



# JOURNAL OF INFORMATION SYSTEM AND TECHNOLOGY MANAGEMENT (JISTM)

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# THE DEVELOPMENT OF THE SENI CINTA WEBSITE, INCORPORATING METICULOUS PROCESSES IN DESIGN, DEVELOPMENT, AND THOROUGH EVALUATION OF USER EXPERIENCE

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#### **Article Info:**

#### **Article history:**

Received date: 30.10.2023 Revised date: 15.11.2023 Accepted date: 20.12.2023 Published date: 27.12.2023

#### To cite this document:

Muda, T. Z. T., & Mohamad, N. S. (2023). The Development of The Seni Cinta Website, Incorporating Meticulous Processes in Design, Development, And Thorough Evaluation of User Experience. Journal of Information System and Technology Management, 8 (33), 320-330.

**DOI:** 10.35631/JISTM.833023.

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This in-depth investigation delves into the evolution of the web for the "Seni Cinta" book, also known as "Love Uses the Brain" in English. Seni Cinta is a digital platform in the Malay language that is dedicated to unravelling the intricate facets of love and love languages within various relationships, including those in families and friendships. Beyond static content, the website enriches user engagement by incorporating five unique personality tests, offering individuals profound insights into their distinct characteristics. Utilising the user-friendly WordPress platform, the website is a custom creation that does not require coding expertise. The primary aim of this study goes beyond exploration; it positions the website as a strategic tool to enlighten the target audience about their individual love personality types. Additionally, the website serves as a promotional gateway for the company's upcoming book, "Cinta Pakai Otak". To simplify the user experience, the platform facilitates seamless book orders, eliminating the need for prolonged account registrations and prioritising accessibility and efficiency. The methodology of the study unfolds through several phases, starting with the requirement phase and progressing through design, development, testing, and deployment, culminating in an ongoing maintenance phase. Client satisfaction with the Seni Cinta website validates the achievement of the primary goal: designing an interactive and user-friendly digital space. The successful integration of informative content, personality assessments, and streamlined book promotion underscores the effectiveness of this comprehensive approach, demonstrating its relevance in meeting the evolving needs of a diverse audience navigating the complexities of love and interpersonal dynamics.

**Keywords:** 

Website, Interactive, Web Design, Personality, Usability Testing

#### Introduction

The digital platform known as the "Seni Cinta" website is dedicated to exploring and disseminating insights into the intricate dimensions of love and love languages within the realms of relationships, familial bonds, and friendships. The primary objective of this platform is to foster a deeper understanding of the various facets of love, and to facilitate this, it incorporates five distinct personality tests that users can engage with to gain profound insights into their unique characteristics.

A notable feature of the Seni Cinta website is its commitment to user-friendly accessibility. For instance, the platform intentionally excludes the need for user registration, allowing individuals to freely peruse the latest book offerings and seamlessly place orders without undergoing protracted registration processes. This strategic decision aims to enhance user experience and ensure that individuals can swiftly access the content and services they seek.

Moreover, the Seni Cinta website operates on the principle of administrative exclusivity, with only designated administrators granted access to the backend. This allows for secure and controlled modification of data, ensuring the integrity and accuracy of the information presented on the platform.

In essence, the Seni Cinta website serves as a multifaceted online space, not merely as a project but as a dynamic and interactive platform that encourages exploration, self-discovery, and meaningful engagement with the intricate dynamics of love.

#### **Literature Review**

Within this section, several literature reviews pertinent to the project's domain will be examined. An exploration of techniques and approaches will be undertaken to comprehensively grasp the chosen topic. The literature reviews will specifically align with the project's thematic area, ensuring a focused understanding that can effectively contribute to the development of knowledge and ideas within the project. Therefore, the forthcoming discussions will centre on a topic closely associated with web-based e-commerce platforms. This stage will involve a detailed examination of prior studies pertaining to web-based e-commerce platforms.

## Analysis of Users' Behavior in Structured e-Commerce Websites

In order to customise e-commerce websites to the needs of consumers, it is critical to comprehend users' interests and behaviour. The web server logs contain data regarding user behaviour. Web logs can be quickly transformed into event logs, which record user behaviour, by providing a standard method of mapping log records in accordance with the e-commerce framework. Then, many predefined queries can be run to find various behavioural patterns that take into account the various activities taken by a user throughout a session (Hernandez et al., 2017; Preethi et al., 2023).

