MARKET SHARE ANALYSIS FOR OPENING NEW BRANCH AND PROMOTION DETERMINATION IN CV BISMA ESTETIKA WITH CUSTOMER RELATIONSHIP MANAGEMENT APPROACH

Jaka Pratama[1], Anna Dara Andriana[2]

Informatic Engineering – Universitas Komputer Indonesia
Dipatiukur Street 112-114, Coblong, Bandung, Jawa Barat
E-mail : jakapratama204@gmail.com[1], anna.dara.andriana@email.unikom.ac.id[2]

ABSTRAK

Hijack Sandal is a company engaged in the sale of sandals, and tebagi in the category of daily, fashion and traveling.CV. Bisma Estetika sells its products online and offline.

based on interviews with marketing managers that the company has a desire to open a new branch based on the turnover that has been achieved by the company when it has reached Rp.300.000,00 in each year. The turnover achieved by this company is dominated by the purchase of several cities of Tasikmalaya, Bogor, Banjar, Depok and Bekasi. Marketing managers claim to have difficulties determining the opening of new branches because of potential purchasing factors, the distance of new branches with targeted consumers and places with high potentials of seljualna. The second problem that happens is the company has experienced a failure in promoting by way of social media and fashion magazines. This promotion has had an impact on the decline in turnover achieved by the company.

Based on the results of blackbox testing and interviews concluded that this system can help the marketing manager in terms of opening new branches and determine the promotion.

Kata Kunci: *Customer Relationship Management*, Analisis Pangsa Pasar, Pembukaan Cabang Baru, Dynamic CRM.

1. PENDAHULUAN

Hijack Sandal is a company engaged in the production of sandals, and is divided into categories of daily, fashion and traveling. Currently CV. Bisma Estetika has a shop located in Bandung City. CV. Bisma Estetika currently has 945 customers, of which 732 customers are in Bandung. CV. Bisma Estetika sells its products by way of direct purchase or online.

Based on interview with Irvando as Marketing Manager at CV. Bisma Estetika states that product purchases in recent years show an increase, this increase in purchases seen from online transactions from 2016 to 2017 on appendix F-2. Online transaction data is dominated by several cities namely Tasikmalaya, Banjar, Bogor, Depok and Bekasi. This prompted the company to increase sales volume to get new customers in West Java Province. However, the company has concerns to increase sales volume by opening new branches due to several factors, namely the potential for product purchasing, the distance of new branches to the target company's consumers as well as a place not close to high sales potential to open new branches outside Bandung. Opening a new branch outside Bandung is expected to increase sales volume and simplify consumers outside the city of Bandung to conduct transactions with the company. Marketing Manager expressed difficulties in determining areas that have high market share and potential for the opening of new branches. Then based on the above problems conducted SWOT analysis on the marketing side of CV products. Bisma Estetika. SWOT matrix diagram states that CV.Bisma Estetika is in the condition of Quadrant 1 (One) ie the company is growing rapidly in sales of its products in order to reach customers who are in West Java Province (Agresive Strategy) on SO-1 strategy that increases the volume sales by way of market share analysis to open a new branch in the City or District of West Java Province. The next problem is based on the results of interviews with Irvando as Marketing Manager is the current promotion that is through fashion magazines and social media, this promotional media has an impact on the decrease in sales volume in appendix F-2. Marketing Manager states have difficulty determining the promotion because previously there has been a decrease in sales volume. If the promotion that runs the company can not increase the sales volume it will have an impact on the allocation of promotional costs incurred by the company so that the company suffered losses. So based on the problem is done SWOT Analysis to get

a strategy used by company to determine promotion. Based on the results of SWOT analysis conducted on the marketing side of the product, in get a strategy to find solution determination of promotion at CV.Bisma Estetika, company can use strategy of diversification (ST-1) that is using promotion mix to increase sales volume.

Based on the problems studied, the purpose of this study to build information systems that can determine the area of high potential sales in order to determine the opening of new branches and determine the appropriate promotion for the CV. Bisma Estetika:

a. Assist Marketing Managers in determining areas that have high sales potential and get appropriate target consumers with the company to determine the opening of new branches based on market share analysis.
b. Help Marketing Managers in determining promotions that can increase sales volume.

1.1 Customer Relationship Management

It is a strategy whereby all lines of business are internally and externally synergized to gain profitability point of view that is profitably oriented to customers [1].

1.2 Stage On CRM

Implementation of a good CRM concept is to organize the CRM process around the members and not just the internal functions of the company. There are three stages in CRM, namely [2]:

1. ***Acquire***, the process of acquiring a new relationship is to gain new customers that can be realized in various strategies.
2. ***Retain***, *retaining customer relationship is the phase in which the organization performs strategies to retain customers by means of service improvement.*
3. ***Expansion***, is the time to foster good relationships that already exist with customers, by always hearing the wishes of customers and serve it well, the creation of customers who are loyal to the product / service organization.

