

## The Customer Relationship Management Concept Increases Customer Commitment

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**Abstract**—The advancement of information technology has encouraged business actors, including retail enterprises such as Toko Jaya Fashion, to adopt digital strategies in order to maintain and enhance customer commitment. Toko Jaya Fashion still operates using a manual sales system, resulting in low efficiency in customer data management and a noticeable decline in sales, particularly at the end of 2024. This study employs a qualitative research method by observing a single case in detail. This approach allows the researcher to gain a comprehensive understanding of the issues studied. This study aims to design and implement a web-based Customer Relationship Management (CRM) system as a solution to address these issues. The system is developed using the PHP programming language and MySQL database, and is equipped with features such as member cards, cashback programs, monthly sales reports, and online customer service. Based on the implementation results, the system significantly improves service quality, broadens marketing reach, and assists in managing customer data in a structured manner. It provides easier access to product information, offers special promotions for loyal customers, and facilitates customer feedback through WhatsApp integration. Moreover, the adoption of this CRM website has expanded product sales to customers outside the Meranti area, enabling Toko Jaya Fashion to reach more customers and increase overall satisfaction, thereby strengthening customer commitment.

**Keywords**—Customer Commitment, Customer Relationship Management, Information System, MySQL, PHP, Toko Jaya Fashion, Website

### I. INTRODUCTION

The growing intensity of business competition compels entrepreneurs to continuously innovate and optimize their marketing strategies to ensure their products are more creative and capable of attracting customer interest [1]. Leveraging information technology contributes to improved operational efficiency and reinforced customer engagement, thereby allowing retail businesses to maximize profits and sustain long-term customer loyalty [2].

Customer commitment refers to a customer's willingness to maintain a long-term relationship with a store or product, with the aim of achieving mutual benefits [3], [4]. The characteristics of customer commitment include sustained loyalty, a tendency toward repeat purchases, a willingness to recommend a product to others, and a corresponding level of satisfaction [5]. Given these characteristics, it is essential for businesses facing declining customer commitment to adopt strategies that directly strengthen customer relationships and foster loyalty [6].

One of the solutions that can be implemented to address these issues is the use of a web-based Customer Relationship Management (CRM) system. CRM is a business approach that integrates processes, technology, and human resources to build and maintain strong relationships with customers [7][8]. The implementation of Customer Relationship Management (CRM) enables Toko Jaya Fashion to manage customer data effectively, deliver more personalized services, and create added value that enhances customer satisfaction and loyalty [9][10]. According to Pasla (2023), CRM provides benefits for both companies and customers by fostering strong relationships, which ultimately lead to increased revenue [11]. In the context of Toko Jaya Fashion, implementing a CRM system is expected to directly address the decline in customer commitment by enabling more targeted marketing efforts and personalized customer engagement.

To evaluate the effectiveness of the proposed CRM solution in enhancing customer commitment, this study adopts a research methodology designed to capture in-depth insights into the store's operational context and customer interactions. Hanifudin (2020) states that Customer Relationship Management has a direct influence on customer commitment. A strong relationship with customers can enhance satisfaction, which positively impacts increased sales and customer loyalty toward the store [12].

This study aims to design and develop a web-based CRM system as a strategy to enhance customer commitment at Toko Jaya Fashion. The system will include features such as member cards, cashback programs, sales reports, and online customer service.

## **II. METHOD**

This study employed a descriptive qualitative approach to examine the implementation of a web-based Customer Relationship Management (CRM) system in enhancing customer commitment at Toko Jaya Fashion.

Toko Jaya Fashion, a retail clothing business located in Dusun X Meranti, previously relied on manual marketing and sales processes. This condition limited the dissemination of product information, reduced competitiveness, and made it difficult to attract and retain customers. Sales data from 2024 indicated a significant decline, particularly in the final quarter, due to unstructured manual record-keeping. The absence of a loyalty program and the inability to identify loyal customers further weakened customer engagement [13]. Therefore, a digital strategy was deemed necessary to improve operational efficiency, expand market reach, and strengthen customer commitment [14].

The research process involved an in-depth case study observation to obtain a comprehensive understanding of the store's operational conditions and system requirements.

