

Application of the Joint Application Design (JAD) Method in Developing a Women's Clothing Sales Information System Website Based at Aldisa Boutique

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ABSTRACT

A website-based women's clothing sales information system is a significant solution in optimizing sales business processes and increasing market affordability for business owners. In this context, this research aims to apply the Joint Application Design (JAD) Method as an approach in developing the sales information system. The JAD method was used to actively involve stakeholders from the start of the development process, enabling a better understanding of Aldisa Boutique's business needs and user desires. Through this study, design and implement a Website-Based Women's Clothing Sales Information System by integrating the JAD method in every stage of development, including needs analysis, design and implementation. The test results show that the application of the JAD method can improve system quality by producing solutions that are more in line with user expectations and business needs. The system is expected to provide solutions for Aldisa Boutique in increasing sales efficiency and making purchases easier for consumers.

Keywords: Joint Application Design, Information Systems, Website, Women's Clothing

INTRODUCTION

In the increasingly developing digital era, the use of information technology has become a key aspect in improving company performance and competitiveness, especially in the retail trade industry such as women's fashion sales. Technological advances have enabled businesses to utilize online platforms, such as websites, to increase the accessibility of products and services to consumers. In this context, the development of a Website-Based Women's Clothing Sales Information System at Aldisa Boutique is becoming increasingly important as a solution to optimize the sales process and increase customer satisfaction. However, developing effective and efficient information systems requires a deep understanding of business needs and user preferences. An appropriate methodological approach is required to ensure the success of information systems development. One approach that has proven effective in facilitating communication between stakeholders is the Joint Application Design (JAD) Method. The JAD method allows active participation from various stakeholders, including management, end users, and system developers, in every stage of development. By actively involving stakeholders from the start of the development process, the JAD Method enables a better understanding of business needs, user preferences, as well as obstacles that may be encountered in using the system. This helps in designing solutions that match user expectations and actual business needs.

Researchers obtained several journal comparisons including according [1] The results of the research and the results of the output of this system will produce a website-based information system for selling jackets or clothes that the company or jacket shop can use to meet the needs of selling Hoodie Jackets from every consumer quickly and accurately. According to the opinion of [2] This information system for the sale of Muslim women's clothing can provide convenience for Customers can transact. According to the opinion of [3] Can help in increasing customer loyalty and maintaining good relationships with customers. According to the opinion of [4] describe how happy customers are with services on the internet. [5] Millennial consumers in Montenegro recognize the benefits of online shopping, but consider it risky. Final opinion

According to [6] Web-based online sales can make it easier for customers, to search for information about products being sold.

From several literature reviews that have been collected, the author wants to explain that In this study, we will discuss the application of the Joint Application Design (JAD) Method in developing a Website-Based Women's Clothing Sales Information System at Aldisa Boutique. We will explore how the JAD Method can be used to identify business needs, design system features, and implement optimal solutions. Through this study, it is hoped that it can provide valuable insight into the development of a successful information system in the online women's fashion sales industry and help make it easier for consumers to order clothes.

METHODS

Stage at a level or stage in a research activity. Where these stages can have a process or flow that is carried out in an arranged, structured, standard, logical and systematic manner [7].

