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Implementation of the Design Thinking Method in Optimizing the UI/UX of the Maxim Application

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Abstract: The Maxim application faces low user satisfaction, particularly in terms of ease of navigation and feature access speed. The average user satisfaction with ease of navigation before the improvements was 53.44%, while satisfaction with feature access speed reached only 52.43%. This study aims to improve the quality of the user interface (UI) and user experience (UX) by applying the Design Thinking method. This method involves five stages empathize, define, ideate, prototype, and test, which are used to identify problems, design solutions, and test the results of the improvements. Data were collected through interviews, questionnaires, and user reviews on Playstore, which were then evaluated using A/B testing with 100 respondents. The results showed that after the improvements, user satisfaction with ease of navigation increased to 73.77%, while feature access speed increased to 73.00%. Therefore, the application of the Design Thinking method successfully enhanced both the ease of use and the speed of feature access in the Maxim application.

Keywords: Design Thinking, UI/UX, A/B Testing, Maxim Application

Introduction

The development of technology in the digital era has brought significant changes across various sectors, including transportation. Globally, app-based transportation services have revolutionized how people access transport, with companies like Uber in the United States and Didi Chuxing in China leading this transformation. According to a Statista report (2023), the app-based transportation market is projected to reach $318 billion by 2024, driven by increasing smartphone penetration and broader internet access. This situation allows people in various parts of the world to access transportation services that are faster, more efficient, and affordable. In Indonesia, this phenomenon is also clearly visible through the rising popularity of online transportation apps such as Gojek, Grab, and Maxim. These services emerged in response to the needs of urban populations seeking faster, more convenient, and efficient transportation solutions amid worsening traffic congestion. Data from the Central Statistics Agency (2024) shows that the number of motor vehicles continues to increase each year, especially in major cities, exacerbating traffic

conditions. With internet penetration reaching 79.5% in February 2024 (APJII, 2024), more people are relying on online transportation services for their daily mobility needs.

However, even though Maxim has become one of the popular online transportation service providers in Indonesia, the app faces significant challenges related to the quality of its user interface and user experience (UI/UX). According to a survey conducted by an Independent Research Institute (2023), around 75% of users reported dissatisfaction with Maxim's app interface. A major issue often reported is the inaccuracy of pickup points on the app's map, which frequently does not match the actual location. This causes confusion for both users and drivers, extends wait times, and detracts from the overall user experience. Additionally, the booking process in the Maxim app is often perceived as inefficient because some additional services, such as food ordering, require users to be redirected to an external website. This platform switching slows down the booking process and reduces convenience. Another complaint is the inadequate user rating system. Unlike competitors that offer a five-star rating system, Maxim only provides a thumbs-up or thumbs-down option, limiting users' ability to give more detailed feedback on their experiences.

Maxim's app interface has been rated as less intuitive, particularly regarding navigation and access to essential features. A survey conducted by (Farahsalsabil Yudhiane Cantika & R. Yuniardi Rusdianto, 2023) found that about 68% of Maxim users reported difficulty in finding the menu. This indicates that the layout of the interface is not clear enough and user-friendly, hindering users from accessing the app's main features. This experience can impact users' perception of the overall quality of the app. In contrast, major competitors like Gojek and Grab consistently update and refine their interface designs, focusing on ease of navigation and the addition of more user-friendly features. Innovations made by these competitors contribute to increased user satisfaction and loyalty, ultimately strengthening their market position (Sonjaya & Ruyani, 2023).

To address these challenges, the implementation of design thinking methods becomes crucial. Design thinking is an innovative, user-centered approach that facilitates the development of solutions based on a deep understanding of user needs and preferences. Research by (Fitra Alfajri, 2020) indicates that the application of design thinking can drive more targeted innovation and enhance user satisfaction across various sectors, including digital services and technology. In the context of the Maxim app, this method can be employed to identify and prioritize improvements to the most critical UI/UX elements for users, such as clarifying the layout of menus and features, as well as enhancing the speed of feature access within the Maxim app. With this approach, it is hoped that navigation within the app can be improved, reducing the time users need to find necessary menus or features. Therefore, this research aims to explore how design thinking methods can be implemented to optimize the UI/UX of the Maxim app. Based on the analysis and challenges faced, the author is interested in creating and compiling a final project report titled “Implementation of Design Thinking Methods in Optimizing the UI/UX of the Maxim App (Case Study: Maxim App)”.

Methodology

Based on the issues being studied, the type of research used is qualitative research, qualitative research is a type of research used to comprehensively or holistically interpret the situations experienced by research subjects by expressing them in the form of language and words within a specific context, and presented using various scientific methods. Thus, qualitative research aims to understand phenomena or problems through the collection of factual data, which is then presented verbally. In the context of this research, the subjects of the study are active users of the Maxim app in the city of Palembang, as this research aims to explore user experiences with the app, with the goal of identifying issues, analyzing user needs, and generating solutions or ideas through prototype development. In this study, the object of research is the Maxim app, focusing on optimizing the UI/UX using design thinking methods. This method is chosen to allow the researcher to understand user needs deeply and produce innovative solutions.

Data sources refer to anything that can provide relevant and useful information related to the research being conducted. In the context of this research, data sources are essential elements that assist the researcher in collecting the necessary information to answer the research questions and achieve the research objectives. The researcher employs various data sources to ensure that the information obtained is comprehensive and accurate. Specifically, in this study, the researcher uses two different types of data, as follows: Primary Data: In this research, primary data is obtained directly from several respondents who are active users of the Maxim app. Primary data is collected through interviews and questionnaires. The researcher conducts structured interviews to obtain valid data that can help in the success of this research. Secondary Data: Secondary data is additional data obtained indirectly. The use of secondary data aims to support the primary data that has been collected directly. Some secondary data can be obtained from various sources, including user reviews on the Play Store, journals, and other relevant documents related to the research context. By utilizing secondary data, the researcher can enrich their insights and understanding of the topic being studied. To obtain relevant, in-depth, and accurate information related to this research, the researcher employs various effective and systematic data collection methods. The selection and application of these methods are carried out carefully to ensure that the collected data can maximally support the research objectives. The data collection methods used in this study include the following steps: Literature Review, Observation, Questionnaire, and Interviews.

