

UI/UX Design for Yamaha Arjawinangun Using the Double Diamond Method and Agile UX

Geraldny Cornelius Kartika^{1*}, Kusnadi Kusnadi², Rifqi Fahrudin³

Universitas Catur Insan Cendekia, Indonesia

Email: geraldny.kartika.ti.23@cic.ac.id*

KEYWORDS	ABSTRACT
Yamaha Agung Motor Arjawinangun, Framer, Double Diamond, Agile UX, UI/UX	This study aims to design and implement a company profile website for Yamaha Agung Motor Arjawinangun using Framer to enhance digital presence and facilitate public access to company information. The research employs an integrated approach combining the Double Diamond method for structured problem-solving and Agile UX for iterative development, ensuring alignment with user needs and business objectives. Through systematic stages of discovery, definition, development, and delivery, the design process incorporated user feedback and usability testing to optimize the interface and user experience. The resulting website demonstrates excellent usability, achieving a remarkable System Usability Scale (SUS) score of 98, significantly exceeding the industry standard of 68. User testing confirmed efficient task completion, with an average time of 1.4 to 2.4 seconds for critical functions, indicating high usability effectiveness. This project successfully establishes Yamaha Agung Motor Arjawinangun's digital footprint while providing valuable insights into the practical application of integrated UI/UX methodologies for small and medium enterprises seeking to enhance their online presence and customer engagement through user-centered design principles.

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INTRODUCTION

In the era of rapid digital transformation, online presence through digital media has become an important aspect of business strategy (Ali Alqararah, Shehadeh, & Yaseen, 2025; Ghamgui, Rezaei, Hentati, Louati, & Karim Kefi, 2025). Companies are required not only to provide quality products or services, but also to provide an optimal digital experience through an intuitive user interface (UI) and user experience (UX) (Devi et al., 2025; Hameed, Maurya, & Arif, 2025). Websites, especially landing pages, are the main gateway to conveying information and building a first impression of a brand (Figl, Miniukovich, Ernst, & Lehrer, 2025; Rautio, 2025). In this context, the visual appearance, navigation flow, and ease of access to information greatly influence user engagement (Rafi, Gani, Hashim, Rahman, & Masukujjaman, 2025; Shamim, Gupta, & Shin, 2025). Yamaha Agung Motor Arjawinangun, as Yamaha's official workshop that has been operating since 2002, does not yet have a digital platform to introduce services and reach customers more widely (Jude, 2025; Kodama, 2025). This is a problem that can affect the competitiveness of companies in the digital era (Hadi, 2025).

Several previous studies have addressed UI/UX design using various methodologies. Research by Ekky Febrihandani, Ayuningtyas, and Tri Sagirani applied the Double Diamond

method in redesigning the CV website. Bangun Bina Bersaudara and achieved a high usability score of 0.937 (excellent category). However, this study lacked comparison with previous versions and detailed explanation of each methodological stage. Another study by Mulyana, Defriani, and Muttaqin utilized the Agile UX method for the Dasteur Geulis mobile application, obtaining good SUS scores, though with limited elaboration on sprint planning and backlog management. Research by Rafiq employing Lean UX for Piramida Jaya clinic website demonstrated design approval from users, yet with minimal documentation of methodological stages and evaluation metrics. Similarly, studies using Design Thinking methodology, while relevant to problem-solving, often lacked in-depth explanation of empathic stages. Research by Sari implementing User Centered Design (UCD) for vocational school websites, while producing positive results, showed gaps between methodological claims and actual implementation details (Visescu, 2025; Visescu, Lárusdóttir, & Choi, 2025).

The urgency of effective site development demands a user-centered design approach (Endsley & Jones, 2025; Shin, Cho, Jang, & Kim, 2025). The Double Diamond method developed by the Design Council provides a structured framework for understanding problems, developing solutions, and systematically realizing digital products (Arin, Murad, & Warnars, 2025; Syach, Arifah, & van der Kroft, 2025). Meanwhile, the Agile UX approach offers flexibility and continuous iteration in the design process based on user feedback (Sahu & Ranganathan, 2025; Siddique & Xue, 2025). The integration of these two methods can provide a balance between structure and adaptability. Framer was chosen as a design tool because of its ability to generate interactive prototypes that are close to the final product and support real-time design validation (Bellino, 2025; Truss & Schmitt, 2025). The evaluation was carried out through usability testing supported by the System Usability Scale (SUS) to assess the effectiveness and convenience of use based on empirical data.