### **A. Research Framework**

The research framework outlines the systematic stages undertaken to address the problems identified in this study. The following illustrates the research framework applied in this study:

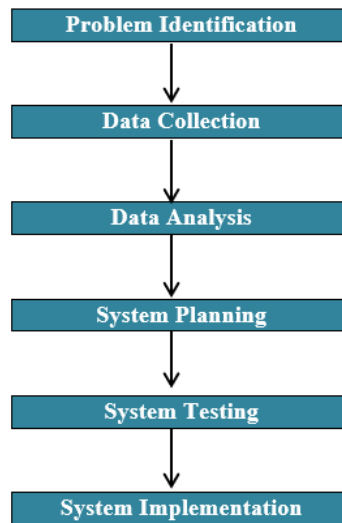


Figure 1. Research Framework

This study was conducted through six main stages: (1) Problem identification based on observations of the manual sales system at Toko Jaya Fashion (2) Data collection through direct observation, interviews with the store owner, and literature review (3) Data analysis to formulate system requirements (4) Design of the web-based CRM system, including the development of flowcharts, UML diagrams, and user interface (5) System testing using the black-box method to evaluate functionality and (6) System implementation in the store's operational environment.

### B. Data Collection Techniques

Data collection techniques refer to the methods used to gather the necessary data and information required for conducting a research study [15]. The data collection techniques used in this study are as follows:

#### 1) Observation

Observation was conducted by directly monitoring sales and customer service activities at Toko Jaya Fashion. This technique aimed to gain a factual understanding of the store's operational conditions, including the transaction flow and customer interactions.

#### 2) Interview

Interviews were conducted with the store owner, Mr. Diyon Kasmula, to gather information regarding the challenges faced, particularly those related to the sales recording system and customer management.

#### 3) Literature Review

A literature review was carried out by examining books, journals, and other scholarly references related to the concepts of Customer Relationship Management (CRM), information systems, and customer commitment.

## III. RESULT AND DISCUSSION

### A. System Analysis

System analysis was conducted to identify and evaluate issues within the existing information system in order to formulate development solutions that better align with the actual needs [16] [17]. At Toko Jaya Fashion, the product marketing process remains manual and relies heavily on customers visiting the store in person. As a result, the delivery of product information is limited and less responsive, thereby reducing the

store’s competitiveness in attracting new customers and maintaining the loyalty of existing ones.

This system aims to support the sales process, strengthen customer relationships, and increase loyalty. Based on the analysis results, the system requirements were designed according to the three-stage CRM architecture: Acquire, Enhance, and Retain [17]:

1) *Acquire (Attracting New Customers)*

The system should provide features such as regularly updated product information, customer testimonials, registration forms, and online product ordering to allow potential customers to become familiar with and interested in Toko Jaya Fashion without the need for an in-person visit.

2) *Enhance (Strengthening Customer Relationships)*

To strengthen relationships with customers, the system provides an online complaint channel for customers experiencing issues. The admin's responses to these reports help build effective communication and enhance customer trust.

3) *Retain (Retaining Customers)*

The system will display real-time promotional information, offer discounts, cashback, and a member card program, as well as provide rating and suggestion features. These are intended to maintain customer satisfaction and encourage long-term loyalty.

Table 1. Strategic Objectives of the Customer Relationship Management (CRM) System at Toko Jaya Fashion

Strategic Objective		Indicator		System Implementation Features
Increase Acquisition	Customer	Growth in Base	Customer	User Interface, Product Display, Registration, Testimonials, Discount Feature, Cashback, Member Card, and Online Ordering Features.
Enhance Satisfaction	Customer	Customer Satisfaction Index	Satisfaction	Product Review, Chat Feature, and Product Availability Display.
Improve Quality	Service	Order Quality Monthly Reports	Index,	Electronic Progress Report Feature.
Strengthen Relationships	Customer	Number of Feedback and Suggestions	Feedback	Feedback & Suggestions Form, Email Communication Feature.

The designed system illustrates the main processes required to fulfill user needs within the context of Toko Jaya Fashion’s customer engagement. Based on these needs, the core functions managed by the system administrator include:

1. The system, developed using PHP programming language and MySQL database, enables product marketing and sales information to be displayed via the Toko Jaya Fashion website.
2. The system facilitates the display of available products, pricing, discounts, cashback offers, member card benefits, live chat support, and stock availability—ensuring customers receive timely and responsive service.
3. Customers can directly place orders through the website, integrated with CRM processes to support smooth transactions and customer engagement.

The system architecture supports three user roles: administrator, customer, and store owner. The administrator, typically a staff member of Toko Jaya Fashion, holds full access to manage product data, orders, and customer interactions. The customers can view product information and make purchases via the system. Meanwhile, the store owner has extended access rights to monitor system operations, evaluate sales reports, and make strategic business decisions. The primary objective of this system is to streamline the sales process and provide accessible, reliable services and product information to customers, thereby increasing satisfaction, strengthening loyalty, and supporting sustainable business growth.

