

APPLICATION OF E-CRM IN MUSHROOM SALES (A CASE STUDY OF BOMBOM BUSINESS)

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Abstract

Background : Bombom business is a business engaged in the sale and cultivation of mushrooms, where there are several types of mushrooms that are cultivated such as oyster mushrooms, ear mushrooms, straw mushrooms, button mushrooms, and toadstools. The location of this business is in Mangkai Baru Village, Lima Puluh District, Batu Bara Regency. Currently the process of selling mushrooms is only done manually, namely by coming directly to the business location and in marketing this business is still doing marketing directly through banners in front of the house and this business does not yet have a sales system that covers a wide area to market its products to a wider area. as outside the province. **Method :** The method used in this research is to apply Electronic Customer Relationship Management (E-CRM). **Result :** The results of implementing E-CRM (Electronic Customer Relationship Management) mushroom sales in the bombom business can improve service to customers and can increase mushroom sales in the bombom business. **Conclusion :** Based on the results of these studies, it can be concluded that E-CRM can help in the sale of mushrooms which can increase sales and can retain customers.

Keywords: E-CRM, Customer, Mushroom, Web

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INTRODUCTION

Bombom business is a business engaged in the sale and cultivation of mushrooms, where there are several types of mushrooms that are cultivated such as oyster mushrooms, ear mushrooms, straw mushrooms, button mushrooms, and toadstools. The location of this business is in Mangkai Baru Village, Lima Puluh District, Batu Bara Regency. Currently, the mushroom sales process is only done manually, namely by coming directly to the business location and product packaging is done using only transparent plastic so that it is less attractive to customers for product promotion. Mushroom product packaging sizes sold are kg, kg and 1 kg in raw or processed products.

Customer Relationship Management (CRM) is one of the means to establish a sustainable relationship between the company and its customers, by utilizing CRM the company will know what its customers expect and need, customer management strategies, starting from the marketing process, sales to after-sales service, which aims to increase customer satisfaction, which leads to customer loyalty [1]. The purpose of implementing CRM is that in CRM there is a means of managing customer feedback data and information that is very effective and can be used as a basis for knowing what customer needs are in order to obtain maximum customer satisfaction [2].

As for the previous studies, they are as follows: Research entitled "Development of Electronic Customer Relationship Management (E-CRM) at Aneka Sport Shoe Stores Malang with Dynamic CRM Framework Method". This study aims to

design and build Electronic Customer Relationship Management (E-CRM) software at the Aneka Sport Malang shoe store, to analyze system requirements based on information obtained from customers, for customers and by customers. This research was also conducted to utilize technology in maintaining good relationships with customers in order to form customer loyalty [3]. Research entitled "Sales Information System in Home Furniture Stores Based on Customers Relationship Management (CRM)". This study resulted in a Sales Information System at the Home Furniture Store at the Sumber Makmur Store. Based on Customers Relationship Management (CRM) using the web so that sales services were more effective [4]. Research entitled "Customer Relationship Management (CRM) for Website-Based Hotel Application Products". With the development of a Customer Relationship Management (CRM) Information System, the company can control all of your Hotel's clients effectively and efficiently. So that the process of recapitulating client data, making invoices, making proposals, making contracts using special applications, and the data is stored in a database safely and can be searched anytime efficiently [5]. Research entitled "Implementation of Web-Based Customer Relationship Management at the Medan Sablon Store". With an order using the Customer Relationship Management (CRM) method, the company will not have problems promoting, informing, updating the latest news, serving customers, thus helping customers in the process of ordering screen printing and payments [6]. Research entitled "Implementation of Customer Relationship Management





(CRM) in Web-Based Double Bakery". With this information system, it can make the Ganda Bakery better known and make it easier for visitors to obtain data about the data on goods to be sold and the CRM (Customer Relationship Management) implemented at the Ganda Bakery increases sales by up to 28% [7]. Research entitled "Application of Customer Relationship Management Strategy On Handicraft Sales". The results of the system research can provide the latest product information, discounts and other offers as well as provide comment facilities for customers and make it easy for customers to make online product purchase transactions [8].

