GRANTING REWARD BASED BY CUSTOMER CLASSIFICATION AT FORMEN GALERI LELAKI BANDUNG THROUGH CRM APPROACHING

Novan Noviandri Sumarna

Universitas Komputer Indonesia
Jalan Dipatiukur No. 112-116, Coblong, Lebakgede, Bandung, Kota Bandung, Jawa Barat 40132
E-mail : azurezinn@gmail.com

ABSTRACT

Formen Galeri Lelaki is a company that engages in the field of Factory Outlet in Bandung. Based on data transaction in July to December 2015 it shows that the number of transactions continue to decline starting from September to December with the rate of decline reached 3%. The other issue in relation to customers Formen Galeri Lelaki have yet to determine special services to the customers based on the types of customers to increase transactions. Formen also does not have special facility to accomodate criticisms and suggestions from customers.

Customer Relationship Management (CRM) Information System is a type of management that discuss the handling of the relationships between company and customers. Using Framework of Dynamic CRM which is a framework as the reference in making CRM information system. A type of CRM that were built which is CRM Analytical because this activity is to analyze what customers need from existing data in the company. Whereas the calculation of customer loyalty using CLV method because the company takes into account the number of potential customers in a way that most see the number of transactions, not the number of customers who often come with a nominal slightly for calculating customer value as the process of segmentation and Value Chain as process to analyze the potential of company.

The result of this research is an application to granting reward based by customer classsification to be able to assist the Supervisor in providing the appropriate reward for the customer bassed on the customer segmentation. Based on result of black box testing as well as interview shows that the system is built to help Supervisor in granting rewards to customers to increase transactions.

Keywords: Analytical, CLV, CRM, Loyalty, Reward

1. INTRODUCTION

Formen that stood in 2004 is a business owned by individuals of the owners of The Big Price Cut Group engaged in the FO (Factory Outlet) and selling men's fashions. Company located in Jl. Ir. H.Djuanda 14 Bandung selling many kinds of garments such as men's casual wear, formal or T-shirts and others.

Based on the results of a brief interview with the Mrs. Hasdini Meidiawaty as HRD at the headquarters of The Big Price Group & Mr. Budi as a supervisor in Formen, explained that in general, customers who often an order is a reseller and tourists both local and from overseas. Ordering procedure applicable in the company is the customers come directly to the company and choose the items that suit and make the payment at the checkout. In attracting potential customers usually Formen working with travel agents, hotels and tour guide by distributing pamphlets and vouchers to increase customer and increase the number of consumers and use the membering system to maintain relationships with existing customers. Members are customers who have signed up as members of the company who will get a membership card of the company and members of every transaction discount card carrying member. The company is also trying to attract potential customers who often come with a flyer.

In an effort to retain customers, the company provides benefits for some customers in transactions carried out by giving members discounts to customers who have registered as members of the current transactions and shopping over Rp. 200,000. How customers to register to become a member itself can be done simply by paying a registration fee of Rp. 100,000 and provide a photocopy of ID to the cashier.

Although it has been applied membering system but seen from the summary transaction data in annex D that is from the month of July to December 2015 shows that the number of transactions continues to decline from the month of September until December the rate of decline the greatest reach 3% in November to December while the stock of

goods , product variety and quality do not have a problem.

In the matter of critics and suggestions also Formen not have a special intermediary so if anyone has critics or suggestions should contact the owner at the central office via SMS without any past companies. In conjunction with the customer, Formen not specify services to customers based on the types of customers to increase transaction, it is seen based on the testimony of a brief interview to the employees of the SPG that deal with customers, that serve any customers, employees treat customers the same way without service special to customers who often make transactions. The Company also implemented a method for the average for all members so each member to get the same bonus either old or new members no matter what the number of transactions.

