

Classifying and Designing Customer's Strategy Pyramid by Customer Life Time Value (CLV) (Case study: Shargh Cement Company)

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ABSTRACT

One of the reasons that we address the issue of customer priorities, are limited of organizational resources. Limited resources lead an organization seeking to obtain the maximum value from the sale of goods and services taking into account its limitations. Expanding markets and increasing the diversity of goods and services provided to customers and increasing variety of customer demands and preferences, market segmentation and targeting key customers are the most profitable for the organization is important more than before. The measuring of customer lifetime value is one of devices for category that is taken in the customer relationship management and can guarantee the profit based on focusing beneficial customers, reducing the expenses and declning the marketing activities. Various models for measuring the lifetime value of customer ever designed. In this model, RFM, which consists of three main variables recently purchased R (number of days elapsed since the last purchase customers), the frequency of purchase of F (number of purchases customers) and financial value purchases, customer-M is used as well as the relative importance of the three variables mentioned (W_R , W_F , W_M) as another value applied. AHP is used to determine the weights of importance of each indicators and models WRFM for classification and rank CLV customers is used. The ranking of every customer in the customer pyramid levels (platinum, gold, iron and leaden) where each layer of the pyramid, with four layer were divided into two sections, A, B so the pyramid was divided into eight levels. Each of these categories are defined according to parameters affecting and strategies related to the use of a resource has been developed by experts of the industry.

KEYWORDS: customer lifetime value (CLV), customer relationship management (CRM), customer priority, analytical hierarchy process (AHP), WRFM model

1. INTRODUCTION

Nowadays organizations have recognized that customers are their important assets; therefore, they consider their relations with customers as beneficial interactions which require appropriate management [1]. Since it can't be stated that all customers have the same share in company success, therefore having customers content, will be more important. But how we can have loyal and valuable customers for long times? And should be our behavior with our customers in the same way? If the answer is No, how we should separate and classify these customers for determining organization strategy in dealing with each group? What should we do with less efficient customers?

The distinction between customers in their communication with company is determined by their sensitivity to price, the length of life time, the extent of purchase value and their behaviors. In fact, these are the main reason for the difference in customer life time value or CLV which will be important for company in long run based on their profitability. In this basis the strategies of finding customers, keeping them and developing customer value are designed for different customers and since the relationship with customer is costly, to answer the above questions we should consider that how much this relation with customer in the long run will be profitable for organization, because managers believe that they should not pay for finding each customer in each level of profitability for company [2].

The organization should spend its limited recourses optimally for finding and keeping key customers of company by increasing competitions in markets. In this case it can identify customers who create high values for organization and can communicate with them. These actions can help to increase customer life time, the profit of that customer and finally the profit of that organization by increasing the loyalty of beneficial customers to organization. One of the most important means to reach communication management with profitable customer is the calculation of customer life time value (CLV). Ston & Jacobs (2001) believe that customer life time value is equal to current gross income value (cash inflows) from customer by subtracting all respective expenses [3].

The main question of this research is: The customers of Shargh Cement company include which groups and categories by applying CLV concept in analyzing customer's value?

And then according to this classification we can recognize: In which groups the most valuable customers are located? Is it necessary to keep all groups by considering the differences in customers profitability?

Generally what are the right performance of Shargh Cement company in dealing with each group and the required strategies for increasing loyalties of each group customers?

The main purpose of this study is to classify and prioritize customers of Shargh Cement Co. by using the concept of CLV and value measurement according to the importance of the proposed requirements. In fact, this study is aimed to apply one of the models introduced in other industries including the banking in the cement industry and to investigate the results. Other objectives of the study is to determine the relative importance and weights of measures used in the classification of this company's customers; to specify CLV rating of different classes of customers; and to identify appropriate strategies of Shargh Cement Co. in dealing with each of these categories which is performed by putting a class of customers in the customer pyramid. We will discuss the characteristics of each level of the customers' pyramid which we can call it customers' strategy pyramid. Analytical Hierarchy Process (AHP) method is used to determine the weight of each indicator and the Weighted Recency Frequency Monetary (WRFM) model is applied for classification and ratings of CLV for customers which are called clustering and discernment analysis methods, respectively.

2. Theoretical basics and research background

2-1. Customer life time value and its associated concepts

As we know, customers are the ultimate growth sources of all businesses. Many organizations concluded that identifying customers' types is very important. If all customers be exactly the same, then Businesses will be very simple, but it is not the case. However, the customers are very diverse regarding characteristics such as customer preferences, sensitivity to price, cost of service, involvement rates, reaction to marketing and sales tactics, and utilization of appropriate communication paths.

