DETERMINATION OF PRIORITY COMPLAINTS WITH THE APPROACH OF CUSTOMER RELATIONSHIP MANAGEMENT (CRM) IN CV. MEGAH AGUNG PERSADA

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ABSTRAK

CV. Megah Agung Persada is a company engaged in building tools distributor. The company is a subsidiary branch of the Faithful Group, CV. Megah Agung Persada myself have been established since the year 2013 officially became a company distributor of building materials in A Shophouse IBCC – 3 Lt. 2 Bandung. The company has many customers who make transactions every day and customers do every day complaints so companies have difficulty in making the handling of complaints if there is customer complaints by category important is often slow in handling so that customers have the opportunity do not do the transaction back to the company. And sales managers had difficulty in providing the handling due to the recording of complaints less complete or that the handling of complaints against customer complaints impressed later. Based on the problems that exist today, then required a construction of information system of determining priority complaints with the approach of Customer Relationship Management. The purpose of the construction of information system of determining priority complaints to ease in determining priority of handling customer complaints.

The methods used for the determination of priority complaints are Sequential Elimination by Lexicography in which will be carried out and priorities the Elimination of complaints for customers. So the relationship between the customer and the company will be created that will create a loyal customer against the customer.

Based on the results of the testing that has been done can be concluded that the system that is built it can help sales manager CV. Megah Agung Persada in doing the handling of customer complaints. So customers with the important category of complaints can be resolved

Keywords : CRM, framework dynamic CRM, Sequential Elimination by Lexicography

1. INTRODUCTION

CV. Megah Agung Persada is a company engaged in the distribution of ceramic that has stood since the year 2002 located in Bandung. Filing a complaint which is being run for this in CV. Megah Agung Persada i.e. by telephone, through sales/marketing or directly come to the company. The complaint submitted by the customer can be submitted to customer service (C. S) or to the sales. CS will schedule the handling of complaints submitted to marketing. CS report to sales manager, then Manager can provide the handling of complaints.

Based on the results of the interviews to Devi Oktaviani as Sales Manager, stating that the service of filing complaints in progress has several shortcomings and weaknesses, particularly in the section on priority handling of complaints. In the handling of customer complaints, the company resolves the complaint based solely on the order of incoming complaints submitted to our Customer Service (C. S) without looking at the priorities which first complaint to be dealt with that resulted in customer complaints with an important complaint levels late in handling with examples of cases in the year 2016 PT. Lappim customers with a complaint returns 150 boxes are at no. 7 of 9 customer complaints not resolved due to the complaints recorded by CS are not complete and are on order. The problem is caused because of customer complaints over this is only delivered through telephone with Customer Service (C. S) or customers themselves who deliver it, which further the new complaint will be submitted to the Manager Direct sales in order to be processed. This can result in customers not deal again in the future because

the complaints are not directly handled by company or slow in handling.

Sales managers often confusion in resolving the complaint because the complaint is submitted is not complete because not all CS noted complaints of customers who came in with the full. This has resulted in if there are complaint with the important categories which should be dealt with in the past are listed below, then the responses will be the longer or even would be repeated back customer complaints from the same or from customers new customers. Sales Manager mengakitbatkan the problem is difficult to determine the complaint should take precedence.

Customer Relationship Management (CRM) is a business strategy that focuses on customers in the business of creating value to customers with the goal of maintaining long term customers, enhance customer loyalty, and get new customers. A company must have a special strategy in improving the quality of service given the increasingly tight competition. CRM is also useful as a means to create value for customers is related to a product or service that is produced by a company.

Therefore need to built a system of Customer Relationship Management to assist the company in making the determination of priority complaints.

The purpose of this research was to build information systems that can manage priority handling complaints to maintain relationships between customers and the company's approach to customer relationship management. The purpose of this research is to assist the Sales Manager in determining the priority of handling customer complaints and customer complaints logging.

2. CONTENT OF RESEARCH

2.1 Theoretical basis

The cornerstone of the theory is a set of theories that became the basis for the development of Customer Relationship Management information system in CV. Megah Agung Persada.

2.1.1 Customer Relationship Management

Customer Relationship Management is a core strategy in the business that integrates internal processes and functions with all external networks to create and realize value for the target customers on a profitable basis. [1]

The core of the definition of Customer Relationship Management is a business strategy that focuses on customers in a business creating value to customers with the goal of maintaining long term customers, enhance customer loyalty, and get new customers.

