IMPLEMANTION OF CUSTOMER RELATIONSHIP MANAGEMENT FOR PT. NISSAN MOTOR INDONESIA

Cindy Himawan[1], Ihsan Arif Budiyono[2], RB. Wahyu[3], Budi Sulityo[4], Rusdianto Roestam[5], Yuyu Wahyu[6]

(1) President University, (Contact : cindy.himawan@gmail.com)
(2) President University, (Contact : ihsanarifbudiyono224@gmail.com)
(3) President University, (Contact : rbw0101@gmail.com)
(4) President University, (Contact : budi241@yahoo.com)
(5) President University, (Contact : rroestam@gmail.com)
(6) President University, (Contact : yuyuwahyusr@yahoo.com)

Abstract

Manage relation with customer is important for company to grow up their business, especially for automotive company such as PT. Nissan Motor Indonesia. The success of company is depending on the ability to manage the relationship with the customer, in competitive business environment companies need to reorganize business processes and change the paradigm in serving customers. To achieve competitive advantage company should have a new paradigm in serving customers with business strategy known as Customer Relationship Management (CRM). The main objective of CRM is to improve the long-term growth and profitability through a better understanding and better service for the customer. CRM itself is not just an application that is used only as a call center or help desk, but also used as a marketing application and as a link (bridge) between the company and each of its customers. With CRM applications, businesses can learn customer service techniques, thus the customer satisfaction can be achieved and the relation between company and customers will be going well.

Keywords : *Customer Relationship Management, Information System*

1. Introduction

Nowadays, business rivalry is requires company to focus on the customer need based on the customer desire. The company starts to change their mindset of profit orientation toward other factors such as the interests of customers and the level of customer satisfaction become a major factor that must be considered by the company.

Customer Relationship Management (CRM) is marketing strategy to build a good relation between company and their customer. A good customer relationship is the key to business success. Relationship building and management, or what has been labelled as relationship marketing, is a leading approach to marketing [1]. Understanding the needs of customers and offering value-added services are recognized as factors that determine the success or failure of companies [3].

The company can coddle the customers and binds them in friendship if the company already knows the customer need and customer expectation. This strategy recommends that company to open up the channels of communication as easy as possible with a high response rate, so the customers feel closeness with the company. Noncurrent communication can foster customer doubts. With close relationship between company and customer that make the customer a sense of belonging. From there, their loyalty to the company little by little will grow and flourish. Thus, despite the company will benefit from the CRM application, which has a loyal customer. [2]

The development of technology especially the internet, not only have an impact on communication and information technology, but also a great contribution for businesses to provide services to customers that are marked by the emergence of e-commerce and e-business. E-CRM (Electronic–Customer Relationship Management) is development of CRM. E-CRM is CRM web-based that created in order to create a system that give advantages compared with its competitors. In accordance with the general purpose of CRM is to create and maintain a good relationship with customers and reduce the likelihood of customers switching to a competitor's product. Good E-CRM implementation would bring the company to maintain customer loyalty, especially those customers who routinely buy the Nissan's Product.

In order to increase profit and built a good communication between company and customer, PT. Nissan Motor Indonesia needs good strategies and the right application or system that can handle their communication with their customer. In addition, they may focus to the application and their customer but do not forget the product quality. Right now, the company not yet implements any specific application that can help them to build a good communication to their customer. The company responds the customer complaint only by phone, fax, and email. The customer need making call by phone to Nissan Care for a complaint, and the process is take a long time for get service, because limited Nissan Care staff that can receive complaint by phone. When customer complaint, they just serve as good as possible. They not try to find customer need and make their relationship closer. If company continues to do this to communicate and serve their customer, they will not only be difficult to promote their product. Also, they will lose their customer.

This research aims to develop E-CRM that can help the company to give the better service to customer. This system provides some main features, such as complaint system that can help the company to accommodate more complaint from the customer, give faster response, and more customers can be serving in a day, and also the company can use the complaint as references to improve their product quality. Order system, which can help the customer to order the Nissan part or accessories online and it can improve the order size of PT. Nissan Motor Indonesia. Booking system, which can help customer to booking the schedule for their service.

2. Methodology

The research methodology used in this research is Waterfall. Called as Waterfall because the first stage must be done before continue to the next stage. Below are stages for developing this system:

- Observation
  Do observation and research directly in the PT. Nissan Motor Indonesia to collect the data.
- Analysis
  Analysis of the data used is based on the SWOT (Strengths, Weaknesses, Opportunities, and Threats) analysis to maximize the Strengths and Opportunities, but at the same time can minimize the Weaknesses and Threats.
- Design
  Create Unified Modeling Language (UML) for designing software development and Entity Relationship Diagram (ERD) to explain database structure.
- Coding
  Next stage is making the system, using PHP MySQL as main web programing language.
- Testing
  Next stage is testing the system, whether the system run well or not. Testing method is black box, which means involve all users who will use this system.

