

USABILITY TESTING OF SIFINAS DIGITAL APPLICATION DEVELOPMENT AND ITS EFFECT ON USER SATISFACTION AND MANAGERIAL PERFORMANCE

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Abstract: *The development of the SIFINAs digital application aims to increase the credibility of MSMEs in the financial management of these MSMEs so that they can control their financial transactions or reports more updated, effective and efficient. The purpose of this study was to test the SIFINAs digital application and to determine its effect on user satisfaction and MSME performance. Overall, there were respondents who stated that they were not willing to respond to the research questionnaire so that the data collected was obtained as many as 37 respondents. The results of the study found that the development of the SIFINAs digital application model is one of the simple and simple application models that greatly supports the performance of MSMEs. The results of testing the research hypothesis show that the development of WEB-based applications affects user satisfaction, user satisfaction affects MSME performance and WEB-based application development affects MSME performance. In the future, the SIFINAs digital application that is being developed is feasible to be used or implemented en masse by medium-level business actors.*

Keywords: *SIFINAs Application, User Satisfaction, Performance, MSME.*

INTRODUCTION

The acceleration of digitalisation is able to encourage innovation in the business world and the economy is the sector that is most easily infiltrated by application-based technology and communication both on a national and international scale. The business sector which is currently experiencing rapid progress due to the impact of adopting application-based technology such as marketplaces, grabfood delivery, banking, online loan companies and other applications has been widely adopted by MSMEs in order to synergise with these technologies (Ferreira et al., 2022) ; (Mukamanzi, 2018); (Pristiyono, 2024).

The concept of developing business applications should aim to provide convenience for anyone who uses it so that it has an impact on user satisfaction (Salehi et al., 2012). MSMEs that adopt application technology indicate that managers or management are very sensitive to business progress or businesses that are ready to face competition and always focus on providing convenience for their customers (Badghish & Soomro, 2024). Application development for MSMEs at this time has transformed not only to function as providing services, digital promotion or digital marketing (Anatan, 2023). The application development also aims to increase the credibility of MSMEs in the financial management of these MSMEs so that users can control their financial

transactions or reports more updated, effective and efficient (Herman & Fahdal, 2023).

One of the financial application developments for MSMEs in research is called SIFINAs (Simple Financial Information System). SIFINAs is the development of a simple financial application that designed based on an analysis of the needs in the field with coverage for the type of MSME business developed from the collaboration of the fields of management, accounting and information systems that can be run on computers, laptops and android. The following is a view of the main menu of the SIFINAs financial application below:

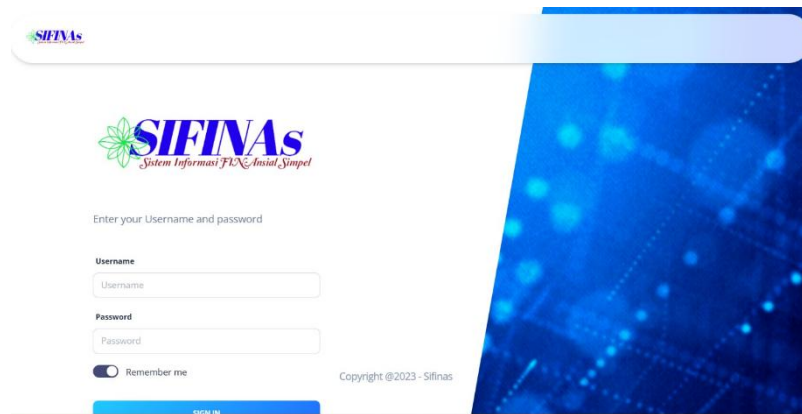


Figure 1. View of the SIFINAs Digital App

Based on Figure 1 above, the appearance of the SIFINAs application looks simple and simple in accordance with its purpose as a simple financial application that can be used by MSME organisations or micro, small and medium enterprises that want to record their financial reports more effectively and efficiently while at the same time can be used for various purposes such as financial reports for loan assistance documents or financial reports for leaders.

