

Integration of Visual Branding and User Experience in the Design of the Nusantara Rempah Marketplace Application

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Article Information	ABSTRACT
Article History Received : July 07, 2026 Revised : July 18, 2026 Published : July 24, 2026	Indonesia has significant potential as one of the world's leading spice producers; however, digital platforms that integrate spice marketing and education remain limited. This study aims to design Rempahara, a spice marketplace application that integrates visual branding and user experience to improve digital transactions while providing educational content on Indonesian spices. The study employed the Design Thinking method, consisting of the Empathize, Define, Ideate, Prototype, and Test stages. A high-fidelity prototype was evaluated through usability testing involving 30 respondents selected using purposive sampling, comprising users familiar with marketplace applications and interested in cooking or spice products. The evaluation used Task Success Rate, Error Rate, and Time on Task metrics. The results showed a Task Success Rate of 97.1%, an Error Rate of 2.9%, and an Average Completion Time of 26.6 seconds. According to usability effectiveness criteria proposed by ISO 9241-11 and Nielsen's usability principles, these results indicate that the application demonstrates high usability, enabling users to complete tasks effectively and efficiently. Therefore, integrating visual branding and user experience can provide an intuitive and informative digital marketplace for Indonesian spices.
Keywords: <i>Design Thinking; User Experience; Visual Branding; Spice Marketplace; Usability Testing.</i>	

INTRODUCTION

Digital transformation has driven significant changes in various business sectors, including the trade of local products and agricultural commodities. The use of information technology through mobile-based applications allows businesses to reach a wider market while improving the quality of service to consumers (Evangelista et al., 2023). One commodity with high economic, cultural, and historical value in Indonesia is spices. Indonesia is known as one of the world's largest spice producers, with a diverse range of spices used in food, traditional medicine, cosmetics, and health products (Anggrasari & Saputro, 2021). However, the spice marketing process is still dominated by conventional methods, resulting in limited access to information, limited market reach, and minimal education regarding the characteristics and benefits of each spice.

Indonesia is a country with a comparative advantage in medicinal plants, aromatic plants, and spices, which are in high demand on the global market. The latest data published by the Central Statistics Agency (BPS) in 2025 shows that throughout 2024, Indonesian spices were exported to various key countries, including China, India, Bangladesh, Pakistan, Vietnam, the United States, and Thailand (BPS, 2025). China was the largest export destination, with a volume of 48,027.9 tons, followed by India with 27,466.6 tons, and Bangladesh with 21,270.6 tons. This

large export volume demonstrates that Indonesian spices remain highly competitive and have the potential to become a strategic commodity in supporting national economic growth. On the other hand, Indonesia's trade performance in 2025 also shows a positive growth trend. The Central Statistics Agency reported that Indonesia's export value during the January–April 2025 period reached US\$87.36 billion, a 6.65% increase compared to the same period the previous year. Non-oil and gas exports grew even higher, at 7.68%, indicating that the agricultural and natural resource-based commodity sectors, including spices, remain important contributors to national export growth. This situation demonstrates that opportunities for developing the spice industry through digital transformation remain wide open to increase added value, expand market access, and strengthen the competitiveness of local products at the national and international levels (Bkperdag.kemendag.go.id, 2025) (Athfal et al., 2024).

Despite its significant market potential, the spice marketing process in Indonesia still faces various challenges, including limited digital market access, limited information on the characteristics and benefits of spices, and a suboptimal user experience on available digital platforms. Most e-commerce platforms still focus on transactional functions, while aspects of product education, brand identity (visual branding), and user experience are not yet optimally integrated (Wijayanto et al., 2024). Modern consumers consider not only ease of transaction but also the quality of interaction, trust in the brand, and ease of accessing information within a single digital platform. Therefore, a spice marketplace application is needed that integrates visual branding with user experience to produce a digital service that is informative, easy to use, and able to increase user engagement (Sari et al., 2023). The purpose of this research is to develop a Nusantara spice marketplace application that integrates visual branding concepts with user experience principles. The application is designed as a platform that not only facilitates spice purchasing transactions but also presents a spice encyclopedia, information on health benefits, and spice-based recipe recommendations within a single digital ecosystem. The integration of these various services is expected to provide a more comprehensive user experience while strengthening the application's brand identity, thereby increasing user engagement and trust in the platform.

