangan berdasarkan fitur-fitur *Develop an Overall Model, Build a Feature List, Plan by Features, Design by Feature* dan *Build by Feature*. Selain menggunakan FDD, perangkat lunak ini juga menggunakan *progressive web app (PWA)* agar aplikasi SILAKSAK dapat di instal di berbagai platform.

Temuan – Aplikasi SILAKSAK sudah berjalan sesuai harapan, Hal ini terbukti dari 17 fungsi yang diujikan, keseluruhan 17 fungsi tersebut berjalan dengan baik. Selain itu, mitra merasa terbantu dengan adanya pencatatan menggunakan aplikasi SILAKSAK karena mitra sudah tidak perlu lagi menggunakan buku catatan dan keuangan mitra sudah bisa diakses serta dipantau oleh pemilik mitra.

Keterbatasan/implikasi Penelitian – Sebelum mengimplementasikan aplikasi keuangan, mitra harus dibekali dengan pengetahuan tentang keuangan, contohnya terkait neraca, laba, buku besar, dan lain-lain.

Kata Kunci: SILAKSAK, UMKM, FDD, Aplikasi

Abstract

Purpose – Creating a SILAKSAK application for Saung Abah Ambu UMKM using the SAK EMKM standard.

Design/methodology/approach – Software development using the Agile Feature Driven Development (FDD) method. A software development approach that prioritizes development based on the *Develop an Overall Model, Build a Feature List, Plan by Features, Design by Feature* and *Build by Feature*. In addition to using FDD, this software also uses a *progressive web app (PWA)* so that the SILAKSAK application can be installed on various platforms.

Findings – The SILAKSAK application has run as expected, this is evident from the 17 functions tested, all 17 functions run well. In addition, partners feel helped by the recording using the SILAKSAK application because partners no longer need notebooks and partner finances can be accessed and monitored by partner owners.

Research limitations/implications – Before implementing a financial application, partners must be equipped with knowledge about finance, for example what is a balance sheet, profit, ledger and others.

Keywords: SILAKSAK, UMKM, FDD, Application

Introduction

Micro, Small and Medium Enterprises (MSMEs) play an important role in Indonesia's economic development (Rohman et al., 2023), making a significant contribution to job creation and poverty alleviation (Ismail et al., 2023; Munthe et al., 2023). MSMEs cover 88.8% to 99.9% of all businesses in Indonesia, absorb 51.7% to 97.2% of the workforce and increase their contribution to GDP from 57.84% to 60.34% (Ismail et al., 2023). Despite their importance, MSMEs face various challenges such as low digitalization, limited access to technology, and lack of survival strategies, especially during the COVID-19 pandemic. To overcome these problems, the MSME development strategy must be based on an integrative legal approach that takes into account the pluralistic characteristics of Indonesia and contains the values of Pancasila and the 1945 Constitution (Kustanto, 2022).

However, one of the problems faced by MSMEs is the limited ability of resources to utilize information technology to support their performance, one of which is in the financial sector (Rohman et al., 2023). Data recorded by the Ministry of Cooperatives and MSMEs (Kemenkop UMKM) shows that 30% of MSMEs admit that they do not understand the benefits of digitalization due to limited resources (Syafira Putri, Lesi Hertat, 2024). Accounting problems, especially in the preparation of financial reports, can hinder MSMEs' efforts to improve performance (Purnomo & Adyaksana, 2021; Putri et al., 2024), because accounting information can help companies make important decisions, identify business development, and manage finances to achieve more success (Dita Fitriani & Hwihanus Hwihanus, 2023). Not many MSME actors focus more on operations without paying attention to good financial transaction records (Putri et al., 2024) because Business Owner Perceptions, Education, Socialization and Incentive

Factors significantly influence the implementation of Financial Accounting Standards. One of the digitalization processes in finance is by utilizing the Accounting Information System. The existence of an accounting information system is very important in the production cycle, with the existence of an accounting information system it helps to produce accurate cost information and clear working hours to be used as input for decision making in planning the products or services produced, how much the product costs, and how to plan the absorption and allocation of resources needed, and what is very important is how to plan and control production costs and distribute the resulting productivity performance (Giman et al., 2024).