The purpose of this study is to pilot the SIFINAs digital application and to determine its effect on user satisfaction and MSME performance to all MSMEs that are willing to use this application. In addition, the phenomenon that supports this research is that there are still many MSMEs that use traditional and manual financial reports so that they are not in line with the rapid development of technology. This means that there is a gap where business actors assume that using technology or applications needs to be expensive and complicated so that it becomes the core of the problem (Saarikko et al., 2020).

In bridging the above problems, the author certainly has a strong basis that this research is not only to determine the impact or influence of application development on users, but to provide information to readers that this research is part of application-based research development whose social use has a positive impact so that digitalisation accelerates in the MSME industry.

LITERATURE

WEB-based Application Development

According to (Kissflow, 2023) application development is the process of planning, designing, creating, testing, and deploying applications to perform various business operations. It can be done by a large organisation with a large team working on

the project or by a single freelance developer. Application development defines the process of how applications are created and generally follows a standardised methodology. According to (Thomas & Devi, 2021) application development model is the process by which software that uses the appropriate framework programming language and runs on the web through internet-integrated computers, laptops and android devices. This kind of application can be categorised as a hybrid application, which is half native application and half web application. Therefore, the quality of an application is very important and needs to be considered, as for the quality indicators of application development consists of usability, verifiability, understandability, productivity and visibility (Wijanarko, 2015).

H₁ : WEB-based application development affects user satisfaction.

User Satisfaction

The definition of satisfaction appears in marketing research emphasises a process-oriented approach that pays attention to how satisfaction is formed through the evaluative (assessment) process that underlies the formation of satisfaction. According to (Mills et al., 2016) user satisfaction is defined as consumer responses to the evaluation of perceived discrepancies between prior expectations (or other performance norms) and the actual performance of the product as perceived after use. According to (Kalankesh & Fein, 2020) application user satisfaction is intangible user satisfaction with the performance of information systems (designing, developing, or adopting systems) that can be accepted by the organisation. Indicators of user satisfaction variables include effective, performance, as expected and overall satisfaction with the application (Lee et al., 2020).

H₂: User satisfaction affects MSME performance.

MSME Performance

In short, SME performance is the combined result of internal and external factors internal and external factors owned by MSMEs. According to (Adiningrat & Ruhayu, 2023) performance is the result of the level of individual success during a certain period in carrying out tasks compared to several possibilities, such as standard work standards, targets, goals, and criteria that have been determined in advance based on mutual agreement. Meanwhile, according to (Rosyidta et al., 2022) performance is the result achieved from the work that has been carried out; other words, it is the result of cooperation between members to achieve organisational goals. Indicators of MSME performance are profitability, operational efficiency, customer satisfaction, and other business growth (Sharabati et al., 2024).

H₃: WEB-based application development affects MSME performance.

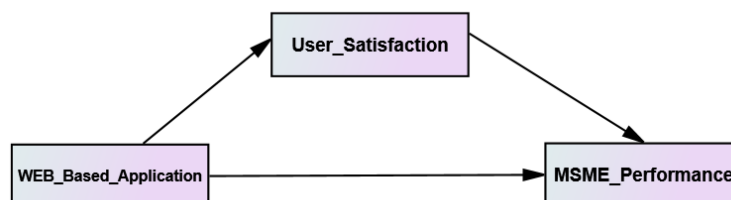


Figure 2. Research model

RESEARCH

This research design is research and development or known as Research & Development (R&D) which is research to produce new products and test the effectiveness of these products (Insee & Suttipun, 2023). After that, the product results (SIFINAs application) were tested on the intended sample with a quantitative descriptive approach research design which aims to solve the research hypothesis (Ghanad, 2023). Previous research shows that a sample size of 100 to 200 is usually a good starting point in doing path modelling (Wong, 2014). So the sample in this study is business actors or MSMEs that are established and independent in management and financial management targeted at 100 business units, while for sampling techniques using purposive sampling techniques while for hypothesis testing analysis using a path analysis approach with AMOS.