The target sample for this research consists of active users of the Maxim app in the city of Palembang. Based on data from the Maxim branch office in Palembang, the total population of Maxim app users in the city is 78,827 users. This study will apply the design thinking method as the main approach in the UI/UX redesign process of the Maxim app, with a focused aim at solving the identified problems from the user's perspective. The design thinking method is applied with the primary goal of gaining a deeper understanding of user needs, expectations, and experiences when interacting with the Maxim app. In this context, the user becomes the central point of the research, and this approach will provide a foundation for designing solutions that are not only aesthetic but also meet the functional

and emotional needs of the users. The design thinking method consists of five stages: empathize, define, ideate, prototype, and test.

The research instruments include the tools used during the research process. These instruments are utilized to collect data, analyze the data, and interpret the results. The media used for data collection include Google Forms and the Figma application for running prototypes. During the data collection stage, the researcher uses Microsoft Word, while for processing and analyzing the results of the System Usability Scale calculations, the researcher uses Microsoft Excel. After all the data is analyzed, the researcher employs the Figma application to create empathy maps, user personas, affinity diagrams, prioritization ideas, low-fidelity designs, high-fidelity designs, and prototypes.

Result and Discussion

Results of Design Thinking Implementation

The implementation of the design thinking method on the UI/UX of the Maxim app resulted in a high-fidelity prototype that has been thoroughly improved and optimized, including layout, colors, icons, and other visual elements. This allows for more accurate usability testing, providing users with an experience closer to the final app to receive more relevant feedback. The strength of this high-fidelity design lies in its ability to identify usability issues and make necessary adjustments, thereby enhancing the interface, navigation, and features of the app with the goal of increasing overall user satisfaction.

High-Fidelity Design Onboarding

The main difference between the two onboarding views of the Maxim app before and after the redesign lies in the visual aspects and the information presented. In Figure 1, the onboarding view before the redesign appears simple, featuring only the Maxim logo on a white background. However, after the redesign in Figure 2, the view becomes more modern and engaging, incorporating illustrations and showcasing three onboarding screens that provide more detailed information related to the necessary access features. Additionally, user interaction has been improved with the addition of right-arrow icons on each onboarding screen, making it easier for users to understand and consent to the app's access requests.

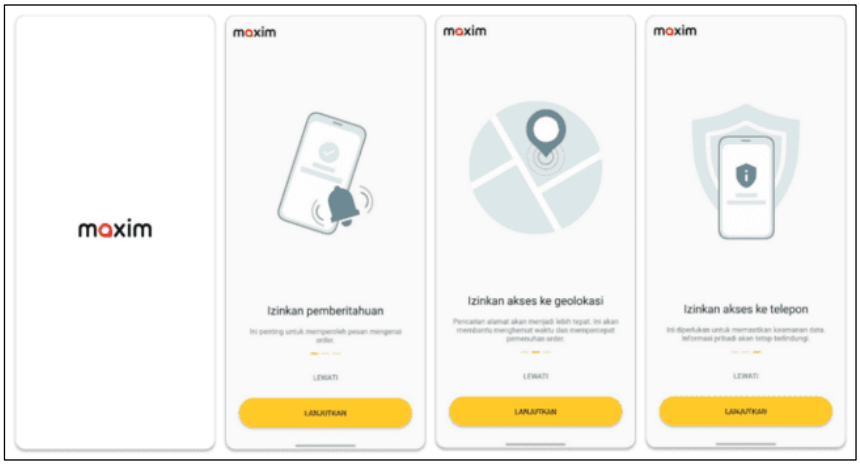


Figure 1. High-Fidelity Design Onboarding Before Redesign

Figure 2. High-Fidelity Design Onboarding After Redesign

High-Fidelity Design Registration Page

Before the redesign, the registration page of the Maxim app appeared quite simple, as shown in Figure 3. There were no specific options for new user registration; the login and registration processes were combined. There was no clear flow or guidance for completing the registration. New users had to enter their phone number to register, just like existing users logging in. The minimalistic layout could leave new users feeling confused during the registration process. After the redesign, the Maxim app interface appears more engaging and informative, as seen in Figure 4. The registration page after the redesign feels more dynamic, enhanced with modern graphic illustrations. There are detailed, step-by-step instructions to guide users through the registration process. Users are prompted to enter their phone number, after which the system sends an OTP code for verification. Following this, users can complete their profile data before they can start using the app. This more interactive and easy-to-understand registration page design is expected to facilitate the registration process and encourage more new users.

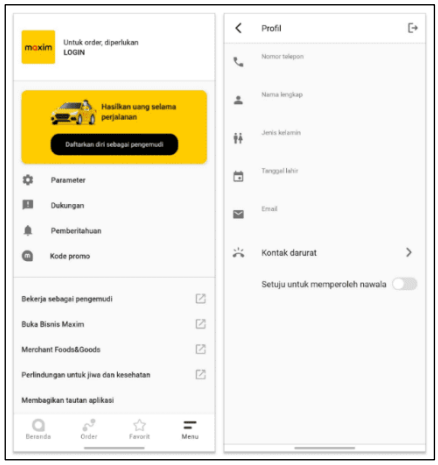


Figure 3. High-Fidelity Design Registration Before Redesign

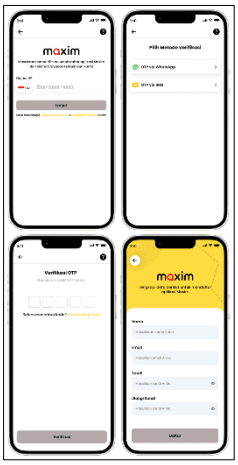


Figure 4. High-Fidelity Design Registration After Redesign

High-Fidelity Design Login Page

The login interface of the Maxim app shows a significant visual difference before and after the redesign. In Figure 5, the previous login screen appears simple, featuring an input field for the phone number against a plain white background. However, after the redesign, Figure 4.6 presents a more modern and appealing look. There are graphic illustrations enhancing the background, along with the addition of a "Login" button to simplify the login process and an option for "Don't have an account? REGISTER" for new users. These changes reflect efforts to enhance the look and user experience of the Maxim app.