1.3 Dynamic CRM

To set the CRM feature appropriately, as a foundation for developing Software Requirement Specification (SRS), a framework is required as a reference. CH Park & YG Kim proposed a CRM Framework called "A framework of dynamic CRM". This framework describes a series of stages on the development / deployment of CRM. The most important substantive is the information obtained from the customer so that the output obtained in the form of Relationship Commitment, the model can be seen in Figure 1.1 Information that became the focus of attention is information about customers, information for customers and information by customers.

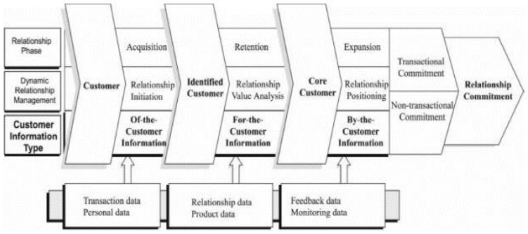


Figure 1.1 Dynamic Framework CRM

1.4 Market Share

Pangsa pasar (Market Share) dapat diartikan sebagai bagian pasar yang dikuasai oleh suatu perusahaan, atau prosentasi penjualan suatu perusahaan terhadap total penjualan para pesaing terbesarnya pada waktu dan tempat tertentu.[3].

1.5 Pemasaran Sasaran

Marketing activities should be directed to the targeted target market, so as to successfully achieve the expected goals. Target marketing is accomplished by three main steps as shown in [4].



Figure 1.2 Target Marketing Stage

1.6 Simple Additive Weighting

The SAW method is often also known as the weighted summing method. The basic concept of the SAW method is to find the weighted sum of performance ratings on each alternative on all attributes. [5].

SAW method recognizes the existence of 2 (two) attributes namely benefit criteria (benefit) and cost criteria (cost). The fundamental difference between these two criteria is in the selection of criteria when making a decision.

The completion step in using it is:

1. Determine the alternative, is Ai.
2. Determining the criteria that will be used as a reference in decision making, namely Cj.
3. Provide an alternative march rating on each criterion.
4. Determine the weight of preference or importence level (W) of each criterion.
5. Create a march rating table of each alternative on each criterion.
6. Create a decision **X** matrix constructed from the match rating table of each alternative on each criterio. The value of X of each alternative (Ai)on each criterion (Cj) has been determined, where i=1,2… m and j =1,2,…. N.
7. Perform normalized decision matrix X by calculating the value of the rated performance ratin (rij) from altenative Ai on criterion Cj

.

$$X = \begin{bmatrix} x_{11} & x_{12} & \cdots & x_{1j} \\ \vdots & & & \vdots \\ x_{i1} & x_{i2} & \cdots & x_{ij} \end{bmatrix}$$

$$r_{ij} = \begin{cases} \dfrac{x_{ij}}{Max_i(x_{ij})} & \text{j is } \textit{Benefit criteria} \\ \dfrac{Min_i(x_{ij})}{x_{ij}} & \text{j is } \textit{Cost criteria} \end{cases}$$

information :

a. It says the profit criteria if the value x_{ij} provides benefits for decision makers, Otherwise the cost criteria when x_{ij} incurring costs for decision makers.
b. If in the form of profit criteria then the value x_{ij} divided by value $Max_i(x_{ij})$ Of each column, while for cost criteria, value $Min_i(x_{ij})$ Of each column divided by value x_{ij} .

8. The result of normalized performance rating (rij) values form a normalized matrix (R)

$$R = \begin{bmatrix} r_{11} & r_{12} & \cdots & r_{1j} \\ \vdots & & & \vdots \\ r_{i1} & r_{i2} & \cdots & r_{ij} \end{bmatrix}$$

9. The final result of the preference value (Vi) is derived from the sum of the matrix elements of the normalized matrix row (R) with the corresponding weight of preference (W) of the matrix column element W.

$$V_i = \sum_{j=1}^{n} w_j r_{ij}$$

A larger value if Vi indicates the the alternative Ai is alternative.