Several previous studies have shown that the application of Design Thinking can improve the quality of the user interface (UI) and user experience (UX) in various marketplace applications and digital platforms. Research by (Prastiyo & Sundari, 2023) demonstrated that the application of Design Thinking resulted in a more intuitive interface and improved application usability through System Usability Scale (SUS) evaluation. Similar results were also reported by (Sriardi et al., 2023) and (Andiani & Wahyui, 2024), who stated that user involvement at each stage of Design Thinking can improve navigation effectiveness and user experience. However, most of these studies still focus on improving transactional aspects or interface usability, while the integration of visual branding, product education, and user experience within a single platform remains understudied. On the other hand, research on the digitalization of spice commodities in Indonesia has focused more on digital marketing strategies, MSME development, and increasing the competitiveness of spice products (Athfal et al., 2024), without developing applications that integrate transaction and educational functions.

Based on these conditions, there is still a research gap in the development of spice marketplace applications that integrate visual branding and user experience as a single unit to support transaction activities and disseminate information about Indonesian spices. Therefore, this study proposes the Rempahara application, which integrates three main features: the Spice Marketplace, the Spice Encyclopedia, and Recipe Recommendations for Spice-Based Food, Drinks, and Snacks. Unlike previous studies that only focused on transaction or education aspects separately, this study combines visual identity (visual branding), user experience (user experience), and educational content in one digital platform. Thus, this study is expected to contribute in the form of a spice marketplace application design model that not only supports the purchasing process but also strengthens the application's visual identity and enhances the user experience through the integration of educational functions, culinary exploration, and digital transactions.

Based on the description, the purpose of this research is to design a Nusantara spice marketplace application that integrates visual branding and user experience to produce an

application prototype that has a strong visual identity, is easy to use, and is able to support the digitalization of marketing and education of Indonesian spices.

RESEARCH METHODS

The method used in developing this research is the Design Thinking method as the primary approach in designing the User Interface (UI) and User Experience (UX) of the Nusantara Rempah Marketplace application. Design Thinking is a user-oriented approach (human-centered approach) that is able to produce solutions that are in accordance with user needs, behavior, and experience. In UI/UX development, this method is widely used because it places the user at the center of the design process from needs identification to prototype evaluation (Magdalenic & Luić, 2025) (Ramadhan & Firdausiah, 2024). Design Thinking itself consists of five main stages, namely Empathy, Definition, Ideation, Prototype, and Testing, which allows the design process to be carried out iteratively to produce interface designs that have better usability and user experience (Dewi et al., 2022).

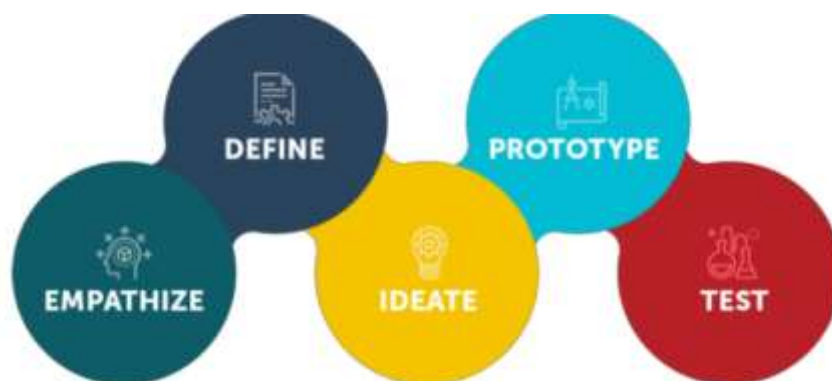


Figure 1. Stages of the Design Thinking Method

Figure 1 above shows the sequence of stages of the Design Thinking Method with the following explanation (Lestari & Supriyanto, 2025):

- a. Empathize: This stage aims to understand the needs, behaviors, and challenges faced by potential users of the spice marketplace application (Sriardi et al., 2023). Data collection was conducted through observations of existing food and spice product marketplaces, semi-structured interviews with potential users interested in spice products and cooking activities, and a literature review on digital marketplaces, visual branding, and user experience. The results, in the form of observational data, were used to identify user needs and obstacles encountered when searching for spice information, purchasing products, and obtaining spice-based recipe references.
- b. Define: At this stage, the data and information obtained in the previous stage are analyzed to formulate system requirements and key user issues (Andiani & Wahyui, 2024). The identified key issues form the basis for developing the application's functional and non-functional requirements.
- c. Ideate: This stage aims to generate various alternative solutions to the identified problems. Activities include brainstorming, developing Information Architecture, developing User Flows, creating Wireframes, and developing visual branding concepts (Prastiyo & Sundari, 2023). This stage integrates Visual Design principles with User Experience concepts. Visual branding is implemented through logo design, color selection, typography, iconography, and a consistent visual style to establish the application's identity while enhancing the user experience.
- d. Prototype: The prototype phase produces a high-fidelity prototype of the application interface. The interface design is developed using interface design software such as Figma, allowing

users to simulate interactions with the application's key features. Beyond functional aspects, the prototype also embodies the application's visual identity through the implementation of the logo, primary colors, typography, icons, illustrations, and consistent interface components, resulting in a visual experience that aligns with the Rempahara brand's character.