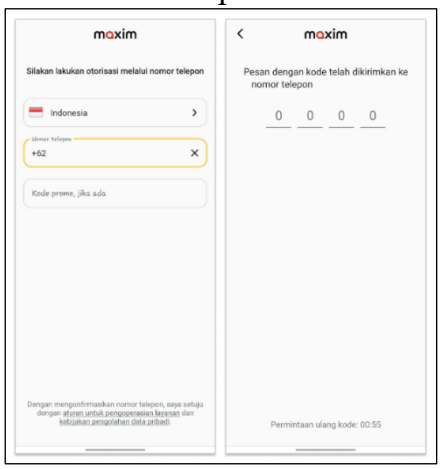
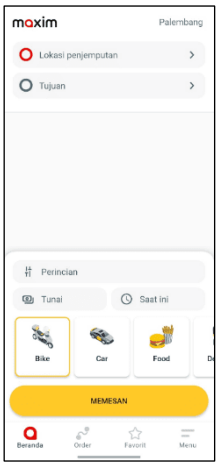


Figure 5. High-Fidelity Design Login Before Redesign

Figure 6. High-Fidelity Design Login After Redesign

High-Fidelity Design Home Page

Before the redesign, the home page of the Maxim app (Figure 7) appeared suboptimal in presenting information and key features. Main menus such as Bike, Car, Food, Delivery, Cargo, Life, and Service were displayed at the bottom near the navigation, receiving less attention from users. Additionally, visual elements like icons and text looked simplistic, lacking clear emphasis. However, after the redesign, the home page of the Maxim app (Figure 8) underwent significant changes. Key features like Bike, Car, Food, Delivery, Cargo, Life, and Service are now placed at the top of the page with larger icons and clear descriptive text. This strategic placement makes it easier for users to directly access the services they need. Furthermore, promotional content, restaurant recommendations, and other important information are also displayed separately and prominently, allowing users to find them easily.



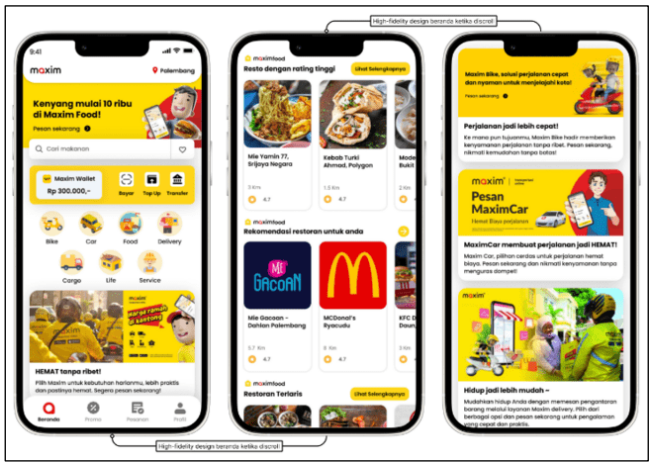
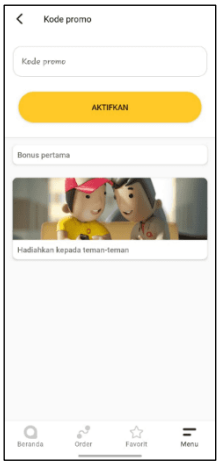


Figure 7. High-Fidelity Design Home Page Before Redesign
Figure 8. High-Fidelity Design Home Page After Redesign

High-Fidelity Design Promo Menu

Before the redesign, the promo menu in the Maxim app was quite difficult for users to find. The promo menu was located within the "Menu" section, requiring users to go through several steps to access it. This made the promo feature appear less prominent. The

appearance of the promo menu before the redesign can be seen in Figure 9. However, after the redesign process, the promo feature in the Maxim app became much easier to find and more noticeable. The promo menu is now placed in the app's navbar, allowing users to access it without navigating through multiple steps. Additionally, the redesigned promo menu features groupings or filters for promotions, making it easier for users to find deals related to the services they want to order. The promo menu's appearance has also been made more appealing with the use of posters and eye-catching informational designs. The results of the redesign of the promo menu can be seen in Figure 10.



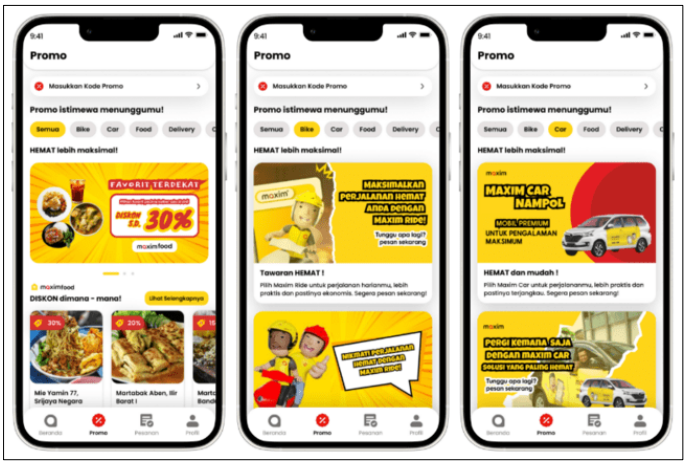


Figure 9. High-Fidelity Design Promo Menu Before Redesign
Figure 10. High-Fidelity Design Promo Menu After Redesign

High-Fidelity Design Order Menu

Before the redesign, the "Orders" menu in the Maxim app only displayed basic information such as the logo, location, and user orders. After the redesign, the "Orders" menu now features a more comprehensive range of order categories, including history, in progress, reservations, and more. This design change reflects an effort to make the "Orders" menu more informative and functional for users in managing their orders. A comparison of the order menu appearance in the Maxim app before and after the redesign can be seen in Figure 11.