2.1.2 Framework of Dynamic CRM

Framework needed to set the feature of CRM appropriately to compose Software Requirement Specification (SRS). CH. Park and Kim proposed a CRM Framework called A Framework of Dynamic CRM. The framework describes a series of stages in the development/implementation of CRM. The most important substantive information is retrieved from the customer so that the output be obtained relationship commitment, which became the focus of attention are as follows:

1. Information about customers.
2. Information for customers.
3. Information by the customer.

Based on the above three is clearly very important information to serve Customer Relationship Management (CRM). Organizations to compete, by processing information will be obtained customer behavior, because customer behavior at this time more likely to want how they feel observed, served and the responsiveness of the organization as a provider of services to them and usually the trend does not see the amount of prices they spend again.[3]

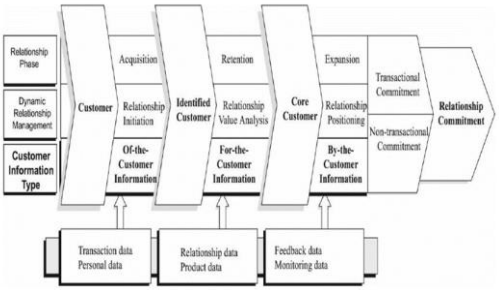


Figure 1. Framework of Dynamic CRM

2.1.3 Priority Handling Of Complaints

Priority handling of complaints was moved forward a complaint from some existing complaints and dealt with in order of priority of the complaints against the service's response to the dissatisfaction to the satisfied customers will berimpas to the loyalty of customers against the company.

2.1.5 Sequential Elimination by Lexicography

A method of Sequential Elimination by Lexicography is a method which features the importance of individual attributes. This method is not too demanding because the weighting-attribute comparison attribute is made whether it

is which is more important than the weighted because attribute-the attribute is created then the ranking which is more important than does it weigh stressed. [5]

Before the data is sorted, searched in advance the maximum or minimum value depends of what we will sort, whether it is a profit-based (profit) or fee-based (cost). If based on profits, then the greater the value, the greater the profits of the company. Conversely, if based on costs then the greater the value the smaller the cost required.

Stages that are used in the calculation of this method are:

1. Prepare the complaint data.
2. Calculate the number of complaints per category.
3. Specify a priority value.
4. Calculate the value of alternative useng the formula, where from priority value will be created lines of matrices, the formula to calculate the value of alternative can be seen in the following equation :

$$V_{ij} = \frac{X_{i,j}}{Max(X_{i,j})}$$

Description :
X = Data calculated criteria
i = Position criteria (Matrix Line)
j = Alternative Position(Column Matrix)
V_{ij} = Value alternative to-j based on criteria to-i.

5. Do the Elimination of alternative value by specifying the value of the selected alternative and the conclusion.

2.2 Problem analysis

Based on interviews with the company ", it can be concluded that there are concerned with is related to the determination of priorities customer complaints and how to determine strategies to improve service to customers. That problem is the sales manager of the difficulty in determining the priority of handling customer complaints due to the absence of data management of customer complaints.

2.3 Analysis Framework Customer Relationship Management at CV. Megah Agung Persada

In the system to be built required a reference framework for CRM features can be built quickly and precisely. The framework is a framework for presenting the phases and maturity of corporate relationships with customers. The framework to be built is Framework Of Dynamic CRM in CV. Megah Agung Persada is as follows:

2.3.1 Relationship Phase

It is illustrated that the CRM phase in a framework is a series of Acquisition-Retention-Expansion processes. As an integrated CRM framework that is based on the types of information about the company, the products available and the current promotions.

1. Stage Acquisition

The acquisition stage is the stage used to attract prospective customers to conduct transactions in CV. Megah Agung Persada. The acquisition stage that is running on CV. Megah Agung Persada is through sales that menarwakan or prospective customers come directly to the store, so customers should ask about the price, availability of products, and various types of products available. The solution offered is to create an information feature in the form of a useful website to provide information to customers related to company information and product information, product type information, and product prices.

Facilities to be built at the stage Acqusition, namely: Information related companies used to facilitate customers and prospective customers in knowing information about the CV. Megah Agung Persada.

