



## E-CRM DESIGN ON ACCESSORIES ROZI TANJUNG BALAI

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### Abstract

**Background :** Sales and marketing is the process of buying an item from one party to another by getting money from that party, either in the form of electronic goods, clothing, food and others. Rozi's accessories shop is located on Jalan. Sudirman Tanjungbalai is one of the businesses engaged in the sale. So far, Rozi's accessories store has only done marketing by providing information through the store front promotion board. This will not be known to old customers or new customers because they have to come or go through the store first. In addition, the sales and transaction processes that are still manual are ineffective because they have to visit the location directly, making Rozi's accessories shop have to try to improve the store's performance in order to reach old customers and get new customers. **Method :** The method used in this research is Electronic Customer Relationship Management (E-CRM). **Result :** The results of this study are the E-CRM system produces product information to customers and facilitates transactions and can retain customers. **Conclusion :** The conclusion obtained is that E-CRM can be applied to sales of accessories to increase sales and attract new customers.

**Keywords:** Accessories, E-CRM, Customer, Web

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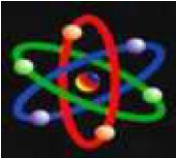
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## INTRODUCTION

Sales and marketing is the process of buying an item from one party to another by getting money from that party, either in the form of electronic goods, clothing, food and others. One of the businesses engaged in the business of selling accessories is watches, hats, necklaces, wallets, and others.

Rozi's accessories shop is located on Jalan. Sudirman Tanjungbalai is one of the businesses engaged in the sale. So far, Rozi's accessories store has only done marketing by providing information through the store front promotion board. This will not be known to old customers or new customers because they have to come or go through the store first. In addition, the sales and transaction processes that are still manual are ineffective because they have to visit the location directly, making Rozi's accessories shop have to try to improve the store's performance in order to reach old customers and get new customers.

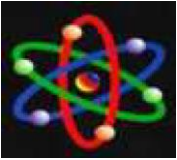
Problems with customers who have to come directly to the location to be able to buy products and make transactions directly. So far, customers don't know about new products unless they have to come to the store. Customers don't know there is a prize if they buy the most products and if they shop often. Customers have difficulty checking whether the product they are looking for is in the Rozi Accessories Store. And the last obstacle that occurs is the absence of media for customers to submit criticism, suggestions, reviews, assessments of product quality.

Based on the problems faced by Rozi Accessories Stores that have not been able to utilize internet information technology

as a process medium for selling the business. So the author wants to make one of the changes to the system, which was originally the system was still done manually and became a computerized system that has been online based on a web using the PHP and MySQL programming languages. The implementation of innovation in the development of information technology can provide results that can help promote and introduce their own business and also increase sales of goods by implementing Customer Relationship Management (CRM). E-CRM is a business strategy used to streamline a business process in a company related to customers [1]. Customer Relationship Management can be defined as an integrated function and marketing and service strategy that aims to increase revenue and customer satisfaction [2]. The real function of Customer Relationship Management is to establish a good relationship between the company and its customers in order to improve service quality [3].

Previous research that has applied the Customer Relationship Management (CRM) method is the research conducted by Janiar Puspa Wildyaksanjani and Dadang Sugiana stating that "Customer Relationship Management (CRM) is currently one of the strategies used by companies to better know and understand their customers, so that companies can provide the best service and foster better long-term relationships with customers [4]. Research conducted by Febri Zoni stated that "in the concept of CRM, it is important for a company to know and handle each customer according to their respective personalities. CRM is done by finding the right target customers and





increasing customer satisfaction to maintain and increase customer loyalty. Managing good relationships with customers is important because customers are the most important asset of a business that will bring the biggest profit to the company [5]. Research conducted by Ovi Dyantina, Mira Afrina, Ali Ibrahim stated that "One of the advantages in service improvement is the application of the concept of Customer Relationship Management (CRM). CRM is a business philosophy that describes a strategy of placing the client as the center of processes, activities and culture [6]. Research conducted by Henny Hendarti, Suryanto, Otto Fikri Septianto stated that "The purpose of this study is to analyze customer needs and satisfaction in the field of advertising services and design an attractive, user friendly and dynamic customer satisfaction site. How to do research using analytical methods, data collection methods and design methods [7]".