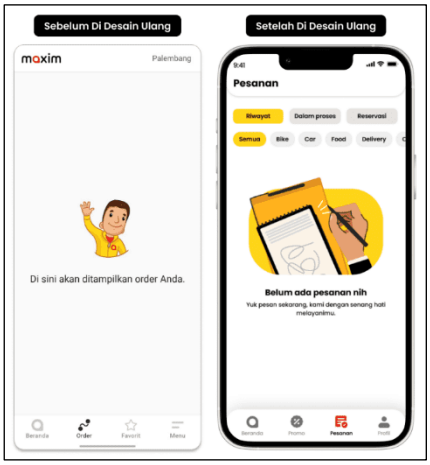


Figure 11. High-Fidelity Design Order Menu

High-Fidelity Design Profile Menu

Before the redesign, the profile menu of the Maxim app only displayed basic user information, such as phone number, gender, date of birth, and email. After the redesign, the profile menu shows a more modern and organized update. The user's profile photo is now clearly displayed at the top. A more comprehensive and integrated navigation menu provides access to various features, such as profile settings, favorite addresses, order history, favorites, promotions, payment methods, notifications, language settings, help center, and log out. This change reflects an effort to present user information in a more comprehensive and structured manner. The more modern and integrated design is expected to enhance user interaction and make it easier for them to manage their profile and access related features. The appearance of the profile menu before and after the redesign can be seen in Figure 12.

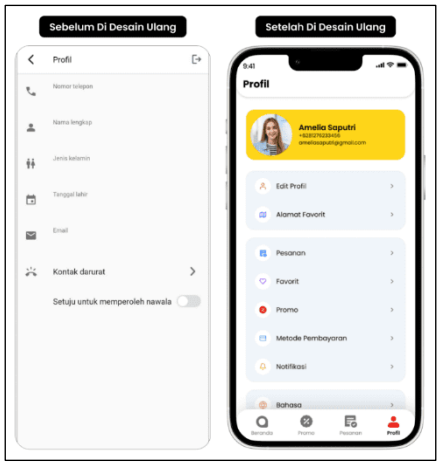


Figure 12. High-Fidelity Design Profile Menu

High-Fidelity Design Bike Menu

The design of the Bike menu in the Maxim app has undergone a significant redesign with several notable changes. The layout of the Bike menu is now more structured and intuitive, making it easier for users to navigate the available features. In this redesigned version, the author has also added a location tracking feature that can automatically detect the user's location, simplifying the selection of pick-up points. The icons and illustrations used in the Bike menu after the redesign appear more realistic and visually appealing, providing a more enjoyable experience for users. Additionally, the colors used in the Bike menu have been updated to brighter, more contrasting, and vibrant shades, giving it a fresher and more modern look.

Previously, users experienced difficulties with digital or cashless payment methods. In this redesign, alongside cash payments, the author also recommends a wider variety of digital payment options, such as MaximWallet, LinkAja, Dana, and OVO. This feature is designed with an easy-to-understand interface and a simple flow to facilitate cashless transactions for users. The redesigned Bike menu also includes a voucher feature on the ordering page, allowing users to enter promo codes and view offers. This helps address user difficulties in finding the promo feature previously. Additionally, users can now leave reviews and tips for drivers after using the Bike service, a feature that was not available

before. With this comprehensive redesign, it is hoped that the Bike menu in the Maxim app can provide a more engaging and user-friendly experience for its users. The design of the Bike menu in the Maxim app before the redesign can be seen in Figure 13, while the redesigned Bike menu can be viewed in Figure 14.

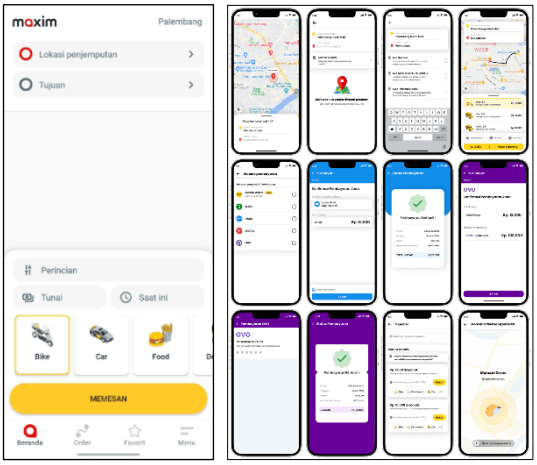


Figure 13. High-Fidelity Design Bike Menu Before Redesign
Figure 14. High-Fidelity Design Bike Menu After Redesign

High-Fidelity Design Car Menu

The Maxim app has undergone a redesign process for the Car menu with several significant changes. The layout of the Car menu is now more structured and intuitive, making it easier for users to explore the available features. An automatic location tracking feature has also been added to help users determine pick-up points. The icons and illustrations in the Car menu appear more realistic and visually appealing, providing a more enjoyable experience for users. The colors used in the Car menu have been updated to brighter, more contrasting, and vibrant shades, giving it a fresher and more modern look. In addition to cash payments, a wider variety of digital payment options are now available, such as MaximWallet, LinkAja, Dana, and OVO. This feature is designed with an easy-to-understand interface and a simple flow to facilitate cashless transactions for users, addressing the confusion and difficulties experienced by users when making cashless payments.

The addition of a voucher feature on the ordering page, positioned strategically, aims to solve the problem users faced in finding promo features previously. With this feature, users can enter promo codes and see the available promotions. In this redesign, the author has also added a feature to give tips, ratings, and reviews for the service provided by drivers, which was not available before. With these updates, the Car menu in the Maxim app is expected to become more intuitive, user-friendly, and provide a more positive experience for users. Additionally, the inclusion of new features such as various easy-to-understand digital payment options with a simple flow, ease in finding promotions, and the ability to give tips, ratings, and reviews to drivers is expected to enhance user satisfaction and comfort while using the Maxim app. These new features are designed to address the issues users faced previously. Figure 15 displays the Car menu in the Maxim app before the redesign, while Figure 16 shows the Car menu after the redesign.

