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Application of Design Thinking and User Experience Questionnaire (UEQ) in a WooCommerce Based E-Commerce Platform

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Abstract

The rapid growth of e-commerce has placed increasing pressure on small and medium-sized enterprises (MSMEs) to adopt user-centered digital platforms that meet evolving consumer expectations. This study aims to design and evaluate the user interface (UI) and user experience (UX) of a WooCommerce-based e-commerce platform using the Design Thinking methodology and the User Experience Questionnaire (UEQ). The research employed a quantitative-descriptive approach, involving 88 respondents drawn from the School of Business and Management at Logistik dan Bisnis Internasional University using the Slovin formula. The Design Thinking process was applied across five iterative stages Empathize, Define, Ideate, Prototype, and Test to generate a High-Fidelity (Hi-Fi) prototype responsive to user needs. UEQ evaluation results indicate that the redesigned platform achieved Excellent ratings for Attractiveness (mean = 1.778) and Dependability (mean = 1.710), Good ratings for Efficiency (mean = 1.776), Stimulation (mean = 1.599), and Novelty (mean = 1.122), and an Above Average rating for Perspicuity (mean = 1.696). These findings confirm that the Design Thinking approach effectively improves UI/UX quality for WooCommerce-based platforms, contributing to enhanced digital adoption among MSMEs. Future research is recommended to extend the evaluation to a broader and more diverse user population.

Keywords:
Design Thinking; User Interface; User Experience Questionnaire; WooCommerce; E-Commerce.

1. INTRODUCTION

The rapid development of digital technology has become a driving force behind the transformation of various sectors, particularly business and commerce (Sari & Purba, 2024). However, not all businesses are able to adapt optimally to these changes. Small business owners often face various challenges in adopting digital technology, which are further exacerbated by low digital competency. This gap limits their access to online consumers and increases the risk of marginalization in an increasingly digitalized market (Ausat, Suparwata, & Risdwiyanto, 2025). The core issue remains the low level of technology adoption within MSME operations (Nefianto, 2025). Despite these hurdles, digital transformation offers substantial opportunities, including improved operational efficiency, enhanced customer experiences, and expanded access to global markets (Margama & Fasa, 2025).

This transformation has been exemplified by the rapid expansion of e-commerce, which has established online transactions as a fundamental component of the global economy. E-commerce encompasses trading activities including the buying, selling, exchange, and communication of goods, services, and information through technology-based computer networks (Mira Yuli, & Siti Aisah, 2025). This platform enables electronic buying and selling processes via the internet without time and geographical constraints (Santoso, Melisa, & Sitanggang, 2022). Furthermore, e-commerce supports companies in reaching consumers across various locations, including international markets, without the necessity of opening physical branches

(Masruroh Syah, L., et al., 2024). By leveraging e-commerce, businesses can expand their market reach globally while maintaining a strategic focus on specific customer segments (Nurzanah & Riofita, 2024).

The increasing integration of e-commerce into business activities has highlighted the importance of user interface quality and overall user experience in determining the success of digital platforms. The development of mobile applications, particularly for e-commerce and web-based services, relies heavily on effective User Interface (UI) and User Experience (UX) design (Edward, Latifah, & Rokoyah, 2022). User Interface (UI) and User Experience (UX) represent the visual and interactive components that users experience during their interaction with a system (Ginasta, N. G., & Firdaus, F. F., 2026). While UI encompasses the visual layout and interactive elements of an application, UX focuses on user perceptions, emotions, and overall satisfaction during use (Mursidin, 2025). An attractive website or application design can significantly influence user perceptions and engagement (Kaharuddin, Adam, & Pernando, 2024). In a highly competitive digital landscape, optimizing UI and UX design is essential for the success of e-commerce applications (Soraya, Malika, Cemara, & Wijayanto, 2024). This design approach can become an important bridge that connects creativity, empathy, and problem-solving skills (Ginasta, Casmadi, & Setiawan, 2025).

To achieve optimal UI and UX design, an approach that focuses specifically on user expectations and usability requirements. One widely used method is Design Thinking, a design methodology centered on understanding user requirements to solve complex problems, particularly within interface design (Anggraini & Hamdani, 2024). The Design Thinking process is structured into five interconnected stages: empathize, define, ideate, prototype, and test (Masruroh Syah, L., et al., 2024). This approach enables developers to create innovative and relevant solutions through an iterative process focused on customer interaction needs and overall satisfaction.

