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AlfaOne Application Redesign Using Lean UX Method

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Abstract

AlfaOne application is a digital service application owned by PT Sumber Alfaria Tri jaya TBK which not only provides transaction features, but also various support services that make it easier for users to do daily activities digitally. This application is designed to increase the ease of service access for users without having to come directly to the physical outlet. The existence of the AlfaOne application is expected to increase the effectiveness of the service, reduce queues at the outlet, and encourage the increase in the use of digital services. However, based on the initial observation results, the features of the AlfaOne application interface design are still considered to be less optimal and less attractive, thus having an impact on the decrease in interest and comfort of users in using the application. Therefore, it is necessary to redesign the user interface (UI) and user experience (UX) as a basis for building a platform that is more attractive, easy to use, and in accordance with user needs. The Lean UX method was chosen in this study because it focuses on user satisfaction through an iterative, collaborative, and user feedback-based design process. Based on the results of analysis, implementation, and evaluation, this research produces a final prototype which is a combination of prototype A and prototype B that has been validated in terms of appearance, functionality, as well as criticism and suggestions from users and technical parties. Prototype A was chosen for 3 features and prototype B was chosen for 3 other features. On the login page selected design B with a percentage of 53%, the home page selected design A with a percentage of 57%, and the history page selected design A with a percentage of 62%. In addition, the research results show that the proposed interface design has consistency in the use of colors, typography, icons, and layouts, as well as providing a user experience that is easier to understand in accessing features and information as needed. The final design is tested using the Usability Testing method to measure the level of ease of use and user acceptance of the proposed alfaone application design.

Keywords: *App Alfaone; Lean UX; User Interface; User Experience; A/B Testing.*

I. INTRODUCTION

In the modernization era like today, humans are very dependent on technology. This makes technology a basic need for everyone. From the elderly to young people, experts to ordinary people also use technology in various aspects of their lives (Muhyidin et al., 2020). By using internet technology, many opportunities to get high quality facilities in various fields can be made easier (Qirani et al., 2024). This can also affect the progress of education by creating innovations about learning methods (Naufal et al., 2022). This phenomenon encourages the interest and encouragement of the community to continue developing technology in other sectors (Kirom & Swalaganata, 2024).

UI or User Interface is a visual representation of product design that connects the existing system with the user (Sanubekti, 2024). With UI, the system can interact directly with the user, and therefore UI is very important to ensure that the designed application has a good UI design that will have an impact on the customer's UX or User Experience (Oka Ananta Pradiptaa1, 2022). The creation of a user interface is carried out with the aim of facilitating the use of the technology by users, which is often called user-friendly terms (Pamungkas, 2023).

User Experience (UX) provides an experience for users in the ease of using the application. UX creation is included in defining how a product operates and meets user requirements, where UX must be clear, comfortable, user-friendly (Sulistyo & Sofiana, 2022).

Lean UX is a modern method in user experience development (Rabbanii et al., 2019). The LeanUX method approach involves users in the development process by making a Minimum Viable Product (MVP) for testing so that it can give feedback on the interface design and improve it according to the results received. LeanUX also focuses on reducing unnecessary processes that come from the results of the development cycle and improving the user experience with each iteration without the need to spend too much time on documentation (Rafiq, 2013).

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In this research, A/B Testing was also carried out on 2 designs but by using 2 scenarios at once to be tested. Differences (Darmawan & Rohman, 2022). A/B Testing or also known as split testing is a UX research method to evaluate design elements in an application. The A/B Testing method conducts trials on users by displaying interface version variants, the difference between each version is only located in one element (Ernowo et al., 2021).

AlfaOne application is a digital service application that is used to support the transaction process and service to users. However, based on the results of the current business process analysis, the use of the AlfaOne application still has several problems, especially in the aspects of ease of use and efficiency of the service flow. The process of user interaction with the application is not fully optimal, so it has the potential to cause confusion, usage errors, and lack of comfort in accessing the available features. The problem shows that the interface display (user interface) and user experience (user experience) on the AlfaOne application needs to be improved and developed. Thus, a redesign (redesign) of the application is needed that is able to adjust the needs of users and increase the effectiveness and efficiency of using the application.

Based on the results of business process analysis and problems found, researchers aim to provide initial solutions in redesigning the AlfaOne application interface.

II. RESEARCH METHODOLOGY

The research method used is divided into four main phases, as seen in the image below:

Figure 1. Lean UX Method

The Lean UX method has four stages, namely:

1. The assumption is to declare as a fact to support why this project is carried out.
2. Create an mvp is the latest version of the product or design that contains features according to the request from consumers whose results are obtained from google form usability testing.
3. Run an experiment is an MVP testing stage that has been built to ensure that the Prototype that has been made is in accordance with the assumptions that have been determined.
4. Feedback and research is the stage to collect and analyze input from users after design testing. At this stage, researchers process the A/B Testing results to determine the difference in user responses between the two designs.