- e. Test: The testing phase was conducted using the Usability Testing method to illuminate the usability level of the Rempahara application prototype. This method directly involved users in completing a series of task scenarios, allowing researchers to identify usability constraints, navigation effectiveness, task completion efficiency, and user satisfaction with the designed interface (Anggraini & Nurhadi, 2023).

User testing was conducted to evaluate the level of usability. The testing involved 30 respondents selected using a purposive sampling technique, namely users who had used marketplace applications, had an interest in cooking activities, and had purchased spices or food ingredients online. Each respondent was asked to complete eight task scenarios that represented the main functions of the application, including account registration, login, searching for spice products, accessing the Spice Encyclopedia menu, looking for spice-based recipe recommendations, adding products to the shopping cart, checking out, and completing payments using a Virtual Account or QRIS. Usability evaluation was carried out using three parameters, namely Task Success Rate, Time on Task, and Error Rate. Task Success Rate is used to measure the level of user success in completing each task scenario, Time on Task is used to measure the average time required for users to complete a task, while Error Rate is used to calculate the number of errors made during the interaction process with the application. These three parameters were chosen because they are able to describe the effectiveness and efficiency of user interaction with the application, while also evaluating the extent to which the integration of visual branding and user experience in the Rempahara application is able to support ease of navigation, clarity of information, and smooth digital transaction processes.

In addition to evaluating the ease of use of the application, the results of usability testing are also used to assess whether the implementation of visual branding elements, such as color consistency, typography, icons, illustrations, and interface layout, are able to support the user experience in accessing the Spice Marketplace, Spice Encyclopedia, and Recipe Recommendations features intuitively and efficiently.

RESULTS AND DISCUSSION

System Design

The Rempahara application is designed as a mobile-based digital platform that integrates spice trading activities with the provision of educational information and culinary inspiration in one digital ecosystem. The application design carries the concept of a one-stop platform so that users can not only make spice purchases but also gain knowledge about various types of spices and their uses in everyday life. Rempahara has three main features: the Spice Marketplace, Spice Encyclopedia, and Food and Snack Recipe Notes. The Spice Marketplace feature functions as a digital transaction medium that allows users to search, compare, and purchase various spice products through a simple process, from product search to payment. Meanwhile, the Spice Encyclopedia feature provides comprehensive information on the characteristics, content, benefits, processing methods, and regions of origin of various types of Indonesian spices, thus functioning as an educational medium that supports increasing public literacy regarding the richness of Indonesian spices.