In its implementation, WooCommerce is one of the most widely used platforms for developing web-based e-commerce. As an extension of the WordPress Content Management System (CMS), WooCommerce facilitates the creation and management of online stores, providing business owners, particularly MSMEs, with a flexible and accessible e-commerce solution. These features enable business owners to customize the appearance and functionality of their online stores without advanced programming skills (Edward, Latifah, & Rokoyah, 2022). However, the implementation of WooCommerce has not yet been fully optimized, especially regarding UI and UX design aspects that often fail to fully address user expectations. Accordingly, this study aims to evaluate and develop the user interface and user experience of a WooCommerce-based platform by applying the Design Thinking methodology. The findings are expected to provide design recommendations that better address user needs and serve as a reference for the development of more effective e-commerce platforms, particularly in supporting MSMEs to maximize the use of digital technologies.

The remainder of this paper is structured as follows. The literature review presents the conceptual foundations of User Interface (UI), User Experience (UX), WooCommerce, and Design Thinking. The methodology section outlines the study design, data collection methods, and the application of the Design Thinking approach. The results and discussion section presents the outcomes of the UI/UX assessment derived from the User Experience Questionnaire (UEQ). Finally, the conclusion synthesizes the primary findings and provides recommendations for future research and practical applications.

1.1. User Interface

In the development of WooCommerce-based e-commerce platforms, effective User Interface (UI) design contributes to the clear presentation of product information and facilitates intuitive navigation throughout the system. User Interface (UI) is a component of User Experience (UX) that focuses on the visual design presentation of a system (Ginasta, et al., 2024). This analysis focuses on the critical UI dimensions that influence usability and interaction efficiency, derived from user feedback and observational data. Direct interaction between users and the system highlights the importance of effective UI design, as it significantly enhances user retention and engagement (Fathurrahman & Sumarsono, 2024). Furthermore, the UI serves as the visual representation of a system, acting as the primary medium for interaction between the user and the application (Saputri, Ameliya, Aulia, & Saputra). The implemented UI components comprising imagery, layout, color palettes, iconography, and typography are strategically curated to guide users intuitively throughout the purchasing process.

1.2. User Experience

In this study, User Experience (UX) focuses on users' interactions with a WooCommerce-based e-commerce platform by assessing usability, operational efficiency, and user satisfaction throughout the entire interaction process. User Experience (UX) plays a crucial role in determining the overall success of an application (Rahma & Huda, 2026). User Experience (UX) is an essential aspect that plays a significant role in determining the success of an application. User experience serves as a fundamental aspect in the design of information system interfaces (Permana, Megawati2, Saputra, & Zarnelly, 2025). The UX framework of this system prioritizes navigational fluidity, clarity of product information, system responsiveness, and a seamless checkout experience, thereby enabling users to browse, select, and complete transactions efficiently.

1.3. WooCommerce

WooCommerce is a WordPress-based e-commerce plugin that enables businesses to create and manage online stores independently without relying on third-party service providers (Arismansah & Erwadi, 2026). Furthermore, the platform offers a robust suite of functionalities (Suryadana, Parwita, Ari, & Aryandana, 2025) designed to optimize product management, transactional workflows, and the overall user experience. WooCommerce is utilized as an e-commerce platform to support small and medium-sized enterprises (SMEs) (Muttaqin, 2022). Additionally, WooCommerce supports seamless integration with various plugins and payment gateways, enabling businesses to enhance website functionality and improve transaction efficiency. The platform also provides customizable themes and responsive interface features that contribute to better usability and customer satisfaction. These capabilities make WooCommerce a suitable solution for MSMEs seeking to strengthen their digital presence and expand market reach in an increasingly competitive e commerce environment.

2. RESEARCH METHOD

This study employs a quantitative explanatory research design. To guide the design process, the research adopts the Design Thinking framework, which is an iterative user-centered methodology consisting of five phases: Empathize, Define, Ideate, Prototype, and Test. The process begins by identifying the challenges small business actors face in digital adoption and analyzing technical bottlenecks within the WooCommerce platform. By integrating business viability, human desirability, and technical feasibility, a UI/UX prototype is developed using the WooCommerce plugin on WordPress, focusing on minimalist typography and efficient navigation to enhance the user's transaction experience (Fathurrahman & Sumarsono, 2024).