Form early times, many organizations have made a mistake in the proper valuation of their valuable customers, high investment on the less value customers, low investment on the high value customers, utilization of their valuable sources, and consideration of the future growth opportunities. So we can see that the correct understanding of customer value and their classification is very important to communicate with them. The concept of CLV was defined for the first time in more than 30 years ago by Cutler as the following:

Present value of the future expected income stream over a period of time during the communicating with customer [4]. Customer life time value is one of the basic principles of customer relationship management (CRM). Customer life time value is sometimes called the life time value (LTV) or future customer value which in most cases is used as a basis for the assessment of the CRM [5]. The concept of CLV is based on this approach that the customers are the source of future incomes and profits.

2-2. Conventional methods of calculating the customer life time value (CLV)

One of the main methods of calculating customer lifetime value is RFM method [6]. RFM calculation is an effective way to measure customer lifetime value. RFM elements are defined as follows:

1. The Recency of transaction: It is the period of time that is passed from last exchange with customer. The less recency, the customer is more likely to purchase again.

2. The Frequency of transaction: It is the number of transactions that a customer dose over a period of time. The more the frequency, the more the customer loyalty will be.

3. The volume of transaction (Monetary): It is the amount of money a customer has spent over a period of time. The high value of this variable for a customer shows that organization needs to focus more on him or her.

Many researchers believe that different industries need to assign different weights to RFM variables for classifying customers. For example, to analyze bank customer values, it is better to assign the highest weight to the variable F, then to the R and the minimum weight is assigned to M. But, as you will see, in Shargh Cement Co. the most important factor is M.

In other approach called Share of wallet (SOW), the basis for customer value calculation is the proportion of a specific product sale by organization to the total purchase of the same product in total market by customer in certain period of time [7]. In other words, this approach regards the degree of satisfaction of customer needs in the organization as a benchmark.

One of the other methods that are applied for CLV calculation is on the basis of Markov chain models [8]. In this model, the major criterion for the classification of customers is the amount of income that they have brought for every organization. This method is based on this fact that the customers never gained the same profits for organizations. One of other proposed methods in this field is the past customer value (PCV) method [9] and [10]. This method is based on the assumption that past performance of customers represents their profitability in the future and a scale from past performance can be applied as the future value. In this method, the customer value is calculated on the basis of his/her total profit from past interactions. Thus, the customer value is transferred to

present time by taking into account the time value of money, and it is a basis for the future value of customer. Another method to calculate CLV is ROI index [3]. In this method, the return rate of investment spent for every customer is a basis to calculate the customer lifetime value. In this way, the amount of money that is spent for each customer has considerable importance. Such an approach is like that we consider a customer as an investment tool (similar to investing in stock). In this investment we can be a winner or loser [7].

2-3. Analysis of common methods for calculation of customer lifetime value (CLV)

As seen in the above methods, each of these methods focused on CLV with different perspectives. One of the proposed methods in the customer evaluation analysis is RFM model which was presented by Hughes in 1994. In this model, the difference of customers is defined by using R, time interval from last customer purchase until now; F, the number of purchases in a given period of time; M, the nominal amount of purchase in the considered period [11]. In RFM, There are little financial attitudes and the main trend is towards quality issues. As was mentioned, in this way, three factors was considered: the volume of exchange, M; The number of repeated exchange, F; and Recency of exchanges, which are not related directly with the profitability of a customer and this model can be upgraded by adding other factors to these three factors to anticipate future purchase and profitability of a customer. WRFM is a model which assigns some weights for data of these three variables on the basis of their importance. Studies show that the higher R and F, it is more likely to have a transaction with the customer, and the higher M, it is more likely to return customer for purchase [12]. Newel, 1997 has shown that RFM model variables are very efficient to rank customers.

Yeh, et al. used RFM variables to select direct marketing method, and expanded the FRM model by adding two variables: The time of first purchase, the probability of losing customer [13]. This model also has various other applications. Jankra used this Model for Customer Segmentation, to determine the optimal marketing strategies [14]. In another study, this model is used for customer's ratings. Some of researchers have used this model to calculate the customer lifetime value [7], [15].

The SOW method cannot be a suitable criterion for calculating customer's value because it used only one sample of customer behavior, and this sample of behavior may be occurred under certain conditions. Another disadvantage of this method is that the purchase shares of a company cannot be a measure of customer value, because a customer may purchase the highest share of an organization, and has the less profitability than other customers. In addition, obtaining information about the customer's purchases from other organizations is not so simple.