Based on these problems, the company sees the need to establish a system to approach with the customer so that the information system of Customer Relationship Management (CRM) have to address this issue. The type of CRM is built is CRM Analytical because it focuses on the decision by the supervisor of the existing data in the database with the framework used is Dynamic Framework CRM as a reference and also segmentation or grouping customers using CLV because the company takes into account the number of customers potentially it with how to see the highest number of transactions is not the number of customers who often come with a nominal slightly, so that the customer relationship to the company can grow. Investigators therefore conducted this study with the title "GRANTING REWARD BASED BY CUSTOMER CLASSIFICATION AT FORMEN GALERI LELAKI BANDUNG THROUGH CRM APPROACHING"

2. RESEARCH CONTENTS

Consumers are a very important asset for a company. There will be no business without any prospect of the relationship between companies and consumers that are loyal. This is the reason why the company should plan and use strategies that clear enough in treating the consumer. Customer Relationship Management (CRM) has been growing in recent decades to reflect the main role of the consumer for setting the company's strategy. CRM includes all sizes to understand consumers and processes to exploit this knowledge for designing and implementing the activities of marketing, production and supply chain of suppliers (suppliers). The following will be defined some understanding of CRM are taken from the literature, among them:

a. In terms of relating to information technology, CRM is a strategy to optimize customer lifetime value by knowing more about the consumer information and interact with consumers intensively.

b. In terms of communication and management, CRM is defined as a company's approach to understanding and influencing consumer behavior through intensive communication in order to improve customer acquisition, retain customers, and customer loyalty.

c. CRM definition when viewed in terms of business can be defined as a business strategy to understand, anticipate and manage the needs of potential customers within an organization in the present and future.

Of the three definitions above can be deduced about the definition of CRM is a comprehensive approach that integrates every business process that relates directly to consumers, ie sales, marketing and customer service through the integration of philosophy, technology, and processes (Tama, 2009). In other words, CRM is seen not as a product or a service, but a business philosophy which aims to maximize the value of the consumer in the long term (customer relationship value) [1].

2.1 Analytical CRM

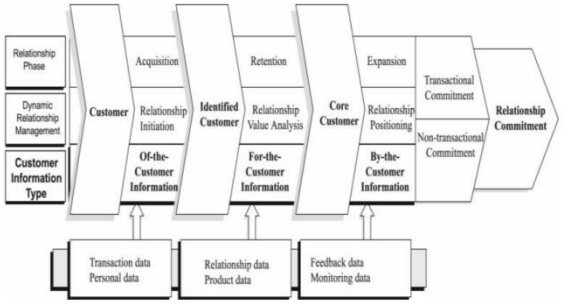
Analytical CRM CRM is known as "back office" or "strategic" CRM. Analytical CRM is usually associated with the use of data effectively, efficiently and strategically so as to enable appropriate decision making for management. Decision-making implemented after going through the process of analysis, modeling, and evaluation of the data stored in the database to generate a mutually beneficial relationship between the company and its customers. Examples of Analytical CRM is a business intelligence such as data warehousing, OLAP, and data mining.

The most important thing in understanding consumer behavior not only understand who they are (in this case customer profiling or segmentation), but also their behavior and patterns (pattern) that they follow. Understanding customer behavior should be defined as a dynamic and ongoing process [1].

2.2 Dynamic CRM

Architecture or framework of CRM is the customer's perspective and organizations in the implementation of CRM. CRM architecture that is used here is Dynamic CRM.

Research on CRM framework conducted by Chung-Hoon Park and Young-Gul Kim, review the connection information and marketing strategies, and create a model that is described in the "Framework of Dynamic CRM" [2]. Described that phase of CRM within a framework in the form of a series of processes Acquisition-Retention-Expansion. As a framework for an integrated CRM didassari by types of customer information is arranged in stratified according to the development of customer relationship.



Picture 1. Framework for Dynamic CRM

In the framework of the above described that there are three types of customer information. including:

a. Of - the - Customer Information (customer information)

Information on personal data and customer transaction data. The information in this category is often known as database marketing and marketing targets.

b. For - the - Customer Information (information for customers)

Information regarding products, services, and company information deemed important by customers. This information could have been channeled through various communication media in the form of direct mail, auto response system, and Internet sites.

c. By - the - CustomerInformation (information by customer)

Non-transactional information feedback from customers which include complaints, proposals, claims, customer needs and others. This information is usually manifested in the form of an expanded customer data because this information is very helpful in customer interactions. In addition, because it contains complaints, needs and suggestions, this type of information can be applied to develop products.