One of the MSMEs that was used as a partner in this study was Saung Abah Ambu which is located on Jl. Pataruman, Lamajang Village, Pangalengan District, Bandung Regency. The type of business run by Saung Abah Ambu is Tilapia cultivation in biofloc ponds (Marikyan & Papagiannidis, 2023). Saung Abah Ambu has limited resources, so all business processes are only run by 3 people. Likewise in the financial section, Saung Abah Ambu already has a SimPanKas application that functions only to record cash inflows and outflows (Yohana, 2021). This is good, but good financial reporting must be based on SAK-EMKM standards (Siswanti & Suryati, 2020).

Entities that are included in the scope of SAK EMKM are entities that meet all the criteria and characteristics, namely not being subsidiaries or branches of companies that are owned, controlled, or are part of either directly or indirectly from medium or large businesses. Therefore, MSME actors must issue standards that have been issued in meeting the preparation (Intan, 2019; Setiawan et al., 2024). financial recording and reporting, namely there are three financial reports that must be met, the position of the financial report, the profit and loss report and notes to the financial

statements. By creating financial reports that comply with predetermined standards, it will make it easier to achieve and realize business goals, create effectiveness and efficiency and become the information/basis needed for interested parties in decision making and make the company grow and progress in running its business (Ayulina Oktaviranti & Muhammad Iqbal Alamsyah, 2023; Yuli Meliana & Hwihanus Hwihanus, 2022). However, many MSMEs have difficulty in financial reporting due to lack of knowledge and still use manual, simple and non-

standard methods (Fitriani, 2021; Hernawati et al., 2020) Several studies that are used as references in this study are the application of SAK EMKM and the application of SAK EMKM using the Android platform. There are still few applications of SAK EMKM using progressive web app (PWA) technology so that the system can run on various platforms (Malavolta, 2016; Steiner, 2018) and produce a Financial Reporting System that meets SAK EMKM standards. This is a novelty/newness in this study

Literature Review & Hypothesis

Literature Review

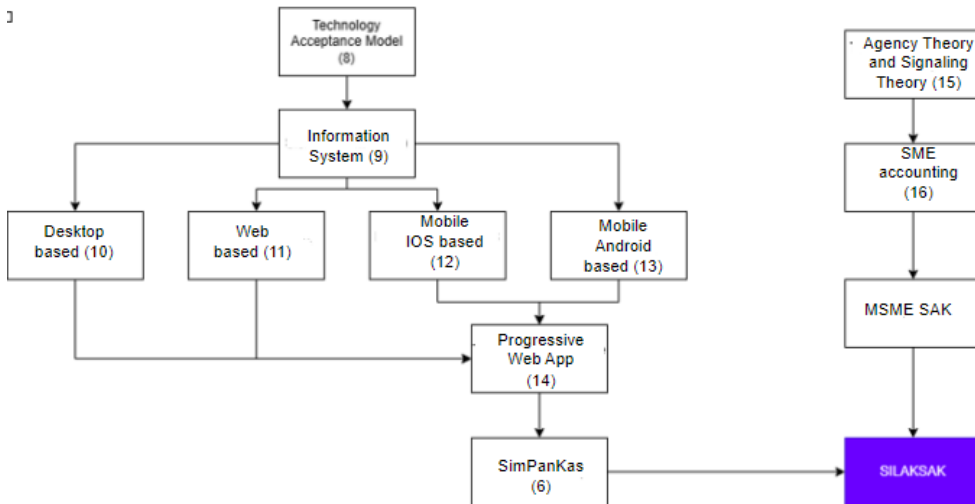


Figure 1
State of The Art
Source: 6, 8-14

Figure 1 is some of the references that underlie this research. Some of the research that has been done is the use of a Web-Based Financial Report Information System (Faizal et al., 2021) the results of this research are functionally tested to produce a system that is in accordance with user needs but is constrained in accessing web pages. Mobile-Based Financial Report Information System (Alamsyah, 2022) the results of this study

can produce a system that is easy for users to use, but there are obstacles, namely hardware that must be compatible with the system. In addition, research on Financial Systems with SAK EMKM standards (Hariono et al., 2014) stated the importance of recording MSME finances with SAK EMK standards.