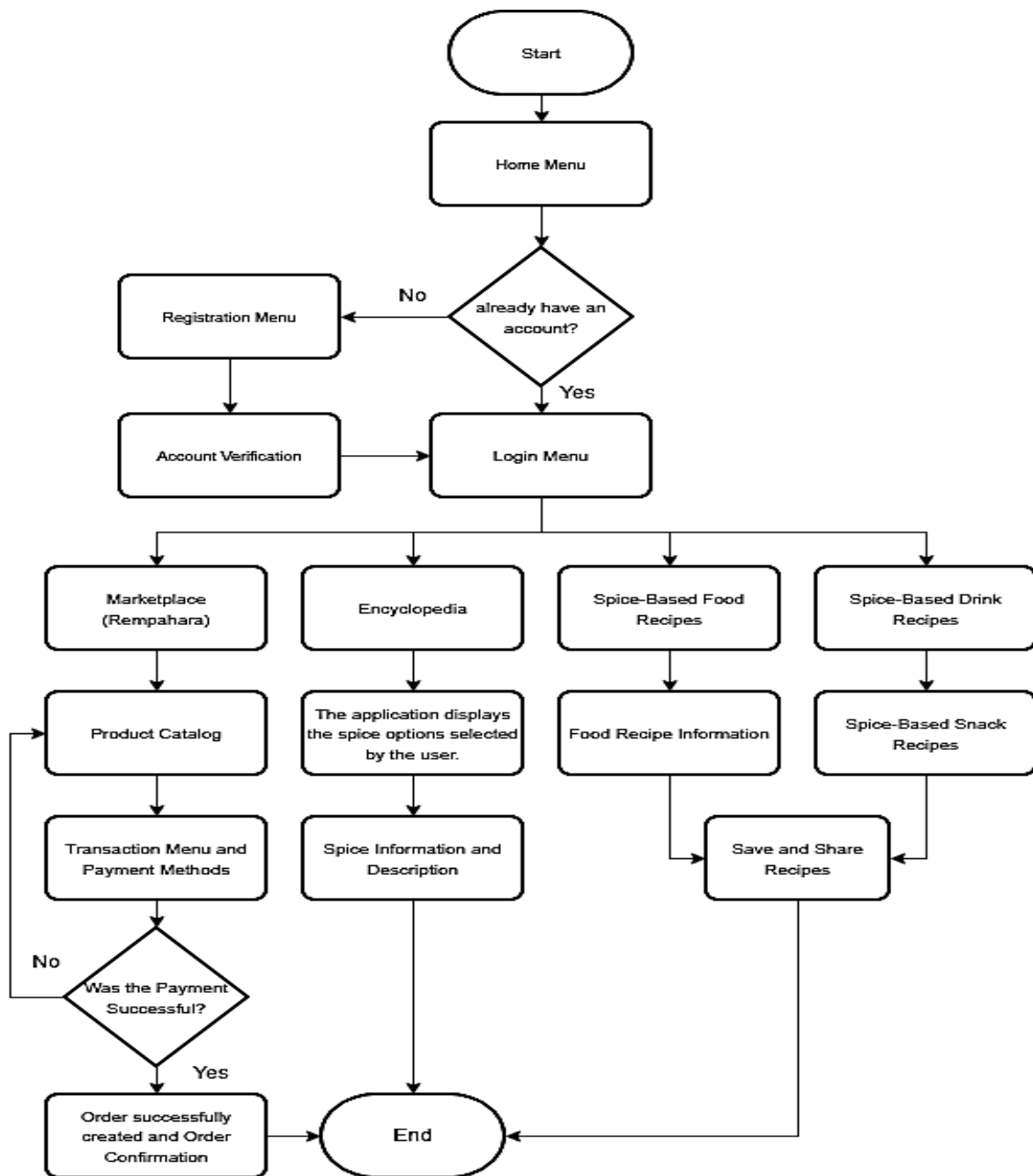


Figure 2. Rempahara Application Process Stages

Regarding the application's features, in addition to supporting transactions and education, Rempahara is also equipped with a Food and Beverage Recipe Notes feature that provides various references for spice-based preparations. Each recipe includes information on ingredients, preparation steps, cooking times, and the benefits of using spices in the resulting food or Snack. The integration of these three features provides added value compared to conventional marketplaces because it is not only oriented towards buying and selling activities, but also connects aspects of education and culinary exploration in one application. With the support of consistent visual branding and the application of user experience principles, Rempahara is expected to be able to provide a more informative and easy-to-use user experience and increase user engagement in learning about and utilizing Indonesian spices.

Overall, the Rempahara app's system design integrates marketplace functionality, spice education, and recipe inspiration into a single, structured user interface. This integration not only

simplifies digital transactions but also enhances the user experience by providing comprehensive information, simple navigation, and a consistent visual identity aligned with the app's branding. Therefore, the Rempahara app is expected to become a digital platform that supports the marketing of Indonesian spices while increasing public awareness of Indonesia's rich spice heritage.

System Implementation

Registration Menu and Login Menu



Figure 3. Registration and Login Menu of Rempahara

The Rempahara app's homepage, as shown in Figure 3, serves as the user's entry point before accessing all available features. This interface is designed to emphasize the app's visual identity through the use of illustrations of various spices as a background, the Rempahara logo, and a combination of maroon and cream, representing the character of Indonesian spices. In addition to serving as a brand introduction, this page also displays a welcome message, "Hello, Selamat Merempah!", to create a friendly impression and increase user engagement from the first time they use the app. At the bottom of the page, there are two main buttons: Register and Login, which give new users the option to create an account or allow existing users to log in directly.

The Login page is designed to provide flexibility in the user authentication process through two methods: email address or phone number. For email logins, users are prompted to enter their previously registered email address and password. A Forgot Password feature is available to assist with account recovery if users encounter problems logging in. Meanwhile, the phone number login method implements a One-Time Password (OTP) verification mechanism as an additional form of authentication to enhance account security. Both login methods are designed with a simple, consistent, and easy-to-understand layout so that users can quickly complete the authentication process before accessing Rempahara's main features, such as the Spice Marketplace, Spice Encyclopedia, and Food and Snack Recipe Notes. The integration of visual branding elements and a simple interface design on the authentication page aims to provide a comfortable user experience while strengthening the app's identity from the initial stage of interaction.