Broadly speaking, Dynamic CRM actually describes a series of phases that you should do an organization in achieving customer management in accordance with the company's main business. This framework can be considered a reference pattern or model of an organization in improving their customer management maturity. Within this framework there are several phases, among others:

a. Relationship Initiation

At the initiation phase relationship with the customer, the organization collected data on customers, usually with a membership registration. Once the customer record, organizations can deduce information about supply what is right for the customer (for-the-customer). After a certain period the customer can increase to core customer. At this stage the organization can resume its next Dase CRM. In this phase occurs two-way interaction between the customer and the organization. Customers will tell what is needed specifically (by-the-customer). This opens up the opportunity pork organizations to offer new products or services to customers, improve core business processes and satisfy customer. At this stage, the initiation of relationships with customers, as for the steps being taken are as follows:

1. *Formen Galeri Lelaki did a survey on customer transaction data obtained from the month of July to September 2015 made by the customer (of-the-customer).*
2. *Once the customer record, organizations can deduce information about supply what is right for the customer (for-the-customer). Such as giving discounts.*
3. *After a certain period the customer is satisfied with what is offered by Formen Galeri Lelaki, then the relationship with the customer can increase to core customer. At this stage Formen Galeri Lelaki can continue in the next phase, namely CRM.*
4. *In this phase occurs two-way interaction between the customer and Formen Galeri Lelaki. Customers will tell what is needed specifically (by-the-customer). Things like this opens an opportunity for Formen to offer new products or services to customers, improve core business processes and satisfy customer.*

b. Relationship Value Analysis

To be more effective CRM, preferably every customer relationship is analyzed from both the standpoint of either the customer or organization. There are two dimensions in determining the value of each customer relationship value from the standpoint of customer rights and organizational point of view. In this phase occurs psychological relationship between the customer and the organization. This usually happens by giving discounts to customers when making large purchases, indirectly increasing customer loyalty.

Customer value is a collection of favorable relationship benefit economically and psychologically. Components and relationship value evaluation method using RFM models [3]. Customer segmentation process will be carried out using a Model CLV (Customer Lifetime Value) which will be accompanied by examples of samples taken from the transaction data Formen Galleries man for 6 months starting from the month of July to December 2015. The method describes CLV customer value by calculating the value of customer use the basic formula of calculation of CLV by Sunil Gupta 2006.

The context of each of the required attributes in the calculation of CLV are defined as follows:

1. *The timeframe for the estimated calculation of CLV is 6 months.*
2. *The production costs are incurred Formen Galeri Lelaki - + 80% of the market price.*
3. *The number of sales transactions of products per 3 months (Recommended companies because already in spare budget*

for services). This means that in one year there are 4 periods.

4. *Surplus - + 20% of the price of the product marketed.*

In analyzing the CLV, as for the stages to be done is in accordance with the customer segmentation described in the flow chart in the picture as follows:



Picture 2. Segmentation Flow Analysis

c. Relationship Positioning

Build a mutually beneficial relationship is very important to maintain a long-term relationship between the customer and the organization. In the application of the strategy of building mutually beneficial relationships, organizations maximize customer rights will automatically increase the customer value. In addition it is fair organization should also evaluate the customer relationship from the standpoint of the profit. If this relationship continues, between the customer and the organization will be formed a strong commitment, both, transactional and nontransaksional and the relationship progressed to the stage of relationship commitment [4].

2.3 Customer Lifetime Value Analysis (CLV)

Once all the data has been collected, the company will be calculated on the value of customer life. The method of analysis performed in this study is a way to calculate the value of customer life or commonly be known as Customer Lifetime Value (CLV). CLV formula will be used in this study are as follows [5]:

$$CLV = \sum_{t=0}^{T} \frac{(Pt-Ct)rt}{(1+i)t} \qquad (1)$$

Where:

pt: revenues from customers in the period T. Where any transactions made by customers will be calculated and summed over the period T, then the value will be obtained pt.

ct: costs incurred by the company to serve customers in the period T. That is costing the company net profit is not calculated to serve every customer transaction during the period T.

i: discount rate or cost of capital of the company. Cost / Capital issued by the company to a product.

rt: the probability that in period t is still a client company's customers. Usually by giving a value of 0 or 1.