From the above studies, this research applies progressive web app (PWA)

technology so that the system can run on various platforms and produce a Financial

Reporting System with SAK EMKM standards. This is a novelty in this research.

Research Method

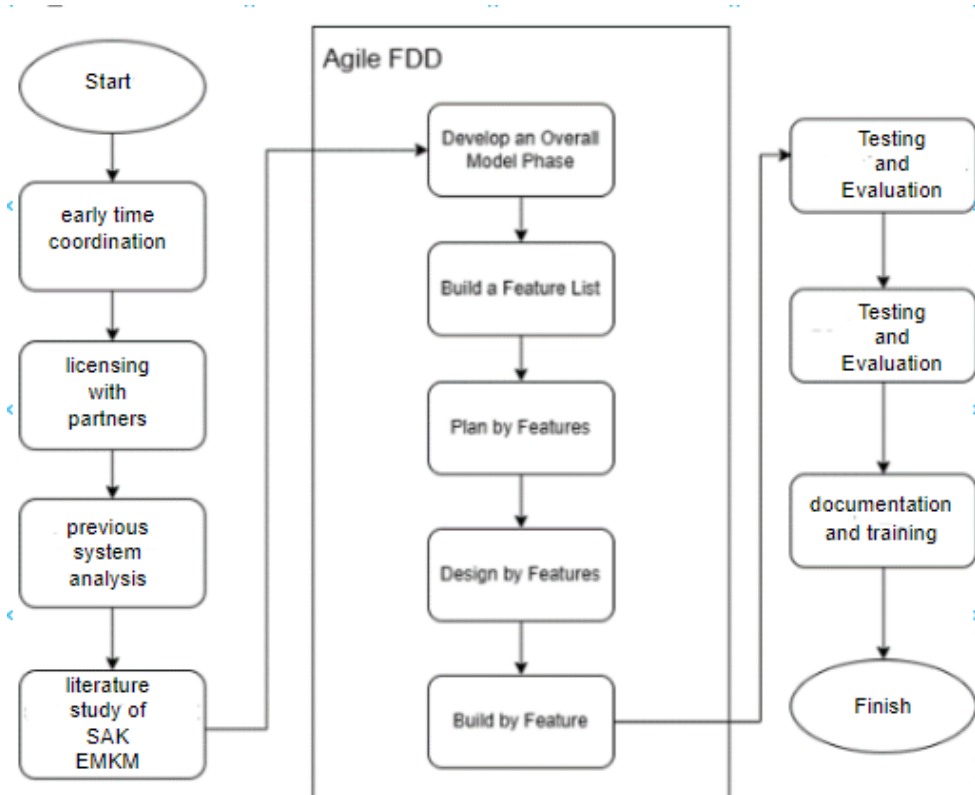


Figure 2
Research Flow Chart

Figure 2 is a flow chart of the research that will be carried out for 1 year. At the initial stage, the team coordinated to discuss the research that would be raised and determine the student members and target partners involved. The next step was to approach partners to obtain research permits. The team then analyzed the previous system, the SimPanKas application, and determined the development process to be carried out.

After that, a literature study and consultation with SAK EMKM experts were conducted to develop the existing system. The initial stage of software development

using the Agile Feature Driven Development method begins with determining the context and scope of creating the SILAKSAK model. In this process, the team worked with partners to create a list of required features, which were then used to plan the software development in detail, including implementation and testing schedules. The system design is created in the form of unified modeling language (UML) modeling and presented to partners for approval.

After that, the design is implemented in a programming language and functionally tested by technology and finance experts. If

problems or inappropriate features are found, evaluations and improvements are made. After all features were deemed appropriate, a user manual was created, and training was provided to partners so that they could use the SILAKSAK system properly. This activity ends with the preparation of a final report and publication in accordance with the predetermined targets. This study uses an empirical study resulting from device testing conducted by a software quality.

Results and Discussion

The initial stage of the team conducts coordination or initial exploration to find out what problems are found in partners after using the SIMPANKAS application used, can be seen in Figure 3.



Figure 3
The Team Coordinates With Partners

The Agile Feature Driven Development method starts with defining the scope of the project and creating an overall model. The relevant teams may propose multiple features, and then they are combined to create a unified representation of the project goals. This model helps set the foundation for the next steps. Functional requirements are made at the build feature list stage which can be seen in table 1.