The Impact of Website Information Convenience on e-Commerce Success of Companies E-commerce is an online market which has been growing rapidly and changing business patterns over the past several years. The success of businesses in e-commerce competition is

heavily dependent on the accessibility of website information, which gives them a significant competitive edge and helps them accomplish their objectives (Salehi et al., 2012).

## The Effects of Online Service Quality of e-Commerce Websites on User Satisfaction

The potential of a business to benefit from online sales should be supported by effective website design. The website has been defined as the e-commerce application of network systems that has become an important phenomenon over the past decade (Zwass, 2003). It should be emphasized that user consumption and websites develop with time, and design decisions typically diverge from those made for previously published pages on a network (Sharma & Lijuan, 2015).

The Internet has been favoured by more and more people for its high efficiency and richness, and e-commerce has emerged (Liu, 2015). Small businesses may find these technologies to be more important because they lack the traditional resources needed to market their products and services (Barnes et al., 2012). Websites give them an opportunity to get beyond these time and financial barriers, enabling them to effectively reach out to buyers.

The company does not have a good platform to promote their new upcoming book, meanwhile, the audience is hard to find information about their preferred love style or language in a relationship, among family members and friends through a website. Thus, to resolve these issues, a new adaptive strategy is offered in which the audience can make online order for the new upcoming book that will be released by the company by using the website. They also can find out about their preferred love language in a more effective way by taking the personality test on the website.

#### Methodology

The construction of the Seni Cinta website employs the Waterfall development model, characterised by sequential phases, namely requirements, design, development, testing, deployment, and maintenance (Kodmelwar et al., 2022). This model is known for its comprehensibility and sequential progression. Each phase follows a step-by-step approach, necessitating completion before transitioning to the subsequent phase (Ritonga et al., 2022). Further elaboration on these phases is provided in the ensuing section.

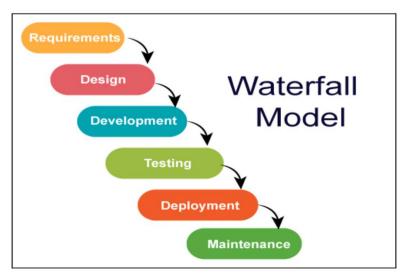


Figure 1: Waterfall Model in Seni Cinta Website

## Phase 1: Requirement Analysis

In this process, this project will analyse the user requirement and online searching as reference to do this project.

#### Phase 2: Design

Database designs to store data of events. However, this project is planned to exclude the "login" function to allow the public to view the website and take the test that has been provided on the website without registering the account. Only the admin is able to login to the backend to modify the data.

## Phase 3: Development

This project will use WordPress as frontend and backend of the website. Elementor feature in WordPress is also the main feature used in this project.

## Phase 4: Testing

This project will do the testing usability after finishing the development process. It is because testing is able to test whether the navigation of the websites is correct and link every button to the right page and modify the feature which is not user-friendly. The Seni Cinta website will be evaluated by 20 respondents. The respondents were given the application Google form link on the mobile application for data-gathering purposes. Due to the small sample size, this study uses a quantitative research approach and a questionnaire as a research instrument to gather data from end-users.

#### Phase 5: Deployment

Deployment is a process that enables developers to make apps available online (Aldi, F. 2022). After testing sessions and ensuring all the functional and non-functional requirements in the project are in good condition, this project will be published on a server and become a website link which allows the organisation or user to access the website.

#### Phase 6: Maintenance

Maintenance is the last stage in the Waterfall Method (Herawati et al., 2021). When the users get some issues when using the websites, the development team will fix the issues or also known as bug(bug) as well as improve the website by maintenance. After maintenance, this project will be submitted again to users until the problem is solved, or they are satisfied with this project. If the users are not satisfied, this project will be maintained until no more issues are found in the project or all the users are satisfied.

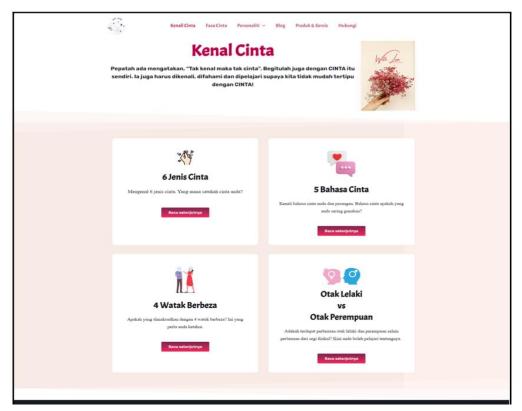


Figure 2: Seni Cinta Front Page Website

#### **Usability Testing**

According to (Krug, 2014) usability testing is a crucial phase in the design and development of products, websites, or applications, focusing on evaluating how easily users can interact with the system. It involves real users performing specific tasks to identify potential issues and gather feedback on the overall user experience. One key aspect of usability testing is its ability to uncover user pain points and areas of improvement. By observing users in action, designers and developers gain valuable insights into navigation difficulties, confusing interfaces, and other usability challenges that may not be apparent in the initial design phase. This iterative process allows for refinement, leading to a more user-friendly and efficient final product.