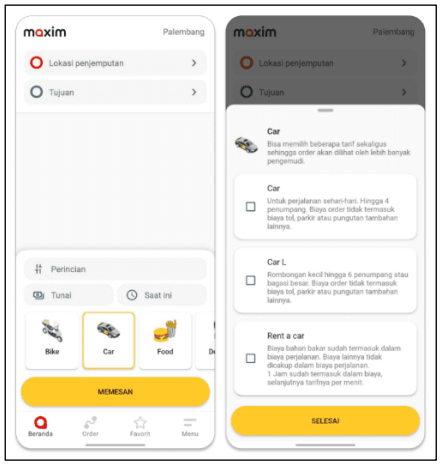


Figure 15. High-Fidelity Design Car Menu Before Redesign

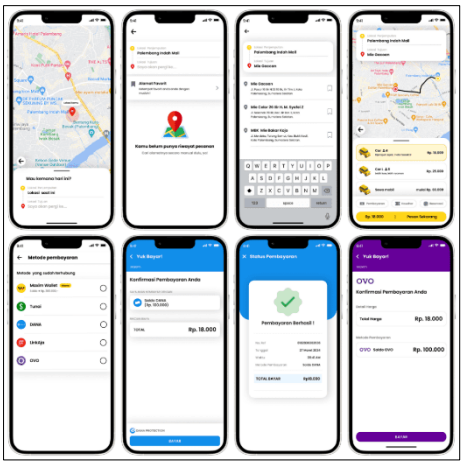


Figure 16. High-Fidelity Design Car Menu After Redesign

High-Fidelity Design Cargo Menu

The Cargo menu in the Maxim app underwent a comprehensive redesign, resulting in several significant changes and improvements. The layout of the Cargo menu has been made more structured and intuitive, making it easier for users to explore and find the available features. One of the new features added is the automatic location tracking capability. This feature greatly assists users in accurately and efficiently determining pick-up points. Additionally, the icons and visual illustrations in the Cargo menu have been redesigned to be more realistic and appealing, giving a more professional and enjoyable impression for users during interactions. Promotional posters have also been added to attract users to utilize the cargo services offered. In terms of visual appearance, the colors used in the Cargo menu have been updated to brighter, more contrasting, and vibrant tones. These changes provide a fresher and more modern feel, enhancing the overall aesthetics and appeal of the app. Furthermore, the author has identified and addressed previous issues related to users' difficulties with cashless payments. In this redesign, a variety of digital payment options have been provided, such as MaximWallet, LinkAja, Dana, and OVO, with designs and flows that are easier to understand and simpler.

On the ordering page, a voucher feature has also been added with strategic placement. This makes it easier for users to find and take advantage of the various available promotions

and discounts. Additionally, a new feature to give tips, ratings, and reviews for the service provided by drivers has been included. This feature was previously unavailable, but now users can easily provide useful feedback to encourage improvements in service quality. With these updates to the Cargo menu, the Maxim app is expected to deliver a more intuitive, user-friendly, and positive experience for users. New features such as automatic location tracking, various digital payment options, ease of finding promotions, and the ability to give tips and reviews are expected to enhance user satisfaction and comfort when using the cargo service on the Maxim app. These new features are designed to address the problems users faced previously. Before the redesign, the appearance of the Cargo menu in the Maxim app can be seen in Figure 17. Meanwhile, the appearance of the Cargo menu in the Maxim app after the redesign can be seen in Figure 18.

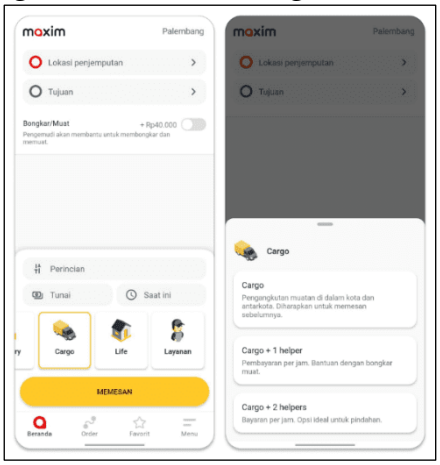


Figure 17. High-Fidelity Design Cargo Menu Before Redesign

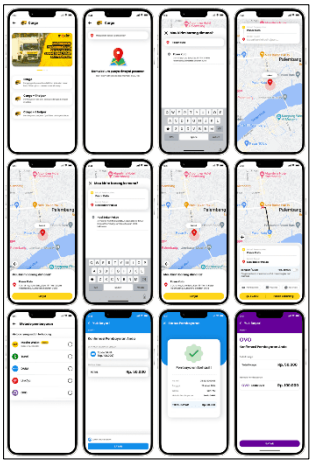


Figure 18. High-Fidelity Design Cargo Menu After Redesign

High-Fidelity Design Food Menu

The Food menu in the Maxim app underwent a comprehensive redesign, resulting in several significant changes and improvements. Before the redesign, the Food menu appeared quite simple and visually unappealing. The list of food and beverage products was displayed in a rather flat format, with limited information such as product names, prices, and order buttons. There was no categorization, so users had to scroll through the

entire list to find the desired products. However, after the redesign, the Food menu in the Maxim app underwent a significant transformation. The menu now looks much more attractive and modern, utilizing colors, illustrations, and a more dynamic layout. There is a category or filter feature for food that facilitates users in exploring various available food categories.

Additionally, the food search feature has seen substantial improvements. At the top, there is a search box with the text “What do you feel like eating?” which looks much more appealing and interactive than before. Below the search box, there is a "Popular Searches" list displaying several trending food categories and popular restaurants. This helps users easily find food choices that are currently in demand. Below the "Popular Searches" list, there is a "Recommended" section showing several restaurants or food shops along with distance and ratings. The product detail view also provides much more comprehensive information. These changes are expected to enhance the user experience when shopping for food through the Maxim app. A more engaging interface, effective search features, and comprehensive product information can facilitate users.