III. RESULTS AND DISCUSSION

3.1 Declare Assumption

The declare assumption is a phase to identify product ideas designed to avoid products that are not needed by users or the market. The declaration assumption stage is carried out gradually by gathering all team members and discussing the problems that occurred before this project began.

3.2 Create a MVP Desain

1. Logo

The identity on the AlfaOne logo is something that symbolizes that the application made is an AlfaOne application. The latest logo that has been designed for AlfaOne can be seen in the image below:

Figure 2. AlfaOne Logo

2. Color Scheme

The prototype that is made has a color scheme that can be seen in the following image:

Figure 3. Color Scheme

3. Typography

The font used from design A and B is the poppins font. From the variation of the poppins font, it was chosen because it looks attractive and can be read well and neatly on all devices. This font is also easy to read in all elements.

4. Prototype Making

Prototyping is carried out as a visual representation of the developed application interface design. This prototype is designed directly using the Figma application by adjusting the user's needs and research objectives. Here is the Prototype design:

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A B

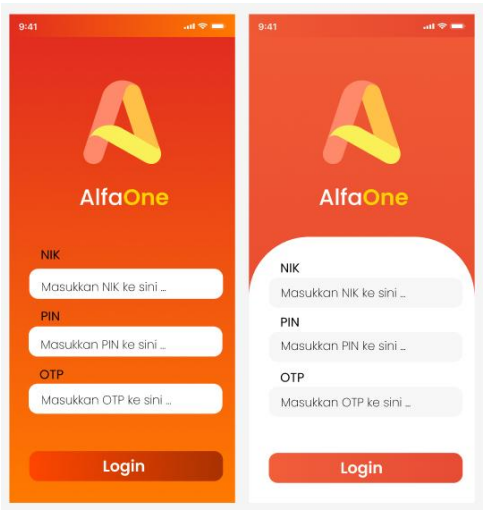

Figure 4. Login Page

A B

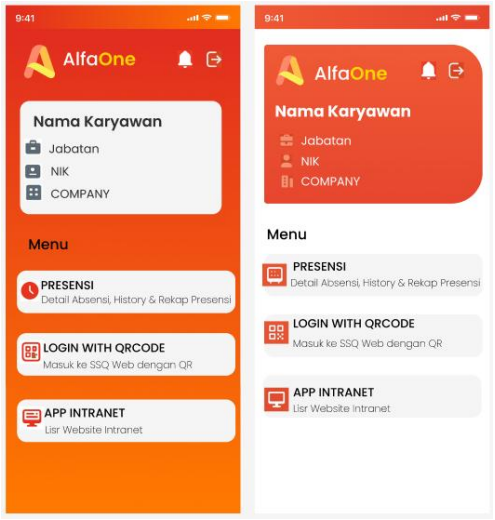

Figure 5. Home Page

A B

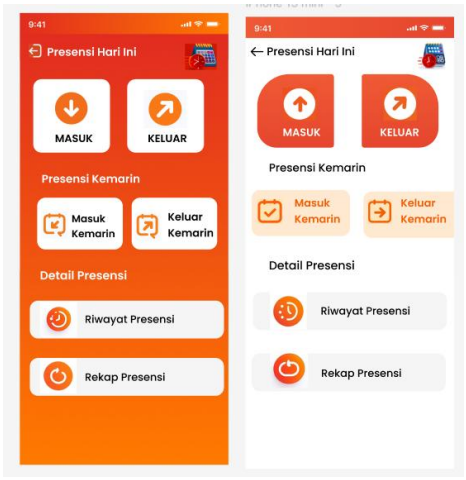

Figure 6. History Page

3.3 Run an Experiment

After creating prototype A and prototype B, the next step is to run an experiment to find out which prototype is better and easier to understand by users. The MVP stream is commonly used to place prototypes in sequence to see how respondents evaluate them by distributing questionnaires in the form of google forms called google form usability testing which serves to help evaluate the prototype user interface.

3.4 Feedback and Research

The feedback and research stage is to collect feedback and analysis and validate existing assumptions through the results of MVP prototype testing to users. This stage proves that the design that has been designed is in accordance with the plan and user needs through two stages of testing iteration.