Usability testing helps bridge the gap between design assumptions and user expectations. It ensures that the end product aligns with the target audience's needs and preferences. This user-centric approach ultimately enhances customer satisfaction and loyalty, as products that are intuitive and easy to use are more likely to be embraced by the market. Moreover, usability testing aids in identifying both quantitative and qualitative data, enabling teams to measure task success rates, completion times, and user satisfaction. These metrics provide concrete feedback on the effectiveness of the design, allowing for data-driven decision-making and continuous improvement throughout the development lifecycle (Schumacher et al., 1994).

Ultimately, usability testing is an indispensable component of user-centred design, providing actionable insights that lead to improved functionality and a more positive user experience. It's a cost-effective means of mitigating potential issues, ensuring that the final product not only

meets but exceeds user expectations. Regarding the next section, we applied the test on this website.

## Questionnaire Results - Demography

## i. Section A: Demographic Respondent

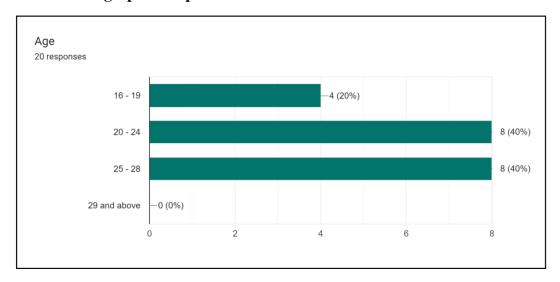


Figure 3: The Respondent Age

Based on the figure above, the majority of the respondents ages are 20 - 24 and 25 - 28 years old which consists of 8 respondents (40%) followed by age 18 - 19 years old that involved 4 respondents (20%).

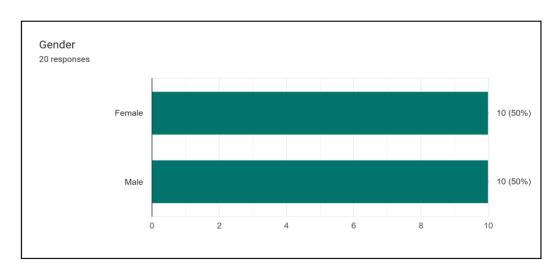


Figure 4: The Respondent Gender

Based on the figure above, both genders are the majority which 10 respondents are female (50%) and 10 other respondents are male (50%).



# ii. Section B, C and D

No.	Usefulness	Percentage	Total
1.	I could successfully login and logout the website.	75%	
2.	The website functions smoothly.	75%	65%
3.	The website included enough necessary information.	45%	
No.	Ease of Use	Percentage	Total
1.	The website interaction is understandable.	95%	90%
2.	Navigation method is clear.	85%	9070
3.	Making errors frequently.	0%	

No.	Usability and Satisfaction	Percentage	Total
1.	The website is user-friendly.	80%	82%
2.	The website can be used all the time.	85%	0270
3.	I am satisfied and will often use it.	80%	
		Total	79%

Table 1: Result from the questionnaire.

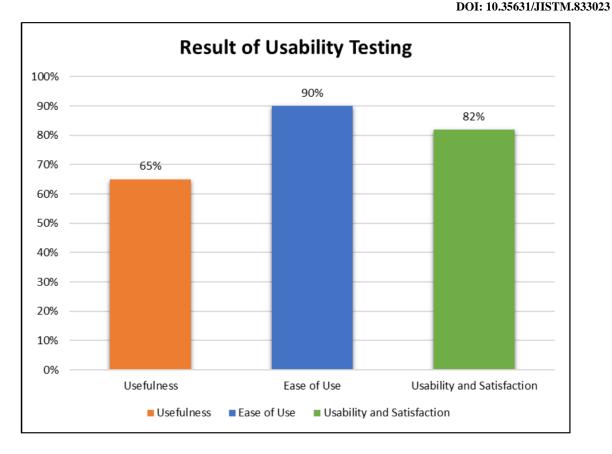


Figure 5: Result of usability testing

The comprehensive findings from the usability testing of the Seni Cinta website have been meticulously documented, as illustrated in both Table 1 and Figure 5. These visual representations serve as valuable tools for interpreting the website's performance in terms of user interaction and overall usability. Notably, the website attained an average score of 79%, signifying a commendable level of user satisfaction and navigational efficacy.