2. CONTENT

2.1 Analysis Framework CRM

It is illustrated that the CRM phase in a framework is a series of processes consisting of Aquitition, Retention, and Expansion. Then the process or activity that is in the stage of the Framework of Dynamic CRM is as follows:

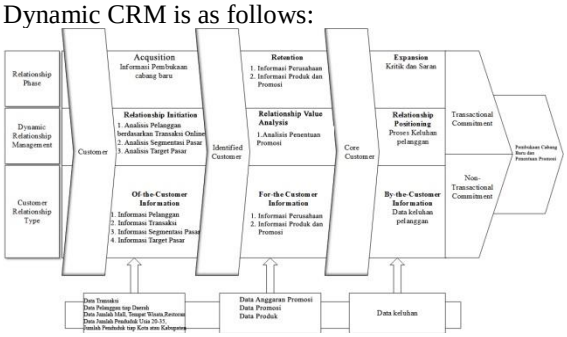


Figure 1.3 Framework Dynamic CRM

2.1.1 Phase Acquisition

Acquire is a stage that is in the acquisition at the stage of the relationship used to attract prospects CV Bisma Estetika to conduct transactions with CV Bisma Estetika.

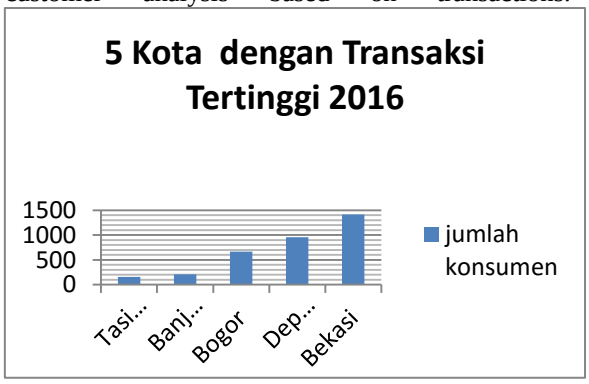
The stages that will be done by CV Bisma Estetika to attract new customers are as follows:

a. Opening a new branch so CV Bisma Estetika get new customers using market share analysis.
b. Displays new system opening information on the system.

Based on interviews with marketing managers, the opening of new branches is limited only to cities / regencies in West Java Province. At this stage further analysis is needed to determine the potential area for accurate opening of new branches. Here are the stages of market share analysis for opening new branches:

1. Customer Based Transaction Analysis

The first stage of the relationship initiation is to conduct customer analysis based on online transactions in September 2016 until July 2017. This is needed to determine the candidate for the opening area of the new branch. Here are the results of customer analysis based on transactions:



Gambar 2.1 Transaksi Berdasarkan Kota

Based on the results of image analysis 3.5 it is concluded that the City of Tasikmalaya, Banjar, Bogor, Depok and Bekasi is a candidate for opening new branches based on transactions. The process of opening a new branch can be done if the company's turnover Rp.300.000.000. Determination of new branch opening can be done in 1 year period.

2. **Market Segmentation Analysis**

Stages of market segmentation analysis will be done with 2 ways of determining the location that is:

a. Added location of market segmentation with reference to customer analysis result based on transaction
b. Added a market segmentation location by not using customer-based transaction analysis

Next will be analyzed market segmentation based on geography. Here are the steps of market segmentation analysis:

a. Analysis of geographical market segmentation

Geographical market segmentation is dividing the market into different geographic units, such as country, state, region, district,

city, or neighborhood. For research in CV Bisma Estetika, geographical area will be divided into cities and districts spread in West Java. Input on the analysis of geographic segmentation is 5 cities based on customer analysis as a reference to determine market opportunities, then used his data BPS citizens aged 20 to 35 years to get market opportunity value. Here are the steps to get the value of market opportunities are as follows:

1) Menggunakan hasil analisis pelanggan berdasarkan transaksi.
   Here is the city as a candidate for the opening of branches in West Java Province.
   a. Tasikmalaya
   b. Banjar
   c. Bogor
   d. Depok
   e. Bekasi
2) Determine the total population in each regin (TSP) in the 2015 BPS data source
   a. Tasikmalaya : 6.575.000 Pers.
   b. Banjar : 1.814.000 Pers.
   c. Bogor : 1.479.000 Pers.
   d. Depok : 2.161.000 Pers.
   e. Bekasi : 2.714.800 Pers.
3) Determine the number of residents from ages 20 to 35 years at the source of BPS 2015 (X).
   a. Tasikmalaya : 1.345.642 Pers
   b. Banjar : 343.148 Pers
   c. Bogor : 734.783 Pers
   d. Depok : 489.431 Pers
   e. Bekasi : 765.676 Pers
4) Calculate market opportunity value of each region = (X / TSP) * 100%. Here is a calculation of the results of market opportunities in table 2.1 :

Table 2. 1 Hasil Peluang Pasar

City / District West Java province	Population, Age 20 - 35 years (X)	Total Entire Population (TSP)	Value of Market Opportunity (X / TSP) * 100%
Tasikmalaya	1.345.642	6.575.000	20.46 %
Banjar	341.148	1.814.000	18.80 %
Bogor	734.783	1.479.000	49.68%
Depok	489.431	2.161.000	22.64%
Bekasi	765.676	2.714.800	28.20%