Based on previous studies, the built E-CRM system is able to increase customer satisfaction based on CRM features that can attract customers at Rozi Tanjungbali Accessories Store.

## RESEARCH METHODS

### Research Stages

Based on the research framework described above, the discussion of each stage in the research can be described as follows:

#### 1. Problem Identification

At this stage the identification of the problem at the Rozi Accessories Store is carried out. Researchers are looking for any problems that exist in the Rozi

Accessories Store that can harm the store.

#### 2. Research Design

At this stage about what the author will do for system design, and solutions to existing problems.

#### 3. Data Collection and Analysis

At this stage the researchers carried out the data collection process and the researchers also analyzed the data, using interviews and observations of the processes that occurred at the Rozi Accessories Store, so that the researchers obtained the data and information needed for this research.

#### 4. System Design

At this stage the researcher designs the system that is designed to design the output, input, file structure, programs, procedures, hardware and software needed to support the information system. If the system designed is not as desired, the researcher must carry out data collection and data analysis again.

#### 5. Implementation and Testing

At this stage the system that has been designed will be tested to find errors that exist, and if there is an error in the system designed, the researcher must redesign the system so that the system has no more errors.

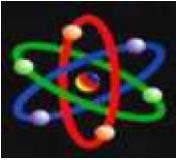
#### 6. Result Analysis

At this stage it is used to see whether the results of the system design made are in accordance with the user's request so that conclusions can be drawn.

### Research methods

The method used in this study is a qualitative method. How to solve problems with explanation, interpretation, and





writing. Then the situation or event is analyzed and conclusions are drawn. General or specific investigation of the issues discussed To explain and explain the situation Rozi Accessories Store.

The system is designed by applying the theories of Customer Relationship Management (CRM) and using information system flow design, Unified Modeling Language (UML) and system implementation in system development and applying research reviews from studies. To design this system, the author uses the PHP programming language and MySQL as the database server.

### ***Customer Relationship Management (CRM)***

E-CRM (Electronic Customer Relationship Management) itself is a method in managing the relationship between customers and companies to increase loyalty to the products offered by utilizing electronic media [8]. E-CRM is an adaptation of CRM in an e-commerce environment and builds and maintains customer relationships by using a network based on a business strategy that requires the development of a set of integrated software applications for processing [9]. Electronic Customer Relationship Management (E-CRM) is a method of managing the relationship between the company and its customers in order to increase consumer loyalty for the products or services offered by the company by utilizing electronic media [10]. The types of CRM applications that can be used are:

#### **1. Operational CRM**

Operational CRM is an integrated business process automation. The main goal of operational CRM is to provide a customer experience that will provide

added value to customers so as to increase customer satisfaction, and satisfied customers will continuously lead to customer loyalty.

#### **2. Analytical CRM**

Analytical CRM is an analysis of data generated by operational CRM, including data mining applications. The main purpose of analytical CRM is to use customer data so that companies can always know what their customers think.

#### **3. Collaborative CRM**

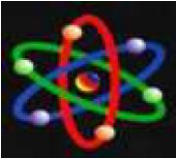
The main purpose of collaborative CRM is to encourage and spread customer loyalty to other customers who are still not at the level of loyal customers and to become a place of contact between customers who are scattered everywhere and the company [7].

### **System Development**

There are several stages in the SDLC, namely planning, analysis, design, implementation, and maintenance.

1. Planning or planning stage aims to identify and prioritize what systems will be developed, and the goals to be achieved.
2. Analysis or systems analysis stage is a research stage on existing systems with the aim of designing new systems or updating existing systems. At this stage, literature study activities are carried out to determine a case that can be handled by the system, as well as identify the previous system for system development.
3. Design or system design stage is the stage to determine the process stages or techniques to implement a new system or a system developed from





the previous system. The design process also requires an analysis of the function of each stage or technique that is built.

4. Implementation or system implementation stage is the stage to implement the design of the stages of the system being built or developed as well as conducting trials on the system.
5. Maintenance or system maintenance stage is the process of maintaining the system during use so that it is still able to operate correctly [11].