Table 2. Access Rights

No	Actor	Description
1	Admin/Staff	The admin is a user responsible for and granted full access to manage all data, including store profile, product categories, products, orders, and payments.
2	Customer	Customers can view the store profile, purchasing procedures, product categories, all available products, and provide feedback on marketed products.
3	Owner	Oversees the entire store operation, evaluates sales reports, and makes strategic decisions for business development.

**B. General System Design**

The general system design provides an overview of the processes within a newly developed system, aiming to offer users a comprehensive understanding of the system’s overall functionality [18].

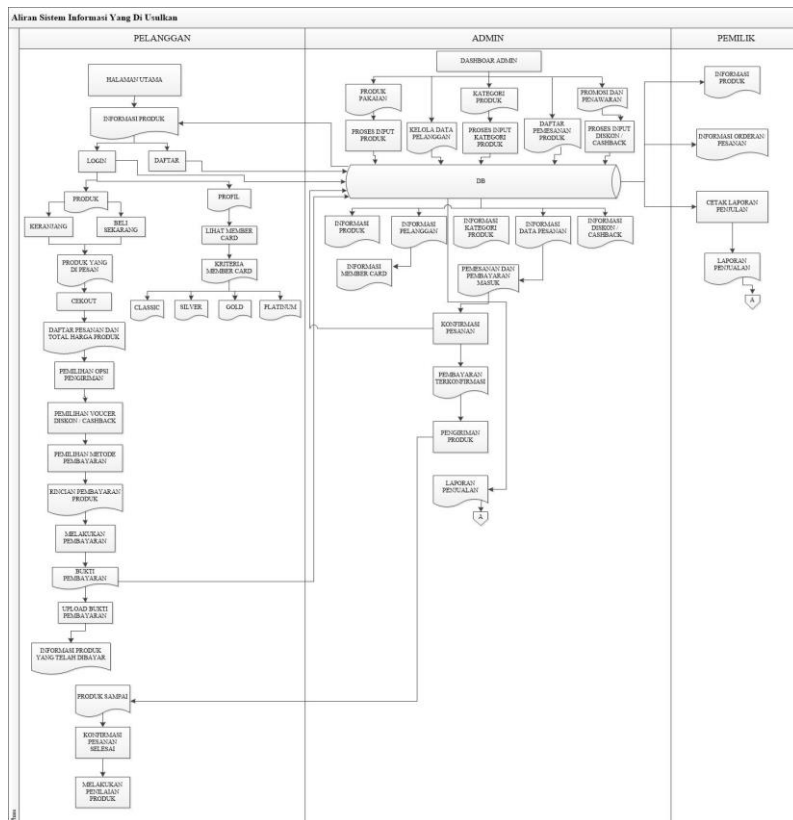


Figure 2. Proposed Information System Analysis

The system flow begins when a customer accesses the homepage to view products, then proceeds to log in or register if they do not already have an account. After selecting products, the customer can add them to the cart, proceed to checkout, and complete the payment. The admin verifies the payment, processes the shipment, and records the transaction. Once the order is received, the customer confirms receipt. Meanwhile, the store owner can monitor sales activities and print reports for business evaluation.

**C. Unified Modelling Language**

The Unified Modeling Language (UML) is a standard modeling language used to visualize and document the structure and behavior of software systems [19], [20]. UML facilitates the analysis and design process by providing various integrated diagram types, allowing both developers and stakeholders to gain a comprehensive understanding of the system.

1) Usecase Diagram

A use case diagram represents the interaction between the system and its actors to achieve specific goals [18]. It describes what functions the actors can perform within the system.