Another important change is the addition of digital or cashless payment options. Before the redesign, the Maxim app only offered cash payment. However, in the new layout, several digital payment options have been added, including Maxim Wallet, DANA, LinkAja, and OVO, while still retaining cash payment. This provides more flexibility and convenience for users in conducting transactions. Overall, the redesign of the Food menu in the Maxim app is expected to improve the user experience in online food shopping, including payment options. The appearance of the Food menu in the Maxim app before the redesign can be seen in Figure 19. Meanwhile, the appearance of the Food menu after the redesign can be seen in Figure 20.

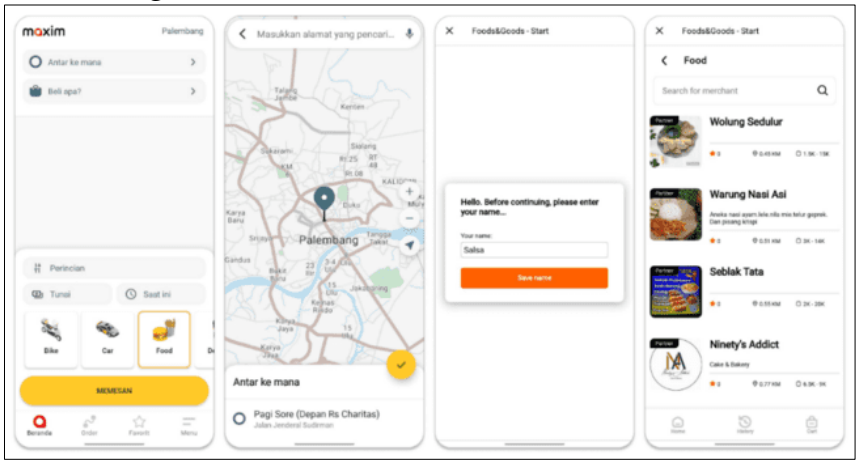


Figure 19. High-Fidelity Design Food Menu Before Redesign

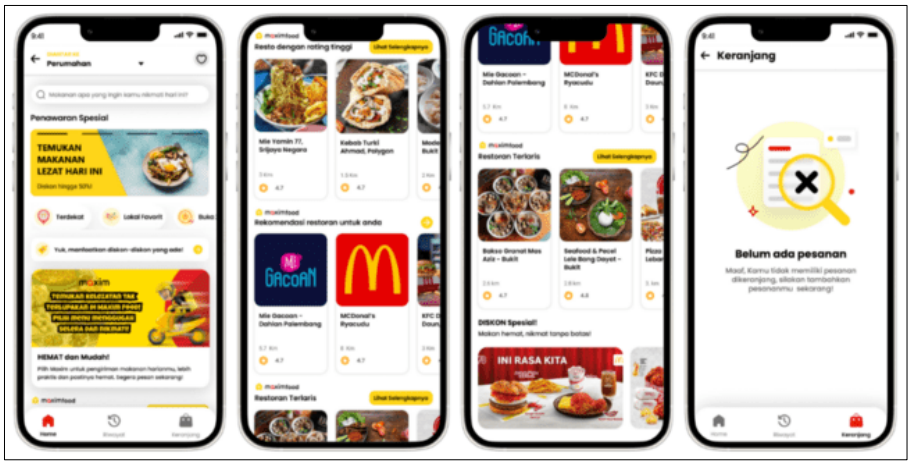


Figure 20. High-Fidelity Design Food Menu After Redesign

High-Fidelity Design Delivery Menu

The Maxim app underwent a comprehensive redesign of the Delivery menu, resulting in several significant changes and improvements. The layout of the Delivery menu has been made more structured and intuitive, facilitating users in exploring and finding the available features. Additionally, the icons and visual illustrations in the Delivery menu have been redesigned to be more realistic and visually appealing, creating a more professional and enjoyable experience for users. Furthermore, promotional posters have been added to attract users' interest in utilizing the delivery services offered. In addition to improvements in layout and visual appearance, the redesign process also focused on simplifying the user flow of the Delivery menu. Previously, users sometimes found it challenging to navigate and locate the features they needed. However, with this redesign, the navigation flow in the Delivery menu has been simplified and optimized. Now, users can easily explore the various features and options available.

In terms of visual appearance, the colors used in the Delivery menu have been updated with a brighter, more vibrant, and contrasting palette. These changes provide a fresher and more modern look, enhancing the overall aesthetics and appeal of the application. Additionally, to address previous issues related to users' difficulties with cashless payments, a variety of digital payment options have been provided in this redesign, including Maxim Wallet, LinkAja, Dana, and OVO, designed with a more straightforward and easily understandable layout.

On the ordering page, a voucher feature has also been added with strategic placement. This makes it easier for users to find and take advantage of various available promotions and discounts. Additionally, a new feature allowing users to give tips, ratings, and reviews for the service provided by drivers has been included. This feature was previously unavailable, but now users can easily provide valuable feedback to help improve service quality. With these updates to the Delivery menu, it is hoped to offer a more intuitive, user-friendly, and positive experience for users. Various improvements have been designed to address the issues users faced previously. The appearance of the Delivery menu in the Maxim app before the redesign can be seen in Figure 21. Meanwhile, the appearance of the Delivery menu after the redesign can be seen in Figures 22.