## RESULTS AND DISCUSSION

The results to be discussed in this study include the following:

### Analysis

The procedure for the analysis of information systems running, namely. The customer comes to the rozi accessories store and sees the store's products after that the customer chooses the desired product. The selected product will be given to the cashier, the cashier makes an invoice and will be given to the customer. Then the customer checks the invoice and the invoice has been checked and the money is given to the cashier to make a payment transaction, the cashier makes a payment transaction and the invoice is paid and the product is given to the customer. The cashier makes a sales report and is given to the leadership, the leader files the sales report.

No	Customer name	Address
1	Khairul	Jln. Anwar idris
2	Amran sitorus	Jln. Sutomo
3	Irfan	Jln. Suprpto
4	Fahmi amri	Jln. M. U. Damanik

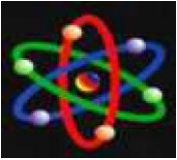
		ujung gg. Sepakat lk. Iv
5	Aldi	Jln. M abbas
6	Mela	Jln. Arteri
7	Jihan	Jln. M abbas
8	Dika	Jln. Sudirman
9	Boy sahputra	Jln. Selat lancing
10	Rahmat hidayat	Jln. Selat lancing

Table 1. Customer Data

Description of customer data: the data collected is customer data who often buys products at the Rozi Accessories Store and the owner remembers these customers and records the names.

Analysis of system requirements based on an analysis of problems in ordering and purchasing to be able to carry out sales transactions to become sales reports. The system is to implement a web-based system with the Customer Relationship Management (CRM) method to reach customers widely. With the implementation of this system, information processing of products sold with the help of internet services will be carried out so that the ordering process, sales, customer data management can run optimally and the transaction process can be stored in the database system created. The analysis of the system proposed in this study is to have a procedure that is. Customers select and add products to the shopping cart, then view the shopping cart and make a payment, upload proof of payment transfer. The cashier manages product data, transactions, payments, customers and chat after that view orders and confirm payments after that print invoices, invoices and products are given to the courier. Courier receives the invoice and the product and makes a receipt after which the receipt and product is given to the customer. The customer receives the product and confirms the product has





arrived. Then the customer gives a rating. The cashier prints a sales report and gives it to the manager. The leadership receives the report and is archived.

### Modeling

Research conducted by compiling UML one of which is a use case diagram. UML (Unified Modeling Language) is one of the language standards that is widely used in the industrial world to define requirements, make analysis and design, and describe architecture in object-oriented programming [12]. UML is a relatively open standard controlled by the Object Management Group (OMG), an open consortium of companies. Where OMG was formed to create standards that support interoperability, especially for object-oriented systems [13].

Use case diagram is a series or description of a group that is interrelated

and forms a regular system that is carried out or supervised by an actor [14].

Class diagram is a model that describes the structure and description of classes and can connect between other classes. Class diagram describes the model used in the design of attributes and functions that will be used to build a new system [15].

### System Implementation

System implementation is a stage of system design that has been carried out and then system development is carried out. After that, the implementation of the system is carried out to ensure that the system is in accordance with the design made. The following is a system display that is made related to the Customer Relationship Management (CRM) method.