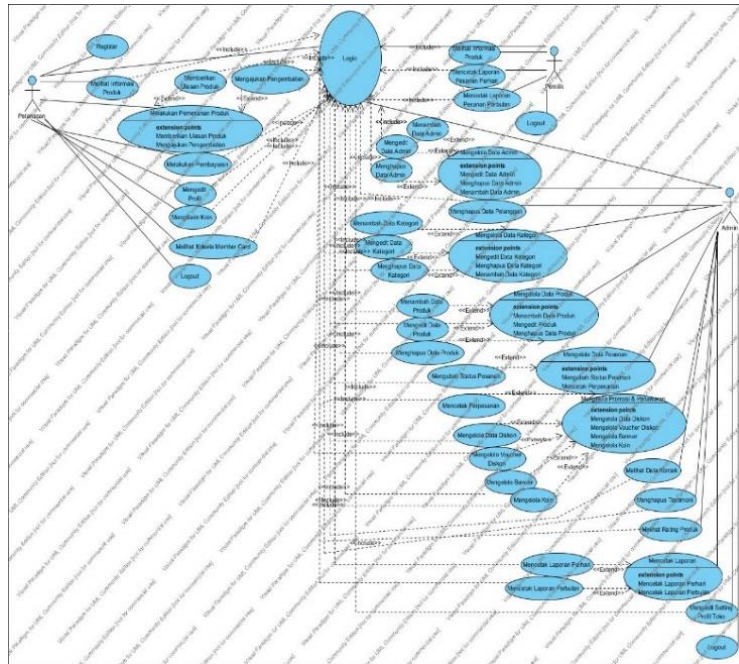


Figure 3. Usecase Diagram

The Customer Relationship Management (CRM) system of Toko Jaya Fashion involves three main actors: the admin, who manages the overall system operations; the owner, who monitors sales data and reports; and the customer, who can access product information, manage their profile, and provide feedback through the system.

2) Class Diagram

The class diagram below illustrates the specifications of each class and how they interact within the system, as shown in the following figure.

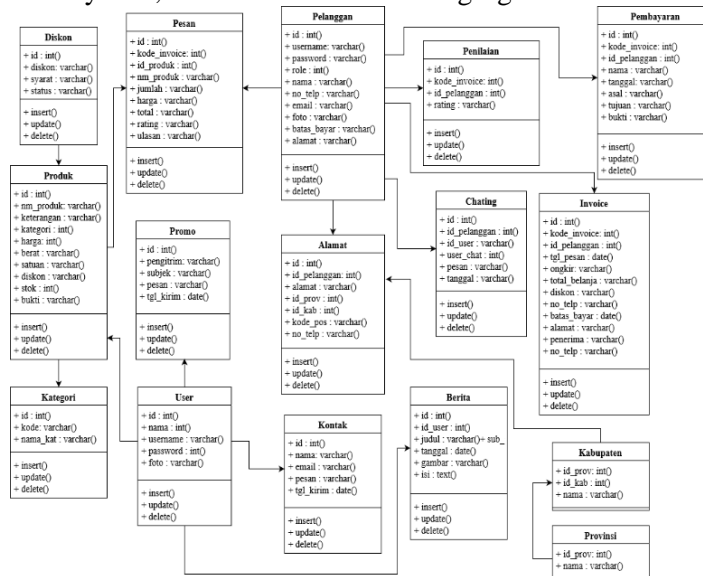


Figure 4. Class Diagram

3) Entity Relationship Diagram

The Entity Relationship Diagram (ERD) is a model used to describe the relationships between entities in a database [18]. ERDs assist in designing an organized and

integrated database structure, allowing for a clear understanding of data relationships. This model serves as a foundation for developing a well-structured and system-appropriate database.

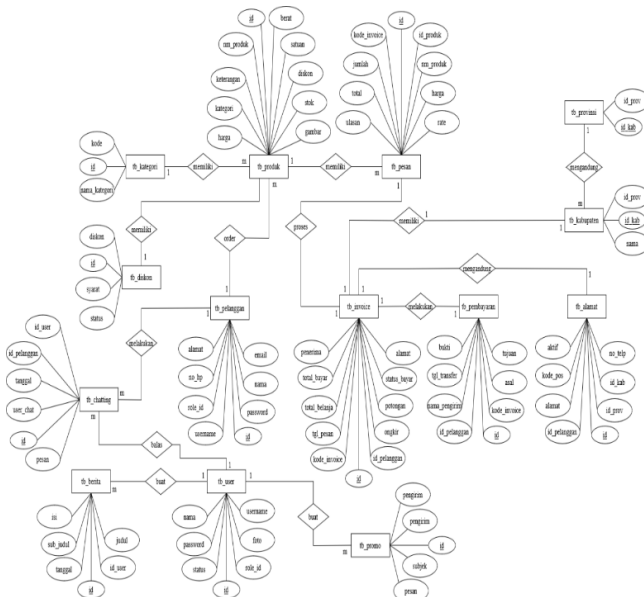


Figure 5. Entity Relationship Diagram

**D. System Testing**

**1) Blackbox Testing**

Testing was conducted using the Black Box Testing method, which focuses on evaluating the system's functionality without examining the internal code structure. The primary objective is to identify errors or deficiencies in the software [21]. The testing scenarios in this study are described as follows:

Table 3. Login Page Testing (Customer Session)

Valid Case and Result (True)			
Input Data	Expected Output	Observation	Conclusion
Entering valid email and password	If login data is valid, the customer is redirected to the customer homepage.	Valid login data	Accepted
Invalid Case and Result (False)			
Incorrect or empty email and password	Display error message: incorrect email or password.	Invalid login data	Accepted