In marketing this business is still doing marketing directly through banners in front of the house and this business does not yet have a sales system that covers a wide area to market its products to wider areas such as outside the province. The Bombom business already has many customers but the customer data is not yet computerized, for example in recording transactions it is still manual. In addition, the lack of a service system related to customers, namely the existence of criticism and suggestions, the existence of service to the customer, the interaction with the customer, the existence of the latest information on the customer causes the relationship between business owners and customers to be less than optimal. The current system in making orders and purchases must come to the business location. to make sales transactions. This requires time to go to the location and the transaction process is still done manually when a purchase occurs, a shopping receipt is made and then recapitulated into

a sales report. This makes it less effective and efficient.

In the bombing business, the decrease in the number of products sold every month of course this has an impact on the profits obtained by the business owner. Aware of the fact that customer satisfaction is important in a business, it is necessary to have a system that can help increase sales. The tight business competition in the current digital era has forced Bombom Business to carry out marketing strategies to manage its customers, increase new customers and retain old customers. In line with the current development of technology and social media, various efforts have been made to increase sales. One way that can be done to be able to compete in the world of business sales is to implement a system or method, namely CRM (Customer Relationship Management).

Based on these descriptions, a research will be conducted that aims to make an application of E-CRM to assist sellers in increasing sales and maintaining good relations between buyers and sellers in order to attract new customers in the Bombom Business by implementing Customer Relationship Management (CRM). With this research, Bombom Business owners can increase sales and expand the mushroom marketing process and can retain customers with Customer Relationship Management (CRM) features with discounted prices, earn shopping points and get prizes.





RESEARCH METHODS

Research Stages

The research process, it is necessary to have stages of research that are useful to assist in the preparation of this research. The stages of research used in this study are as follows.

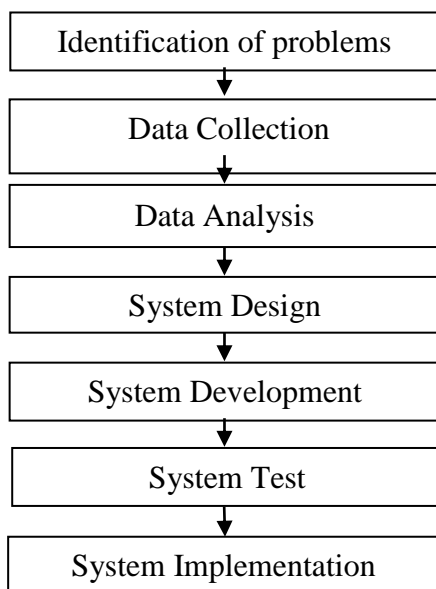


Figure 1. Research Stages

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

1. Identification of problems

Problem identification is one of the important research processes in research. Where researchers look for problems to be studied. Researchers here observe the process of selling Mushrooms at the Bombom Business still manually and the services provided are still not effective and efficient.

2. Data Collection

Data collection is the method used by researchers in data collection activities by taking mushroom data at the Bombom Business through observation, interviews and documentation.

3. Data Analysis

Data analysis is a process or effort to process data into information in a study. The analysis is carried out by using a sales strategy.

4. System Design

System design is an activity to design or design a system well to determine web-based Mushroom sales and make it easier for customers to make Mushroom purchase transactions. The design is done using Unified Modeling Language (UML), Flowchart, Database and User Interface.

5. System Development

System development is the process of making the system after the system design has been carried out. System development is carried out using the Hypertext Preprocessor (PHP) and MySQL programming languages.

6. System Test

System testing is the most important thing to determine errors or deficiencies in the system that has been made. Is the system that has been designed for Bombom Mushroom Business as expected.

7. System Implementation

The application of the system is a procedure and application of the system that has been approved in the design of the system with testing to operate the new system on selling Mushrooms using Blackbox.





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)

Customer Relationship Management (CRM) is an integrated function of sales, marketing, and service strategies aimed at increasing customer satisfaction [9]. Electronic Customer Relationship Management (E-CRM) is the use of technology that focuses on customers with the support of a quality customer database so that companies can find out customer needs now and in the future [10]. E-CRM is a CRM (Customer Relationship Management) which implemented in digital form such as using Android application media, web browser, e-mail, call center, as well as personalization directly between companies to customers which makes a company and its customers have entered online service technology [11].