1. Company Information
   This facility is used to facilitate the customers and prospective customers in search of information about the company. Information company is a company profile. The facility is expected to customers or prospective customers can have more confidence to do deals in CV. Megah Agung Persada
2. Product Information
   This facility is used to facilitate the customers and potential customers in the know clearly about product information, so that customers and prospective customers can determine what products will be purchased easily.

3. Stage Retention

The retention stage is a process by which the company builds a good relationship with the customer. Retention stage that is running on CV. Megah Agung Persada is a customer complain directly by way of coming to the company or deliver to the sales who come to visit. Facilities to be built at the Retention stage, namely: filing a complaint and promo info on CV. Megah Agung Persada.

4. Stage Expansion

Expansion stage is the stage to foster good relationships with customers to improve

customer loyalty to the company. Customer loyalty can increase if customers are provided with a service to keep the company and customer relationships in good standing. The ongoing expansion stage of complaint handling is only based on the order of submitting the complaint without seeing the importance of the complaint so that the customer with the important complaint category will be slow in handling it. Facility to be built in Expansion process that is: information result of segmentation of complaint and customer segmentation in CV. Megah Agung Persada with this facility customer complaints with important categories can get faster handling.

a. Segmentation of complaints Using Sequential Elimination by Lexicograpy

The grievance segmentation has the purpose of turning the complaint data into an information that can assist the Sales Manager in determining a strategy to improve service in the CV. Megah Agung Persada. Segmentation of complaints is done using Sequential Elimination by Lexicograpy. This method has the final output to give priority to the grievance segmentation based on the complaint category

1. Complaints Data

   The initial stage in the analysis of the segmentation of complaints is the existence of input from the data complaints on the CV. Megah Agung Persada. The complaint data will be calculated the number per category then will determine which complaint data will be required the biggest handling. The current ongoing complaint at the company is still in a direct way, so the company has little customer complaints data. Based on the problem, the researcher will use the complaint data in company on January 14, 2018.

2. Calculation Of The Number Of Complaints Per Category.

   The complaint data in input by customers will be processed back into an information which contains a recapitulation of the number of complaints submitted to the company by type of similarity of categories. The table below is a recap of the results data of customer complaints.

No.	Kategori	Jumlah
1.	Pengiriman	2
2.	Salah Kirim	4
3.	Penambahan	3
4.	Retur	5
5.	Pelayanan	1

Figure 2 Rekapitulasi Data Keluhan

3. Determination Of Priority Value

   The determination of the priority scale range is done to find out which category that has the highest priority scale. The determination of the scale of priorities drawn up by as much as the criteria to be a consideration of decision-making. The following are the priority scale ranges that will be applied is 1 to 4 represent the assessment of the

   1. Very Important
   2. Important
   3. Less Important
   4. Not Important

4. The determination of the variable and the value of Alternative

   Determination of variables used to perform the calculation in determining the priority value based on customer complaints. The value of a variable is determined based on priority categories of customer complaints.

   Based on the results of the calculations on the recapitulation of data customer complaints then obtained the matrix below.

$$\begin{bmatrix} 2 \\ 4 \\ 3 \\ 5 \\ 1 \end{bmatrix}$$

   The line shows the value of alternatives to the matrix-matrix columns j and demonstrated value to-i. Based on the data above, note that the complaint category there are five types. In determining the priority of the complaints researchers use alternative value-based calculation of profits due to the higher value of the complaint then the bigger to improve the level of his Ministry.

$$V_{1,1} = \frac{X_{1,1}}{Max(X_{4,1})}$$

$$V_{1,1} = \frac{2}{5} = 0.4$$

5. Elimination of alternatives that Have the smallest Value

   After counting all the alternative based on values from the category complaints

then the value of alternative will be compared to the value of other alternatives. Categories of complaints have little alternative value will be eliminated. Based on data obtained alternative value complaint recap of each category the following table.

Table 1 Nilai Alternatif dari Kategori Keluhan

No.	Variabel	Jumlah	Nilai Alternatif
1.	Pengiriman	2	0.4
2.	Salah Kirim	4	0.8
3.	Penambahan	3	0.6
4.	Retur	5	1
5.	Pelayanan	1	0.2

6. The Selected Alternative

The selected alternative is information that contains the priority of the most complaints were complained of by the customer. Sequential Elimination by Lexicograpy will sort the ratings of complaint data when all the data calculation process finished. The rating information is displayed according to the priorities specified in the phase 3 determination of scale of priorities. The table below is the final result of the calculation by Sequential Elimination techniques by Lexicograpy of Table 1.