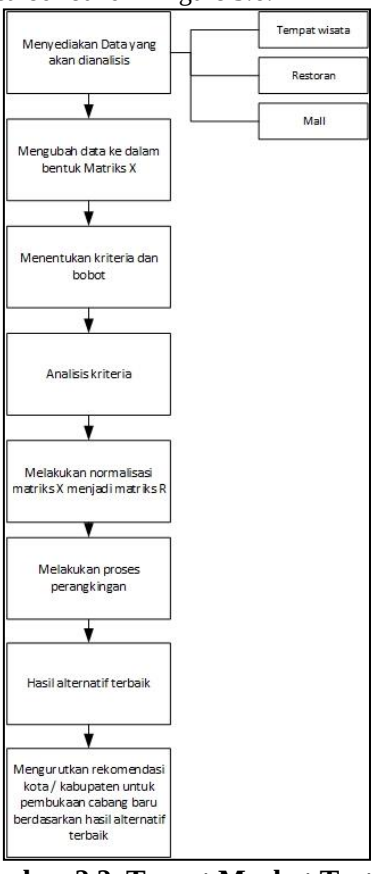
Based on the calculation of market opportunity that has been done in Table 2.1, then concluded for the results of geographical segmentation will be taken 5 cities or districts with the highest value. The following table 2.2 shows the conclusion of market opportunities:

Table 2. 2 The Conclusion of Market Opportunities

No	Capture of candidate result of market opportunity City / Prov. Jabar	Value of Market Opportunity	Ranking
1.	Bogor	49.68%	1
2.	Bekasi	28.20%	2
3.	Depok	22.64%	3
4.	Tasikmalaya	20.46 %	4
5.	Banjar	18.80 %	5

3. Target Market Analysis

Stages of market target testing conducted to measure how people's purchasing power to purchase a product, by looking at the factor of the number of malls, restaurants and tourist attractions. The selection of these criteria is based on where the consumer has the interest, the ability (purchasing power) of a product or service [6]. Criteria for determining the target market that has been set will be assisted by Simple Additive Weigthing (SAW) recommendation method. Here are the steps to determine the target market based on the flow of SAW method found in Figure 3.6:



Gambar 2.2 Target Market Testing Workflow

a. Provide data to be analyzed

The data used are the original data obtained from the transaction data in Appendix F-1. For example, the calculation applied to the SAW (Simple Additive Weight) method is analyzed by 5 (three) cities / kab in West Java which have been obtained from the 5

highest value of market opportunity. Below is the result of the calculation of geographical market segmentation that will be used as the calculation of SAW (Simple Additive Weight) method.

Tabel 2. 3 Data Yang Akan Dianalisis

No	City / Regency in West Java	Tourist attraction	Shopping center	Restaurant
1.	Bogor	45	14	135
2.	Bekasi	8	40	120
3.	Depok	18	15	45
4.	Tasikmalaya	14	6	35
5.	Banjar	5	1	11

The selection of criteria for tourist attractions, shopping malls and restaurants is used as a test of consumer target market and potential sales that will be achieved by CV.Bisma Estetika. The number of tourist attractions, shopping centers and restaurants is obtained from the West Java industry and trade office in 2013.

b. Convert data into X form

After getting the data to be analyzed in table 2.3 then made into the form of matrix X based on the formula (2.2). Below is the result of matrix equation X:

$$X = \begin{vmatrix} 45 & 14 & 135 \\ 8 & 40 & 120 \\ 18 & 15 & 45 \\ 14 & 6 & 35 \\ 5 & 1 & 11 \end{vmatrix}$$

c. Defining Criteria and Weight (W)

Before doing the calculation is determined in advance criteria and weights that will be used in the ranking calculation. Market testing criteria by looking at the number of malls, restaurants and tourist attractions is a factor influencing consumer purchasing decisions [7]. Factors the number of malls, tourist attractions and restaurants selected for review of middle to upper class lifestyle that has a lifestyle, personality and motivation to purchase different products with other groups [7]. The determination of this weight is based on the Director's interview result that the tourist spot is the top priority with 50% weight because it greatly affects the purchasing power of the product, then the restaurant and the shopping center each has 25% weight. Below are the criteria and weights in Table 2.4.