This study aims to design and evaluate the landing page of Yamaha Agung Motor Arjawinangun with a Double Diamond and Agile UX method approach using the Framer platform. The results of this research are expected to contribute to the development of user-based digital design strategies, improve the quality of user experience, and become a practical reference for other companies in building a digital presence that is adaptive to market needs and technological development.

METHOD

Several previous studies have addressed designing user interfaces (UI) and user experiences (UX) using a variety of user-focused design methods. Research by Ekky Febrihandani, Ayuningtyas, and Tri Sagirani used the Double Diamond method in redesigning the UI of the CV website. Bangun Bina Bersaudara and managed to obtain a high usability score of 0.937 (excellent category). This approach has proven to be effective in improving the quality of the design, but unfortunately, it is not accompanied by a discussion of comparisons to older versions of it or a detailed explanation of each stage. This is a gap in the documentation of the process that should be able to strengthen the argument for the success of the method.

Meanwhile, the Agile UX method used in the UI/UX research of the mobile-based Dasteur Geulis application obtained a good SUS score, showing that the iterative and user-oriented approach was able to provide satisfactory results. However, the process of sprint

planning and the elaboration of the backlog are not explained in detail, raising questions regarding the effectiveness of the internal stages of the method implemented. Another study that uses Lean UX in designing Piramida Jaya UI/UX design also shows success in producing designs that are approved by the majority of users, although documentation of method stages and metric evaluation is still minimal. A similar thing happened in studies that adopted Design Thinking, where although the method was relevant to the problem, initial approaches such as the emphatic stage were not explained in depth.

Then, the User Centered Design (UCD) approach used in the research of Prasetyo and Reza Muhammad in the design of the UI/UX website of SMK PBL Muara Jawa using the Eye Tracking method and Website Usability Evaluation (Webuse) gave positive results. However, the lack of elaboration of the UCD implementation process as well as the details of the metrics used create a gap between the claimed method and the actual implementation. From the series of studies, it can be concluded that while the majority of studies have succeeded in demonstrating the effectiveness of the methods used, there are still shortcomings in in-depth documentation, integration of modern tools, and strong design validation with a systematic approach.

This research places itself on a gap that has not been explored much, namely by combining Double Diamond and Agile UX methods in an integrated way in the context of landing page planning for a workshop that previously did not have a digital representation at all. In addition, the study leveraged the Framer as a key tool to develop an interactive prototype that could be implemented immediately, an approach that had not been widely discussed in previous studies. This research also emphasizes the importance of data-driven validation through usability testing and System Usability Scale (SUS), as well as considering the needs of users and workshop owners in a well-documented iterative process. Thus, this research not only enriches the methodological approach in the realm of UI/UX, but also provides practical contributions that can be applied directly in the industry, especially for small businesses who want to increase their digital visibility.

This research refers to the Double Diamond method which consists of four main stages, namely Discover, Define, Develop, and Deliver. This model is used as a framework for designing structured and user-centered design solutions. This method is combined with an Agile UX approach to enable an iterative and flexible process in design development.