Table 2 Alternatif Terpilih

No.	Kategori	Jumlah	Nilai Alternatif
1.	Retur	5	1
2.	Salah Kirim	4	0.8
3.	Penambahan	3	0.6
4.	Pengiriman	2	0.4

b. Frequency Distribution Transaction Data Lists

Frequency distribution transaction data lists aim to do grouping data transaction company and become an information to assist in the calculation method of Sequential Elimination by Lexicograpy.

1. Transaction Data

At an early stage in the making of the frequency distribution is the existence of transaction data transaction data from customers at the magnificent Great CV Persada. The transaction data will be calculated and in the group in accordance with the classes that will be determined later and will then assist in the calculation of the company's complaint handling.

2. Range

Range = Rp 465.000.000 – Rp 750.000
= Rp 464.250.000

3. Many of the Class Intervals

Many Class = 1 + (3.3) log 15
= 1 + (3.3) (1.176)
= 4.8811

Frequency distribution list with a lot class 5..

4. The Length of Class Intervals

P = (Rp 464.250.000)/5

= Rp 92.850.000

5. End Of The First Intervals Class

The lower end of the first interval class Rp 750.000

6. The Length of the class Interval (p) selected

Total Transaksi	Tabulasi	Frekuensi
Rp 750.000 – Rp 93.000.000	~~IIII IIII~~	10
Rp 93.00.001 – Rp 186.000.000	II	2
Rp 186.000.001 – Rp 279.000.000	I	1
Rp 279.000.001 – Rp 372.000.000	I	1
Rp 372.000.001 – Rp 465.000.000	I	1

Based on the Table above, the researcher performs a grouping based on ranges of data transactions and assumes a value of any class that can be seen in the Table below.

Table 3 Kelas Data Transaksi

Kelas	Total Transaksi	Nilai
Kelas A	Rp 372.000.001 – Rp 465.000.000	1
Kelas B	Rp 279.000.001 – Rp 372.000.000	2
Kelas C	Rp 186.000.001 – Rp 279.000.000	3
Kelas D	Rp 93.00.001 – Rp 186.000.000	4
Kelas E	Rp 750.000 – Rp 93.000.000	5

c. Customer Segmentation Using Sequential Elimination by Lexicograpy

Customer segmentation used to figure out which of the complaints from customers are handled first by the company.

1. Transaction Data

   The first stage in the customer has first input segmentation is a frequency distribution of the list already in the group based on nominal payment is paid by the customer to the company that can be seen in Table 4.

Table 4 Data Transaksi

Nama	Customer Type	Luar Kota	Total Transaksi	Kelas
Sinar Mulya	Toko	Ya	Rp 150,000,000	Kelas D
Yuliana Sukarsih	Individu	Tidak	Rp 2,000,000	Kelas E
Ondi Caringin	Individu	Tidak	Rp 4,500,000	Kelas E
PT. Jaya Abadi Regency	Toko	Ya	Rp 98,000,000	Kelas D
Yuni	Individu	Tidak	Rp 750,000	Kelas E
PT. Lappim	Toko	Tidak	Rp 356,000,000	Kelas B
Baros Jaya	Toko	Ya	Rp 60,000,000	Kelas E
Mirah Jaya	Toko	Tidak	Rp 35,000,000	Kelas E
Cahaya Abadi	Toko	Tidak	Rp 9,000,000	Kelas E
Liana	Individu	Tidak	Rp 1,500,000	Kelas E
CV. Megah Selatan Djaya	Toko	Tidak	Rp 465,000,000	Kelas A
PT. Indonesia Pondasi Raya	Individu	Ya	Rp 17,500,000	Kelas E
PT. Wahana Teknik Indonesia	Individu	Tidak	Rp 55,000,000	Kelas E
CV. Haka Megah Agung Jaya	Toko	Ya	Rp 220,000,000	Kelas C
Ade Lestari	Individu	Tidak	Rp 950,000	Kelas E

2. Complaints Data

   The second stage on the segmentation of customer complaints i.e. segmentation is the same as the input data in the form of a complaint. The complaint data will then be counted how many complaints per category from each customer. Complaint data for customer segmentation using data on 14 January 2018 can be seen on Table 5.