3.4.1 Data processing

Based on the results of running an experiment, there were 21 consumer respondents and technicians each. The measurement results of the A/B test are summarized in the table shown in the figure below:

Table 1. Test results on A/B design

Application Type	Page View	Design A	Design B	Winner
AlfaOne	Login Page	47,6%	52,4%	B
	Home Page	57,1%	42,9%	A
	History Page	61,9%	38,1%	A

In addition, we present the results of all the respondents' answers in excel form as follows:

Timestamp	NAMA	UMUR	JENIS KELAM	LOGIN	BERANDA	RIWAYAT
19/11/2025 18:15:01	FIKI RAMZABI	21	Laki -Laki	B	B	A
19/11/2025 18:15:18	Saiba Anjeli	20	Perempuan	A	A	A
19/11/2025 18:42:47	Nabila Paraswati	20	Perempuan	A	B	A
19/11/2025 20:14:11	Dela Citra	20	Perempuan	B	B	A
19/11/2025 22:07:45	ananda alzikra arbi	21	Laki -Laki	B	A	A
19/11/2025 22:08:03	M Uwais Al-Qarni	19	Laki -Laki	B	A	B
20/11/2025 20:53:50	Fadil afif	20	Laki -Laki	B	A	A
22/11/2025 0:54:02	zaini	21	Laki -Laki	B	B	B
22/11/2025 12:41:42	Indah	23	Perempuan	B	B	A
23/11/2025 12:59:46	Wan Fadri Yogi	23	Laki -Laki	A	A	B
25/11/2025 9:51:34	Arnisia Anastasia	21	Perempuan	A	B	A
25/11/2025 12:35:30	Aviva fidelima	21	Perempuan	A	A	B
25/11/2025 18:29:58	luqmanul hakim	20	Laki -Laki	B	B	B
26/11/2025 13:04:48	Ananda Saputra	21	Laki -Laki	A	A	B
26/11/2025 14:52:52	FANILIA	20	Perempuan	A	A	A
26/11/2025 15:04:40	keke	21	Perempuan	B	A	A
26/11/2025 15:09:26	Farhan	22	Laki -Laki	B	B	B
26/11/2025 15:10:46	Daffa	23	Laki -Laki	A	B	A
26/11/2025 15:12:06	djodi	20	Laki -Laki	A	A	A
26/11/2025 20:13:38	Alung satia pratama	23	Laki -Laki	A	A	B
27/11/2025 17:29:56	lia	21	Perempuan	B	A	A

Figure 7. Answer results from all respondents

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As for us, we present it in the form of percentages as follows:

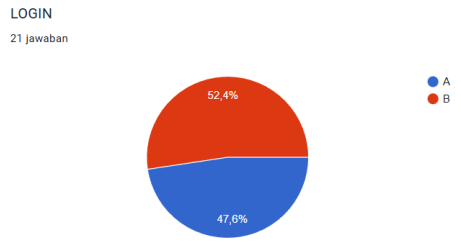

Figure 8. The answer from the respondent about which login design they like

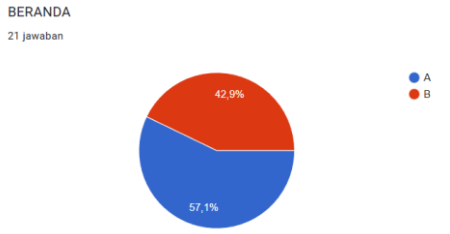

Figure 9. The answer from the respondent about which porch design do you like

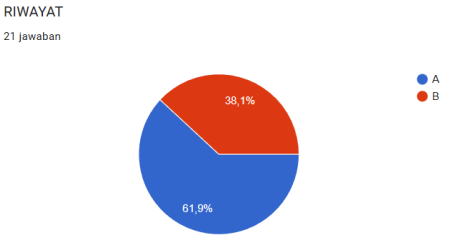

Figure 10. Answers from respondents about which History design they like

From all the percentage pictures above, we take the most/most percentage for each page as a winner.

5. CONCLUSION

Based on the results of analysis, implementation, and evaluation of user interface design/user experience on AlfaOne design using the Lean UX method produces a final prototype that has: The color scheme contained in the latest design that has been designed is consistent and consistent, namely orange with code #E6462E and white with code #FFFFFF, thus creating an interesting color combination. The font used in both designs A and B is Poppins, designed to look attractive and read nicely and neatly on all devices. In the usability testing questionnaire, respondents are asked to choose which design is most appealing. On the login page, design B was selected with a 52.4% share; on the home page, design A was chosen with a 57.1% share; and on the history page, design A was selected with a 61.9% share. User experience can be easily understood by users when accessing the application and getting information that suits their needs based on the test results that have been done.

RECOMMENDATIONS

The suggestions that can be given for the development of the AlfaOne application in the future are as follows:

1. The design that has been selected should continue to be developed by paying attention to the needs of users periodically, so that the application remains relevant and easy to use.
2. Continued usability evaluation with a larger number of respondents can be done to obtain more comprehensive evaluation results.

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