Turning our attention specifically to the aspect of usefulness, it is discerned that a significant majority of respondents express a robust consensus. Specifically, respondents strongly agree that the processes of logging in and out are intuitively designed, facilitating a seamless and user-friendly experience. Furthermore, users commend the website for its smooth and efficient functionality, which significantly contributes to their overall positive perception.

Quantitatively, the average percentage for the usefulness factor is calculated at 65%. This metric encapsulates the collective responses of users regarding the utility and practicality of the Seni Cinta website. Beyond mere numbers, this figure encapsulates the users' affirmative perspectives on the website's ability to fulfil its intended purpose effectively.

In essence, these usability testing results offer a comprehensive snapshot of the Seni Cinta website's performance, portraying a favourable scenario with users lauding its ease of use and functionality. The interplay of numerical averages and qualitative user feedback underscores the website's success in meeting user expectations, further positioning it as an effective and user-centric digital platform in the realm of online interaction.

In addition to the noteworthy achievements mentioned earlier, it is noteworthy that the average percentage for ease of use of the Seni Cinta website stands impressively at 90%. This statistic is indicative of the positive reception and satisfaction levels among the respondents regarding their experience with the website.

The respondents unequivocally expressed a strong consensus on the website's user-friendliness. They specifically highlight the clarity of website interaction and the easily navigable structure. Users find the navigation methods to be straightforward, contributing to a seamless and enjoyable browsing experience.

Furthermore, the respondents commend the website for its remarkable reliability, asserting that it exhibits minimal errors. This feedback reflects the dedication of the developers to ensuring a smooth and error-free user experience. The commitment to minimizing errors contributes significantly to the overall positive perception of the website's functionality and efficiency.

In summary, the impressive 90% average for ease of use not only serves as a quantitative indicator of user satisfaction but is also substantiated by qualitative feedback highlighting the website's clear interaction, navigational clarity, and minimal error occurrence. This confluence of positive factors underscores the success of the Seni Cinta website in delivering a user-centric and technologically robust online platform.

In conclusion, it is noteworthy to highlight that the overall average percentages for both usability and satisfaction culminate at a commendable 82%. This robust metric encapsulates the collective sentiment of respondents regarding their experience with the website, reflecting a noteworthy level of user contentment.

A closer examination of the respondents' feedback reveals a strong consensus on two pivotal aspects. Firstly, users resoundingly assert that the website embodies a user-friendly design, indicating an intuitive and seamless interface that contributes positively to their interaction with the platform. Secondly, the unanimous agreement that the website remains consistently usable over time is indicative of its reliability and enduring appeal.

This confluence of high average percentages and emphatic user agreement underscores the achievement of a key project objective: the creation of an interactive and user-friendly website. The positive reception from respondents not only validates the success of the website in meeting its intended goals but also positions it as a reliable and enduring digital platform that resonates with user preferences and expectations.

In essence, the culmination of these findings suggests that the Seni Cinta website has not only met but surpassed user expectations, offering an engaging and satisfactory user experience. As the digital landscape continues to evolve, this positive user sentiment positions the website as a resilient and adaptable platform, capable of consistently delivering on its commitment to user-friendliness and overall satisfaction.

#### Conclusion

The Seni Cinta website, meticulously developed on the WordPress platform, represents a dedicated effort to create a digital space centred around the exploration and comprehension of the intricate facets of love. At its core, this project seeks to provide a platform where individuals



can not only share their perspectives on love but also gain a deeper understanding of its multifaceted nature.

In alignment with the project's user-centric philosophy, the website consciously omits the need for user account registration. This deliberate decision is aimed at enhancing user engagement by allowing seamless access to the website's features. The backend of the system is exclusively accessible to administrators, ensuring secure data modification and system management.

A notable feature of the Seni Cinta website is its commitment to user-friendliness. Users can actively participate in a personality test and effortlessly order books without the traditional hurdle of account registration. This approach prioritizes a hassle-free experience for the audience, aligning with contemporary expectations of digital interaction.