T: span of time used in the calculation of CLV. In determining the time span is determined by the company how often companies want to provide service to its customers.

2.4 Value Chain Analysis

Value Chain Analysis is a method to classify, analyze, and understand the changes in resources to processing to final products and services. It is used as a mechanism to analyze how to improve the cost structure (productivity) and value-added (differentiation) [6].

Analysis Value Chain consists of two activities, among which:

1. Primary activities, activities that allow it to fulfill its role in the industry value chain and hence satisfy customers, who see the immediate effect of how well these activities do. Not only does each activity must be implemented properly, but also have to be connected effectively if the overall business performance is optimized. Such activities are:

1. Inbound logistics, is an activity related to the acquisition, receipt, storage and regulation of key inputs and resources in quantity and quality are right for your business.

2. Operations, is the activities associated with transforming inputs into products or services required by the customer.

3. Outbound logistics, are activities associated with delivering products to consumers.

4. Marketing and sales, are activities associated with the provision of the ways in which customers aware of products and services and how they can get, including persuading customers to buy or use the product or service.

5. Service, is an activity that adds value to ensure that customers get the value and benefits of a product or service.

2. Supported activities, activities required to control and develop the business from time to time and thus indirectly adds to the values embodied by the success of primary activities. Such activities are:

1. Procurement, is associated with supplier management, financing, subcontracting, and specification.

2. Human Resources Management, is related to the management of human resources from recruitment, compensation, training, etc..

3. Product and Technological Development, is the design of products and processes, production engineering, market testing, Research and Development, etc.. [7]



Picture 3. Value Chain Framework

2.5 Customer segmentation

Don Pepper and Martha Roger in his book "Managing Customer Relationship: A Strategic Framework", Doing categorization of customers as follows:

1. *Most Valuable Customer (MVC), ie customers with the highest value for the company. A customer who give the greatest advantage for the company.*
2. *Most growable Customer, ie customers who unknowingly has great potential.*
3. *Below Zero, ie customers who benefit less than the cost to provide services.*
4. *Migrators, ie customers who are in a position somewhere between below zeros and most growable customer and need to be analyzed in order to know the category of origin [3].*

2.6 ERD (Entitiy Relationship Diagram)

ERD is a picture or diagram that shows the information created, stored, and used in a business system [8]. Entities usually describes the same type of information. In the entity is used to connect between the entities which also shows the relationship between data. In the end, the ERD can also be used to menjukan business rules that exist in the information system to be built. The symbols used in ERD include:

The elements Entity Relationship Diagram is as follows:

1. Entity

In the E-R diagram, entity described by a rectangular shape. Any entity is something that is in the system, real or abstract where data is stored. Entities are named with a noun and can be grouped into four types of names, namely: people, objects, scene (there is a time element in it).

2. Relationship

In the E-R diagram, the relationship can be described by a lozenge. Relationship is a natural relationship that occurs between entities. In general, the relationship named by the verb base, so that makes it easy to do the reading relation.

3. Attribute

In general attributes are properties or characteristics of each entity and each relationship. That is something that explains what exactly does the entity or relationship, so it is often said that the attributes are elements of each entity and relationship.

4. Cardinality

Cardinality of the relation indicates the maximum number of tuples that can relate to other entities. From a number of the many possibilities of the relationship of the entity, the cardinality of the relation refers to the maximum correlation occurs from one entity to another entity and vice versa. Various cardinality of the relation, namely:

a. One to one Relationship
The level of one to one relationship, expressed by one occurrence of the first entity, has only one connection with the events of the second entity and vice versa.

b. One to many Relationship
One to many relationship is to one occurrence of the first entity may have many relationships with the events of the second entity.

c. Many to one Relationship
For a lot of events in the first entity can only have one connection with the events of the second entity.

d. Many to many Relationship
The level of many to many relationship occurs when each incident on an entity will have a lot to do with the events of other entities, both in terms of the first entity and the views from the second side.

e. Key
An attribute or set of attributes whose values uniquely identify an entity within an entity. Key has several types according to their usage, which is the primary key and foreign key.