RESULTS AND DISCUSSION

SIFINAs Application Research & Development (R&D) Results

The following are the results of the development of the SIFINAs application trial starting from the menu display, data input, recording process and output process can be seen below:

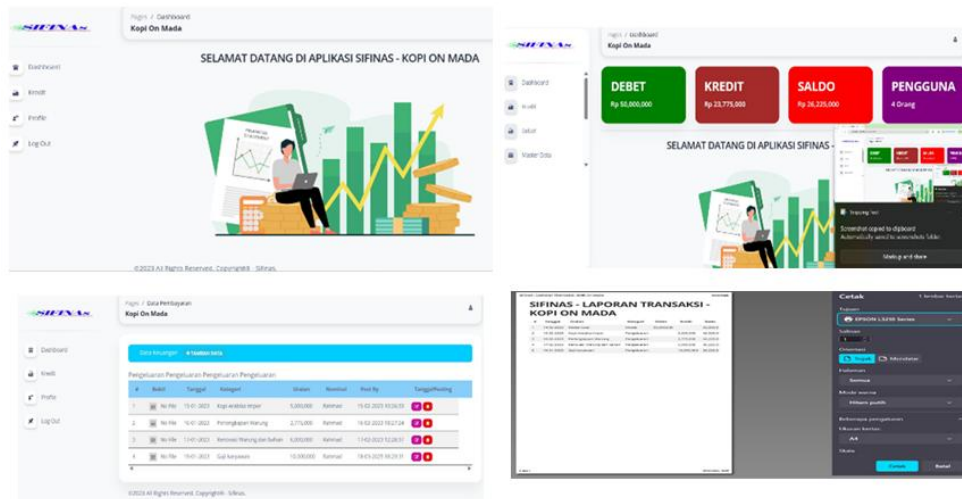


Figure 3. SIFINAs Application Trial Results

The results of the SIFINAs application trial in the figure above show that the SIFINAs application (Simple Financial Information System) has a simple appearance and menu in accordance with the needs of users, namely MSMEs Coffee On Mada Rantauprapat. From the figure shows login access starting from data input, the recording process and output (application recording report) aims to provide convenience to users.

Descriptive Results of Respondents

Based on the results of the distribution of questionnaires carried out related to the trial of the SIFINAs application that was successfully collected in the field, many business actors have been determined and targeted as many as 100 respondents. Overall, there were respondents who stated that they were not willing to respond to the research questionnaire so that the data collected was obtained as many as 37 respondents. The

following is the distribution of respondent profiles that have been successfully processed can be seen as follows:

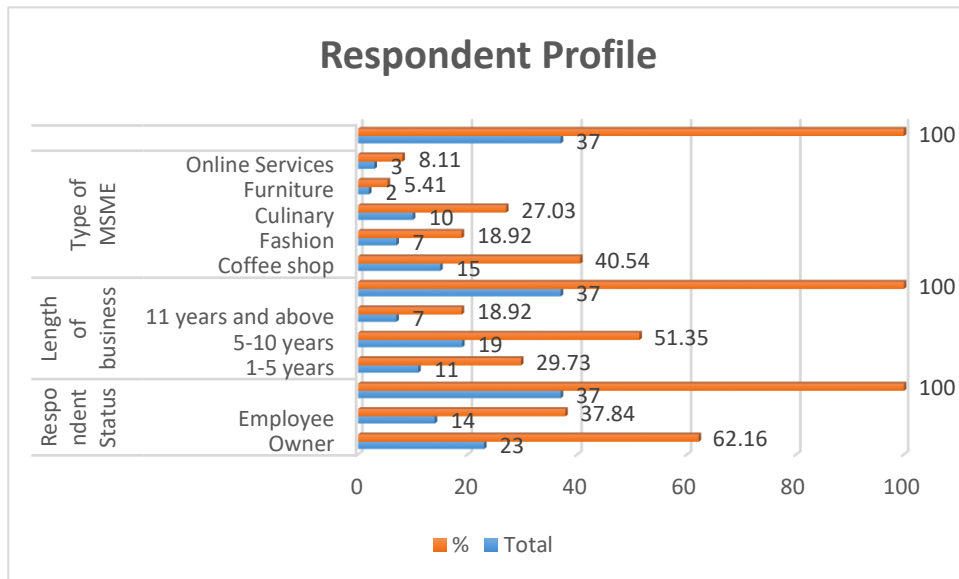


Figure 3: Profile of Research Respondents

The profile of respondents based on the data obtained is presented in Figure 3. It shows that from the results of the SIFINAs application trial, those who are willing from the category of MSME types are dominated by Coffee shops at 40.54%, Culinary at 27.03% and followed by types of MSMEs Fashion, Furniture and Online Services. The length of time the respondents have been in business is quite long between 1-11 years and the status of the respondents mostly found in this study is the status of the owner or owner of the business itself. From this data illustrates that the respondents found in this study are MSMEs that already understand the use of the SIFINAs digital application, which means that they support the implementation of the SIFINAs financial application as an effort to accelerate digital (Hanum & Anggreini, 2024).

Hypothesis Testing Results

The final step in this section is to test the research hypothesis with a path analysis approach. The results of hypothesis testing in this study are:

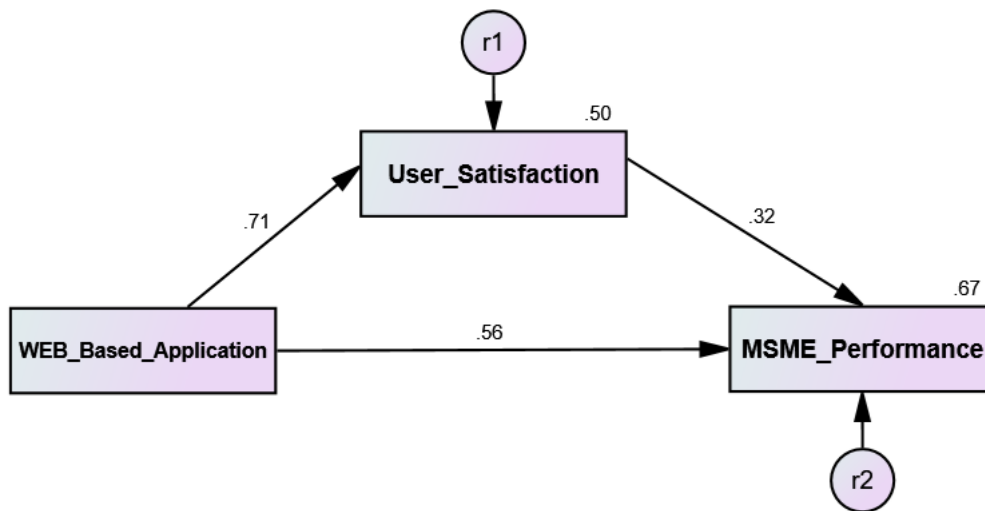


Figure 4. Path Analysis Model

Table 1. Regression Weights

	Hypothesis	Estimate	S.E.	C.R.	P
User_Satisfaction	<--- WEB_Based_Application	.319	.053	5.975	***
MSME_Performance	<--- User_Satisfaction	.549	.234	2.343	.019
MSME_Performance	<--- WEB_Based_Application	.441	.106	4.156	***

Source: Data Processed, 2024

Based on Table 1. Regression Weights above, the following discussion is then carried out:

1) H₁: WEB-based application development affects user satisfaction.