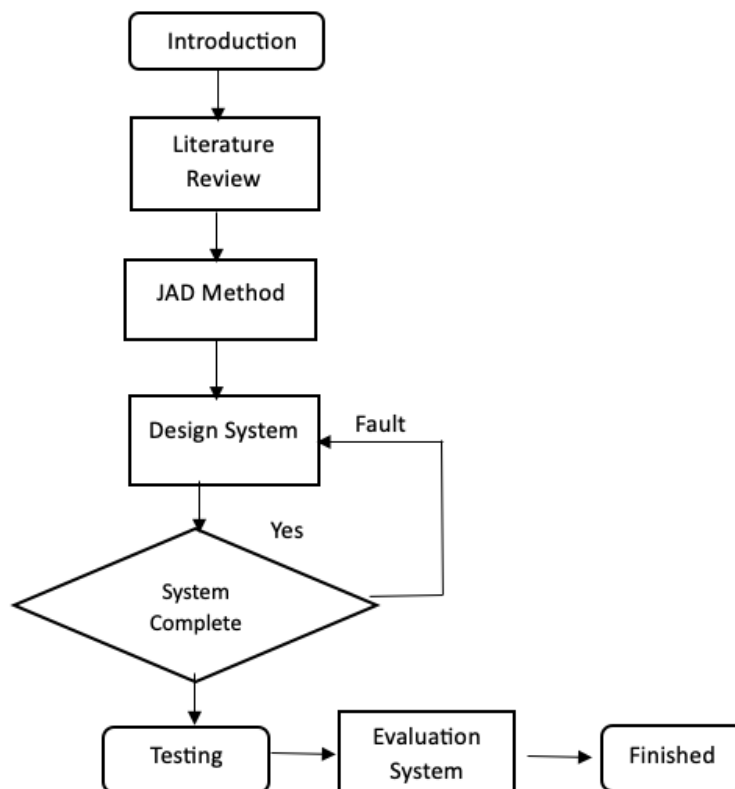


Figure 1. Research Stages

In Figure 1, the research stages that have an explanation are analyzing the background of the problem first, looking for several comparative references for related research, applying the JAD method, carrying out system design, then testing the system to see whether it is running well or whether it is being repaired. The system is evaluated and completed.

Research Instrumentation

1. Literature about the concept of a Website-Based Women's Clothing Sales Information System Using the Joint Application Design (JAD) Method
2. The software in this research is website-based programming

3. Application for the data storage process for information system analysis using the PHP MYSQL database

Joint Application Design (JAD) Method

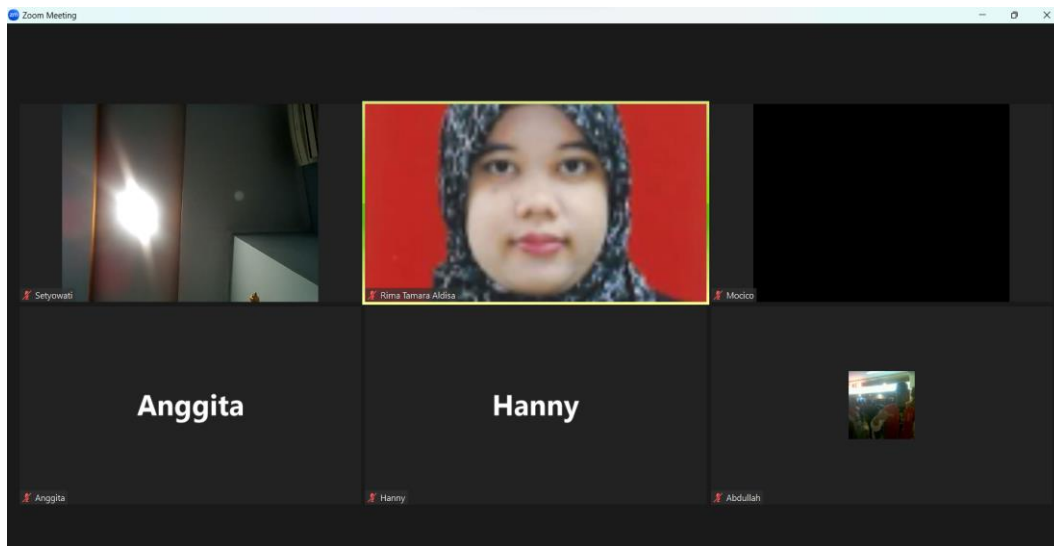
Joint Application Design (JAD) is a method that prioritizes user commitment in determining needs, and requirements and designing a system. Joint Application Design is carried out and implemented by forming a joint team from all project stakeholders, who work together in the form of a forum. discussions and meetings in person or in a virtual way [8]

The Joint Application Design (JAD) method is a collaborative approach to information system development that actively involves various stakeholders throughout the design process. This method aims to create a deep understanding of the business needs and desires of users by involving them in discussions, problem-solving, and decision-making.