3. Discussions

SWOT analysis is an analysis that evaluates the Strengths, Weaknesses, Opportunities, and Threats. This process involves determining the specific purpose of the business and identifying the internal and external factors that support and or not in achieving that goal. Based on the result of SWOT analysis, there are several conclusions that can be taken during observation process:

- Customer need facility that easier to use and give faster response for their complaint.
- Difficult for the customer to checking the progress of their service.
- Customer needs booking service facility for service their car.
- Company need to know the customer satisfaction.
- Company has to provide online order for Nissan part or accessories.
- Company needs other option for do a promotion.
- Company needs system that can accommodate more complaint a day.

In the system, user divides by 2 part, customer and NMI staff. Each NMI staff has responsibility, which the responsibility is referring to Segregation of Duties concept. Segregation of duties (SoD) is the concept of having more than one person required to complete a task. In business the separation by sharing of more than one individual in one single task is an internal control intended to prevent fraud and error [4].

Table 3.1. *Table of Users*

Customer	NMI Staff
Member	Nissan Care
Buyer	Customer Relationship
	Customer Service
	Marketing
	Engineer
	Sales

This system needs an internet connection in order to access it. All information that is needed by the user will be saved in the database (MySQL). User authentication is required for all users to use the system. The main activities are needed in the system as follows:

- Login and Register.
- Sending a data into the database.
- Showing information in the system interface.

In modeling a system, an object-oriented system analysis is conducted. Figure 3.1 shows details of the swimlane for user to check the service schedule. Begin with the customer click my service schedule tab and then the

system will display list of service schedule based on user id.

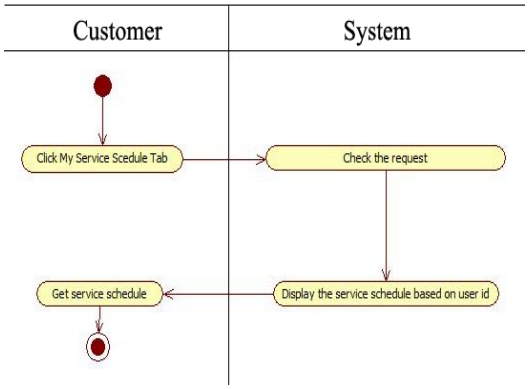

Figure 3.1 *Swimlane of My Service Schedule*

Figure 3.2 shows the details of the swimlane for user to request test drive. Begin with the customer fill the test drive form and then the system will check the required information, if the information is suitable with the format then the system will save the data in database and the customer get success message. All inputted data will be stored into database.

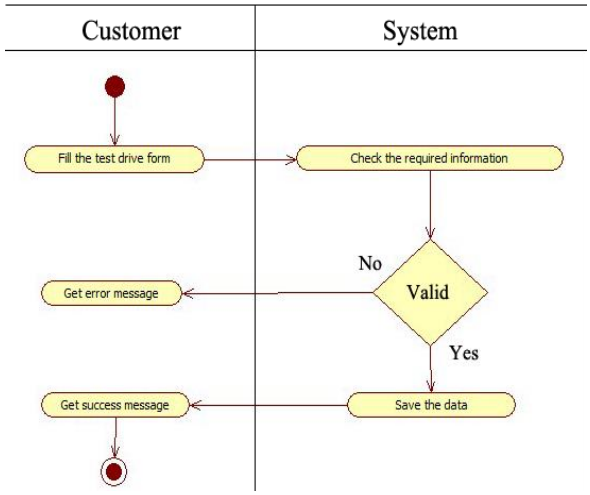

Figure 3.2 *Swimlane Diagram of Request Test Drive*

Figure 3.3 shows the details of the swimlane for user to make new order. Begin with the customer choose the product and fills the order from. After done, the system will check the required information. If the required information is valid, then the system will save the data into the database. If the customer did not make a payment within 24 hours, then the order will be canceled. And if the customer make a payment, the order process will be continue until the customer can check the order with progress is received.

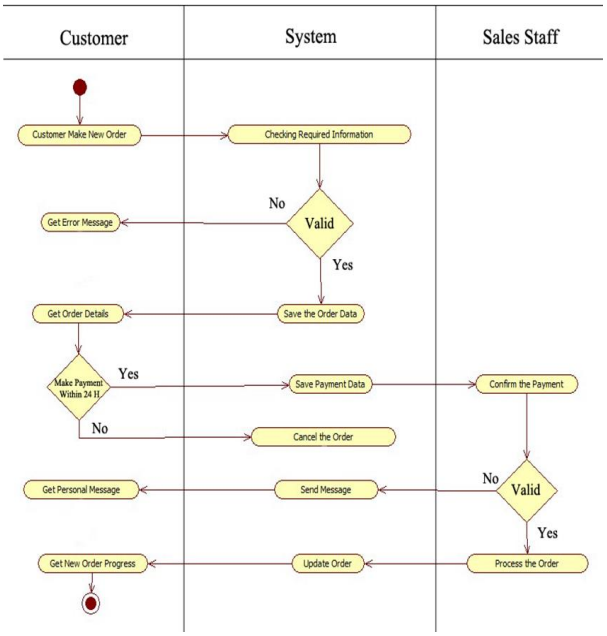

Figure 3.3 *Swimlane Diagram of Creating New Order*

While the use-case diagram for the customer is shown in Figure 3.4.