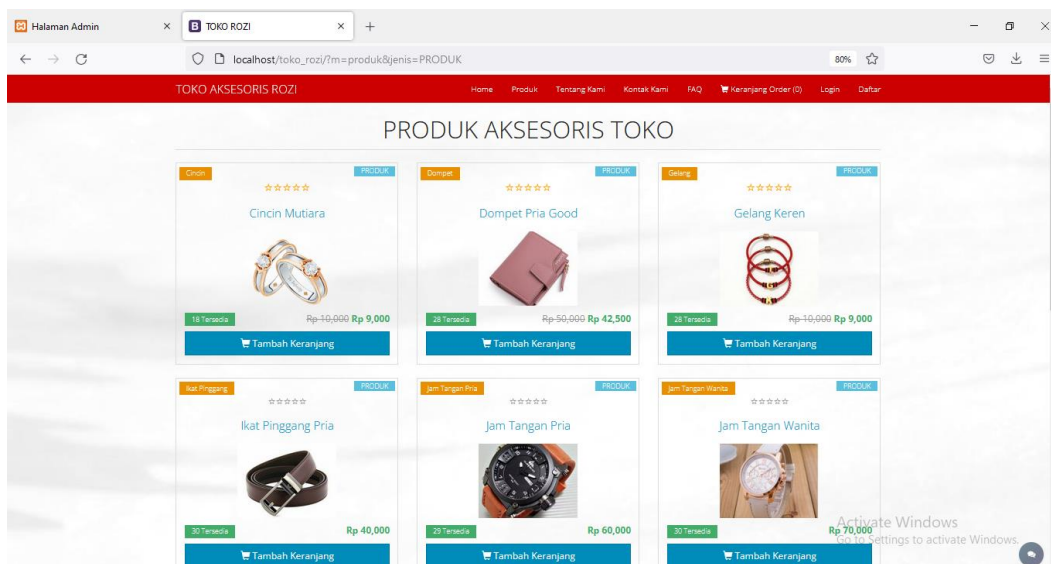


Figure 1. Product Display



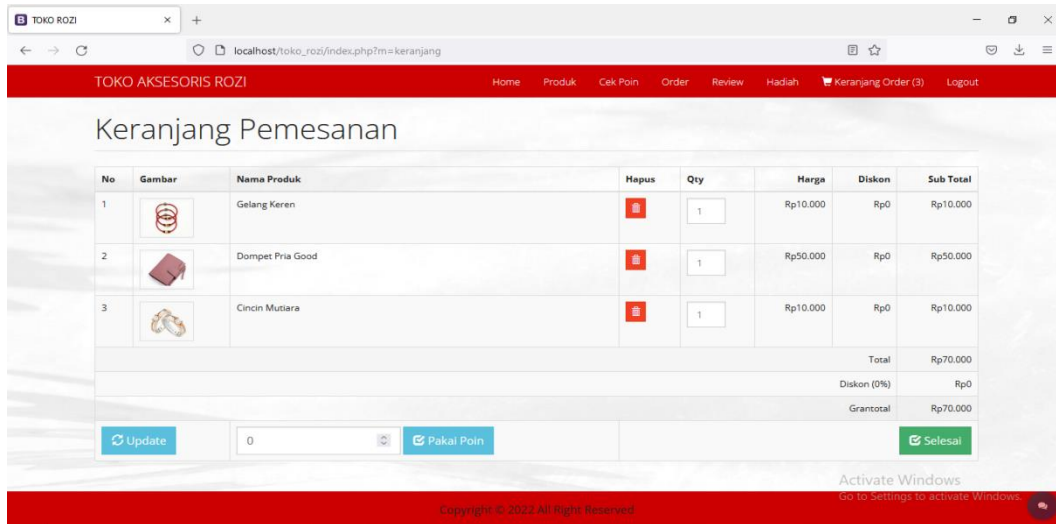
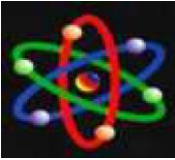


Figure 2. Shopping Cart Display

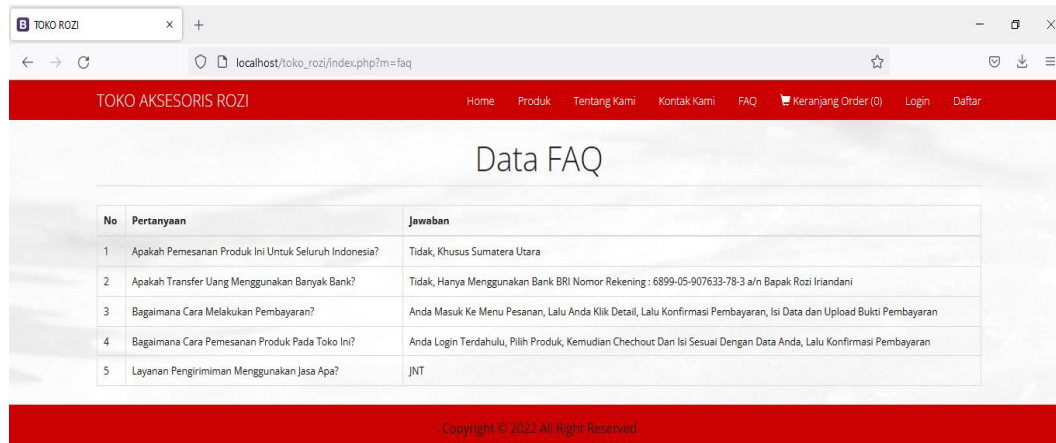
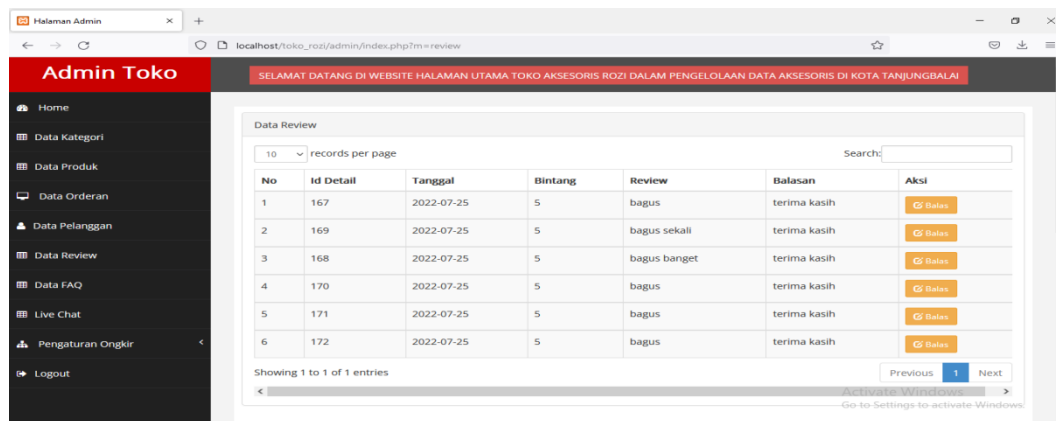