Main characteristics of the JAD Method

- **Active Participation:** Stakeholders who are actively involved in the JAD session, including management, end users, system developers, and other stakeholders.
- **Professional Facilitation:** JAD sessions are led by a trained facilitator to lead discussions, and encourage collaboration between participants.
- **Structured Sessions:** JAD sessions have a structured and sequential agenda, starting from understanding the business context to formulating decisions about system design.
- **Shared Decision Making:** The primary goal of a JAD session is to achieve consensus among stakeholders about business requirements, system features, and solution design.
- **Use of Techniques and Tools:** The JAD method can involve the use of a variety of techniques and tools, such as business process analysis, flow diagrams, prototypes, and design sketches.
- **Documentation of Results:** Decision discussion results from JAD sessions are well documented for reference during the system development phase.

JAD Implementation Process



Picture 2 above depicts the practical application of the Joint Application Design (JAD) method, a collaborative approach used to gather requirements for a system. In this instance, the implementation occurred virtually through a Zoom meeting. This modern adaptation allowed

stakeholders to convene remotely and engage in discussions regarding the necessary features and functionalities for the system under development.

Through the virtual platform, participants were able to streamline communication and ensure all key stakeholders could contribute to the requirements gathering process. By leveraging technology such as Zoom, geographical barriers were overcome, enabling efficient collaboration regardless of participants' locations. This approach facilitated a comprehensive exploration of the system's needs and requirements, ensuring that all perspectives were considered in the design phase.

The utilization of Zoom for the JAD session exemplifies the adaptability of modern technology in facilitating collaborative efforts, even in the realm of software development. Virtual meetings not only enhance accessibility but also promote inclusivity by accommodating diverse schedules and locations. As organizations increasingly embrace remote work practices, such virtual collaboration tools play an integral role in driving efficient and effective project outcomes.

RESULTS AND DISCUSSION

Usecase Diagram

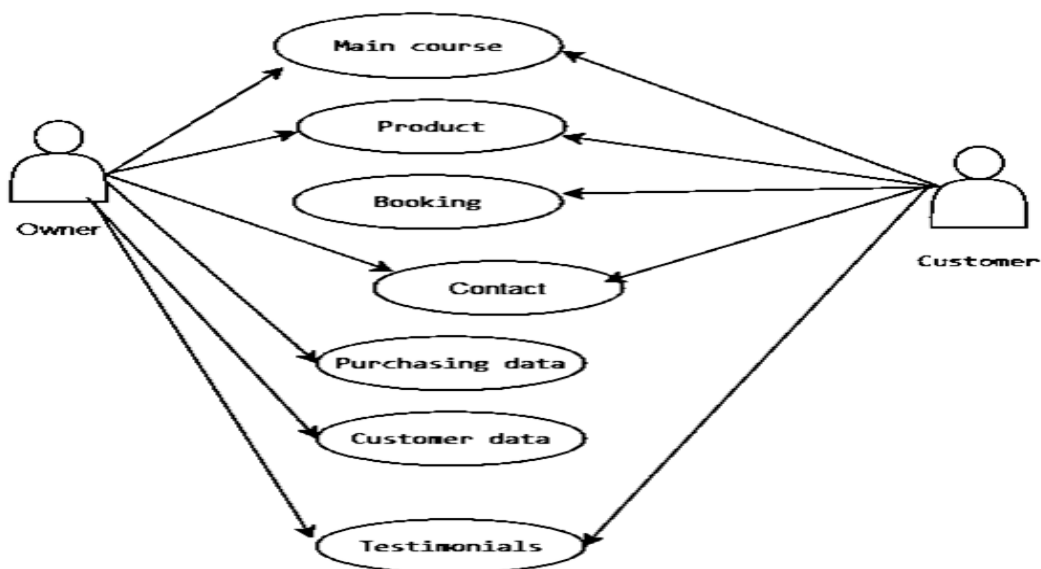


Figure 3 Use case diagram

Figure 3, A use case diagram is a visual representation of the interactions between actors (users) and a system. In the scenario described, there are two primary actors: business owners and consumers. The use case diagram outlines the functionalities accessible to each actor within the system.

For business owners, the diagram depicts several options they can access. Firstly, they can access the main menu, which likely serves as the entry point to the system. From there, they can navigate to specific sections such as the product menu, where they can manage and update information about their products or services. Additionally, business owners can access the contact menu, allowing them to communicate with customers or other stakeholders. Moreover, they have access to essential data menus, including order data and customer data, enabling them to track orders, manage customer information, and analyze business performance. Lastly, they can view testimonials from consumers, providing valuable feedback on their products or services.