Table 5 Jumlah Keluhan Per kategori Pelanggan Tanggal 14 Januari 2018

Nama	Customer Type	Total Transaksi	Kelas	Retur	Salah Kirim	Penambahan	Pengiriman
Sinar Mulya	Toko	Rp 150,000,000	Kelas D	0	0	0	1
Yuliana Sukarsih	Individu	Rp 2,000,000	Kelas E	0	1	0	0
Ondi Caringin	Individu	Rp 4,500,000	Kelas E	0	0	1	0
PT. Jaya Abadi Regency	Toko	Rp 98,000,000	Kelas D	0	1	0	0
Yuni	Individu	Rp 750,000	Kelas E	0	0	1	0
PT. Lappim	Toko	R 356,000,000	Kelas B	1	0	0	0
Baros Jaya	Toko	Rp 60,000,000	Kelas E	0	0	0	1
Mirah Jaya	Toko	Rp 35,000,000	Kelas E	1	0	0	0
Cahaya Abadi	Toko	Rp 9,000,000	Kelas E	0	0	1	0
CV. Megah Selatan Djaya	Toko	Rp 465,000,000	Kelas A	1	0	0	0
PT. Indonesia Pondasi Raya	Individu	Rp 17,500,000	Kelas E	1	0	0	0
PT. Wahana Teknik Indonesia	Individu	Rp 55,000,000	Kelas E	0	0	0	1
CV. Haka Megah Agung Jaya	Toko	Rp 220,000,000	Kelas C	1	0	0	0
Ade Lestari	Individu	Rp 950,000	Kelas E	0	1	0	0

3. Determination of the priority value

   Determination of the priority value can be seen from the final conclusions segmentation complaints. The priority scale as seen from the type of customer, the transaction class, and categories of complaints. In determining the scale for the types of customers value assumes researcher 2 types of customers to the store and a value of 1 for individual types of customers due to the type of Store customers preferred the kind of individual.

   1. The type of customers

   2. Transaction Class

   3. Returns

   4. Wrong Send

   5. The addition of

   6. Delivery

   The order of the priority scale, indicating that levels of handling is very important to immediately tackled is by the type of customers at a store and the amount of the transaction, the second-largest is the third wrong, send returns, fourth addition, and the last one is shipping.

4. The determination of the variable and the value of Alternative

   Determination of variables can be seen from the number of complaints filed and the value of alternative anyone customers who file a complaint seen on Table 6. Based on the priority value then the value of the selected alternative in accordance with a scale of priorities to find out which customers are handled first by the company..

Table 6 Data Kelas Transaksi dan Data Keluhan Pelanggan Berdasarkan Skala Prioritas

Variable	Customer Type	Kelas	Retur	Salah Kirim	Penambahan	Pengiriman
Sinar Mulya	1	4	0	0	0	1
Yuliana Sukarsih	2	5	0	1	0	0
Ondi Caringin	2	5	0	0	1	0
PT. Jaya Abadi Regency	1	4	0	1	0	0
Yuni	2	5	0	0	1	0
PT. Lappim	1	2	1	0	0	0
Baros Jaya	1	5	0	0	0	1
Mirah Jaya	1	5	1	0	0	0
Cahaya Abadi	1	5	0	0	1	0
CV. Megah Selatan Djaya	1	1	1	0	0	0
PT. Indonesia Pondasi Raya	2	5	1	0	0	0
PT. Wahana Teknik Indonesia	2	5	0	0	0	1
CV. Haka Megah Agung Jaya	1	3	1	0	0	0
Ade Lestari	2	5	0	1	0	0

Based on Table 6 then obtained the matrix used for the calculation of the value of alternative. The number of the priority scale was made the number of rows in the matrix while the number of variables was made the number of columns in a matrix so that it formed a 14x5 matrix of order can be seen in the equation below.

$$\begin{bmatrix} 4 & 0 & 0 & 0 & 1 \\ 5 & 0 & 1 & 0 & 0 \\ 5 & 0 & 0 & 1 & 0 \\ 4 & 0 & 1 & 0 & 0 \\ 5 & 0 & 0 & 1 & 0 \\ 2 & 1 & 0 & 0 & 0 \\ 5 & 0 & 0 & 0 & 1 \\ 5 & 1 & 0 & 0 & 0 \\ 5 & 0 & 0 & 1 & 0 \\ 1 & 1 & 0 & 0 & 0 \\ 5 & 1 & 0 & 0 & 0 \\ 5 & 0 & 0 & 0 & 1 \\ 3 & 1 & 0 & 0 & 0 \\ 5 & 0 & 1 & 0 & 0 \end{bmatrix}$$

