

The Use of E-CRM as a Means of Selling Groceries

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Customer Relationship Management (CRM) is a type of management regarding the management of a company with its customers to improve relationships with customers to maximize company growth. To implement Electronic-Customer Relationship Management (E-CRM), the role of information technology and human resources of the company is needed. E-CRM can make it easier for customers to get the necessary information from the company. Wholesale Berkat Doa is one of the basic food distributors that sells various kinds of basic necessities such as rice, oil and sugar which are the most demanded needs. To see these basic food products, customers must come directly to the store because there is no intermediary media to convey and provide product information to customers. The purpose of this research is to create an E-CRM system so that sales at Wholesale Berkat Doa can be done online. By implementing the E-CRM system, it can help Wholesale Berkat Doa to market and sell basic food products to customers. Customers know product information in detail and with CRM features namely members, discounts, promos, live chat, points, vouchers and reviews can maintain relationships with new and old customers which makes loyal customers to keep shopping at Wholesale Berkat Doa.

Keywords—E-CRM, Sales, Basic Foods

I. INTRODUCTION

Customer Relationship Management (CRM) is a type of management regarding the management of a company with its customers to improve relationships with customers to maximize company growth [1][2]. CRM implementations can be developed to acquire new customers [3], improve relationships with customers, and retain customers which will ultimately lead to the creation of customer loyalty [4]. CRM can be adapted to Electronic Customer Relationship Management (E-CRM) [5]. To implement E-CRM, the role of information technology and human resources of the company is needed [6]. The role of information technology as a leading medium in the process of accelerating information is the main reason for business people to have and use it, such as banking, insurance services, sales that provide services to customers who make transactions online or use the internet [7].

E-CRM can make it easier for customers to get the information they need from the company [8][9]. This is a means to maintain the company's relationship with customers in order to realize customer loyalty [10]. By designing a new system, customers and the company will be able to cooperate well with marketing transactions [11]. E-CRM is an approach in business that manages the relationship between stores and customers in terms of communication and marketing [12]. This concept has been known and widely applied to improve service in stores [13].

Sales is the purchase of an item from one party to another party by getting compensation from that party, whether in the form of electronic goods, clothing, food and others [14]. Wholesale Berkat Doa is one of the basic food distributors that sells various kinds of basic necessities such as rice, oil and sugar which are the most demanded needs. To see these basic food products, customers must come directly to the store because there is no intermediary media to convey and provide product information to customers. Then in the process of ordering products, customers use the phone or also customers come directly to the store to carry out the transaction process [15]. Grosir Berkat Doa does not have another alternative to do the ordering process if the customer does not have time to

come to the store or the customer does not have credit to contact the store when ordering products. This is one of the conditions that must be fixed by the store.

Grosir Berkat Doa needs a media, namely in the form of a system that integrates marketing, ordering and customer service into an online-based application that can manage the relationship between the company and its customers, by creating a website that implements E-CRM [16] [17] such as research conducted by [18] because the E-CRM system can reach customers far away so that communication with customers can be maintained. Other research by [19] which concludes that with the existence of a website-based E-CRM application, it is expected to be a company solution in company service management and can utilize customer databases and their complaints to become input and improvement of the company and can make it easier for customers to place orders.

Other studies using E-CRM [20] They concluded that by building an E-CRM system in Kemuning Chips SMEs using PHP and Mysql languages can help ease the work in processing and storing chip sales data and with the implementation of E-CRM in Kemuning Chips SMEs provides convenience to customers in knowing information on types, prices, and discounts on each package. Customers can communicate directly with business owners in this way customers can provide news, suggestions or orders without having to come to the store.

The purpose of this research is to produce a sales system using web-based E-CRM. So that the existence of this system can help Wholesir Berkat Doa in marketing and selling products online and maintaining relationships with new and old customers, and with the CRM feature applied to the system, customers will be happier to shop so that sales can be more optimal [21].