On the other hand, consumers also have access to various functionalities within the system. Similar to business owners, they can access the main menu, serving as their entry point. From there, they can explore the product menu to browse available products or services. Consumers also can place orders directly through the system, streamlining the purchasing process. Furthermore, they can access the contact menu to reach out to the business for inquiries or support. Lastly, consumers can view testimonials from other users, helping them make informed decisions about their purchases based on others' experiences.

System Development

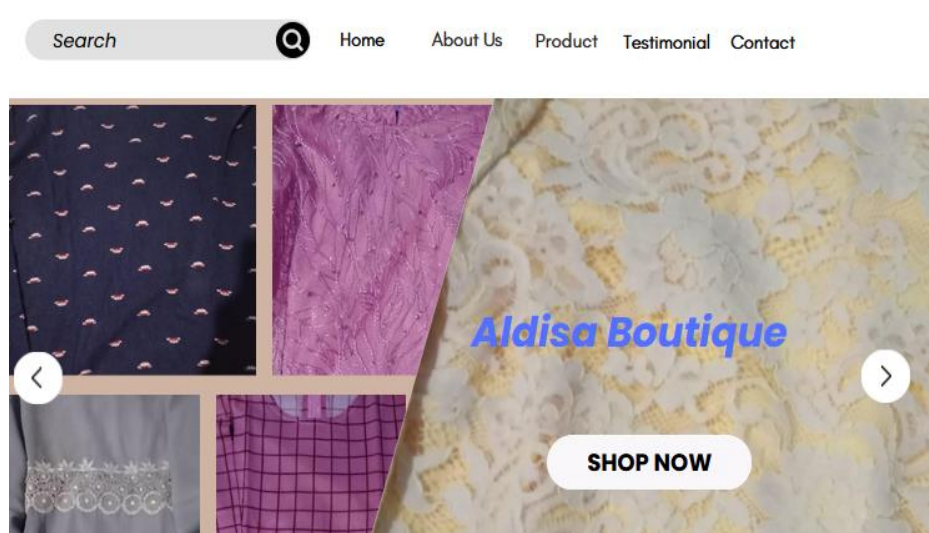


Figure 4 Women's fashion website for Aldisa Boutique

In Figure 4, The website for Aldisa Boutique has been meticulously crafted to offer an intuitive user experience. Upon entering the site, visitors are greeted with a streamlined home menu that effortlessly guides them through the different sections. From learning about the boutique's story in the "About Us" page to exploring the diverse range of products available in the "Products" section, every aspect of the website is designed to captivate and engage consumers.

One of the standout features of the website is its emphasis on personalization. Within the "Products" section, customers have the freedom to select clothing motifs that resonate with their individual style preferences. Additionally, the website offers a seamless browsing experience, allowing shoppers to easily filter items by size, ensuring that they find the perfect fit with minimal effort.

Furthermore, the inclusion of a "Testimonials" section adds a layer of authenticity to the browsing experience. Here, satisfied customers share their experiences, providing valuable insights and building trust among potential buyers. Finally, for any inquiries or feedback, the "Contact" page offers a convenient way for consumers to reach out to the boutique, fostering a sense of accessibility and customer care. In essence, the Aldisa Boutique website is not just a platform for purchasing clothing; it's a digital space designed to delight and cater to the needs of its discerning clientele.

CONCLUSION

The application of the Joint Application Design (JAD) method in developing a Website-Based Women's Clothing Sales Information System has had a significant positive impact in producing solutions that suit the needs and expectations of business developers. Through this

collaborative approach, we were able to identify deep business needs, user preferences, and obstacles that needed to be overcome in using the system. The JAD implementation session that was held successfully involved various stakeholders, including business developers, teams, sales staff, and end users. Good and collaborative discussions allowed us to thoroughly understand the business context, the challenges faced in selling women's fashion online, as well as user expectations for the new system. The application of the JAD method has been successful in producing effective and efficient solutions in the context of information system development. The resulting system can improve the performance of women's fashion sales online, increase customer satisfaction, and expand the market for business developers. Overall, this research provides an important contribution to the understanding of how the Joint Application Design (JAD) method can be applied in the context of information system development, especially in online sales of women's fashion at Aldisa Boutique.

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