One of the weaknesses of PCV method is that it provides no prediction for future behavior of customers, because in this method any potential issues to predict customer behavior is never used. Another weakness of this method is that it does not consider the marketing and customer retention costs. These costs can be very effective in the future value of customers. ROI method is tended more towards financial issues, and qualitative factors are less considered. Taking into account customer as a commodity or an investment tool is not so acceptable in the current business world [7].

2-4. Research background

CLV models presented by the researches can be categorized in three groups: The first group includes the models which evaluate the effectiveness of marketing programs on concepts such as attracting and retaining customers. Among the researches which have been done in this case is a model proposed by Kumar et al. 2006. The second group includes the models that evaluate the relationship between different components of the CLV. For example, Thomas, 2001 showed the relation between attracting customers and retaining customer which both have a direct relationship with CLV. In a study conducted in 1996, Reichheld also has shown that customer retention is the most sensitive part which impacts CLV. The third group includes models that connected the CLV to the value of the firm. One example of these models is Gupta, et al. 2004 which by using data from five companies, proved that CLV is a good representation of the value of an enterprise. Another example is Kumar and Leo, 2006 which showed that how a certain brand's value for someone can affect his/her CLV.

In the financial services industry, a case study is done about CLV with the proposed model by Glady et al, 2008. They described the concept of customer lifetime value as discounted value of future marginal revenues based on customer activity. Another study in the banking industry is Haenlein et al. model which presented in 2007. This model is based on customer segmentation in homogeneous groups according to four variables: age, life type, services used in bank by the customer and activated level of customer [15].

3 - Research Methodology, measurement and data collection

Research method regarding the purpose of research is applied research and the research in terms of data collection is a descriptive-survey one.

3-1. spatial domain of the research is customers of Shargh Cement Co. in Khorasane Razavi province of Iran.

3-2. temporal domain of the research is a three-year period of (2009 to 2011), which takes place in 2012.

The model for this study is based on Figure 1. Firstly the weight and importance of each of investigated indicators has been determined by using AHP method. After weighting these factors, we sample the customers of Shargh Cement Company based on enumerating customers with purchase more than 100 tons of cement in 2011. Thus the sample and the population were the same (505 customers had this condition and all of this are included in calculations in this study) and R, F and M are determined for each customer. Then based on WRFM model in which weight of indexes are calculated based on determined weights in the first section of the study by experts, we classified customers and then ranked the CLV of each categories. At the end, the results in each category and strategies that company should apply in dealing with different bunches of customers have been studied.

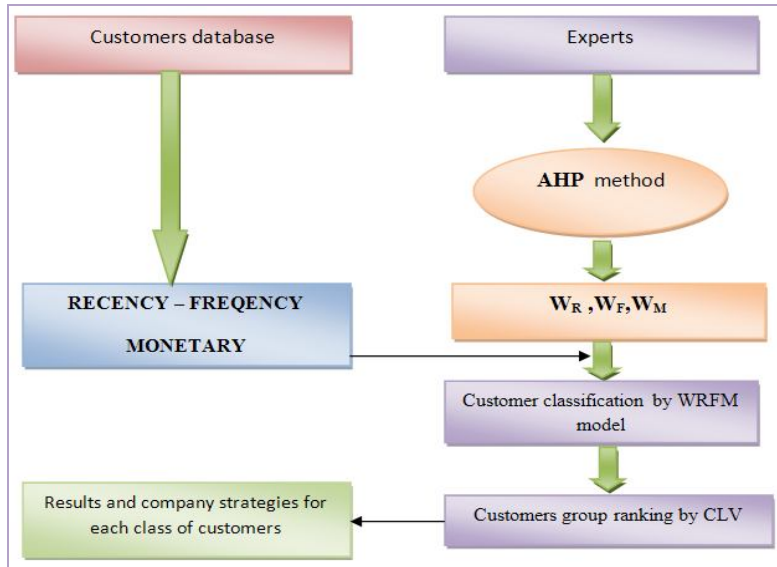


Figure 1-Model study

3-3. The population and sample of research

- The population in this study consists of two parts:
- A.Expert population of customer's affairs in Shargh Cement Co.
- B.Shargh Cement customers population .

Expert population of customers affairs includes all managers, professionals and experts who are working in departments of consumer affairs, sales, marketing, and sales department. The second part of the statistical population includes all of real and legal customers who purchased more than 100 tons in 2010. 2010 is selected as basic year since this year is generated mean value for a three year interval and customers who have purchased in this year have adequate information during the time of study that we can investigate their background and loyalty. The total numbers of customers in this study are 505 customers. by considering that the total number of customers population were selected statistically, the sample is equal to population and there is no need for sampling. Experts are 30 people and their limited number is due to their numbers is due to their particular circumstances such as marketing expertise, consumer affairs and cement sales experience... .