Based on the equation above, alternative values can be calculated by way of finding the maximum value in each row is then the value of the divisor for each value on a line. Examples for the calculation of the value of an alternative to the first line:

$$V_{1,1} = \frac{X_{1,1}}{Max(X_{1,1})}$$

$$V_{1,1} = \frac{4}{4}$$

$$=1$$

Calculation based on matrix then obtained the results in Table 7.

Table 7 Nilai Alternatif Setiap Pelanggan

Nama	Customer Type	Kelas	Retur	Salah Kirim	Penambahan	Pengiriman
Sinar Mulya	1	1	0	0	0	0.25
Yuliana Sukarsih	2	1	0	0.2	0	0
Ondi Caringin	2	1	0	0	0.2	0
PT. Jaya Abadi Regency	1	1	0	0.25	0	0
Yuni	2	1	0	0	0.2	0
PT. Lappim	1	1	0.5	0	0	0
Baros Jaya	1	1	0	0	0	0.2
Mirah Jaya	1	1	0.2	0	0	0
Cahaya Abadi	1	1	0	0	0.2	0
CV. Megah Selatan Djaya	1	1	1	0	0	0
PT. Indonesia Pondasi Raya	2	1	0.2	0	0	0
PT. Wahana Teknik Indonesia	2	1	0	0	0	0.2
CV. Haka Megah Agung Jaya	1	1	0.3333	0	0	0
Ade Lestari	2	1	0	0.2	0	0

5. Elimination of alternative values that Have the smallest Value

   Once known the value of alternative from each customer thus based from Table 7 alternative values will be sorted from largest to smallest views of the most important categories i.e. returns, then the alternative value will comparison on each category as in Table 8.

Table 8 Hasil Pengurutan Nilai Alternatif Setiap Pelanggan

Nama	Customer Type	Kelas	Retur	Salah Kirim	Penambahan	Pengiriman
CV. Megah Selatan Djaya	1	1	1	0	0	0
PT. Lappim	1	1	0.5	0	0	0
CV. Haka Megah Agung Jaya	1	1	0.3333333	0	0	0
Mirah Jaya	1	1	0.2	0	0	0
PT. Jaya Abadi Regency	1	1	0	0.25	0	0
Cahaya Abadi	1	1	0	0	0.2	0
Sinar Mulya	1	1	0	0	0	0.25
Baros Jaya	1	1	0	0	0	0.2
PT. Indonesia Pondasi Raya	2	1	0.2	0	0	0
Yuliana Sukarsih	2	1	0	0.2	0	0
Ade Lestari	2	1	0	0.2	0	0
Ondi Caringin	2	1	0	0	0.2	0
Yuni	2	1	0	0	0.2	0
PT. Wahana Teknik Indonesia	2	1	0	0	0	0.2

6. The Selected Alternative

   At the customer segmentation stage, the number of selected alternatives can be determined by the Sales Manager. How many complaints a customer will be handled by the company depends on the Sales Manager. In Table 9, the first customer will be the first complaint that is CV. Megah Selatan Djaya. Because seen from the type of customer, the total transaction, and from the first Priority of the complaint is Returns, CV. Megah Selatan Djaya

has the highest value. The table below shows 5 examples of customers selected for first handling complaints.

Table 9 Alternatif Terpilih

No.	Nama	Customer Type	Total Transaksi	Keluhan
1	CV. Megah Selatan Djaya	Toko	Rp 465.000.000	450 box pecah dan belah
2	PT. Lappim	Toko	Rp 356.000.000	250 box ganti ukuran
3	CV. Haka Megah Agung Jaya	Toko	Rp 220.000.000	150 box tukar ukuran
4	Mirah Jaya	Toko	Rp 35.000.000	60 box ganti warna jadi gray
5	PT. Jaya Abadi Regency	Toko	Rp 98.000.000	Barang tidak sesuai dengan yang dipesan

3.4 Identification Of Actors

Information systems CRM (Customer Relationship Management) that will be built with a lot of actors who have interpreted the information systems to be used by some employees and customers at the magnificent Great CV Persada. As for the employees and customers as an actor who will be using the system described in Table 10.