Table 2. 4 Weighting Criteria

No	Criteria	Weighting
1.	Restaurant	25%
2.	Shopping Center	25%
3.	Tourist Attraction	50%

Based on Table 3.4 then the results obtained based on equation (2.1). The following is the result of the equation obtained:

W = [0.25 0.25 0.50]

d. Criteria Analysis

The selection of market testing criteria of restaurants, shopping malls and tourist attractions is a benefit variable for the company. This means that the company benefits from restaurants, shopping malls and tourist attractions to support the opening of new branches in the areas to be analyzed, namely Bogor, Depok and Bekasi. Here is a table 2.5 which shows the analysis of opening new branch criteria:

Tabel 2. 5 Determining *Cost* and *Benefit*

No	Croteroa	Cost	Benefit
1.	Restaurant		√
2.	Shopping Center		√
3.	Tourist Attraction		√

e. Normalizing the Decision Matrix (X)

1. the number of tourist attractions. Then obtained the value as follows :

$$R_{11} = \frac{45}{Max\ (45; 8; 18; 14; 5)} = \frac{45}{45} = 1$$

results 1 for calculate Bogor

$$R_{21} = \frac{8}{Max\ (45; 8; 18; 14; 5)} = \frac{8}{45} = 0.167$$

results 0,167 for calculate Bekasi

$$R_{31} = \frac{18}{Max\ (45; 8; 18; 14; 5)} = \frac{18}{45} = 0.375$$

results 0,375 for calculate Depok

$$R_{41} = \frac{14}{Max\ (45; 8; 18; 14; 5)} = \frac{14}{45} = 0.311$$

results 0,311 for calculate Tasikmalaya

$$R_{51} = \frac{5}{Max\ (45; 8; 18; 14; 5)} = \frac{5}{45} = 0.111$$

restults 0,111 for calculate Depok

Then the conclusion of the above calculation with the criteria of the highest number of tourist attractions in Bogor City with a value of 1.

2. Number of shopping centers. Then obtained the value as follows:

$$R_{12} = \frac{14}{Max\ (14; 40; 15; 6; 1)} = \frac{14}{40} = 0.35$$

results 0.35 for calculate Bogor

$$R_{22} = \frac{40}{Max\ (14; 40; 15; 6; 1)} = \frac{40}{40} = 1$$

results 1 for calculate Bekasi

$$R_{32} = \frac{15}{Max\ (14; 40; 15; 6; 1)} = \frac{15}{40} = 0.375$$

results 0,375 for calculate Depok

$$R_{42} = \frac{6}{Max\ (14; 40; 15; 6; 1)} = \frac{6}{40} = 0.15$$

results 0,15for calculate Tasikmalaya

$$R_{52} = \frac{1}{Max\ (14; 40; 15; 6; 1)} = \frac{1}{40} = 0.025$$

results 0,02 for calculate Banjar

Then the conclusion of the above calculation with the criteria of the number of shopping centers of the highest value found in the city of Bekasi with a value of 1.

3. The large number of restaurants. Then obtained the value as follows:

$$R_{13} = \frac{135}{Max\ (135;\ 120;\ 45;35;11)} = \frac{135}{135} = 1$$

results 1 for calculate Bogor

$$R_{23} = \frac{120}{Max\ (135;\ 120;\ 45;35;11)} = \frac{120}{135} = 0.888$$

results 0,888 for calculate Bekasi

$$R_{33} = \frac{45}{Max\ (135;\ 120;\ 45;35;11)} = \frac{45}{135} = 0.333$$

results 0,333 for calculate Depok

$$R_{43} = \frac{35}{Max\ (135;\ 120;\ 45;35;11)} = \frac{35}{135} = 0.259$$

results 0,259 for calculate Tasikmalaya

$$R_{53} = \frac{11}{Max\ (135;\ 120;\ 45;35;11)} = \frac{11}{135} = 0.081$$

results 0,081 for calculate Banjar

So the conclusion of the above calculation with the highest value restaurant criteria are located in Bogor City with a value of 1.

After the calculation is done by normalizing the decision X matrix, it will get the matrix R based on equation (2.4). Below is the matrix R obtained.

$$X = \begin{vmatrix} 1 & 0.35 & 1 \\ 0.167 & 1 & 0.888 \\ 0.375 & 0.375 & 0.333 \\ 0.311 & 0.15 & 0.259 \\ 0.111 & 0.025 & 0.081 \end{vmatrix}$$

f. Ranked Process

At this stage after obtaining the matrix R it will be calculated ranking with equation formula based on the formula number (2.5) as follows:

V_1 = (0.25) (1) + (0.25)(0.35) + (0.5)(1)
= 0.25 + 0.087 + 0.05 = 0.837

results 0.837 is ranked for the city Bogor

V_2 = (0.25)(0.167) + (0.25)(1) + (0.5)(0.888)
= 0.041 + 0.25 + 0.444 = 0.731

results 0.731 is ranked for the city Bekasi

V_3 =(0.25)(0.375)+(0.25)(0.375)+ (0.5)(0.333)
= 0.093 + 0.093 + 0.166 = 0.352

results 0.352 is ranked for the city Depok

V_4 =(0.25)(0.311)+ (0.25)(0.15) + (0.5)(0.259)
= 0.108 + 0.037 + 0.129= 0.274

Hasil 0.274 is ranked for the city Tasikmalaya

V_5 =(0.25)(0.111)+(0.25)(0.025)+ (0.5)(0.081)
= 0.027 + 0.006 + 0.040 = 0.073

Hasil 0.073 is ranked for the city Banjar

g. Nilai Alternatif Terbaik

Based on the calculation on ranking stage, then the best alternative value is V_1 with the value of 0.837 So if viewed from 5 areas analyzed then the opening of new branch of CV Bisma Estetika based the best alternative value is in the city of Bogor.

h. The conclusion of target market analysis

Based on the calculation stage with SAW (Simple Additive Weight) method with 5 cities and districts that have been analyzed namely Bogor, Bekasi, Depok, Tasikmalaya and Banjar. Below is the result of the calculation of 5 cities and districts that are analyzed in table 2.6.

Table 2. 6 The Result of Calculating the Target MarketValue

No	City / Regency in West Java	Tourist attraction	Shopping center	Modern market	The final result
1	Bekasi	0.167	1	0.888	0.731
2	Bogor	1	0.35	1	0.837
3	Depok	0.375	0.375	0.333	0.352
4	Tasikmalaya	0.311	0.15	0.259	0.274
5	Banjar	0.111	0.025	0.081	0.073

The results of SAW method calculation shows that the highest end result shows that Bogor City is a new branch opening for CV.Bisma Estetika. Based on the results and recommendations for the establishment of new branches, the final decision will be returned to the company in determining the opening area of the new branch.

2.1.2 Tahap Retention

a. promotion determination analysis

To know the influence of promotion mix to increase sales volume, hence writer use multiple regression. This analysis is calculated based on the CV. Bisma Estetika.

Based on the data of existing promotion allocation on CV.Bisma Estetika there are 5 independent variables (Xi) and sales volume (Y) as the dependent variable. here is the equation of linear regression coefficient as follows:

$$Y = a + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + b_5X_5$$

Dimana:

Y = Sales Volume
X_1 = Advertising
X_2 = Sales Promotion
X_3 = Penjualan Personal
X_4 = Personal Sales
X_5 = Publicity
a = Constant number
b_1, b_2, b_3, b_4, b_5 = regression coefficients

Next will be done stages to find the value of multiple regression equation. Determination of the promotion is looking for the influence of a free variable (Xi) on the independent variable (Y). The independent variables used are advertising, sales promotion, personal selling, publicity and direct marketing.

This analysis is conducted to determine promotions that can increase sales volume, by

analyzing the allocation of promotional funds. Here is a linear regression calculation in this study:
The first will look for the value of regression coefficients with the following steps:

Table 2. 7 regression coefficient

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	T	Sig.
1	(Constant)	156033344,807	153248658,279		1,018	,355
	Periklanan	-798,563	291,875	-,759	-2,571	,041
	Promosi Penjualan	666,886	197,821	1,002	3,371	,020
	Penjualan Personal	139,026	385,136	,061	,361	,733
	Publisitas	634,020	189,657	,804	3,343	,020
	Pemasaran Langsung	-846,064	505,149	-,357	-1,675	,155

a. Dependent Variable: Volume Penjualan

From the results in Table 2.7 it is known that the value of the constant and the regression coefficient so that it can be formed multiple linear regression equation as follows:
Y = 156033344,807 - 798,563X1 + 666,886X2 + 139,026X3 + 634,020X4 -846,064X5
Having known the value of multiple regression equation then will be done a strong analysis of the relationship between variables X with variable Y (correlation coefficient) and also want to know the percentage of influence (coefficient of determination). To find correlation and coefficient of determination of formula used is as follows:

By using SPSS then get the value of multiple correlation coefficient and coefficient of determination as follows

Table 2. 8 Value of Correlation Coefficient

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,948[a]	,898	,796	26949649,332

a. Predictors: (Constant), Pemasaran Langsung, Periklanan, Penjualan Personal, Publisitas, Promosi Penjualan

Table 2. 9 Correlation Coefficient and its estimates

Coefficient Interval	Relationship Level
0,00 - 0,199	Very low
0,20 - 0,399	Low
0,40 – 0,599	Medium
0,60 – 0,799	Strong
0,80 – 1,000	Very strong

Next determine the promotion of the test results in the analysis phase of the determination of the promotion. The determination of the promotion will be based on the regression equation that has been obtained in the previous stage. Here is an analysis of the allocation of promotional funds:

1. Provide data on the allocation of promotional funds CV. Bisma Estetika

Table 2. 10 Promotion Cost Allocation

Year / Month		Sales Promotion	Publicity	Personal Sales
2016	September	Rp 350.000	Rp 450.000	Rp 890.000
2016	October	Rp 350.000	Rp 450.000	Rp 350.000
2016	November	Rp 550.000	Rp 550.000	Rp 250.000
2016	December	Rp 480.000	Rp 480.000	Rp 484.000
2017	January	Rp 450.000	Rp 450.000	Rp 450.000
2017	February	Rp 500.000	Rp 540.000	Rp 500.000
2017	March	Rp 550.000	Rp 550.000	Rp 340.000
2017	April	Rp 500.000	Rp 500.000	Rp 500.000
2017	May	Rp 450.000	Rp 450.000	Rp 120.000
2017	June	Rp 500.000	Rp 540.000	Rp 500.000
2017	July	Rp 430.000	Rp 130.000	Rp 430.000

2. Furthermore, it will be used the allocation of promotional funds in one month, for example in September 2016 as follows:

Tabel 2. 11 Cost Allocation in September 2016

Year / Month		Sales Promotion	Publicity	Personal Sales
2016	September	Rp 350.000	Rp 450.000	Rp 890.000

Then the value will be entered into the regression equation that has been obtained as follows:

Y = 156033344,807-798,563X1 + 666,886 (350000) +139,026 (890,000) +634,020 (450000) - 846,064X5

These results indicate that if the X2, X3 X4 variables are sales promotion, personal sales and publicity are allocated promotion costs of one unit and other variables are constant, then variable Y will increase sales volume.

The conclusion of the determination of promotion for CV.Bisma Estetika is sales promotion, personal selling and publicity can be used to increase and have a positive influence on sales volume.

2.1.3 Stage Expansion

Expansion stage is the last phase phase of dynamic CRM, which is used to maintain customer loyalty to CV Bisma Estetika. This feature will manage how critics and suggestions from Hijack

Sandals customers. Criticism and suggestions provided by the customer will be managed by the Sales Manager in order to understand the response back after using Hijack Sandals products, then to maintain good relationships with customers so customers can continue to transact with the company in the future.

2.2 Database Analysis

In the development of CRM system required a database design, Modeling to be used in the design of this database using Entity Relational Diagram (ERD). Here is a database modeling on customer relationship management information system in CV. Bisma Estetika in Figure 2.3:

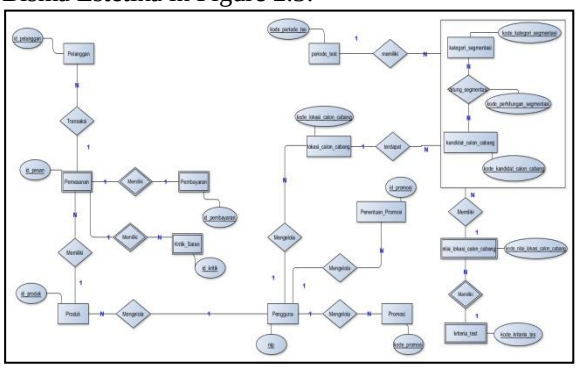


Figure 2.3 ERD

2.3 Context Diagram Analysis

Here is an analysis of the context diagram in this study:

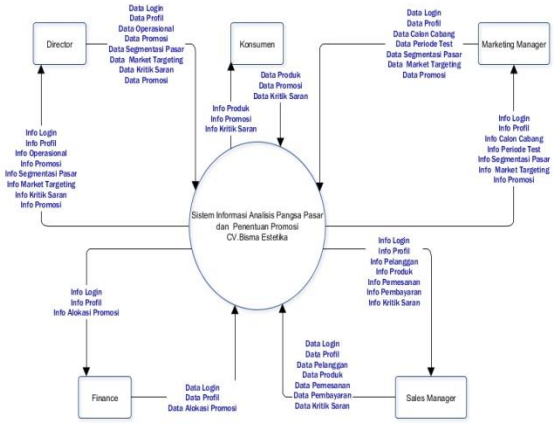


Figure 2.4 Context Diagram

2.4 Data Flow Diagram

Here is an analysis of data flow diagram design in thisstudy:

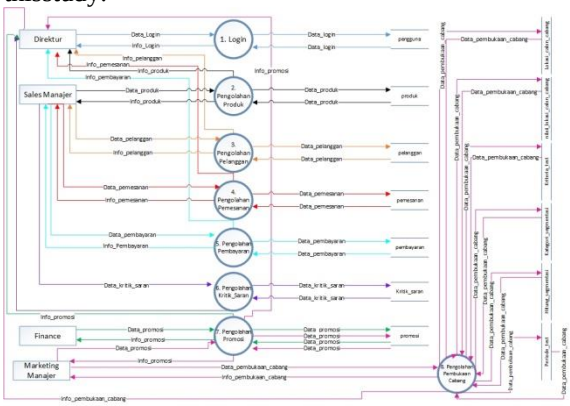


Figure 2.5 DFD

2.5 Testing System

Testing this system using black box testing. Black box testing focuses on functional requirements of software and end user acceptance.