II. RESEARCH METHOD

This research uses a qualitative method with the following research stages :

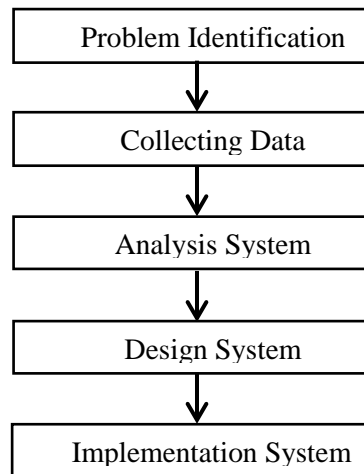


Figure 1. Research Stage

A. Problem Identification

Problem identification is an important first step in the research process. In this stage, the researcher identified a problem that occurred in Wholesir Berkat with the problem of limited marketing reach because it only carried out direct promotions at sales locations or stores. Grosir Berkat Doa has not utilized computerized information technology to manage sales data and strengthen relationships with customers, and it is difficult to provide information about prices, discounts, and promos to customers.

B. Collecting Data

Data collection is carried out to obtain the information needed. Researchers collect data in various ways, including conducting interviews, observations, and literature studies. The interview was conducted by interviewing the owner of Wholesale Berkart Doa and obtaining product data and sales data.

C. Analysis System

After collecting data, the researcher analyzed the system and found a solution to the existing problem, namely by building an E-CRM that can help promotion, sales, and customer service at Wholesale Berkart Doa.

D. Design System

From the results of problem identification and system analysis, the researcher then designs a system that will be built using PHP and MySQL programming languages, including designing databases, user interfaces, inputs, outputs, and other activities.

E. Implementation System

System implementation is the procedure carried out to complete the design in the approved system design document and test and use the system that has been created.

III. RESULTS AND DISCUSSION

The results of the needs analysis obtained are the input data needed in the E-CRM system. The input data will be the initial data for the E-CRM system where later customers can see the product data they want to buy. Meanwhile, the output needs analysis is in the form of a web-based E-CRM program display that can be used when you have activated the local server, XAMPP. The following is the initial input data for the E-CRM system in table 1.

Table 1. Product Data

No	Categori	Product	Price
1	Beras	Beras cap mahkota (10kg)	Rp. 137.000
2	Beras	Beras cap burung nuri (10kg)	Rp. 135.000
3	Gula	Gula vit (/kg)	Rp. 17.000
4	Kopi	Kopi Bintang Api	Rp. 3.500
5	The	Teh Sari wangi	Rp. 6.000
6	Susu	Susu Carnation	Rp. 14.500
7	Susu	Susu Tiga Sapi	Rp. 12.500
8	Garam	Garam Walet	Rp. 4.000
9	Kecap	Kecap Bangau (60ml)	Rp. 3.000
10	Minyak Goreng	Minyak Sinolin (2 Liter)	Rp. 29.000
11	Tepung	Tepung terigu cap jawara	Rp. 125.000
12	Air Mineral	Le Mineral (330 ml)	Rp. 2.500
13	Mi Instan	Indomie Rasa Soto Medan	Rp. 110.000
14	Detergen	Rinso Cair	Rp. 5.000
15	Pewangi Pakaian	Downy	Rp. 5.000

A. Design System

Before building a system, a design is needed with the aim of describing the overall system functionality [22]. The design of this system uses a use case diagram. The following are the results of the web-based E-CRM design.