Encyclopedia Menu

The Spice Encyclopedia is designed as a digital educational tool that provides comprehensive information on various Indonesian spices. This feature was developed to help users understand the characteristics of each spice in greater depth, enabling the Rempahara app to function not only as a marketplace but also as a learning tool about Indonesia's biodiversity. On the encyclopedia's main page, users can browse various spices through the search feature and

available categories. Each spice is presented in the form of an information card complete with images, making it easier for users to visually identify the product.



Figure 4. Encyclopedia Menu of Rempahara Apps

The process in this menu is that when the user selects a type of spice, the system will display a detailed page containing complete information about the spice name, description, physical characteristics, nutritional content, health benefits, how to use, storage methods, and the main producing regions in Indonesia. In addition, the detailed page also provides information on the use of spices in various food and beverage preparations, so users can gain insight into the function of spices in everyday life. The information based on research from (Agung & Rosmasari, 2025) stated that is presented with a simple layout, easy-to-read typography, and supporting illustrations that are consistent with the application's visual identity, thus increasing user comfort when reading the information.

Spice Purchase and Transaction Menu

The Transaction and Purchase menu in the Rempahara app is designed to provide a simple, fast, and secure digital spice purchasing process. The transaction process begins on the Buy Page, where users can view a list of selected spice products along with information such as product images, spice names, weights, prices, and purchase quantities.

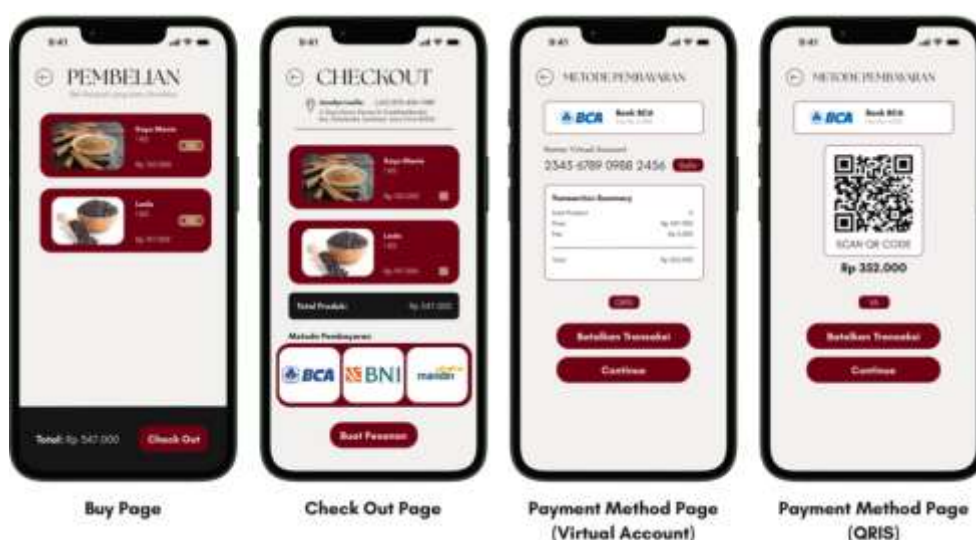


Figure 5. Spice Purchase and Transaction Menu of Rempahara Apps

On this page, as shown in Figure 5, users can also change the product quantity as needed before proceeding to checkout. The total purchase value is automatically displayed at the bottom of the page, allowing users to estimate the cost before completing the transaction. After selecting a product, users are directed to the Checkout page to confirm their order. This page displays the recipient's information, shipping address, a list of products to be purchased, and the total purchase price. Users can also choose from a variety of available payment methods based on their preferences. This structured presentation of information aims to minimize transaction errors while providing transparency regarding order details before payment is made. At the payment stage, the Rempahara application offers two payment methods: Virtual Account (VA) and QRIS, allowing users to choose the method that best suits their needs. The system displays complete payment information, including a transaction summary, total payment, and the virtual account number or QRIS code used to complete payments through banking services or digital wallets. Once the payment is successfully verified, the system automatically processes the order and sends a notification to the user regarding the transaction status. The entire transaction flow is designed based on user experience principles, prioritizing ease of navigation, clarity of information, and security of the payment process, allowing users to purchase spices quickly, conveniently, and efficiently (Aziz et al., 2025).