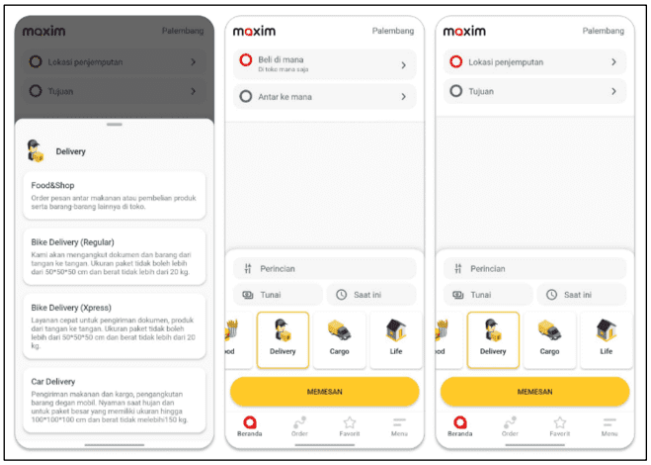


Figure 21. High-Fidelity Design Delivery Menu Before Redesign

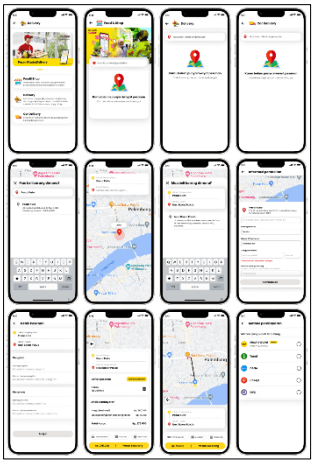


Figure 22. High-Fidelity Design Delivery Menu After Redesign

High-Fidelity Design Life Menu

In the redesign process of the Life menu in the Maxim app, several key improvements were made, including layout, navigation flow, icons, visual illustrations, and the addition of promotional posters. The layout was simplified and features were grouped in a more logical manner, making it easier for users to find and access the services they need. The navigation flow was also improved to create a more intuitive and seamless user interaction. Additionally, the icons and visual illustrations in the Life menu have been redesigned to be more realistic and appealing. These changes aim to enhance the overall aesthetics and attractiveness of the application, providing a more engaging and enjoyable experience for users interacting with the Life menu. The redesign process also included the addition of promotional posters to attract users to take advantage of the available life services.

The Life menu offers three services: massage (male therapists), massage (female therapists), and cleaning. For the Massage (Male Therapist) service, several types of treatments are offered, including Massage, Scrub, Face Treatment, and Kerokan. Similarly, the Massage (Female Therapist) service also includes treatments like Massage, Scrub, Face Treatment, and Kerokan. The Cleaning service provides options for home or office cleaning packages by trained personnel, using appropriate cleaning and disinfecting equipment.

With these various types of care and cleaning services, the Life menu in the Maxim app offers diverse solutions to meet users' needs in health and beauty, as well as environmental cleanliness. The combination of improvements in appearance, navigation, and service promotion is expected to provide a more intuitive, user-friendly, and positive experience for users interacting with the Maxim app. The appearance of the Life menu in the Maxim app before the redesign is shown in Figure 23. Meanwhile, the appearance of the Life menu after the redesign process can be seen in Figure 24.

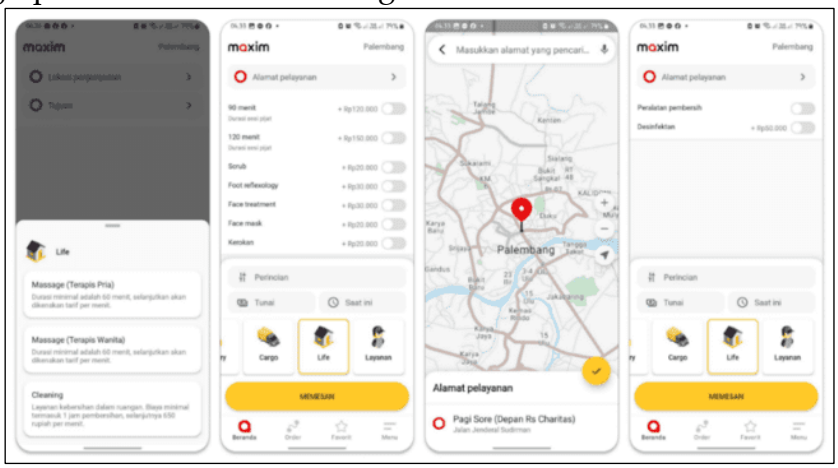


Figure 23. High-Fidelity Design Life Menu Before Redesign

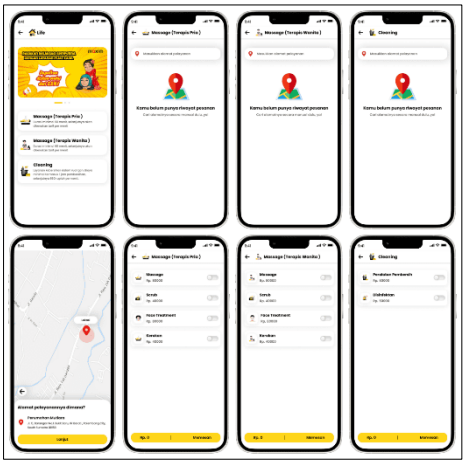


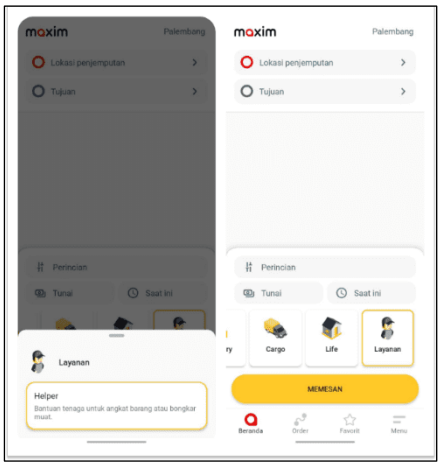
Figure 24. High-Fidelity Design Life Menu After Redesign

High-Fidelity Design Service Menu

The Service menu in the Maxim app has undergone a redesign process that has resulted in significant changes and improvements. The layout of the Service menu has been made more structured and intuitive, making it easier for users to explore and find the available features. The icons and visual illustrations in the Service menu have also been redesigned to be realistic and appealing, providing a modern and enjoyable experience for users. To attract user interest, promotional posters related to the service offerings have been added. In terms of appearance, the colors in the Service menu have been updated to brighter, more contrasting, and vibrant tones. These changes provide a fresh and modern impression, enhancing the overall aesthetics and appeal of the application. Additionally,

previous issues related to users' difficulties in making cashless payments have been addressed. In this redesign, a variety of digital payment options have been provided with a design and flow that are easier to understand and straightforward.