4. Data Analysis

4-1 - AHP method

For application of AHP Method to determine the weight of each used indicators, we used a questionnaire which has been shown in figure 2. This questionnaire was based on quantitative amounts of different judgments between indicators.

← Higher priority than the fase factor										=	Higher priority than the fase factor →									
RECENTY	9	8	7	6	5	4	3	2	1	2	3	4	5	6	7	8	9	MONETARY		
RECENTY	9	8	7	6	5	4	3	2	1	2	3	4	5	6	7	8	9	FERQUENCY		
MONETARY	9	8	7	6	5	4	3	2	1	2	3	4	5	6	7	8	9	FERQUENCY		

Figure 2- Sample questionnaire in AHP for this research

AHP method was proposed by Thomas L. Saati in 1980. It is one of the most used multi-criteria decision-making methods (MCDM).

The AHP method can be summarized in the following steps:

Building a hierarchical tree - Determining objectives, criteria and alternatives (as shown in Figure 3) - Gathering data: designing questionnaire, determining population and calculating of weights - Calculating inconsistency rate.

In the step of calculating weights in the AHP, elements of each row are compared by the corresponding element in higher level Two by two, and their weights are calculated. These weights are called the relative weight. Then, the final weight of each element which is called the absolute weight is determined by combining the relative weights. The gathered Information from comparisons is summarized in the matrices called "Paired Comparison Matrix" [16].

Inconsistency rate is a criterion to determine validity of respondent's answers. This mechanism determines the validity of respondent's answers and it should be less than 0.1 according to Saati. To determine Inconsistency rate of a questionnaire, firstly we must compare and calculate the eigenvalues of the matrix in each comparison level and then by using it we calculate the inconsistency index and finally inconsistency rate are calculated:

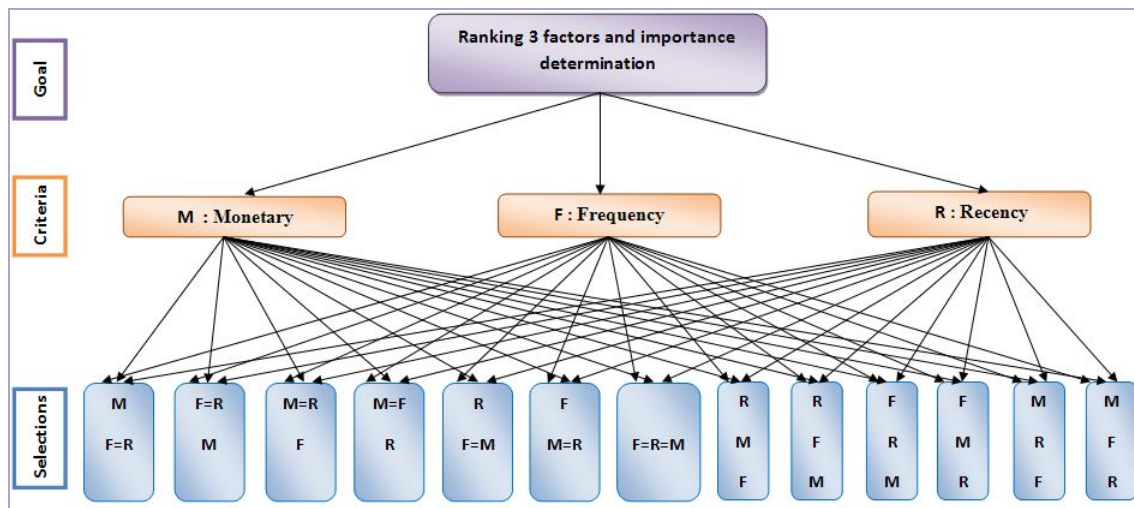


Figure 3- Hierarchical tree for AHP in this research

AHP analysis output by using Expert Choice software in this study:

After collecting the questionnaires, the results were summarized and their mean entered into the software as primary input of EC. This software provides AHP analyze method. Diagram 1 shows the outputs for the Shargh Cement Company.



Diagram 1- AHP outputs for weight of indicators

The above diagram shows the weights of effective Indexes for classifying customers and as can be seen, the volume of customer's purchase has the maximum weight and the frequency of customer's purchases has the lowest weight. Rate of inconsistency is less than 0.1. As a result the consistency is acceptable in the paired comparisons.