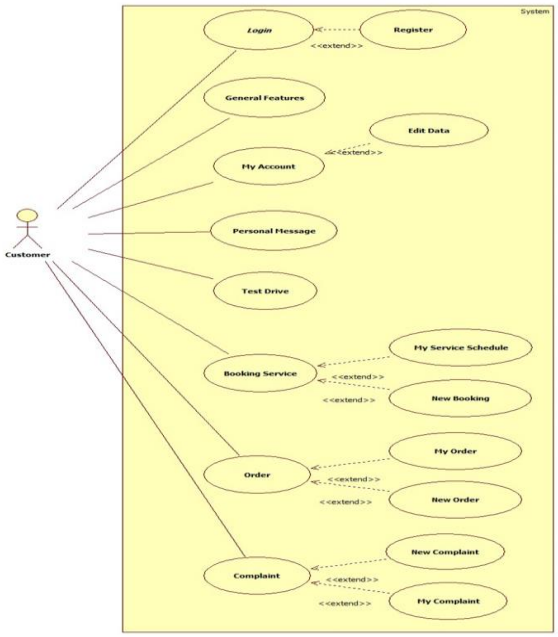

Figure 3.4. *The use-case diagram for the customer*

The features that customer can access depend on the type of customer itself. Below are the menus for the customer:

1. Register

This menu accommodates an unregister user to register as a customer (member).

2. Login

This menu accommodates a customer (member and buyer) for input a login data. This menu has verification of the login data, whether valid or not valid.

3. General Features

There are some menu such as, History, Career, Nissan Product, Nissan Genuine Accessories, Nissan Insurance, Technology and Design, Dealer, News, All Promotion, Maintenance Cost, and Contact Us. Each menu displays the information about the menu itself.

4. My Account

This menu function is to show all customer data, about username, password, personal data, and also car's data for the buyer.

5. Personal Message

This menu function is to display all incoming message from NMI Staff.

6. Test Drive

This menu function is to provide a form for the customer to request test drive for specific cars of PT. Nissan Motor Indonesia.

7. Booking Service

This menu function is to help the customer to booking the schedule for their service.

8. Order

This menu function is to help he customer to order spareparts or accessories for their car from PT. Nissan Motor Indonesia.

9. Complaint

This menu function is to help the customer to complaint their problem, such as asking information related with customer problem or asking the company to send the engineer from PT. Nissan Motor Indonesia to the customer home or customer location at that time when the problem happened.

Figure 3.5 depicts about the relation between entities in the database. The diagram consists of eight entities which represent schema for tables. From the diagram, the customer has relationship one to many with entities booking _service, complaint, testdrive, and order, which mean one customer may have one or more complaint, one or more order, one or more test drive, and one or more booking service. For staff, they has relationship one to many with entities booking _service, complaint, testdrive, order, and phone_activity, which mean one staff can handle one or more complaint, one or more order, one or more test drive, one or more booking service, and also may create one or more phone activity. For one complaint may belong to one and only one customer. For one order may belong to one and only one customer. For one test drive may belong to one and only one customer. For one booking service may belong to one and only one customer.

Customer Table

The table will be used to storing the customer's data. There are two tables for the customer; customer (buyer) table and customer (member) table. Table consists of two parts of part of attributes for member, such as account data and personal data and three parts of attributes for member, such as account data, personal data, and cars data. This data will used in almost all part of the system. In addition, Buyer table has additional attribute for cars data of buyer. Cars data will use for booking service. Thus buyer did not need to input the data when booking service schedule. It will reduce time for the buyer.

Staff Table

This table will be used for storing the staff's data. There are six types of staff in this table. Each staff has their own username and password.

Complaint Table

This table will be used for storing the information about customer complaint which has been made by the customer.

Product Table

This table will be used for storing the information about product or accessories of specific Nissan's cars that are available for the customer to buy it online.

Phone Activities Table

This table will be used for storing the information about phone activities which has been made by the Nissan Care.

Test Drive Table

This table will be used for storing the information about test drive request which has been made by the customer.