Table 4. Checkout Page Testing (Customer Session)

Valid Case and Result (True)			
Test Action	Expected Output	Observation	Conclusion
Click "Finish Shopping" button	Display order data, courier service options, and courier service details.	Valid order data	Accepted
Invalid Case and Result (False)			
Click "Continue Shopping" button	Redirect to product form page.	Order not finalized	Accepted

Table 5. Registration Page Testing

Valid Case and Result (True)			
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Test Action	Expected Output	Observation	Conclusion
Filling in all registration data completely	Display success message and save data to database.	Valid input data	Success
Invalid Case and Result (False)			
Incomplete registration data	Display message indicating incomplete data and prompt user to complete the form.	Invalid input data	Success

Based on alpha testing using the Black Box method, the Customer Relationship Management system at Toko Jaya Fashion has functioned as expected from a functional standpoint. However, further testing is required involving end users to assess the system's usability, as well as web testing tools to evaluate website performance and compatibility across devices.

**E. System Implementation**

System interface implementation was carried out for each program module developed. The following are the interface displays of the Customer Relationship Management (CRM) system implemented at Toko Jaya Fashion:

1) *Product Page Display*

The product page provides detailed information about each item sold by Toko Jaya Fashion.

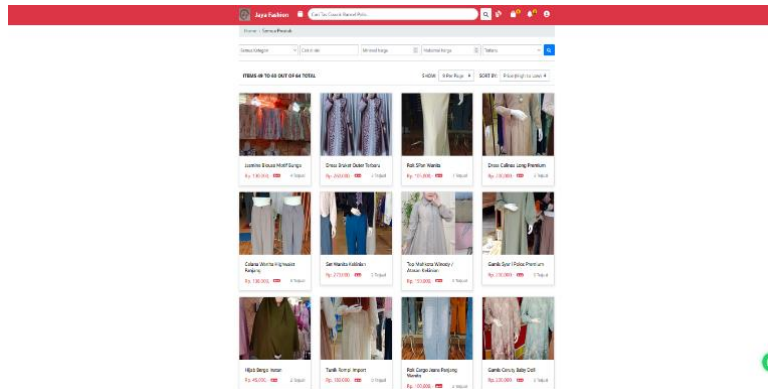


Figure 7. Product Page Display

2) *Payment Page Display*

This page displays the payment confirmation details submitted by customers after completing their transactions.

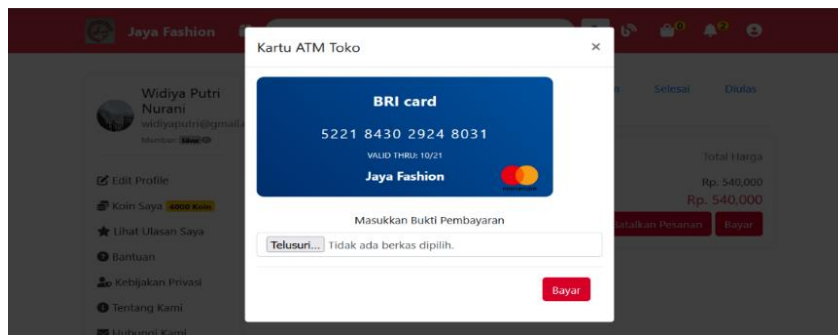


Figure 8. Payment Page Display

3) *Member Card Display*

The member card interface presents membership benefits tailored to customer loyalty levels.



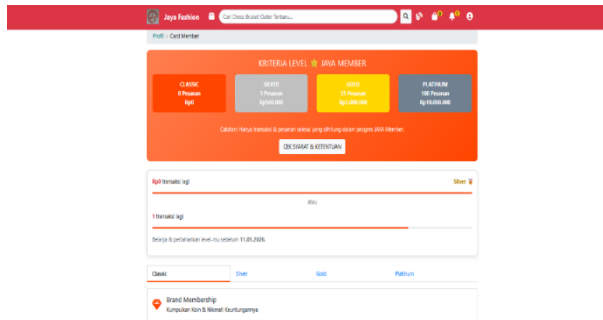


Figure 9. Member Card Display

## V. CONCLUSION

The implementation of a web-based Customer Relationship Management (CRM) system at Toko Jaya Fashion has successfully addressed challenges related to manual customer management and sales processes. The system, developed using PHP and MySQL, enables online sales processing, enhances service efficiency, and strengthens customer commitment. The CRM website offers features such as product information, promotional programs, discounts, cashback, free shipping, and a customer feedback channel via WhatsApp. Moreover, the system expands market reach beyond the Meranti area, potentially increasing sales and fostering long-term customer loyalty.

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