Spice-Based Food Recipes

The Rempahara app's Food Recipe Recommendations menu is designed as a supporting feature that connects spice education with its application in various culinary creations. This feature provides a variety of Indonesian spice-based recipe references that users can use for inspiration when preparing food and drinks. Each recipe is presented in an attractive visual format, accompanied by an image of the dish, the name of the dish, a list of ingredients, and systematic steps, making it easy for users to follow the cooking process. Furthermore, each recipe also displays the type of spice used as the main ingredient, so users can understand the function and benefits of spices in each dish.



Figure 6. Spice-Based Food Recipes Menu of Rempahara Apps

In this menu, users can also browse various recipes by spice type or food and beverage category, then save favorite recipes through the Favorites feature for easy retrieval. The recipe menu's integration with the Spice Marketplace feature allows users to purchase the spices they need directly without having to leave the app, while its link to the Spice Encyclopedia provides additional information on the characteristics and benefits of the spices used in the recipe. By

combining education, culinary exploration, and ease of shopping in one platform, this feature provides a more interactive user experience while encouraging the use of Indonesian spices in everyday life.

Spice-Based Snack Recipes

The Spice-Based Snack Recipe Recommendations menu on the Rempahara app is designed to inspire users to create various snacks that utilize Indonesian spices as both primary and supporting ingredients. This feature presents a variety of snack recipes, such as chips, traditional cakes, cookies, spice sticks, and modern snacks combined with spices such as cinnamon, ginger, turmeric, cloves, nutmeg, and cardamom. Each recipe is displayed with a product image, the name of the food, a list of ingredients, preparation steps, and information about the types of spices used so that users can easily follow the process and understand the role of spices in creating the distinctive flavor and aroma of each dish.



Figure 7. Spice-Based Snack Recipes Menu of Rempahara Apps

Users can search for recipes by spice type or snack category and save favorite recipes for future access. This feature's integration with the Spice Marketplace allows users to purchase the spices they need directly, while its connection to the Spice Encyclopedia provides additional information on the characteristics, benefits, and usage of spices found in recipes. By combining culinary references, education, and easy shopping in one platform, the Spice-Based Snack Recipe Recommendations menu is expected to encourage user creativity in developing various spice-based snack preparations while increasing the utilization and added value of Indonesian spice commodities (Petersen et al., 2024). The integration of the Spice Encyclopedia menu with the Marketplace and Food and Beverage Recipe Notes features provides a more comprehensive user experience. After learning the benefits and characteristics of a spice, users can directly purchase the product through the Marketplace menu or view various recipe recommendations that use that spice. This integration creates a more efficient user flow and adds value compared to conventional marketplace apps, as it connects educational activities, culinary exploration, and digital transactions in one integrated platform (Sulistiyono et al., 2023).

Usability Testing Results by Users

Based on the results of Usability Testing on 30 respondents, the Rempahara application demonstrated an excellent level of usability with an average success rate of 97.1%. All respondents successfully completed the account registration scenario, searching for spice products, and accessing the Spice Encyclopedia menu with a success rate of 100%, indicating that the navigation

structure and interface layout are easy for users to understand. Meanwhile, the lowest success rate was in the scenario of adding products to the cart and the checkout process with a percentage of 93.3%, which was caused by some users still needing time to understand the transaction flow on the first try. The test results are as shown in the following table.

Tabel 1. Usability Test Results from Rempahara Application Users

No	Testing Scenario	Success Rate	Average Time (seconds)	Number of Errors
1	Register an account	30/30 (100%)	46	0
2	Sign in using your email or phone number	29/30 (96,7%)	18	1
3	Search for spice products using the search feature	30/30 (100%)	15	0
4	Open the Spice Encyclopedia menu and view information about spices	30/30 (100%)	21	0
5	Search for and open spice-based recipes	29/30 (96,7%)	24	1
6	Add spice products to your shopping cart	28/30 (93,3%)	17	2
7	Complete payment	28/30 (93,3%)	33	2
8	Complete payment using a Virtual Account or QRIS	29/30 (96,7%)	39	1

The average completion time for all scenarios was 26.6 seconds, with the fastest time in the product search process (15 seconds) and the longest time in the payment process (39 seconds) because users had to confirm the payment method via Virtual Account or QRIS. During testing, only 7 errors were found out of a total of 240 completed tasks (30 respondents × 8 scenarios), resulting in an overall error rate of 2.9%. The results of this usability testing align with research by (Sriardi et al., 2023) which explains that the application of the Design Thinking method produces an interface with a high task completion rate because the design process is centered on user needs (human-centered design). However, compared to these studies, the Rempahara application has a different contribution because it not only functions as a marketplace, but also integrates a Spice Encyclopedia and Recipe Recommendations for Food, Drinks, and Spice-Based Snacks in one platform. The integration of these three features allows users to obtain information, explore the use of spices, and make transactions continuously without switching applications. Despite having a more complex scope of functions than conventional marketplaces, the Rempahara application still maintains a task completion rate of 97.1%, indicating that the addition of educational features does not reduce the application's ease of use. These results also align with research by (Prastiyo & Sundari, 2023) who reported that the application of Design Thinking resulted in a more innovative interface, enabling users to complete tasks more effectively.