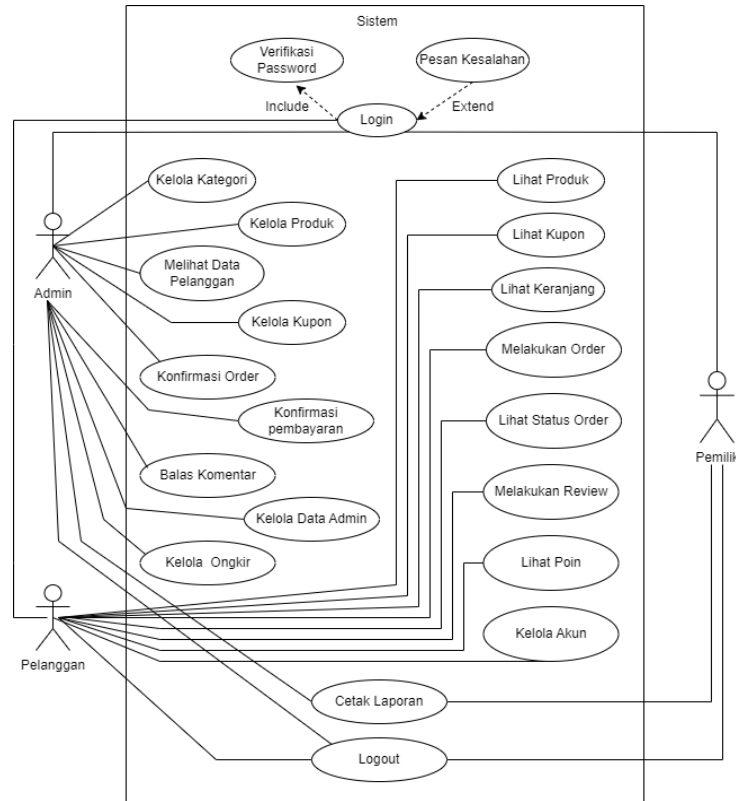


Figure 2. Use Case Diagram

The results of the use case diagram design aim to help identify and document the main functionality of the E-CRM system. In addition, it provides an overview of how users or actors will interact with the system. In the design we made, we determined the users who use the E-CRM system. there are 3 users who can log in to the E-CRM system, first the admin to manage the system. The admin's job is to enter product data, product categories, reply to chat messages, create promos, discounts and vouchers to view and print sales reports. The second user is the customer, who is the person who uses the system to buy the products sold, customers can use the chat feature to contact the admin, discounts and vouchers for shopping discounts. The third user is the owner where the owner can view sales reports on the E-CRM system.

B. Implementation System

After designing the system, the next stage is to implement the design that has been made into the web-based CRM program.

1) Home Page

The main page is the main menu for those who use this system.

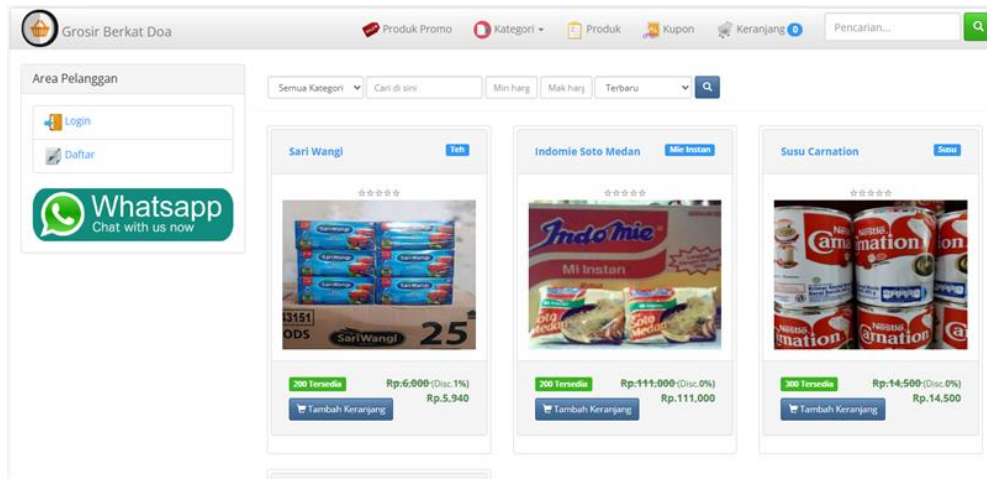


Figure 3. Home Page

2) Registration Page

The registration page is the page to register as a customer.