Table 10 Identifikasi Aktor

No.	Aktor	Deskripsi
1.	Sales Manager	The officer in charge and have access rights to manage public information companies, managing complaints, managing the product, see the customer, transaction.
2.	Customer Service	The officer in charge and have access rights in managing customers, see complaints, managing the transaction.
3.	Customers	Customers are customers who are already registered on the companies with the rights owned by filling in a complaint, see transaction history, change your profile.
4.	Non Customers	Non Subscribers are customers who have not registered at companies with access rights only see the General information of the company and see the product.

3.4 Scheme Relation

The partnership scheme is a Figurean relation of every Table that was made in a database that will be designed. Scheme relation that has diFigurekan in Figure 7.

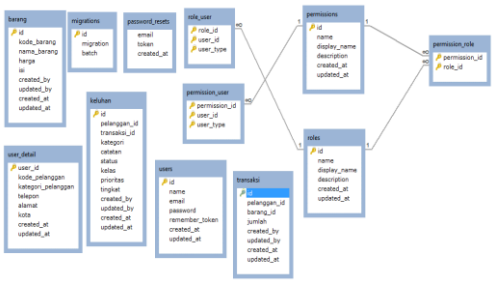


Figure 3 Skema Relasi

3.5 Semantic Network

Semantic Network is a network design that connects the menus that can be accessed by each user accompanied by the appearance of notification messages, errors, and warnings. There are 3 Semantic Networks on the development of CRM CV system. Megah Agung Persada, which can be seen in the following Figure:

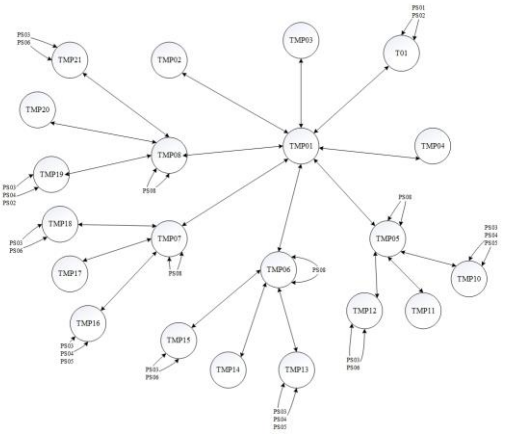


Figure 4 Jaringan Semantik Manajer Penjualan

3.6 Testing the system

System testing is the most important thing that aims to find any errors or omissions in the information system tested. Testing the system in question to know the performance of information systems that have been made in accordance with the objectives of the design of information systems. Testing the system using black box testing. Black box testing focuses on the functional requirements of the software.

The testing plan will do is to test the system in a way that was built in Black box and Beta.

3.6.1 Black Box Testing Conclusions

Based on the test results from the Black Box, the determination of the priority of the complaint with the CRM Approach is functionally already meet the needs in accordance with the hope that it can help sales managers in determining the priority of handling complaints on company.

3.6.2 The Conclusion Of The Beta Test

Based on the results of the interview with the sales manager at the magnificent Great CV Persada namely Devi Oktaviani, then can be taken decisions testing the determination of the priority of the complaint with the CRM Approach is as follows:

1. It can help sales managers in determining the handling complaints based on their importance.
2. Can help companies in conducting logging customer complaints.

3. CLOSING

This section discusses how the conclusions of the final results of the study i.e. the results of the analysis, design and implementation, designing, and testing of the determination of the priority of the complaint with the approach of Customer Relationship Management in the magnificent CV. Great Persada. This section also discusses also about suggestions for giving the important note in the development of the system..

3.1 Conclusion

Based on the results of the testing and discussion has been made then the obtained conclusions as following:

1. determination of the priority of the complaint with the CRM Approach can help sales managers in determining the handling of the complaint on the basis of importance of the complaint.
2. determination of the priority of the complaint with the CRM Approach can help companies in doing the recording of customer complaints so as to retain customers who potentially would no longer make transactions to the company

2.1 Advice

Advice that can be given to development of the determination of the priority of the complaint with the CRM Approach that has been quickly for further development can be described as follows:

1. Determination of Priority Complaints with this approach to CRM can be developed by adding sms gateway feature for scheduling notice handling complaints

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