4-2. Classification of customers by using clustering method and based on WRFM model

In the second part of the data analysis, archived data related to customers' exchanges were analyzed separately. The clustering method was used in this section. Customers were classified based on three variables which were resulted from their archived exchanges data: R, F, and M. In this case at first these three variables for each customer are normalized and then each normalized value is multiplied in the relative importance of that variable which was obtained from AHP method and then, the customers were classified based on normalized weighted RFM values.

$$R^N = (R_{MAX}-R) / (R_{MAX}-R_{MIN})$$

$$F^N = (F-F_{MIN}) / (F_{MAX}-F_{MIN})$$

$$M^N = (M-M_{MIN}) / (M_{MAX}-M_{MIN})$$

After calculation of values for each customer, they were classified by using SPSS software; therefore, K-Means Clustering method was used. In this method, each variable can take two states: 1- When the average of variable for the category is higher than the average of that variable for total customers, and 2- when the average of variable for the category is less than the total average of that variable. Based on this fact and given the number of variables (Three variables), the total number of possible states are 8 (2 * 2 * 2), therefore eight categories were determined. After classifying customers based on this method, states of three variables for each category and the number of customers in each category were determined. The results are given in Table 1.

Table 1- Mean values for each group

Group type	Number of customer	R	F	M	Number group
R↓, F↓, M↓	175	99.2114	15.045	512397137.314	1
R↓, F↓, M↑	5	82	20.60	3502976233.400	2
R↓, F↑, M↓	67	37.7761	51.194	1293191696.701	3
R↑, F↓, M↓	191	443.3822	7.387	320185425.638	4
R↓, F↑, M↑	51	39.3922	165.70	22708899287.392	5
R↑, F↓, M↑	2	534.5000	14.000	5058532900.000	6
R↑, F↑, M↓	8	387.0000	54.625	1086461361.375	7
R↑, F↑, M↑	6	297.5000	56.833	6887223566.000	8
	505	223.6594	33.334	2917365548.350	Total mean

4-3.Ranking Customers categories based on CLV

In this section, customers are ranked based on CLV. This ranking is obtained based on an integrated rating for all categories. Integrated rating of Category J is as the follows:

$$C^J_I = w_R C^J_{R+} + w_F C^J_{F+} + w_M C^J_{M+}$$

Where C^J_R , C^J_F , and C^J_M are normalized mean values of RFM (Tables 2 and 3) for customers in each Category.

Table 2- The average normalized values and weighted

Cluster Number of Case	M^N	R^N	F^N	M^N_{w}	R^N_{w}	F^N_{w}
1	.0021	.8653	.0100	.0009	.2829	.0024
2	.0150	.8889	.0140	.0065	.2907	.0033
3	.0055	.9496	.0358	.0024	.3105	.0085
4	.0013	.3932	.0046	.0006	.1286	.0011
5	.0980	.9473	.1176	.0426	.3098	.0279
6	.0217	.2682	.0093	.0095	.0877	.0022
7	.0046	.4705	.0383	.0020	.1539	.0091
8	.0296	.5933	.0399	.0129	.1940	.0094
Total	.0125	.6946	.0231	.0054	.2271	.0055

Table 3- Data for integrated rating

Cluster Number of Case	$w_M C^J_M$	$w_R C^J_R$	$w_F C^J_F$
1	.0009	.2829	.0024
2	.0065	.2907	.0033
3	.0024	.3105	.0085
4	.0006	.1286	.0011
5	.0426	.3098	.0279
6	.0095	.0877	.0022
7	.0020	.1539	.0091
8	.0129	.1940	.0094
Total	.0054	.2271	.0055

Table 4- Ranking CLV for each group of customer

Rank CLV	Percent	Integrated rating	Number of customer	Number group
4	17.97294	.2862	175	1
3	18.9758	.3005	5	2
2	21.66542	.3214	67	3
7	3.710743	.1302	191	4
1	22.08827	.3803	51	5
8	1.742828	.0994	2	6
6	5.339835	.1649	8	7
5	8.504165	.2163	6	8
	100		505	

4-4. Using of discriminant analysis to test the significance of the performed

In this section, the significance of the performed classification is examined by using discriminant analysis. This means that whether categories can be used to distinguish customers or not and are they statistically significant or not? The result of the above analysis for customers shows that eight category can be distinguished by the three variables R, F, M, because the significance level for each variable is equal to 0.000 and is less than 0.05.