Based on the results of hypothesis testing, it is known that the development of WEB-based applications affects user satisfaction has an estimated value of 0.319 and a critical ratio value of 5.975 and a p-value of 0.000. This means that the critical ratio value and p-value in this hypothesis are qualified or constant so that the hypothesis is accepted. This means that the critical ratio value and p-value in this hypothesis meet the requirements or are constant so that the hypothesis can be accepted. The results of this study strongly support the research conducted by (Haryaka et al., 2017) e-learning user satisfaction model has a very significant correlation value and strong construction between variables so that the development of the model can be considered in developing e-learning applications in the future. Other research is in line according to (Bano et al., 2017) that user satisfaction significantly contributes to system success even when schedule and budget goals are not met. From the analysis and literature study developed in this study, it proves that the development of the SIFINAs digital application as a simple financial recording report application based on web and android from the test results that the development of the SIFINAs digital application is very helpful for MSMEs in compiling effective and efficient reports. SIFINAs is an application that is designed to be very simple and simple in order to provide users and ultimately provide satisfaction to its users. Factors that influence the quality of

application development consist of usability, verifiability, understandability, productivity and visibility (Wijanarko, 2015).

- 2) H₂: User satisfaction affects MSME performance.

Based on the results of hypothesis testing, it is known that user satisfaction affects the performance of MSMEs has an estimated value of 0.549 and a critical ratio value of 2.343 and a p-value of 0.019. This means that the critical ratio value and p-value in this hypothesis meet the requirements or are constant so that the hypothesis can be accepted. The main objective of developing the SIFINAs WEB digital application is certainly not to have an impact on user satisfaction but to improve the overall performance of MSMEs (Widodo, 2023) . The results of this study also support research (Kilay et al., 2022) the development of digital-based financial applications is very helpful for MSME actors, government, and related institutions in MSME actors, government, and related institutions in accelerating the digitalisation of MSMEs in Indonesia. According to (Sun & Zhang, 2024) digital financial inclusion has the effect of promoting technological innovation of enterprises of different technological levels. From the research analysis, it is found that the SIFINAs digital application that is being developed is feasible to be used or implemented en masse by medium-level business actors because it has the convenience of management so that it has an impact on user satisfaction and improves the performance of the MSMEs themselves as well as being supported by variable indicators of user satisfaction including effective, performance, as expected and overall satisfaction with the application (Lee et al., 2020).

- 3) H₃: WEB-based application development affects MSME performance.

Based on the results of hypothesis testing, it is known that the development of WEB-based applications affects the performance of MSMEs, has an estimated value of 0.441 and a critical ratio value of 4.156 and a p-value of 0.000. This means that the critical ratio value and p-value in this hypothesis meet the requirements or are constant so that the hypothesis can be accepted. The results of this study strongly support the research (Ketut et al., 2022) web-based financial application development has practical implications that in today's digital era, MSMEs must prioritise the implementation of Digital Financial Services to improve and maintain their performance. MSMEs that implement financial application development will have an impact on cost-effectiveness, easy technical management, and the ability to reach a wide consumer base. According to (Mayasari & Fathurrahmi, 2024) that MSME managers agree and strongly agree to use this web-based application in the future and will recommend it after several improvements are made. Referring to the explanation above that the development of the SIFINAs digital application through trials to respondents or business actors that the SIFINAs application helps the performance of MSMEs, especially in recording transactions and financial reports that are well systemised so as to provide efficiency for users.

Implications

The research implications show that the development of the SIFINAs digital application for MSME players has a broad impact on users, in addition to having an impact on user satisfaction but being able to improve the performance of MSMEs. The development of the SIFINAs digital application which is designed to be simple and simple is very easy for users to apply so that the application has flexibility with the level of needs in the field and helps government programs in accelerating digitalisation or towards a green economy.

CONCLUSIONS

The conclusion of the study found that the development of the SIFINAs digital application model is one of the simple and simple application models that greatly supports the performance of MSMEs. The results of testing the research hypothesis show that the development of WEB-based applications affects user satisfaction, user satisfaction affects MSME performance and WEB-based application development affects MSME performance. In the future, the SIFINAs digital application that is being developed is feasible to be used or implemented en masse by medium-level business actors because it has the convenience of management so that it impacts user satisfaction and improves MSME performance.

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