These results indicate that the Rempahara application has met the aspects of effectiveness and efficiency of use, and is able to provide a good user experience through the integration of the Marketplace, Spice Encyclopedia, and Food and Beverage Recipe Notes features in one mobile-based application. The findings of this study align with (Dewi et al., 2022) research, which shows that the application of Design Thinking to the design of MSME marketing applications can improve interface quality and provide a better user experience because user needs have been identified from the early stages of development. Although the research was conducted in the context of MSME product marketing, the applied human-centered design principles are also evident in the Rempahara application, where each feature is developed based on user needs, resulting in easy-to-understand navigation and a more efficient transaction process (Zamakhsyari & Fatwanto, 2023).

CONCLUSION

This research successfully designed a prototype of the Rempahara spice marketplace application by integrating visual branding and user experience using the Design Thinking method, which includes the stages of Empathize, Define, Ideate, Prototype, and Test. The resulting design resulted in an application that integrates three main features: the Spice Marketplace, the Spice Encyclopedia, and Recipe Recommendations for Spice-Based Food, Drinks, and Snacks. This not only supports digital transactions but also provides educational resources about Indonesian spices in a single platform. Usability testing results showed that the application prototype had a good level of usability, with a Task Success Rate of 97.1%, an Error Rate of 2.9%, and an Average Completion Time of 26.6 seconds. These results indicate that most users were able to complete all test scenarios effectively, efficiently, and with a low error rate. These findings indicate that the application of consistent visual branding and user-experience-oriented interface design can improve ease of navigation, clarify information delivery, and provide a better interaction experience in the Rempahara application.

This study still has limitations because the testing was conducted on a prototype using a relatively limited number of respondents, namely 30 users, so the results of the study do not fully represent the conditions of use in real implementation. Therefore, further research is recommended to develop Rempahara into an application that can be fully implemented on Android and iOS platforms, and conduct testing with a larger number of respondents and more diverse user characteristics. In addition, the evaluation can be expanded by adding user satisfaction measurements, such as the System Usability Scale (SUS) or the User Experience Questionnaire (UEQ), so that the quality of the user experience can be evaluated more comprehensively.

REFERENCES

- Agung, M. W. L., & Rosmasari. (2025). Human-Computer Interaction in User Interface Design. *Inheriten Journal*, 1(1), 31–46. <https://doi.org/10.56861/inheriten.v1i1>
- Andiani, W., & Wahyui, A. (2024). Perancangan Desain Ui/Ux Menggunakan Metode Design Thinking Pada Website Pt. Virama Karya (Persero). *JASIKA (Jurnal Sistem Informasi Akuntansi)*, 04(01), 1–10. <https://doi.org/10.31294/jasika.v4i01.3145>
- Anggraini, R. D., & Nurhadi, D. (2023). Design Thinking dalam Riset dan Pengembangan Produk Fashion. *Briliant: Jurnal Riset Dan Konseptual*, 8(2), 328. <https://doi.org/10.28926/briliant.v8i2.1107>
- Anggrasari, H., & Saputro, W. A. (2021). Comparative Advantage of Indonesia with Competitive Countries For Exporting of World Spices. *Journal of ASEAN Dynamics and Beyond*, 2(1), 48–65. <https://doi.org/10.20961/aseandynamics.v2i1.52181>
- Athfal, M., Wulandari, S., & Aurachman, R. (2024). Designing A Digital Marketing Strategy for Bumbu Instan Noeya Products using Sostac Method. *Jurnal Sains Pemasaran Indonesia (Indonesian Journal of Marketing Science)*, 21(3), 224–246. <https://doi.org/10.14710/jspi.v21i3.224-247>
- Aziz, F., Yanto, Y., & Saputri, D. U. E. (2025). Penerapan Metode Design Thinking untuk Perancangan UI/UX: APIW Aplikasi Image Watermarking. *Journal of Information System Research (JOSH)*, 6(2), 1290–1299. <https://doi.org/10.47065/josh.v6i2.6204>
- Bkperdag.kemendag.go.id. (2025). *Ekspor Tangguh, Neraca Perdagangan Indonesia Semester I 2025 Kembali Cetak Surplus*. <https://bkperdag.kemendag.go.id/storage/publikasi/PwqhpYcFr6dcAMefRISRqv8n8r86AVspLt1C3QaR.pdf?>
- BPS. (2025). *Perkembangan Ekspor dan Impor Indonesia April 2025*. Wwww.Bps.Go.Id. <https://www.bps.go.id/id/pressrelease/2025/06/02/2433/ekspor-april-2025-mencapai->