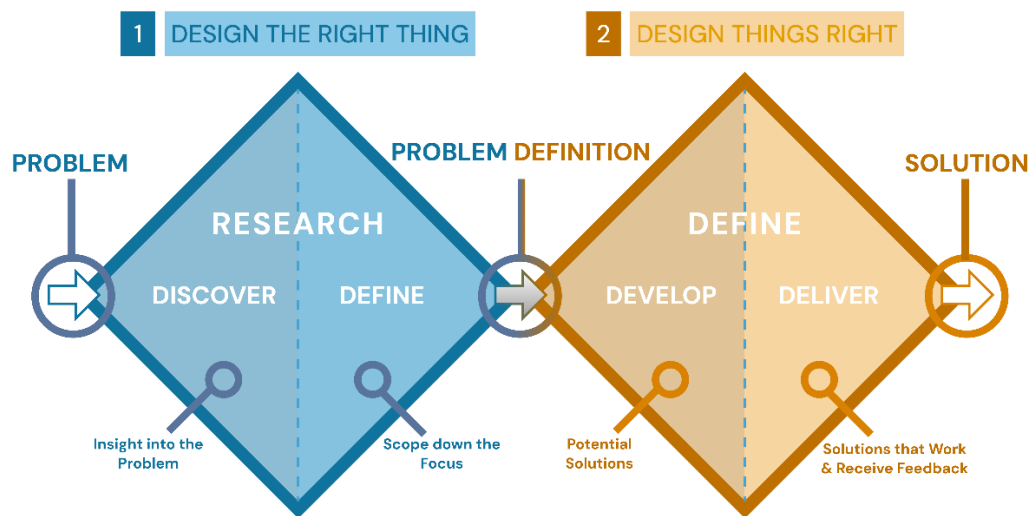


Figure 1 Double Diamond Method and Agile UX
 Source: Data processed from usability testing results (2024)

Figure 1 is an illustration of the flow of the method used. The picture explains the problem discovery process carried out by conducting direct interviews with workshop owners and managers, starting from what problems they usually face, what they need or their expectations for the system to be created. Once the problem is discovered, the problems are outlined so that the solution can be clearer and more focused. Once the solution idea is found, the method will enter the third stage, namely Develop. At this stage, based on the findings in the Define stage, the researcher compiled the initial wireframe and prototype. The design is tested iteratively through sprints by engaging direct feedback from users to continuously improve the quality of the design. In the fourth stage or Deliver, the final prototype is tested through usability testing to evaluate the design and flow of use. The measurement was carried out using the System Usability Scale (SUS) method, accompanied by feedback and final revision as needed.

The System Usability Scale (SUS) is used as a support for evaluating the effectiveness of site design based on quantitative. The SUS consisted of 10 questions that were graded using a Likert scale of 1-5, which reflects the respondents' level of approval. The score is calculated in a way for odd questions, the score is from the answer value minus one. For even questions, the score is five minus the value of the answer. All scores are summed up, then multiplied by 2.5 to produce the final SUS score. This value ranges from 0 to 100, with the average feasibility of the system generally being 68. Values below that number indicate that the system is not optimal in terms of usability. Although the SUS does not specify the specific location of the problem, it is effective in measuring the extent to which the system can be used comfortably by the user. Data collection was carried out by three methods, namely observation, interview, and questionnaire. At the observation stage, direct observation was carried out on the operations of the Yamaha Agung Motor Arjawinangun workshop both directly and indirectly. The goal is to understand how workshops reach customers, convey information, and the obstacles that customers face in interacting without digital media, because the companies that will succeed in understanding and succeeding are those who can integrate the latest technology in their systems. Then in the interview stage, this is done directly to the owner and manager of the workshop to dig up information about business goals, expectations for the site, current problems, and the workshop service flow. In addition, interviews were also conducted with five usability testing participants to understand their interaction with the prototype that had been made, including

aspects of navigation, information delivery, visuals, brand comfort, and feature expectations. The last stage is a questionnaire that is distributed to the target audience in accordance with the criteria of workshop service users to identify their needs, preferences, and main problems. The results of the questionnaire are the basis for creating personas and formulating design solutions.

RESULTS AND DISCUSSIONS

In this study, the system developed is not in the form of software with a complex backend, but a web-based interactive landing page prototype focused on designing the interface and user experience (UI/UX). Therefore, the need for a system in this context refers to the hardware and software specifications required during the design process, the implementation of the protocol using the Framer, and the implementation of Usability Testing. This need includes the tools used by the researcher and the devices used by the participants to access and test the prototype. By clearly defining the integrity of the system, the design and testing process can take place optimally and in accordance with the research context.

The following is a visual documentation of the program display in the form of a screenshot of the Yamaha Agung Motor Arjawinangun landing page that has been designed and implemented using Framer. Each display is the result of the Double Diamond and Agile UX method design approach process, and has been tailored to the needs of users and the business goals of the workshop. Descriptions accompany each view to explain the functions, interaction flows, and design considerations used on each page. This documentation also serves as a visual reference in the evaluation and usability testing process.



Figure 3. Wireframe Home Page

Source: Research documentation (2024)

Figure 3 is one of the wireframe or design creations in the form of a skeleton or design layout, which in this case is the home page. This design includes the idea of copywriting in general on each information, the layout of the information and images displayed, and the order of the information sections. The wireframe of this home page is the main page when the user visits the website. The information displayed here is brief information related to the workshop, service, blog, and booking information.