Table 5- Tests of equality of group means

Tests of Equality of Group Means					
	Wilks' Lambda	F	df1	df2	Sig.
M	.856	11.966	7	497	.000
F	.738	25.170	7	497	.000
R	.212	263.502	7	497	.000

Then, we can discuss the difference of each variable between the paired groups by using post hoc tests (Tamhane). Eigen values are also calculated in this study, which are equal to the proportion of squares sum of the differences between groups to squares sum of differences within groups. In this analysis the numbers greater than 1 for the first variable in this analysis indicates that differences between different groups is larger than the difference between the values of these variables within each group of customers, and the numbers smaller than 1 indicate that the difference between different groups is smaller than the difference between the values of these variables within each group of customers. In this study, Canonical Correlation values are also visible. This is a numeric value that is less than or equal to one. It shows the Correlation between discriminant variable and distinguishes between different categories if it is close to 1, the correlation will be high. The numbers resulted from analyzes show a high correlation and thus there is a good analysis to distinction between different categories based on three variables R, F, and M.

Table 6- Results of Eigenvalues and Canonical Correlation

Eigenvalues				
Function	Eigenvalue	% of Variance	Cumulative %	Canonical Correlation
1	3.763 ^a	91.8	91.8	.889
2	.300 ^a	7.3	99.1	.480
3	.037 ^a	.9	100.0	.188

5 – DISCUSSION AND CONCLUSION

The first thing that companies and organizations can do to increase their customers' loyalty is to provide more different services to the customers. Therefore, after identifying different categories of customers and ranking them by CLV, the Company should apply the best strategy in dealing with customers. In the following section, the behavior of customers in each category and their suitable strategy are described. Note that suitable strategies for each company may be different based on the objectives and the programs of the organization. In this section, we only discuss the strategy overviews in increasing customer's loyalty in each section. It is obvious that achieving a proper performance in dealing with each category and also an accurate and reliable program requires more extensive and continuous research and studies, in line with changes and fluctuations in market conditions. And also it will be affected by changes in consumer behavior.

5-1. Classification of customers based on the customer pyramid model

The conceptual model of customer pyramid (Fig. 4) includes four levels [17].

1. Platinum tier .Customers in this segment are highly profitable and loyal to the company. These are considered as the great consumers of products who are not so sensitive to price and are intended to investment

or they possess a significant volume of the company's shares. They are ready to use new products and also are committed toward company.

2. Golden tier. They are in lower level regarding profitability in comparison to platinum tier. Perhaps, this is due to customer's demand to receive the discount which restricts profit margins. Despite these customers use products much, but it is possible that they not be faithful to the company. Moreover, they may deal simultaneously with other manufacturers to minimize the risk. These customers are reputable in Cement market, but they may be intended to purchase Cement due to the lack of adherence to a particular brand, (by considering the minimum in price).

3. Iron tier. This category includes customers who are appropriate to cover the volume of organization activities, but their level of consumption or their loyalty and profitability are not significant enough. These groups are likely to increase the share of purchase and to strengthen their loyalty if they are supported, and if they are not supported there will be a descending trend in cement purchase.

4. Lead tier. This category includes the customers who are cost-maker for Shargh Cement Co. and always requires more benefits, while their profitability is low.

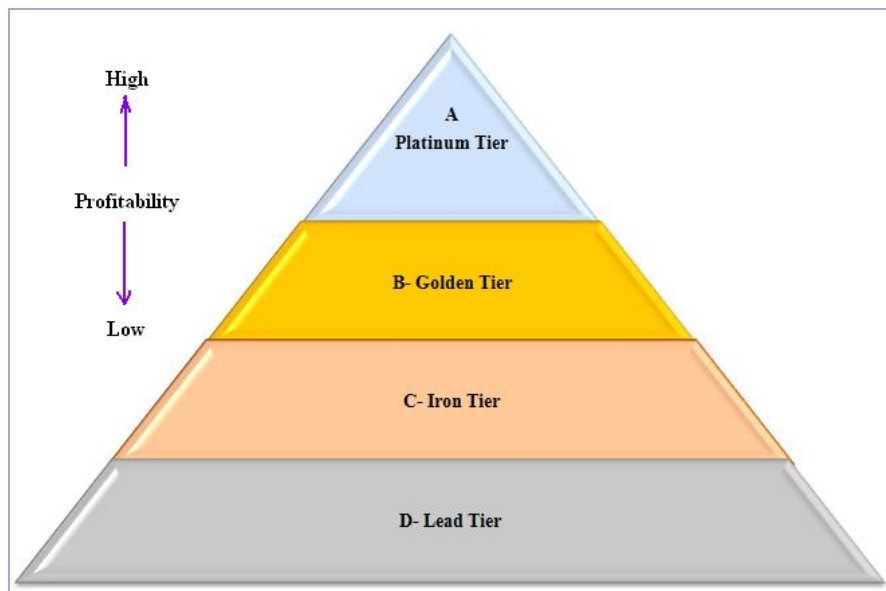


Figure 4- Customer pyramid

SOURCE: 3rd International Management Conference Iran, December 2002

5-2 - What is the proper performance of Shargh Cement Company in dealing with each category? And what are the required strategies to increase customer loyalty?