CRM can be classified in 3 forms, namely Strategic CRM, Operational CRM,

and Analysis CRM. It can be explained as follows [12]

1. Strategic CRM is an effort to develop a culture or culture in a company to always be oriented to consumers/customers. Matters related to behavior to consumers, procedures for serving consumers and all other things that are reflected in behavior are part of Strategic CRM.
2. Operational CRM is an effort to automate the company in building customer relationships. Operational CRM is also often referred to as the company's "Front-Office". This CRM application plays a role in interaction with customers. Operational CRM includes an integrated automation process of all business processes, such as marketing, sales, and service automation. Operational CRM, for example, is to build online sales, making it easier for customers to buy or view products being sold. The results of the study conclude that operational CRM can provide benefits for customers and sellers, where for buyers feel they can get information quickly and for sellers this can be profitable in terms of time and efficiency.
3. CRM Analysis is part of the company's "Back-Office", CRM Analysis is useful in exploiting customer needs based on customer history, registration history, purchase data, and so on. So that the company can draw conclusions about the customer, it does not stop there, CRM analysis is also able to provide further analysis of the current trends, both from the market side and from the customer's needs side.





RESULTS AND DISCUSSION

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

Running System Analysis

The procedures for the analysis of information systems running are as follows:

1. Customers come to Bombom Enterprises to place orders. The cashier will provide information on the mushroom products in the Bombom Business.
2. Customers view mushroom products and select the desired mushrooms.
3. The selected mushroom product is given to the cashier.
4. The cashier will record and make customer orders.
5. The cashier creates an invoice and gives it to the customer.
6. The customer checks the invoice and the invoice that has been given to the cashier for payment transactions.
7. The cashier makes a payment transaction and an invoice for the order has been paid and the mushroom product is given to the customer.
8. The cashier makes a sales report and gives it to the leadership.
9. The leader files the sales report.
3. After that go to the product view and select and add the product to the shopping cart and check the product and enter the payment page.
4. The customer makes the payment and the order detail page appears.
5. The cashier opens the E-CRM application and logs in then enters the web page.
6. Then the cashier manages product data, transactions, payments, customers and chat.
7. After that go to the order page and confirm payment. After that print invoices, invoices and products are given to the courier.
8. Courier receives the invoice and the product and makes a receipt. After that the receipt and product are given to the customer.
9. The customer receives the product and confirms the product has arrived. Then the customer gives a rating.
10. The cashier prints the sales report.
11. New customers will get free shipping vouchers and old customers will get points and old customers who have ordered five times will get mushroom prizes.

Proposed System Analysis

Process analysis in this system is based on system requirements analysis, namely the system proposed in this study which has the following procedures:

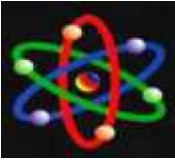
1. The customer opens the E-CRM application and registers by entering the registration page.
2. The customer logs in and goes to the customer page.

UML 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 [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]. The





following is a use case diagram in this study as shown in the following figure 2.

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].

In Figure 2 the use case diagram, the cashier will manage category data, product data and shipping data in which there is an input and delete process. The cashier also manages order data to confirm payments and complete customer orders. The cashier will also reply to chat and reply to customer reviews. Leaders will give prizes and only see data on categories, products, orders, customers and reviews. The customer will register for an account, select the product and checkout the product, view the order and confirm the payment, after that review the product and will get points and can do live chat.

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.

In Figure 3 it can be seen that the product display included in the Customer Relationship Management (CRM) system is a bombom attempt to provide discounts on every product that customers want to give discounts.

In Figure 4, it can be seen that the basket display included in the Customer Relationship Management (CRM) system is a bombom business providing services using points, every customer who purchases will get points for each total shopping and will be used as a total shopping discount in the system.

In Figure 5, it can be seen that the voucher display at checkout which is included in the Customer Relationship Management (CRM) system is the Bombom business providing free shipping vouchers for new customers who buy mushrooms at the Bombom business.

Figure 6 shows the display of gifts for customers which are included in the Customer Relationship Management (CRM) system, which is a bombom effort to give gifts to customers who have purchased mushrooms five times each time they buy mushrooms.