Table 1
Functional Requirement

Requirement
Can add a list of Accounts (CoA) to facilitate the identification and classification of financial transactions
Can record transactions based on Accounts (CoA) (General Journal)
Can perform balance opening
Can monitor the total balance
Can monitor the amount of income
Can monitor the amount of expenditure
Can monitor the amount of payables
Can monitor the amount of receivables
Can record a list of assets owned by the user
Can record a list of debts owned by the user
Can make adjustments if there are errors recording transactions that have been recorded in the general journal
Can view the initial balance sheet report (before adjustment)
Can view the final balance sheet report (final after adjustment, if there is an adjustment)
Can see the income statement
Can view the statement of financial position
Can view the general ledger report
Can view CaLK report

There are 17 features created, including viewing all financial reports.

After the Functional Requirement creation stage is complete, plan by features is done by creating an implementation schedule which can be seen in table 2.

Table 2
Implementaton Schedule

Activity Name	3	4	5	6	7	8	9
Team initial coordination							
Licensing with partners							
Previous system analysis							
Literature study							
Develop an overall model							
Build a feature list							
Plan by features							
Design by feature							
Build by feature							
Testing and Evaluation							
Documentation and Training							

In table 2 there are 11 activities starting from month 3 (March) to month 9 (September). Activities carried out from coordination and licensing to documentation. Within the 11 activities there are activities of the Agile Feature Driven Development Method for the development of SILAKSAK.

After planning the schedule for making SILAKSAK, the next stage is Design by Features. This stage creates a customized application design based on the Build a Feature List, one of which is shown in Figure 4.

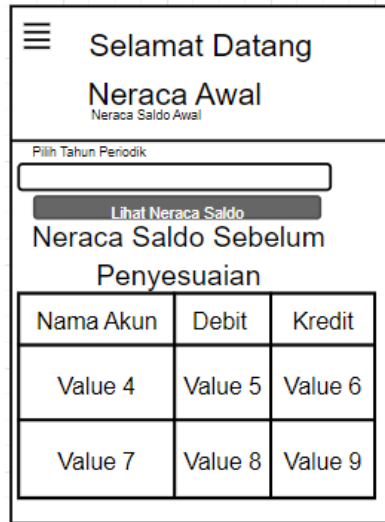


Figure 4
Initial Balance Sheet Display Design

Figure 4 is one of the initial balance sheet menu display designs that will be designed in the SILAKSAK application. After designing the application display design, Build by Feature is performed. Figure 5 is one of the application views that has been completed by the programmer. Figure 5 describes the balance sheet viewing feature.