The development process adheres to the waterfall model, progressing through distinct phases such as requirements, design, development, testing, deployment, and maintenance. This structured approach ensures a comprehensive and systematic evolution of the system, addressing each aspect thoroughly before moving on to the next phase.

Qualitative data gathered from potential users and customers plays a pivotal role in shaping the system's development. By identifying and understanding the problems and needs of users, developers can tailor the Seni Cinta website to meet the expectations and preferences of its audience effectively.

The choice of WordPress as a custom-building application without the need for coding underscores the versatility and accessibility of the platform. The Seni Cinta website's achievement of an impressive average rating of 79% attests to the successful realization of the primary objective: designing an interactive and user-friendly digital space. This positive feedback not only reflects client satisfaction but also affirms the project's overarching goal of providing a meaningful and engaging online experience.

## Acknowledgements

The authors would like to extend their appreciation to Global Academic Excellence (M) Sdn. Bhd. for granting publication and to MYCEO Publishing for supporting the project.

#### References

- Aldi, F. (2022). Web-Based New Student Admission Information System Using Waterfall Method. Sinkron: jurnal dan penelitian teknik informatika, 7(1), 111-119.
- Barnes, D., Clear, F., Dyerson, R., Harindranath, G., Harris, L. and Rae, A. (2012), "Web 2.0 and micro-businesses: an exploratory investigation", Journal of Small Business and Enterprise Development, Vol. 19 No. 4, pp. 687-711.
- Becker, P., Tebes, G., Peppino, D., & Olsina Santos, L. A. (2019). Applying an Improving Strategy that embeds Functional and Non-Functional Requirements Concepts. Journal of Computer Science & Technology, 19.
- Burns, P., Jones, S. C., Iverson, D., & Caputi, P. (2013). Usability testing of AsthmaWise with older adults. CIN: Computers, Informatics, Nursing, 31(5), 219-226.
- Hernandez, S. P., Alvarez, P. J. J., Fabra, J., & Ezpeleta, J. (2017). Analysis of Users' Behavior in Structured e-Commerce Websites. IEEE Access, 5, 11941–11958. https://doi.org/10.1109/access.2017.2707600



- Kodmelwar, M. K., Futane, P. R., Pawar, S. D., Lokhande, S. A., & Dhanure, S. P. (2022). A Comparative Study of Software Development Waterfall, Spiral and Agile Methodology. Journal of Positive School Psychology, 6(3), 7013-7017.
- Krug, S. (2014). Don't Make Me Think, Revisited: A Common Sense Approach to Web Usability. New Riders.
- Liu, J. (2015). Design and Implementation of Online Bookstore Based on JSP and JavaBean Technology. Modern Information, 12, 42-47.
- Preethi, C., Saran, V.S.S., Hammed, S.S., Haripriya, K., & Kumar, B.A. (2023) Sell and Buy Homegrown Vegetables and Fruits Online Using E-Commerce UML Algorithm. 2023 International Conference on Intelligent Systems for Communication, IoT and Security (ICISCoIS), https://doi.org/10.1109/ICISCoIS56541.2023.10100576
- Ritonga, R. M., Munthe, I. R., & Purnama, I. (2022). Design an Information System Pendawa Bulucina (RAM) Web-Based Using The Waterfall Method. Jurnal Mantik, 6(1), 383-389.
- Salehi, F., Abdollahbeigi, B., Langroudi, A. C., & Salehi, F. (2012). The Impact of Website Information Convenience on E-commerce Success of Companies. Procedia Social and Behavioral Sciences, 57, 381–387. https://doi.org/10.1016/j.sbspro.2012.09.1201
- Schumacher, R. M., Sasse, M. M., & Smith, J. C. (1994). Usability Testing: A Review. ACM SIGCHI Bulletin, 26(3), 22-26. https://doi.org/10.1145/190043.190056
- Sharma, G., & Lijuan, W. (2015). The effects of online service quality of e-commerce Websites on user satisfaction. The Electronic Library, 33(3), 468–485. https://doi.org/10.1108/el-10-2013-0193
- Williams, B., Damstra, D., & Stern, H. (2015). Professional WordPress: design and development. John Wiley & Sons.
- Zwass, V. (2003), "Electronic commerce and organizational innovative: aspects and opportunities", International Journal of Electronic Commerce, Vol. 7 No. 3, pp. 7-37.