On the ordering page, a voucher feature has been added in a strategic location, making it easy for users to find and take advantage of various promotions and discounts. A new feature for tipping, rating, and reviewing the driver's services is also available, allowing users to provide valuable feedback to encourage service quality improvements. With these updates to the Service menu, the Maxim app is expected to deliver a more intuitive, user-friendly, and enjoyable experience for users. These various improvements are designed to address the issues previously faced by users. The appearance of the Service menu in the Maxim app before the redesign is shown in Figure 25, while the appearance after the redesign process can be seen in Figure 26.



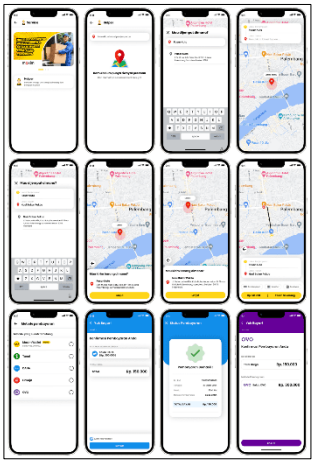


Figure 25. High-Fidelity Design Service Menu Before Redesign
Figure 26. High-Fidelity Design Service Menu After Redesign

Discussion

The implementation of the design thinking method in the Maxim app has produced a high-fidelity prototype that has been thoroughly improved and optimized. This includes changes to layout, colors, icons, and other visual elements, enabling more accurate usability testing and providing a user experience closer to the final application. The strength of this high-fidelity design lies in its ability to identify usability issues and make necessary adjustments, thereby enhancing the app's interface, navigation, and features with the goal of increasing overall user satisfaction.

Enhanced Onboarding Design

The main difference between the onboarding view of the Maxim app before and after the redesign lies in the visual aspects and the information presented. Before the redesign, the onboarding view appeared simple, featuring only the Maxim logo on a white background. After the redesign, the view became more modern and engaging, incorporating illustrations and showcasing three onboarding screens that provide more detailed information related to necessary access features. User interaction has also been

improved with the addition of right-arrow icons, making it easier for users to understand and consent to the app's access requests.

More Informative Registration Page

Before the redesign, the registration page of the Maxim app appeared very simple and could confuse new users. However, after the redesign, the registration page became more dynamic and informative with step-by-step instructions. Users are prompted to enter their phone number and receive an OTP code for verification before completing their profile data. This more interactive design is expected to facilitate the registration process and encourage more new users to join.

Updated Login Interface

The login interface of the Maxim app also shows a significant visual difference. After the redesign, the look became more attractive with the addition of graphic illustrations and a "Login" button that simplifies the login process. The availability of a registration option for new users also reflects efforts to enhance the user experience.

Revitalized Home Page

The home page of the Maxim app before the redesign looked suboptimal in presenting information and key features. After the redesign, key features are now placed at the top of the page with larger icons and clear descriptive text, making it easier for users to access the services they need. Promotional content and restaurant recommendations are also displayed separately and prominently, allowing users to find them easily.

More Accessible Promo Menu

Before the redesign, the promo menu was difficult to find. However, after the redesign, the promo menu is now more easily accessible, placed in the app's navbar, and includes groupings or filters to help users find relevant offers. The design has also been made more appealing with promotional posters that attract user attention.

More Comprehensive Orders Menu

The "Orders" menu now displays various order categories, including history, ongoing orders, and reservations. This design change reflects an effort to make the orders menu more informative and functional for users.

Better Organized Profile Menu

The revised profile menu presents user information in a more organized and modern way. The user's profile photo is now clearly displayed at the top, and a more comprehensive navigation menu allows access to various important features.

Updated Bike Menu

The Bike menu has undergone significant changes, including the addition of an automatic location tracking feature and a wider variety of digital payment options. The design of the icons and illustrations is more attractive, enhancing the user experience.

Enhanced Car and Cargo Menus

The Car and Cargo menus have also been updated, with the addition of location tracking features and a broader range of payment methods. This new design aims to improve user comfort and satisfaction while using Maxim's services.

More Engaging Food and Delivery Menus

The Food and Delivery menus are now more appealing and user-friendly, featuring improved search functions and categories that make it easier for users to find food options and delivery services. Digital payment options have also been added for greater flexibility.

Improved Life Menu

The Life menu presents more structured and informative services, with a more attractive look and promotions that encourage users to take advantage of health and cleaning services.

Revitalized Service Menu

The Service menu has been redesigned to provide a more intuitive experience, incorporating digital payment options and rating features to enhance user feedback. Overall, the redesign of the Maxim app demonstrates a commitment to enhancing user experience through significant visual updates, streamlined processes, and the addition of relevant new features, which are expected to improve overall user satisfaction.

Conclusion

Based on the conducted research, the implementation of the design thinking method in optimizing the Maxim application shows significant results. This process follows five main stages: empathize, define, ideate, prototype, and test. In the empathize stage, researchers conducted observations and interviews to understand users' needs and problems. This information was then formulated in the define stage to identify the main issues that needed to be addressed. Next, in the ideate stage, various solutions were proposed, which were then realized in the form of prototypes during the prototype stage and tested in the test stage to gather feedback from users. Each of these stages contributed to design improvements, focusing on enhancing the user experience. Testing was conducted to assess user satisfaction before and after the redesign of the Maxim application, involving 100 respondents who answered 30 questions regarding navigation ease and feature access speed. The A/B testing method was used to compare two versions of the application. Test results indicated that the average user satisfaction related to navigation ease increased from 53.44% to 73.77%, reflecting an improvement of 20.33%. This increase shows that users found it easier to discover and utilize features after the redesign.

Furthermore, regarding feature access speed, user satisfaction rose from 52.43% to 73.00%, representing an increase of 20.57%. This indicates that users experienced faster access to various features within the application, which is crucial for enhancing their experience, especially for those seeking a more efficient process. Overall, the UI/UX redesign of the Maxim application positively impacted user experience, particularly in navigation ease and feature access speed, with an average improvement of around 20% in both aspects. Although there is still room for improvement, this data demonstrates that the

steps taken in the redesign have successfully increased user satisfaction, especially in terms of ease and efficiency of application use.

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