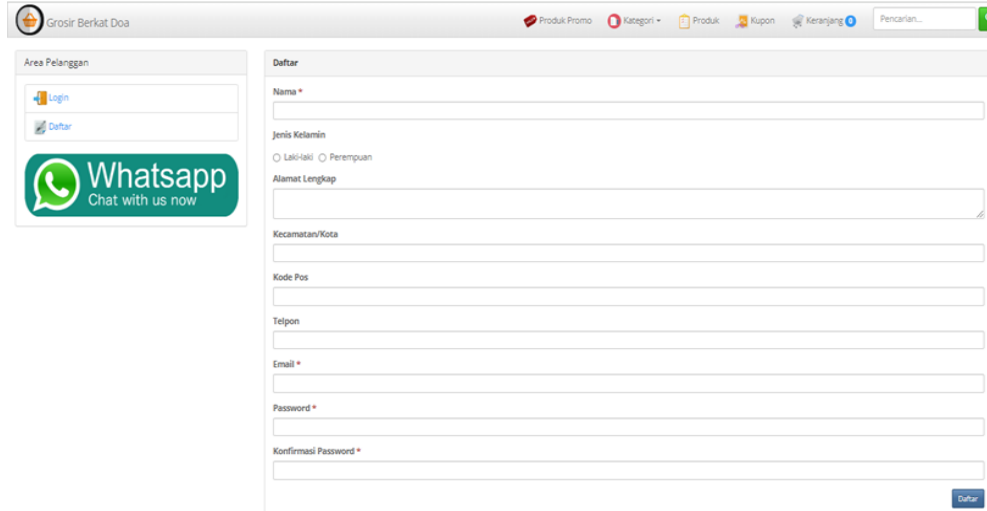


Figure 4. Registration Page

3) Login Page

The login page is a page that allows users to log in to the system and perform activities.

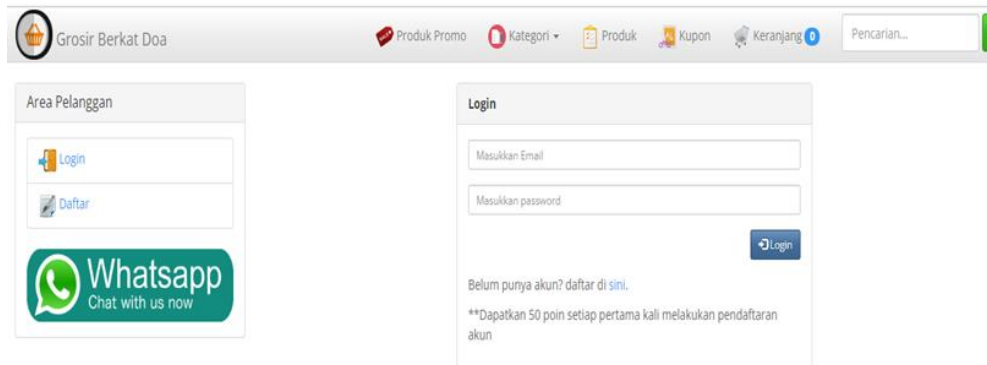


Figure 5. Login Page

4) Admin Dashboard View

The admin dashboard view is the main view when the admin has logged in to the system.