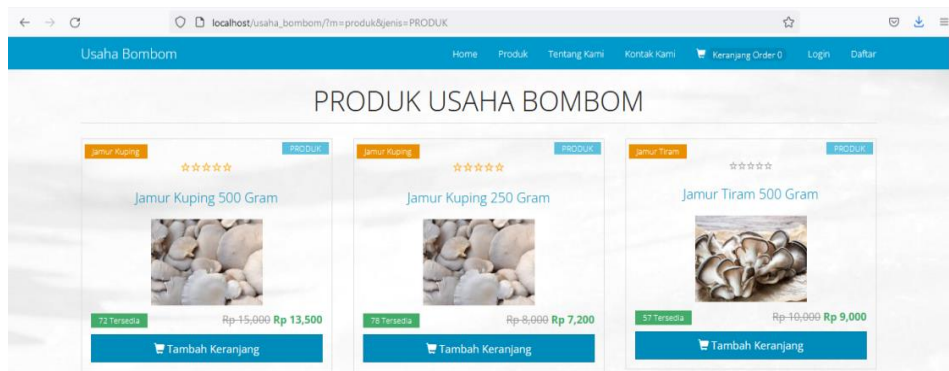
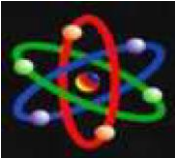


Figure 2. Product Display

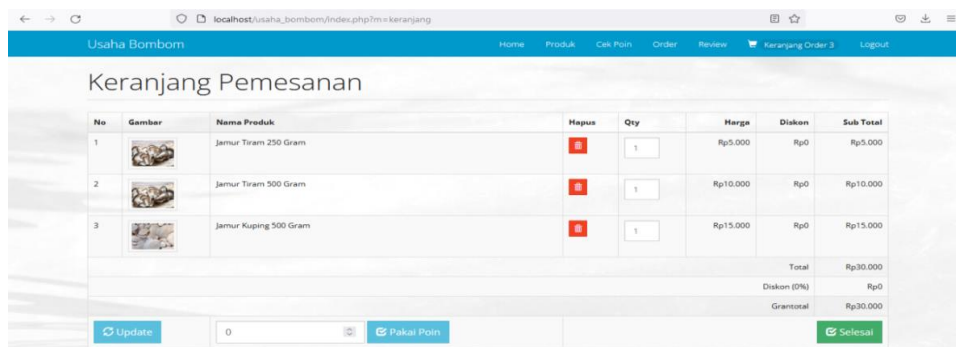


Figure 3. Shopping Cart Display

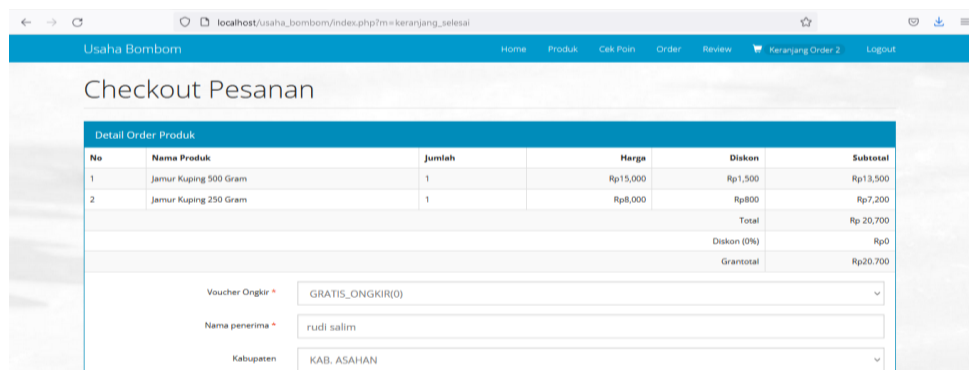


Figure 4. Shopping Voucher



No	ID Order	Nama Produk	Tgl	Nama	Hadiah	Total	Status	Aksi
1	126	Jamur Tiram 500 Gram	17 September 2022	Citra	1/4 Jamur	Rp 460,000	Dibayar	Detail
2	125	Jamur Kuping 500 Gram	17 September 2022	Citra		Rp 23,500	Selesai	Detail
3	71	Jamur Kuping 250 Gram	31 Agustus 2022	Citra		Rp 7,920	Selesai	Detail
4	69	Jamur Kuping 250 Gram	14 Agustus 2022	Citra		Rp 80,000	Selesai	Detail
5	63	Jamur Kuping 250 Gram	19 Juli 2022	Citra		Rp 13,000	Selesai	Detail

Figure 5. Reward For Customers

CONCLUSION

Based on the results of the research conducted, it can be concluded that the results of implementing E-CRM (Electronic Customer Relationship Management) mushroom sales in the bombom business can improve service to customers and can increase mushroom sales in the bombom business. The results of the implementation of E-CRM at the Bombom Business can 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 give gifts to customers with five times of mushroom purchases and special customers just will get free shipping.

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