2.5.1 Functional Testing

Functional testing scenario in CRM information system in CV Bisma Estetika done so that input and output on the system according to what had been expected. In functional testing will be described stages as follows:

Cases and Test Results (Data True)			
Input	**Hope**	**Observation**	**Conclusion**
Sample input Username: owner Password: owner	If Fill in the login data already registered, Go to the system main page	The login data is correct and the user will go to the system main page	[√]received [ ] rejected
Cases and Test Results (Data False)			
Input	**Hope**	**Observation**	**Conclusion**
Sample input Username: owner Password: 21874	If Filling wrong login data, message "Incorrect password entered."	Can display error message "Incorrect password entered	[√]received [ ] rejected
Cases and Test Results (Data Empty)			
Input	**Hope**	**Observation**	**Conclusion**
Sample input Username: Password:	If the login field is unfilled there will be a message "Username and Password you entered can not be empty. Please repeat again. "Can display error message"	Please fill in this field (Username) "and" Please fill this field (Password) "	[√]received [ ] rejected

2.5.2 User Acceptance Test

In this type of testing, the User will conduct an assessment of the system using interview methods addressed to Owner / Managing Director, General

Manager, Marketing Manager, Store Manager. So the question given becomes clear and directed.

Table 2.12 Reception Penggun Director

Question	Answer
Can this system help you in determining the opening of new branches?	According to Mr. Zaky, said this system allows us to see existing market opportunities based on purchases for the opening of new branches
Can this system help you in determining promotion for the company?	According to Mr. Zaky, states this system allows us to see how much that can cost in allocation for promotion
Can this system help you to monitor customer data, product, order, payment well?	According to Mr. Zaky, said this system helped me to monitor my operational data, which used to be a lot of multiple data
How do you think about the language used on this system?	According to Mr. Zaky, declaring the system easy to understand, does not cause ambiguity
How do you think about the interface display on this system?	According to Mr. Zaky, stated interface display on this system is quite good.
How do you feel about the ease of use of this system?	According to Mr. Zaky, states can facilitate me in determining the marketing area and determine the promotion

3. Closing

3.1 Conclusion

After doing the stages of analysis, design, and testing. Then can be obtained conclusion as follows:

1. This Customer Relationship Management Information System can assist Marketing Manager at CV Bisma Estetika in determining area of town / kab which has high market share potential for opening new branch in order to attract new customers.
2. Customer Relationship Management information system can assist the Marketing Manager in recommending the type of promotion that affect sales.

3.2 Suggestion

In order for the system built to work better, should be added several things as follows:

1. The addition of online sales menu facility on Customer Relationship Management Information System in CV Bisma Estetika. There is a more in-depth analysis of the marketing area.
2. An increase in market share analysis of competitor in Customer Relationship Management Information System in CV Bisma Estetika.

BIBLIOGRAPHY

[1] F. Buttle, Customer Relationship Management: Concepts and Tools, Bayumedia Publishing, 2007.

[2] I. Gautama T. Thendean, W. Sanjaya and J. Holim, "PEMBANGUNAN CUSTOMER RELATIONSHIP MANAGEMENT (CRM) BERBASIS WEB PADA PT. APP TOUR AND TRAVEL - JAKARTA," *KOMMIT*, Vols. ISSN:1411-6286, 2004.

[3] BW. S. d. S. D. Nuraini, "The Effect of Market Share, Laverage Ratio, and Capital Intensity Ratio on Stock Return," Vols. 3(2): 139-146, 2009.

[4] S. Assauri, Manajemen Pemasaran : Dasar, Konsep & Strategi, Depok: RajaGrafindo Persada, 2015.

[5] S. Kusumadewi, S. Hartati, A. Harjoko and R. Wardoyo, Fuzzy Multi-Attribute Decision Making (Fuzzy MADM), Yogyakarta, 2006.

[6] W. R. Griffin and G. Moorhead, Organizational Behavior Managing People and Organizations, USA: South-Western, 2010.

[7] Saladin Djaslim, Unsur-Unsur Inti Pemasaran dan Manajemen Pemasaran, Hal :134, Bandung, Mandar Maju, 1996