The first rank of Customers with model of $M \uparrow F \uparrow R \downarrow$: This includes customers who have the high volume and frequency of purchase and have recently purchased from company. Since all these three variables for this category have favorable situation in terms of loyalty and value to company, we can say that they are the most important and valuable customers for us. According to the pattern of loyalty and value, these customers by achieving the first rank in CLV demand more expenses and always organizations try to satisfy them. According to the number of this group ($n= 51$), organization can do something about their loyalty by providing special grade one services of customers till they always stay in this position and their needs to be investigated carefully and regularly.

The second rank of customers with model of $M \downarrow F \uparrow R \downarrow$: This includes customers who have small volume and high frequency of purchase and they have recently purchased. These customers are loyal to the company, but regarding the low volume of purchase from CLV are worth less than the first rank. The organization must encourage them to become more active and to provide the necessary conditions for increasing their purchase volume by considering the high frequency of their reference to company and the recency of their last purchase.

The third rank of customers with model of $M \uparrow F \downarrow R \downarrow$: These customers can be valuable customers, but they have low loyalty. Therefore it is possible for them to refer to their rivals in next periods. This category includes %0.99 of customers, 5 people, and Shargh Cement Co. should try to keep them because they are less in number. In this group, if the number of customers with these characteristics increases in the future, we should investigate whether these groups have purchased in order to meet a temporal need or their need is satisfied in long-term periods. In the first case, there is no need to apply special programs and only in the second case the relationship retention will be necessary after sale, delivery, and poll operations by relevant experts to ensure the reference of customers in the future.

The fourth rank of customers with model of $M \downarrow F \downarrow R \downarrow$: It can be said that these customers are those that have recently become a member in company. These customers are in the class of customers with average CLV, and they can only be valuable customers only if they increase their purchase volume and frequency. They are important due to their high number and Shargh Cement Co. must identify the customers who try to communicate with the company more and maintain only those that have the ability to become more valuable customers.

The fifth rank of customers with model of $M \uparrow F \uparrow R \uparrow$: This rank of customers is those that have the high volume and frequency of purchase but they have no purchase recently. This group includes %1.19 of customers who are 6 people and are regarded as valuable customers with high potential by considering their high purchase and the frequency of their purchase, but given the high R that reflects the long time passed from their last purchase, there is possibility that they are attracted by competitors.

The sixth rank of customers with model of $M \downarrow F \uparrow R \uparrow$: Since in this study the variable of purchase volume in comparison to other two variables has great importance in determining the CLV of customers, it can be said that these customers are not considered as valuable customers. These groups have only high frequency of purchase, but they are not in proper situation in relation to price and the recency of exchanges. Therefore, in terms of volume and loyalty, they are customers that maintaining them with their present situation will not have great value for the company.

The seventh rank of customers with model of $M \downarrow F \downarrow R \uparrow$: The pattern of these customers indicates that they are in the group of customers with the lowest value. They have high frequency of purchase and low volume of purchase. In addition long times has been passed from their last purchase and they are not considered as loyal customers. Therefore, the company should not invest much time and energy for them and should separate the potentials of this group to prevent wasting resources.

The eighth rank of customers with model of $M \uparrow F \downarrow R \uparrow$: These customers are in the lowest category of value. This category includes 0.4% of customers and only 2 customers. In this group the volume of purchase is high but they not don't have purchase repeat and very long time has been passed from their last purchase. Therefore, they have less loyalty and it is likely that the loyal customers of competitors under special circumstances have forced to purchase from Shargh Cement Co. who later returned towards competitors again.