2.7 DFD (Data Flow Diagram)

Data Flow Diagrams (DFD) is a diagram that uses notations to describe the flow of the data system, whose use is helpful to understand the logic of the system, tersruktur and clear. DFD is a tool-oriented system design data flow with the concept of decomposition can be used for the delineation of analysis and system design that easily communicated by the professional system to the user or the programmer.

Data flow diagram is a diagram that is often used to describe an existing system or the new system will be developed logically without considering the physical environment where the data flow or the physical environment in which the data will be stored [9].

1. Specification Process

Process Specifications describe the event in every process at the lowest levels in the data flow diagram. Kegiatanyang specification defines the process to be done to transform inputs into outputs [10]. The specification process is used to describe the process that occurs at the most basic level in the DFD. This model serves mendeksripsikan what to do when the inputs are transformed into outputs.

No Urut	Proses	Keterangan
	No. Proses	
	Nama Proses	
	Source (Sumber)	
	Input	
	Output	
	Destination (Tujuan)	
	Logika Proses	

Picture 4. Specification Process

2. Data dictionary

The data dictionary is a set of data elements that are structured with the understanding that consistent and in accordance with the system, so that users and systems analysts have the same pemahama the inputs, outputs and components of data simpaan.

Establishment of a data dictionary based on the flow of data contained in the DFD. DFD data flow in general (only show the name of data flow without showing the structure of the data flow). To show the structure of the data flow in detail it needed a data dictionary. Data dictionaries created on the stage of system analysis and be used both in analysis and in the design stage of the system. At the stage of system analysis, data dictionary can be used as a means of communication between system analysis with system users about the data that flows in the system, namely about the data coming into the system and of the information needed by users of the system. At the stage of system design, data dictionary used to design input, designing reports and databases. The data dictionary is based on data flow in DFD.

The dictionary definition of data [9] "data dictionary is a catalog of facts about the data and information needs of an information system".

Nama	
Where Used / How Used	
Deskripsi	
Struktur Data	
[Penjelasan Struktur Data]	

Picture 5. Data Dictionary

2.8 Business Process Modeling Notation (BPMN)

BPMN is an acronym for Business Process Modeling Notation, which is a new methodology developed by Business Modeling Initiative as a new standard for modeling business processes, and also as a design tool in complex systems such as e-Business based messaging (message-based) , The main objective of BPMN is to provide a notation that is easy to use and can be understood by everyone involved in the business, which includes business analysis model the business processes, development techniques to build systems that implement business, and various levels of management must be able to read and understand the process diagrams quickly so as to assist in decision-making.

The new BPMN notation is also designed for the nature of web services-based systems. BPMN can model complex messages that are passed between businesses or parts of businesses, events that cause a message to be passed, and business rules that restrict the incident. Memugkinkan BPMN business process mapped to XML-based business execution languages such as BPEL4WS (Business Process Execution Language for Web Services) and BPML (Business Process Modeling Language). Information on the language of business execution can be visualized with a common notation. [11]

2.9 Flowchart

Flowchart is a chart that has a flow that illustrates steps to resolve the problem. Flowchart prepared by the symbol. This symbol is used as a tool to describe the processes involved in the program.

Flowchart is a depiction of a graph of the steps and the order of procedure of a program. Usually facilitate the settlement of problems in particular need to be studied and evaluated more. [12]

3. CLOSING

The conclusion that can be drawn from all the processes that have been made in the implementation of Customer Relationship Management (CRM) in the information system are as follows:

1. Assist Supervisor create customer related information system to manage data and decision-making
2. Help supervisors determine the special treatment given to the customer.
3. Assist Supervisor with the media for the submission of comments and suggestions to the company's customers directly.

Based on the conclusions that have been described, the expected information systems Customer Relationship Management (CRM) can be developed in a way:

1. Adding online transaction facility, so customers who are far away from the company can conduct transactions wherever and whenever.
2. Adds Customer Testimonials so customers can give his opinion about the services or products in general in order to attract potential customers.

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