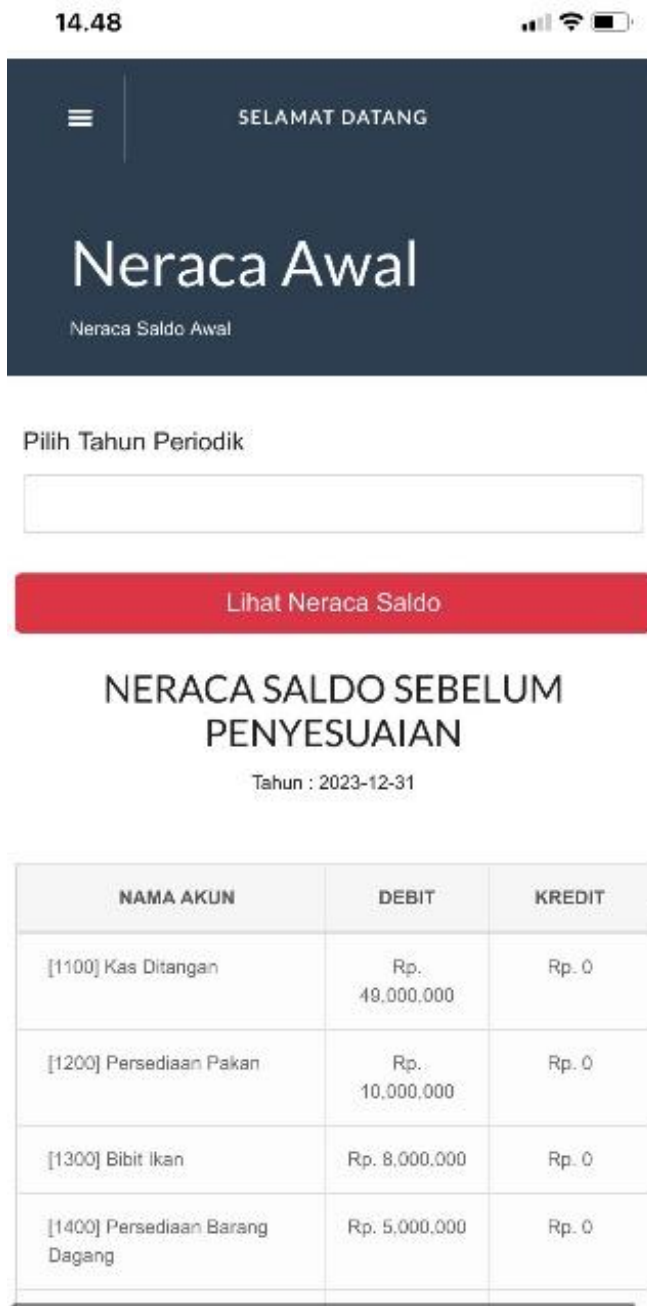


Figure 5
Beginning Balance Sheet

After creating the program, system testing was carried out to QA, testing was carried out on 17 functions of the SILAKSAK application which can be seen in Table 3 System Testing.

Table 3
System Testing

Expected Result	Test Result	Conclusion
Can add account (CoA)	Can add account (CoA)	[x]Accepted [] Rejected
Can record transactions by account (CoA)	Can record transactions by account (CoA)	[x]Accepted [] Rejected
Can Perform opening balance	Can perform opening balance	[x]Accepted [] Rejected
Can monitor the total balance	Can monitor the total balance	[x]Accepted [] Rejected
Can monitor the amount of income	Can monitor the amount of income	[x]Accepted [] Rejected
Can monitor the amount of expenses	Can monitor the amount of expenses	[x]Accepted [] Rejected
Can monitor the amount of debt	Can monitor the amount of debt	[x]Accepted [] Rejected
Can monitor the amount of receivables	Can monitor the amount of receivables	[x]Accepted [] Rejected
Can record asset list	Can record asset list	[x]Accepted [] Rejected
Can record debt list	Can record debt list	[x]Accepted [] Rejected
Can make adjustments if there is a transaction recording error	Can make adjustments if there is a transaction recording error	[x]Accepted [] Rejected
Can view the opening balance sheet report	Can view the opening balance sheet report	[x]Accepted [] Rejected
Can view the final balance sheet report	Can view the final balance sheet report	[x]Accepted [] Rejected

Expected Result	Test Result	Conclusion
Can view the income statement	Can view the income statement	[x]Accepted [] Rejected
Can view the statement of financial position	Can view the statement of financial position	[x]Accepted [] Rejected
Can view the ledger report	Can view the ledger report	[x]Accepted [] Rejected
Can view CaLK report	Can view CaLK report	[x]Accepted [] Rejected

Table 3 can be seen that of the 17 functions tested, all functions run as expected. After the function runs as expected, the SILAKSAK Application is tried for partners. As seen in figure 6.



Gambar 6
SILAKSAK Training to Partners

Conclusion and Recommendation

Conclusion

The SILAKSAK application has performed as intended. This is evident from the 17 functions tested, all 17 functions worked well. In addition, partners felt helped using the SILAKSAK application. recording can be viewed in real time by several parties, recording is paperless and data management is very good.

Recommendation

Before implementing a financial application, partners must be equipped with knowledge about finance, for example what is balance sheet, profit, ledger, and others.

Acknowledgments

This Beginner Lecturer Research is funded through the activities of the Research and Community Service Funding Recipient in Academic Universities for Fiscal Year 2024 of the Ministry of Education and Culture through the Beginner Lecturer Research (PDP) scheme with Parent and Derivative Contract Numbers 106/E5/PG.02.00.PL/2024 and 093/SP2H/RT-MONO/LL4/2024, 020/LPPM/KP/VI/2024. Our gratitude goes to the Institute of Digital Economy LPKIA, Bandung Regency Government.

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