2.1. Design Thinking

Design Thinking serves as an efficacious methodology for enhancing design quality and user experience within digital platforms, particularly in the development of WooCommerce-based e-commerce. It represents an innovative, human-centered approach to the design process, emphasizing a profound understanding of user requirements and the formulation of pragmatic solutions. This framework integrates three fundamental pillars desirability (people), feasibility (technology), and viability (business) to establish a robust foundation for innovative problem-solving (Puspitasari, 2024). Through an iterative cycle, the design architecture undergoes continuous refinement, informed by the results of rigorous evaluation at every developmental phase. Consequently, Design Thinking provides a structured yet flexible pathway to optimizing the interaction quality and functional effectiveness of WooCommerce-based digital storefronts.

The five stages of Design Thinking were operationalized as follows. In the Empathize stage, user interviews and observational studies were conducted with MSME stakeholders and students to uncover pain points in the existing WooCommerce platform, including navigation difficulties, inconsistent product displays, and a confusing checkout workflow. n the Define phase, the insights obtained during the previous stage were integrated to formulate a clear problem definition: the existing platform interface was not sufficiently effective in supporting users with limited digital literacy during purchase transactions. During the Ideate stage, brainstorming sessions generated multiple design concepts prioritizing minimalist layouts, intuitive navigation, and streamlined checkout processes. The Prototype stage produced a High-Fidelity (Hi-Fi) mockup developed using the WooCommerce plugin on WordPress, incorporating revised typography, color schemes, and navigation structures aligned with identified user needs. Finally, the Test stage involved distributing the UEQ instrument to 88 respondents who interacted with the prototype, yielding quantitative data that supported the effectiveness of the proposed UI/UX design enhancements.

2.2. UEQ

The final evaluation is conducted through the User Experience Questionnaire (UEQ) to quantitatively assess the overall quality of the platform. The User Experience Questionnaire (UEQ) is a standardized assessment tool developed to measure the level of user experience for systems or products, enabling rapid and efficient evaluation (Savitri & Ratnasari, 2023). The UEQ measurement framework encompasses three primary dimensions: Attractiveness, Pragmatic Quality, and Hedonic Quality (Silaban & Pibriana, 2022).

Furthermore, the UEQ model is structured around six core variables: Attractiveness, Perspicuity, Efficiency, Dependability, Stimulation, and Novelty (Pangestu, Suryanto, & Pratama, 2023). The questionnaire items employ a semantic differential format, utilizing pairs of bipolar adjectives measured on a seven-point scale.

Table 1. User Experience Questionnaire Category

Aspect	Category				
	Excellent	Good	Above Average	Below Average	Bad
Attractiveness	>1,75	>1,52	>1,17	>0,7	<=0,7
Perspicuity	>1,9	>1,56	>1,08	>0,64	<=0,64
Efficiency	>1,78	>1,47	>0,98	>0,54	<=0,54
Dependability	>1,65	>1,48	>1,14	>0,78	<=0,78
Stimulation	>1,55	>1,31	>0.99	>0,5	<=0,5
Novelty	>1,4	>1,05	>0,71	>0,3	<=0,3

The User Experience Questionnaire (UEQ) serves as a standardized assessment instrument comprising six distinct scales and twenty-six items, specifically designed for the rapid elicitation of user impressions. It enables participants to articulate their subjective feelings, perceptions, and attitudes emerging from product interaction. Furthermore, the UEQ offers significant methodological versatility, supporting both conventional paper-based distribution and digital online formats.

$$x = \frac{\sum x\{scale\}}{\sum item} \quad (1)$$

Description:
χ = individual scale mean
$\sum$ x {scale} = sum of scale values across all respondents
$\sum$item = total number of respondents

To facilitate a comparative assessment, mean scores and comprehensive result analyses are employed. The benchmarking framework utilizes five performance tiers to categorize the findings: Excellent (mean> 1.75), Good (mean> 1.20), Above Average (mean> 1.17), Below Average (mean> 0.70), and Bad (mean< 0.70).