Figure 3. FAQ Display



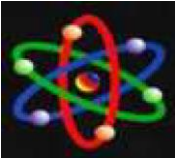


Figure 4. Product Review Display

The screenshot shows the 'Admin Toko' interface. The main content area is titled 'Data Pelanggan' and displays a table with 5 rows of customer information. The table has columns for 'No', 'Nama', 'Username', 'Alamat', and 'Telpon'. The data is as follows:

No	Nama	Username	Alamat	Telpon
1	Aldi	aldi	Jln. M abbas tanjungbalai	082344662788
2	Amran sitorus	amran	Jln. Sutomo tanjungbalai	082277389383
3	Fahmi amri	fahmi	Jln. M. U. Damanik ujung gg. Sepakat lk. Iv	087726336277
4	irfan	irfan	Jln. Suprpto tanjungbalai	082277387722
5	khairul	khairul	Jln. Anwar idris tanjungbalai	082287889033

Figure 5. Display of Customer Data

The screenshot shows the 'Pimpinan Toko' interface. The main content area is titled 'Berikan Hadiah' and contains a form for giving gifts. The form has a dropdown menu labeled 'Pilih hadiah' and two buttons: 'Simpan' and 'Kembali'.

Figure 6. Display of Giving Gifts

In Figure 1 is a display of shop accessories products where there is product information, ratings and comments or reviews of customers who have purchased the product. The product display that is included in the Customer Relationship Management (CRM) system is that the store provides discounts or discounts on each product that customers want to give discounts.

In Figure 2 the display of the basket which is included in the Customer Relationship Management (CRM) system is that the store provides service using

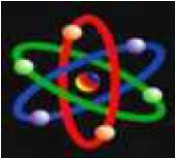
points, every customer shopping will get points for each total shopping and will be used as a total shopping discount in the system.

In Figure 3 the display of the faq which is included in the Customer Relationship Management (CRM) system is an information store with frequently asked questions to the store for customer information.

In Figure 4, the product review display that is included in the Customer Relationship Management (CRM) system is that the store provides product review







services and gives stars to the products offered by the store.

In Figure 5 the customer data display that is included in the Customer Relationship Management (CRM) system is a store that integrates customer data as an effort to collect computerized customer data.

In Figure 6 the display of giving gifts which is included in the Customer Relationship Management (CRM) system is the store leader giving gifts to customers who have ordered 5 times in a row in the system.

## CONCLUSION

Based on the research results, the conclusions obtained are the results of designing a system for Rozi Accessories Stores by applying the Customer Relationship Management method to make it easier to provide information about products, place orders and product transactions, and improve customer service with live chat features, comments, shopping points, and provide gifts for customers with the most purchases.

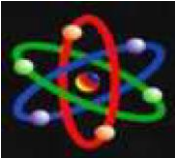
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