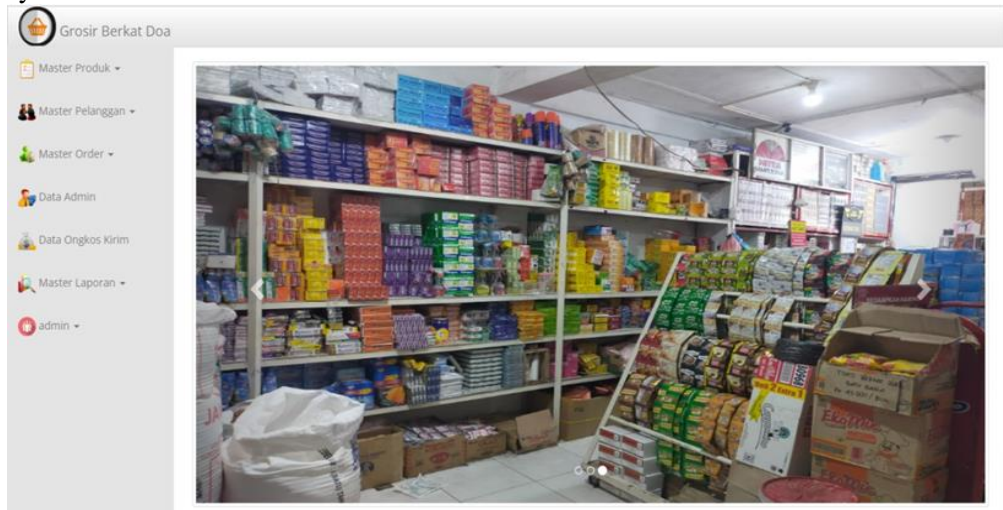


Figure 6. Admin Dashboard View

5) Category Menu Display

Category views are views that display product category data and can be managed by admins.

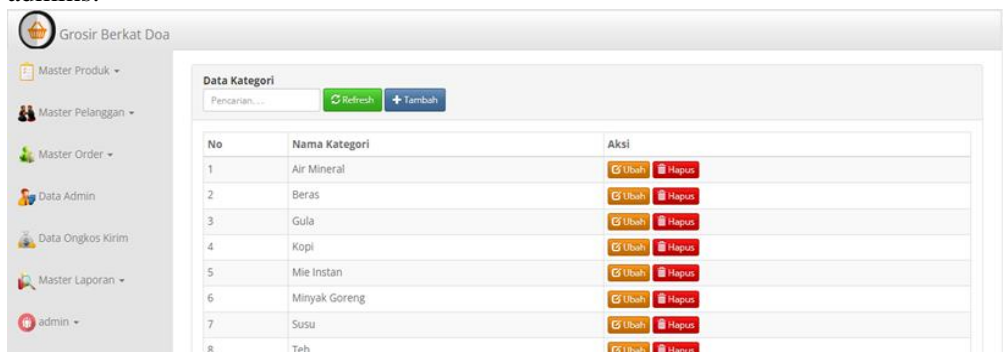


Figure 7. Category Menu Display

6) Product Menu Display

A product view is a view that displays product data and can be managed by an admin.

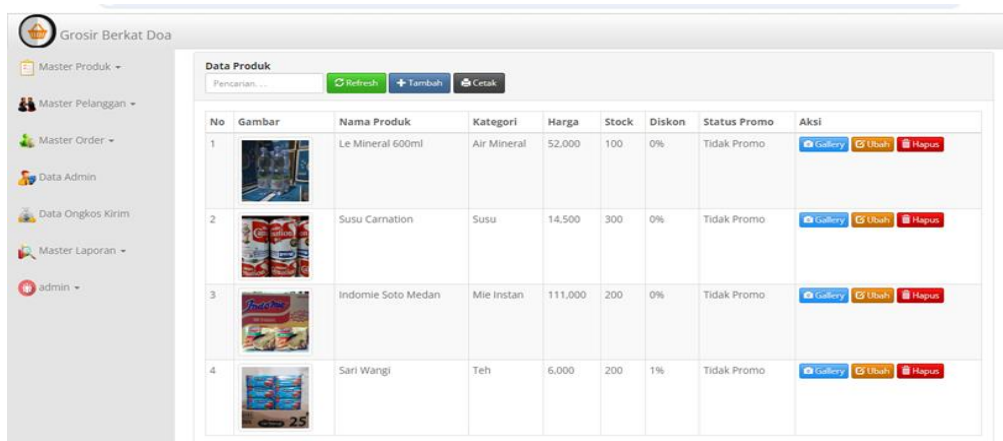


Figure 8. Product Menu Display

7) Customer View

A customer menu view is a view that displays the data of all customers.



Figure 9. Customer View

8) Coupon Display

Coupon view is a view that displays coupon data and can be managed by admins.



Figure 10. Coupon Display

9) Point Display

Point display is a display that displays the number of points owned by customers as well as the history of entry and exit points.