2.2.1. Participant

The study population consisted of 716 students from the School of Business and Management at Logistik dan Bisnis Internasional University. This population was selected because students from the School of Business and Management, particularly those in the Digital Business program, are familiar with digital technologies and e-commerce platforms, including WooCommerce. Therefore, they were considered suitable respondents for evaluating the usability and user experience of a WooCommerce-based e-commerce platform. A purposive sampling technique was employed, in which respondents were selected based on predefined criteria, namely students from the School of Business and Management who met the research requirements. To ensure a representative sample from this defined population, the Slovin formula was utilized to determine the minimum sample size required when the population parameters are known. With a specified margin of error (level of significance) of 10% (e = 0.1), the sample size is calculated as follows:

$$\begin{aligned} n &= \frac{N}{1+Ne^2} \\ n &= \frac{716}{1+716(0{,}1)^2} \\ n &= \frac{716}{1+716(0{,}01)} \\ n &= \frac{716}{8{,}16} \\ n &= 87{,}74 \end{aligned} \quad (2)$$

Description:
n = Respondents
N = Population
e = margin of error 10%

A preliminary assessment of the legacy system's user experience was conducted using the User Experience Questionnaire (UEQ) to establish a performance baseline. This evaluation aimed to quantify the existing user experience levels among students of the School of Business and Management at Logistik dan Bisnis Internasional University. Based on the Slovin calculation, 88 respondents participated in this study.

The questionnaire was distributed online through Google Forms to students who met the predefined research criteria. The data derived from this initial phase served as a critical diagnostic tool to identify usability issues in the current design and provided a comparative benchmark for evaluating the effectiveness of the proposed Design Thinking intervention.

Table 2. UEQ method question instrument

		1	2	3	4	5	6	7	
1	annoying	○	○	○	○	○	○	○	enjoyable
2	not understandable	○	○	○	○	○	○	○	understandable
3	creative	○	○	○	○	○	○	○	dull
4	easy to learn	○	○	○	○	○	○	○	difficult to learn
5	valuable	○	○	○	○	○	○	○	inferior
6	boring	○	○	○	○	○	○	○	exciting
7	not interesting	○	○	○	○	○	○	○	interesting
8	unpredictable	○	○	○	○	○	○	○	predictable
9	fast	○	○	○	○	○	○	○	slow
10	inventive	○	○	○	○	○	○	○	conventional
11	obstructive	○	○	○	○	○	○	○	supportive
12	good	○	○	○	○	○	○	○	bad
13	complicated	○	○	○	○	○	○	○	easy
14	unlikable	○	○	○	○	○	○	○	pleasing
15	usual	○	○	○	○	○	○	○	leading edge
16	unpleasant	○	○	○	○	○	○	○	pleasant
17	secure	○	○	○	○	○	○	○	not secure
18	motivating	○	○	○	○	○	○	○	demotivating
19	meets expectations	○	○	○	○	○	○	○	does not meet expectations
20	inefficient	○	○	○	○	○	○	○	efficient
21	clear	○	○	○	○	○	○	○	confusing
22	impractical	○	○	○	○	○	○	○	practical
23	organized	○	○	○	○	○	○	○	cluttered
24	attractive	○	○	○	○	○	○	○	unattractive
25	friendly	○	○	○	○	○	○	○	unfriendly
26	conservative	○	○	○	○	○	○	○	innovative

3. RESULTS AND DISCUSSION

3.1. Design High Fidelity Mockup

The subsequent stage is dedicated to the design development process. During this stage, design refinements are executed based on the previously established wireframe blueprints. These improvements are then visualized through High-Fidelity (Hi-Fi) Mockups and Prototypes, representing a transition from structural concepts to detailed, interactive representations of the final product.

The Hi-Fi prototype was developed within the WordPress environment using the WooCommerce plugin, focusing on three primary interface improvements identified during the Empathize and Define stages. First, the homepage layout was redesigned to feature a clean hero section with a prominent call-to-action, product category cards with consistent thumbnail imagery, and a simplified top navigation bar. Second, the product detail page was restructured to display product information hierarchically leading with high-quality imagery, followed by price, product description, variant selectors, and a clearly visible “Add to Cart” button. Third, the checkout flow was streamlined from a multi-step process into a single-page layout, reducing cognitive load and minimizing user drop-off risk. Typography was standardized using a sans-serif font system to improve readability, while the color palette was adjusted to achieve consistent visual contrast across all page components. These refinements collectively addressed the usability deficiencies identified in the baseline UEQ evaluation and formed the basis for the final prototype assessed by respondents.

3.2. Design Analysis

This phase involved the distribution of the survey instrument, resulting in the acquisition of data from 88 respondents. The raw scores, originally measured on a 7-point scale, were subjected to a data transformation process to align with the standard UEQ numerical range. Subsequently, the transformed data were aggregated and calculated using Equation (1) to determine the mean scores for each variable, as presented in Table 3.