Order Table

This table will be used for storing the information about customer order which has been made by the customer. Start from customer order specific product until the payment confirmation will save in this table. NMI staff has responsibility to update status of the order, whether expired, approved, packaging, sent, or already received. The customer can check the progress every time. The sales staff must change order status become expired if there is no payment confirmation in 24 hours.

Booking Service Table

This table will be used for storing the information about booking service which has been made by the customer

Message Table

This table will be used for storing the information about message which has been made by NMI staff for the customer.

Promotion Table

This table will be used for storing the information about promotion which has been made by the Marketing staff.

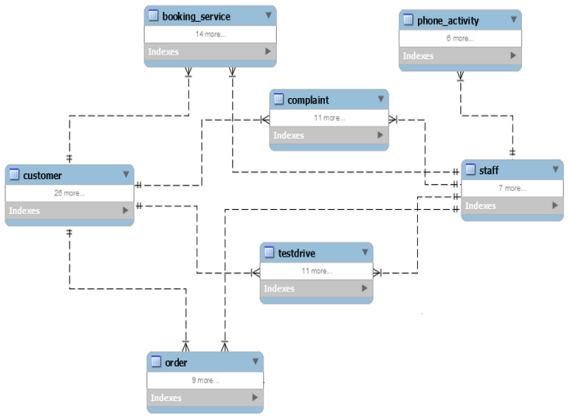

Figure 3.5 *Entity Relationship Diagram of the system*

While Figure 3.5 shows the login screen design of the system. After clicking login button, the system will check the login data whether it is valid or not and also check the user type. After that, if the login data is valid, then the system will display the homepage for the user depends on the user type.

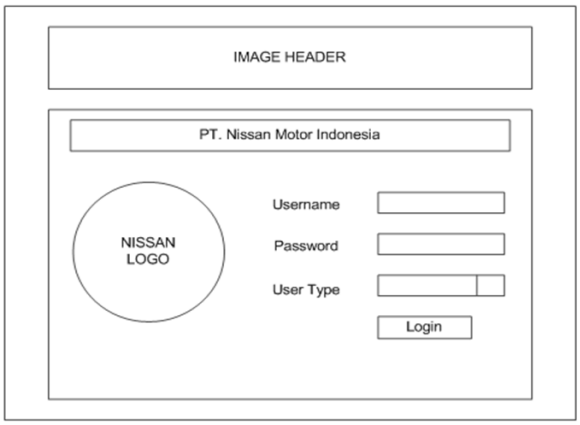

Figure 3.6 *Login screen design*

The homepage design is shown in Figure 3.6. The homepage screen is a display page which appears after the customer or NMI staffs have been successfully logged in to the system. Each user has difference feature depend on the type of the user itself.

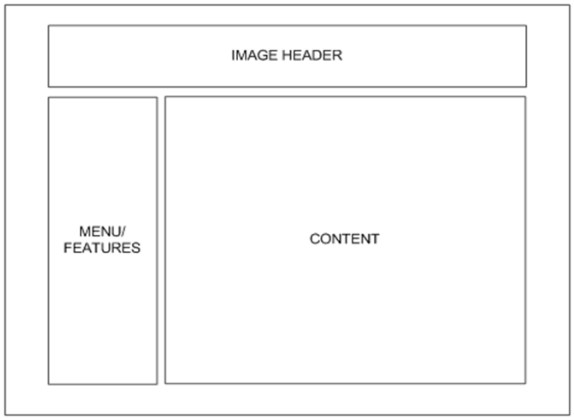

Figure 3.7 *Homepage Design*

4. Conclusions

This research proves that the system can become a bridge between the company and the customer and give advantages for both sides. Based on the development and system testing result, there are several conclusions that can be extracted from the system:

- Every data is shown based on the user who login in the system.
- With the database for data storage, then the data can be stored for a long time and can be reused if at any time required.
- The system able to gives more complete information about the company.
- The customer did not need to call Nissan care for a complaint. By using complaint system, customer easier to make a complaint than using their phone.
- The system helps to give faster response to the customer complaint.
- The customer can buy the spareparts for their car using this system; they do not need to come to the Nissan dealer.
- The customer easily to check the status of their complaint and order. And also there are personal message for the customer when the status of their order change.

References

[1] Grönroos, C. From Marketing Mix to Relationship Marketing: Towards a Paradigm Shift in Marketing, Management Decision, Vol. 32, No. 2, pp. 4-20. 1994

[2] Oetomo, B. S. D., John P. S., dan Andreas A. S. I-CRM Membina Relasi dengan Pelanggan.com, Yogyakarta: Andi, 2003.

[3] King, S-F., Burgess, T-F. Understanding Success and Failure in Customer Relationship Management, Industrial Marketing Management, 37(2008), pp. 421-431, 2008

[4] Segregation of Duties (SoD). [online]. http:// whatistechtarget.com/ definition/segregation of-duties-SoD [Accessed October 2014]