Figure 4 Design Iterations
Source: Research documentation (2024)

After making the wireframe, at this stage it is immediately implemented into a prototype design. The prototype design that has been made will be tested internally with the workshop user and Yamaha. After getting feedback, iterate the design directly to suit the needs of each user. The iteration of the design adds and changes a few things from the original design. In the Hero section, there is additional information related to the workshop's opening days and hours, the workshop's social media, and also a CTA button with a function for those who go directly to the next section. Layout and copywriting adjustments also occur in the service, blog, and footer sections. The results of the test from usability testing were carried out on five user partitions where three of them were participants selected through a questionnaire and two of them were the owners and managers of the Yamaha Agung Motor Arjawinang workshop. The following are the results of usability testing in the form of an average table and conclusions starting from measuring the time and success of tasks and metrics, System Usability Scale (SUS) research, and in-depth interview conclusions.

Table 1 Usability Testing Results Task 1

Find the location of the workshop and see the map			
Metric / Observation	Task Completion (S/F)	Metric / Observation	Task Completion (S/F)
Click the "Contact Us" menu	5 out of 5 Successful Participants	Click the "Contact Us" menu	5 out of 5 Successful Participants
Scroll to the location information section	5 out of 5 Successful Participants	Scroll to the location information section	5 out of 5 Successful Participants

Find the location of the workshop and see the map			
<i>Metric / Observation</i>	<i>Task Completion (S/F)</i>	<i>Metric / Observation</i>	<i>Task Completion (S/F)</i>
Find the full address of the workshop	5 out of 5 Successful Participants	Find the full address of the workshop	5 out of 5 Successful Participants
Find and view location maps	5 out of 5 Successful Participants	Find and view location maps	5 out of 5 Successful Participants

Source: Data processed from usability testing results (2024)

Based on the results, average time and recording of each given task, all participants obtained fairly good results as seen from the success of all participants of each metric measured, the average time was fast, and no difficulties were encountered at the time of testing.

Table 2 System Usability Scale Results

Respondent	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	SUS Score
R1	5	1	5	1	5	1	4	1	5	1	97.5
R2	5	1	5	1	5	1	5	1	5	1	100
R3	5	1	5	1	5	1	5	1	5	1	100
R4	4	1	5	1	5	1	4	1	5	2	92.5
R5	5	1	5	1	5	1	5	1	5	1	100
Average Total											98

Source: Brooke (1996), modified for this research

After the participants test the given metrics or tasks, participants are given 10 questions with a scale of each question of 1-5 which refers to the System Usability Scale (SUS). The calculation of the SUS score is taken from the score of each even question minus 1, then 5 minus the score of each odd question and the two are summed up. After that the total number will be multiplied by 2.5. From the average number of respondents obtained, a score of 98 was produced, where the score was above 68 (Average SUS score) which supports that this system is quite good.

After conducting all the tests, further interviews were conducted to find out the user's behavior and their opinion of the Yamaha Agung Motor Arjawinangun workshop site before and after using it. This interview was also conducted to find out if the features created were really in line with their needs and met their expectations and if they had any suggestions or other criticisms of the system created.

Based on the interviews conducted, the participants said that they were happy to have a feature that could be linked directly to the workshop, especially because there was a Whatsapp admin that was listed and could directly book the service through the Whatsapp, because usually one of the participants made a booking or consultation via the workshop phone where the voice was unclear and sometimes disconnected. The participant also said that with this situation, the workshop should be better known by potential consumers around and more familiar with the workshop, because maybe new people will not know that this workshop is open to types of

motorcycles other than Yamaha. Participants feel quite helped by the features provided in this site, but still hope that there are other features that can be added to help consumers or users in using workshop services.

CONCLUSION

This research successfully designed and tested the landing page for Yamaha Agung Motor Arjawinangun's workshop using an iterative approach combining the Double Diamond and Agile UX methods, implemented via Framer. Usability testing with five participants demonstrated smooth task completion, affirming that navigation flow and content structure were intuitive. The System Usability Scale (SUS) score averaged 98, well above the standard 68, indicating excellent usability. Positive participant feedback highlighted the site's clear features, attractive design, and ease of use, confirming that the landing page effectively met functionality, accessibility, and user experience goals. For future research, it is suggested to explore adding a brief onboarding guide for new users to reduce initial confusion and to investigate the integration of additional features such as online service booking, spare parts sales, and enhanced customer service to further improve the site's value and user engagement.

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