Table 3. UEQ Scale Confidence Interval Value in 26 instruments

Confidence interval (p=0.05) per item						
Item	Mean	Std. Dev.	N	Confidence	Confidence interval	
1	1.716	1.241	88	0.259	1.457	1.975
2	1.932	1.294	88	0.270	1.662	2.202
3	0.989	1.891	88	0.395	0.594	1.384
4	1.295	1.925	88	0.402	0.893	1.698
5	1.432	1.970	88	0.412	1.020	1.843
6	1.443	1.267	88	0.265	1.178	1.708
7	1.807	1.081	88	0.226	1.581	2.033
8	1.477	1.277	88	0.267	1.210	1.744
9	1.443	1.530	88	0.320	1.123	1.763
10	1.136	1.525	88	0.319	0.818	1.455
11	1.886	1.208	88	0.252	1.634	2.139
12	1.807	1.437	88	0.300	1.507	2.107
13	1.852	1.170	88	0.244	1.608	2.097
14	1.841	1.060	88	0.221	1.619	2.062
15	1.193	1.639	88	0.342	0.851	1.536
16	1.932	1.172	88	0.245	1.687	2.177
17	1.875	1.320	88	0.276	1.599	2.151
18	1.716	1.295	88	0.271	1.445	1.986
19	1.602	1.318	88	0.275	1.327	1.878
20	1.886	1.208	88	0.252	1.634	2.139
21	1.705	1.547	88	0.323	1.381	2.028
22	1.898	1.269	88	0.265	1.633	2.163
23	1.875	1.320	88	0.276	1.599	2.151
24	1.682	1.520	88	0.318	1.364	1.999
25	1.693	1.465	88	0.306	1.387	1.999
26	1.170	1.770	88	0.370	0.801	1.540

The transformed datasets are processed through Equation (1) to yield the primary quantitative results. These outcomes serve as the empirical foundation for the subsequent benchmarking phase, enabling a comparative performance assessment against industry standards. The calculated mean values and their corresponding benchmark classifications for the proposed e-learning platform design are comprehensively detailed in Table 3.

Table 4. Confidence intervals (p=0.05) per scale

Scale	Mean	Std. Dev.	N	Confidence	Confidence interval	
Attractiveness	1.778	1.057	88	0.221	1.557	1.999
Perspicuity	1.696	1.157	88	0.242	1.454	1.938
Efficiency	1.776	1.132	88	0.237	1.539	2.012
Dependability	1.710	1.044	88	0.218	1.492	1.928
Stimulation	1.599	1.145	88	0.239	1.360	1.839
Novelty	1.122	1.041	88	0.217	0.905	1.340

The benchmarking results for the proposed design reveal strong overall performance across all UEQ dimensions. Attractiveness (mean = 1.778) and Efficiency (mean = 1.776) achieved Excellent ratings, both exceeding the threshold of 1.75. Perspicuity (mean = 1.696), Dependability (mean = 1.710), and Stimulation (mean = 1.599) all attained good ratings, comfortably surpassing the 1.20 threshold. The Novelty dimension (mean = 1.122) was classified as Above Average. These results collectively indicate that the redesigned WooCommerce-based platform was well-received by users, particularly in terms of visual attractiveness, operational efficiency, and overall usability. The relatively lower Novelty score suggests that while the design meets and exceeds standard usability benchmarks, further innovation in distinctive features could be explored in future development iterations.

Table 5. Sixth UEQ Scale Confidence Interval Value

Scale	Mean	Comparisson to benchmark
Attractiveness	1.78	Excellent
Perspicuity	1.70	Good
Efficiency	1.78	Excellent
Dependability	1.71	Good
Stimulation	1.60	Good
Novelty	1.12	Above Average

Figure 1 presents a graphical representation of the benchmarking results for each User Experience (UX) dimension of the ecommerce, categorized according to established performance standards.