According to the statistical data and the results, eight categories of Shargh Cement Co. customers are placed on the customer pyramid level based on CLV ranking which has been shown in Fig.5. If we divide each level of the pyramid into two parts: A and B, and place the customers in these parts, we can see that according to Pareto Law, about %23of customers are placed in platinum tier which includes are the most important and valuable customers and the remaining groups are placed in other six parts , respectively. There are some important points that we can refer to them in the following:

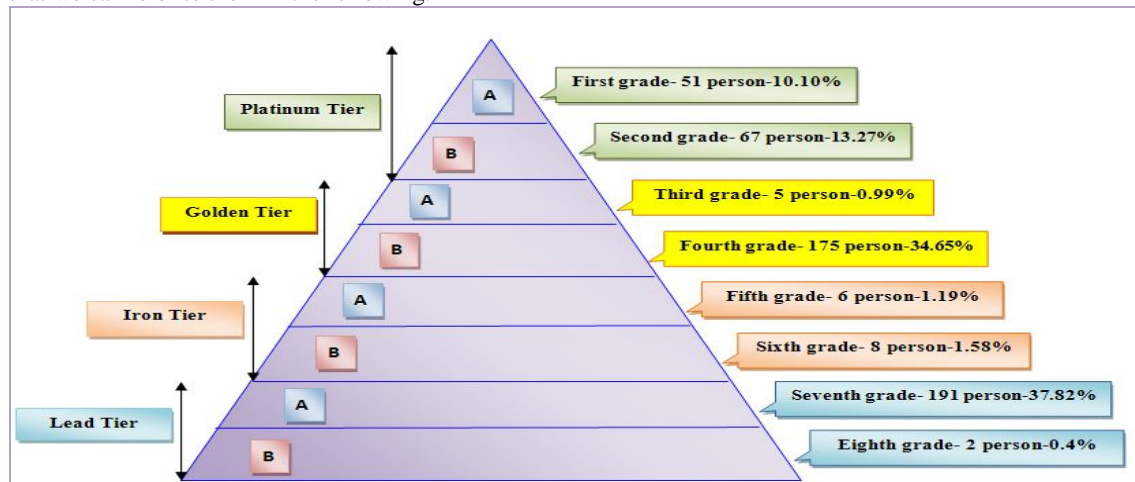


Figure 5- Customer strategy pyramid in Shargh Cement Co.(2012)

Customers of layer A must be retained in their place and they should be encouraged to higher valuable ranks. In particular, as can be seen in Fig.5 five customers in layer A of gold class can easily advance to the platinum tier by using strategic and incentive programs. Also six customers in layer A of iron class can upgrade to a better place by little resources, which in turn leads to their loyalty. But customers in layer B have the risk to fall into less valuable ranks. Based on customer's current status and their frequency, Shargh Cement Co. must decide whether these groups of consumers worth to spend more costs and resources and to perform specific marketing programs or not. For example, Customers B in platinum class should never fall to less valuable category and should be reinstated in their positions by considering the high percentage of %13.27 (n = 67). Therefore, we must remove the obstacles and problems of this group. Customers in B layer of old class constitute the 34.65% of total customers (n = 175), naturally require special attention and support because the loss of these customers or reduction of their purchases will have negative impact on corporate profits. Shargh Cement Co. should reduce marketing costs for Groups A and B in lead category, (although they constitute %37.82 and %4 of customers, respectively) because these customers are neither loyal nor profitable and it should also provide costs and facilities for more valuable customers including 175 customers who are in B layer of golden class and have recently purchased and need to be encouraged for future purchases and to increase purchase volumes in order to become loyal customers. In general, we can say that customers of layer A have better stability in their position and will be remained in the same area of pyramid in time of position fluctuations.

However, the customers in layer B are likely to fall to a lower level of pyramid which is less valuable. This means loss of customers, reduction of loyalty and profitability which is important and requires more attention. According to this classification, the most valuable customers of Shargh Cement Co. who are profitable and loyal and have recently purchased, include 51 customers or %10.10 of all customers. Then there are customers with less profitability but more loyalty who are 67 people and they include % 13.27 of all customers. These customers constitute platinum level of customer pyramid in Shargh Cement Co. and the organization focuses on deepening relationships, strengthening loyalty and optimizing profitability through various sales techniques, diversifying available services and increasing purchase.

In this study, we classified the customers by combining AHP method and WFRM model. Also, the rank of all customers was determined based on CLV. In this study, we tried to introduce CLV as a useful tool for identifying the customers of Shargh Cement Co. In addition by considering that customers have been investigated in relation to the detail and accuracy of the kind of their purchase and other matters used in future decisions of company, we can say that by using the concept of CLV an important tool is presented for identifying key customers. Classifying customers based on the variables of give weight related to customer's activity and exchanges provides us the comparison of these customers' value. Considering the high volume of customers in each organization the calculation of each customer's lifecycle value will cost more to organization. Furthermore, the results of such calculation will not be useful for this company and organization. But in this study the application of CLV in comparing and classifying of categories showed that such comparison can have useful information in advancing each company's objectives and strategies.

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