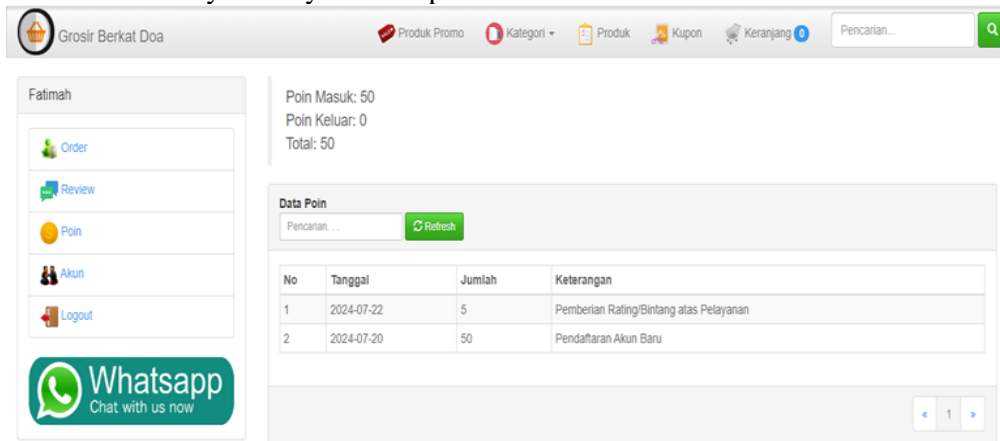


Figure 11. Point Display

10) Payment Display

The payment view is a view of the proof of payment data made by the customer.

No	Bukti Bayar	Atas Nama	Tanggal Pesan	Pelanggan	Kota	Total	Aksi
1		fatimah	22 Juli 2024	Fatimah	Talawi	Rp 124.000	Detail

Figure 12. Payment Display

11) Shipping Cost Display

The shipping fee view is a view that displays shipping cost data and can be managed by the admin.

No	Nama Kota	Ongkos Kirim	Aksi
1	Air Putih	Rp 10.000	Ubah Hapus
2	Datuk Lima Puluh	Rp 12.000	Ubah Hapus
3	Datuk Tanah Datar	Rp 10.000	Ubah Hapus
4	Laut Tador	Rp 12.000	Ubah Hapus
5	Limapuluh	Rp 10.000	Ubah Hapus
6	Limapuluh Pesisir	Rp 15.000	Ubah Hapus
7	Medang Deras	Rp 14.000	Ubah Hapus
8	Nibung Hangus	Rp 15.000	Ubah Hapus
9	Sei Balai	Rp 11.000	Ubah Hapus
10	Sei Suka	Rp 15.000	Ubah Hapus

Figure 13. Shipping Cost Display

12) Report View

A report view is a view that displays sales report data.

No	Produk	Jumlah	Total
1	Indomie Soto Medan	1	Rp 111.000
2	Sari Wangi	1	Rp 6.000

Figure 14. Report View

The grocery sales system using web-based E-CRM has been successfully created using the php programming language and Mysql database. Based on the results of the needs analysis, this system is important to be made because Groceries Berkart Doa does not have a medium for product promotion so that it can reach distant customers, customers must come directly to the store to buy products.

With this E-CRM system can help Groceries Berkart Doa in promoting products to expand marketing, sell products to distant customers and with the Chat feature to maintain communication with customers, Members for customers to get shopping points which can later be exchanged for shopping discounts, Vouchers to get product discounts.

The results of the implementation of the web-based E-CRM system This web-based E-CRM system can be run on a computer that has a local server application installed, namely localhost. This application runs using a web browser and the user interface is made as attractive as possible by combining several colors so that it is not monotonous to see. colors so that it is not monotonous to look at so that users who use this E-CRM system feel comfortable. this E-CRM system feel comfortable with the interface displayed.

IV. CONCLUSSION

From the research that has been carried out, it is concluded that the E-CRM system can help Groceries Berkart Doa to market and sell basic food products to customers. Customers know product information in detail and with CRM features namely members, discounts, promos, live chat, points, vouchers and reviews can maintain relationships with new and old customers which makes loyal customers to keep shopping at Wholesale Berkart Doa.

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