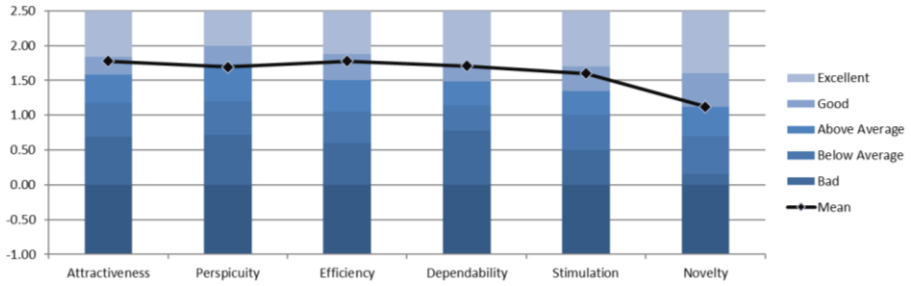

Figure 1 Benchmark Sixth Scale E-Commerce WooCommerce Based

Based on Figure 1, the benchmarking results indicate that most UX dimensions achieved scores within the Good and Excellent categories. The highest mean score was obtained in the Efficiency dimension, indicating that users perceived the WooCommerce-based e-commerce platform as efficient and easy to use during interaction processes. In contrast, the Novelty dimension recorded the lowest score compared to the other aspects, although it still remained within the acceptable benchmark category. Overall, these findings demonstrate that the implemented UI/UX design successfully enhanced usability, interaction quality, and user satisfaction across the evaluated dimensions.

These findings are consistent with the study conducted by (Prasetio & Manongga, 2025), which applied the Design Thinking methodology to redesign an e-commerce website. Their study demonstrated that involving users throughout the Design Thinking process resulted in a more intuitive interface and improved overall user satisfaction. Similarly, the present study confirms that implementing Design Thinking in the development of a WooCommerce-based e-commerce platform effectively addresses user needs and enhances overall usability.

Furthermore, the findings are supported by (Kusuma, Sartika, & Ramadhan, 2024), who combined the Design Thinking methodology with the User Experience Questionnaire (UEQ) to evaluate interface quality. Although their research focused on an educational platform, both studies demonstrate that integrating Design Thinking with UEQ provides an effective framework for improving interface quality and evaluating user experience. The Above Average score obtained for the Novelty dimension in the present study also indicates opportunities for future enhancement through more innovative interface features while maintaining usability.

4. CONCLUSION

This This study demonstrates that the implementation of the Design Thinking methodology effectively improves the User Interface (UI) and User Experience (UX) of a WooCommerce-based e-commerce platform. Through the five Design Thinking stages—Empathize, Define, Ideate, Prototype, and Test—the study successfully identified key usability issues and transformed these findings into a user-centered high-fidelity prototype. The redesigned interface emphasizes intuitive navigation, streamlined transaction processes, consistent visual hierarchy, and improved accessibility, resulting in a more efficient and engaging shopping experience.

The User Experience Questionnaire (UEQ) evaluation involving 88 respondents demonstrated positive results across all UX dimensions. The platform achieved Excellent ratings in Attractiveness and Efficiency, Good ratings in Perspicuity, Dependability, and Stimulation, and an Above Average rating in Novelty. These findings indicate that integrating Design Thinking with UEQ provides an effective framework for developing user-centered WooCommerce-based e-commerce platforms, particularly for supporting the digital transformation of MSMEs.

Despite these contributions, this study has several limitations. The participants were limited to students from the School of Business and Management at the University of Logistics and International Business, and the evaluation was conducted using a high-fidelity prototype rather than a fully implemented system. These limitations may affect the generalizability of the findings to broader user populations and real-world contexts. Therefore, future research should involve more diverse participant groups, including MSME owners and consumers, and evaluate a fully implemented platform to further assess the effectiveness of the proposed design.

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REFERENCES

Anggraini, D., & Hamdani, D. (2024). Implementasi Metode Design Thinking Dalam Perancangan Prototype Sistem Pengelolaan Data Barang. Jurnal Teknologi dan Sistem Informasi Bisnis, 6(3), 597-608. https://doi.org/10.47233/jteksis.v6i3.1469

Anisa Dyah Savitri, & Ratnasari, C. I. (2023). Implementasi User Experience Questionnaire (UEQ) untuk Mengevaluasi Pengalaman Pengguna pada UII RAS. KLIK: Kajian Ilmiah Informatika Dan Komputer, 4(3), 1352-1361. https://doi.org/10.30865/klik.v4i3.1444

Arismansah, M., & Erwadi, Y. (2026). Design and Development of a WooCommerce-Based E-Commerce System to Boost Sales at Koko Store. Jurnal Media Computer Science, 5(2), 943-956. https://doi.org/10.37676/jmcs.v5i2.11187