us-20-74-miliar--impor-april-2025-mencapai-us-20-59-miliar-.html

- Dewi, E. Z., Fransisca, M., Handayani, R. I., & Cahyanti, F. L. D. (2022). Analysis and Design of UI/UX Mobile Applications for Marketing of UMKM Products Using Design Thinking Method. *Sinkron*, 7(4), 2329–2339. <https://doi.org/10.33395/sinkron.v7i4.11505>
- Evangeulista, G., Agustin, A., Putra, G. P. E., Pramesti, D. T., & Madiistriyatno, H. (2023). STRATEGI UMKM DALAM MENGHADAPI DIGITALISASI. *Jurnal Oikos-Nomos*, 16(1), 33–42.
- Lestari, D. A., & Supriyanto, A. (2025). Pembuatan Website E-commerce untuk Online clothing Menggunakan Metode Design Thinking. *Bit-Tech*, 7(3), 742–749. <https://doi.org/10.32877/bt.v7i3.2042>
- Magdalenic, D., & Lujic, L. (2025). Assessing the Impact of Digital Tools on the Recruitment Process Using the Design Thinking Methodology. *Administrative Sciences*, 15(4). <https://doi.org/10.3390/admsci15040139>
- Petersen, K. S., Fulgoni, V. L., Hopfer, H., Hayes, J. E., Gooding, R., & Kris-Etherton, P. (2024). Using Herbs/Spices to Enhance the Flavor of Commonly Consumed Foods Reformulated to Be Lower in Overconsumed Dietary Components Is an Acceptable Strategy and Has the Potential to Lower Intake of Saturated Fat and Sodium: A National Health and Nutrition Ex. *Journal of the Academy of Nutrition and Dietetics*, 124(1), 15-27.e1. <https://doi.org/10.1016/j.jand.2023.07.025>
- Prastiyo, M. A., & Sundari, J. (2023). Analisis dan Rancangan UI/UX pada PT. Sherindo Cargo dengan Metode Design Thinking dan SUS. *Jurnal Masyarakat Informatika*, 14(2), 131–145. <https://doi.org/10.14710/jmasif.14.2.57117>
- Ramadhan, G. B., & Firdausiah, R. A. (2024). Pendekatan Metode Design Thinking Dalam Perancangan Inovasi Produk. *Jurnal Kewirausahaan Dan Inovasi*, 3(3), 918–928.
- Sari, W. P., Sholihah, Z., & Masali, F. (2023). Digital Branding Umkm Melalui Komunikasi Visual. *Jurnal ABDI: Media Pengabdian Kepada Masyarakat*, 8(2), 129–134. <https://doi.org/10.26740/abdi.v8i2.15923>
- Sriardi, M. D., -, T., & Nurapriani, F. (2023). Implementation of Design Thinking Methods in Ui/Ux Designing Job Searching Applications. *Jurnal Sistem Informasi Dan Ilmu Komputer Prima(JUSIKOM PRIMA)*, 7(1), 223–240. <https://doi.org/10.34012/jurnalsisteminformasidanilmukomputer.v7i1.4047>
- Sulistiyono, M. R., Setiawan, A., & Nuryanto, N. (2023). Penerapan Metode Design Thinking untuk Perancangan UI/UX Sistem E-Marketplace Berbasis Website. *Journal of Information System Research (JOSH)*, 4(4), 1364–1376. <https://doi.org/10.47065/josh.v4i4.3534>
- Wijayanto, G., Jushermi, J., Nursanti, A., Novandalina, A., & Rivai, Y. (2024). The Effect of E-commerce Platforms, Digital Marketing, and User Experience on Market Reach and Competitiveness of Indonesian MSMEs. *International Journal of Business, Law, and Education*, 5(1), 811–823. <https://doi.org/10.56442/ijble.v5i1.492>
- Zamakhshari, F., & Fatwanto, A. (2023). A Systematic Literature Review of the Design Thinking Approach for User Interface Design. *International Journal on Informatics Visualization*, 7(4), 2313–2320. <https://doi.org/10.30630/joiv.7.4.1615>