Ausat, A. M. A. ., Suparwata, D. O., & Risdwiyanto, A. (2025). Optimalisasi Digital Competence sebagai Strategi Adaptasi Dinamis Wirausahawan dalam Menghadapi Disrupsi Pasar di Era Digital. Jurnal Minfo Polgan, 14(1), 173-182. https://doi.org/10.33395/jmp.v14i1.14674

Edward, Latifah, & Rokoyah, K. (2022). Sistem Informasi Penjualan Berbasis Web pada Toko Online. Sistem Informasi Komputer Dan Teknologi, 12(1), 35-48. https://sikomtek.jakstik.ac.id/index.php/sikomtek/article/view/3

Fathurrahman, M. I., & Sumarsono, S. (2024). Penerapan prinsip desain antarmuka dalam evaluasi user interface dan user experience e-learning. Jurnal Komtika (Komputasi Dan Informatika), 8(2), 171-181. https://doi.org/10.31603/komtika.v8i2.11689

Ginasta, N. G., & Firdaus, F. F. (2026). UI/UX Desain Mobile Apps Skin Check untuk Identifikasi Jenis Kulit dan Rekomendasi Produk Skincare: UI/UX Design of Mobile Apps Skin Check to Identify Skin Type and Recommend Skincare Products. MALCOM: Indonesian Journal of Machine Learning and Computer Science, 6(2), 524-533. https://doi.org/10.57152/malcom.v6i2.2383

Ginasta, N. G., Casmadi, Y., & Setiawan, I. (2025). Peningkatan Literasi Digital Melalui Pelatihan Ui/Ux Bagi Siswa/I di SMA Negeri 24 Bandung. JURNAL MERPATI, 30-36. https://doi.org/10.36618/merpati.v7i1.4516

Ginasta, N. G., Hanum, R., Supriady, Febrianti, T. A., Yulandari, N., Sihite, J. P., . . . Fuadah, F. S. (2024). Membuat Produk Digital: Desain UI/UX menggunakan Figma. Jakarta: PT Cipta Gading Artha.

Kaharuddin, Adam, S., & Pernando, Y. (2024). Analisis Usability dan Aksesibilitas Desain UI/UX Aplikasi HIMAKOM Universitas Universal Menggunakan System Usability. KLIK: Kajian Ilmiah Informatika Dan Komputer, 4(5), 2389-2397. https://doi.org/10.30865/klik.v4i5.1479

Kusuma, M. B. A., Sartika, D., & Ramadhan, M. (2024). Penerapan Metode Design Thinking dan User Experience Questionnaire (UEQ) dalam Perancangan User Interface E-Learning. Jurnal Nasional Ilmu Komputer, 5(2), 89- 97. https://doi.org/10.47747/jurnalnik.v5i2.1747

Margama, A. L., & Fasa, M. I. (2025). Transformasi Digital Dalam E-Bussines: Peluang Dan Tantangan Bagi Umkm. Jurnal Intelek Dan Cendikiawan Nusantara, 2(2), 924-931.

Masruroh Syah, L., Faqihuddin Hanif, I., Novianti, E., Saidatuzzahra, P., Khoirunnisa, & Rahmawati, H. (2024). Penerapan Prinsip Design Thinking pada UI/UX Aplikasi Mobile Renas Fashion. Jurnal Informatika Polinema, 10(4), 463–470. https://doi.org/10.33795/jip.v10i4.5232

Mira Yuli, & Siti Aisah. (2025). Perkembangan dan Tren E-Commerce di Indonesia. JURNAL MANAJEMEN DAN BISNIS EKONOMI, 3(4), 131–140. https://doi.org/10.54066/jmbe-itb.v3i4.3584

Mursidin, M. H. (2025). Perancangan UI/UX Aplikasi Mobile E-Commerce Forhuman Apparel Menggunakan Figma. Jurnal Pendidikan Tambusai, 9(2), 24538–24544. https://doi.org/10.31004/jptam.v9i2.30616

Muttaqin, M. (2022). Rancang Bangun Aplikasi E-Commerce Ukm Kota Pari Berbasis Woocommerce. Jurnal Nasional Teknologi Komputer, 2(3), 142–149. https://doi.org/10.61306/jnastek.v2i3.49

Nadia Syahrani. (2025). Pengaruh Teknologi E-Commerce terhadap Peningkatan Penjualan. Uranus: Jurnal Ilmiah Teknik Elektro, Sains Dan Informatika, 3(1), 142–151. https://doi.org/10.61132/uranus.v3i1.677

Nefianto, T. . (2025). Strategi Transformasi Digital Untuk Penguatan Manajemen Organisasi. Jurnal Sosial Teknologi, 5(10), 4026–4031. https://doi.org/10.59188/jurnalsostech.v5i10.32469

Nurzanah, S., & Riofita, H. (2024). Manfaat E-Commerce terhadap Dunia Bisnis. As-Syirkah: Islamic Economic & Financial Journal, 3(2), 946 -. https://doi.org/10.56672/syirkah.v3i2.221

Pangestu, K. K., Suryanto, T. L. M., & Pratama, A. (2023). User Experience Questionnaire (UEQ) Sebagai Metode Pengukuran Evaluasi Pengalaman Pengguna Virtual Campus Tour Universitas Pembangunan Nasional (UPN). Journal of Information System, Applied, Management, Accounting and Research, 7(2), 442-451. https://doi.org/10.52362/jisamar.v7i2.718

Permana, J. H., Megawati, M., Saputra, E., & Zarnelly, Z. (2025). Evaluasi User Experience Pada Aplikasi Maxim Mobile Menggunakan User Experience Questionnaire. JIPI (Jurnal Ilmiah Penelitian dan Pembelajaran Informatika), 10(2), 1178-1184. https://doi.org/10.29100/jipi.v10i2.6192

Prasetio, N. W., & Manongga, D. H. (2025). Perancangan UI/UX website e-commerce Uppervista menggunakan metode Design Thinking. AITI, 22(1), 117–132. https://doi.org/10.24246/aiti.v22i1.117-132

Puspitasari, F. (2024). Perancangan Desain UI/UX Tempo Store Berbasis Website E-Commerce Dengan Metode Design Thinking. CREATIVA SCIENTIA, 1(1), 44–64. https://doi.org/10.70429/creativascientia.v1i1.84

Rahma, F. R., & Huda, M. (2026). Analisis User Experience (UX) Menggunakan Metode User Experience Questionnaire Plus (UEQ+) pada Aplikasi Perpustakaan Digital Nasional Republik (IPUSNAS). Journal of Applied Science and Information Technology, 2(1), 78-89. https://doi.org/10.32639/rx8hqp71

Santoso, S., Sitanggang, I. A., & Melisa, G. (2022). Perancangan Perancangan Website E-Commerce Ineed. Id. Jurnal Teknik Informatika, 14(1), 19-23.

Saputri, C. A., Ameliya, P., Aulia, N. N., & Saputra, M. A. (t.thn.). Analisis Pengaruh Desain Antarmuka Pengguna terhadap Kepuasan Pengguna pada Aplikasi E-Commerce. (2025). Prosiding SEMNAS INOTEK (Seminar Nasional Inovasi Teknologi), 9(1), 125-134. https://doi.org/10.29407/qg8mj359

Sari, W. D. C., & Purba, S. H. (2024). Transformasi Digital dalam Kesehatan: Tinjauan Literatur tentang Inovasi, Tantangan, dan Dampak Teknologi Kesehatan Digital . Jurnal Pendidikan Tambusai, 8(3), 45195–45201. Retrieved from https://jptam.org/index.php/jptam/article/view/21574

Silaban, S., & Pibriana, D. (2022, September 14). Penggunaan Model UEQ untuk Menganalisis Kualitas Pengalaman Pengguna Aplikasi Xaris di Gereja Methodist Indonesia. Jurnal Teknologi Sistem Informasi, 3(2), 229-242. https://doi.org/https://doi.org/10.35957/jtsi.v3i2.3016

Soraya, T., Malika, Cemara, & Wijayanto, S. (2024). Perancangan UI/UX Aplikasi E-Commerce Tas dengan Metode UCD. JRIIN: Jurnal Riset Informatika Dan Inovasi, 2(9), 1781–1790. Retrieved from https://jurnalmahasiswa.com/index.php/jriin/article/view/2137

Suryadana, P. E., Parwita, W. G. S., Ari, R. T., & Aryandana, G. S. (2025). Optimalisasi penggunaan website e-commerce sebagai katalog produk digital dan media pemasaran busana adat Bali pada DEPO Udeng Ces. Jurnal Ilmiah Nusantara, 2(1), 679-692. https://doi.org/10.61722/jinu.v2i1.4081