DEVELOPING THE CONCEPT OF CRM COMPLEX

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A concept that allows to manage customer relations on the scale of a company and to maximize the effectiveness of customer relations is suggested. The key element is a mathematical model of optimum advertising budget distribution between the existing segments of the client base. The feature of this concept is the application of the existing methods as a unified complex, as well as their improvement. The concept allows both to make a decision on the course of action in the process of customer contact and optimize advertising costs, as well as maximize the sum total of the profit from all the client segments.

Today it is not enough to just offer good products or services. Today the main and the most important competitive advantage is effective longterm customer relations, especially with the most payable customers. This task requires constant dialogue and effective use of the information obtained in every contact spot. This is the essence of CRM strategy, whose aim is the attraction and retention of profitable customers via establishing and improving the relations with them.

A lot of researchers dedicated their time and thought to the issue of effective CRM. Theoretical analysis of their works allowed to make certain conclusions on the degree of development of the above-mentioned issue:

1. Most scientific papers (e.g. Molino P., Newell Ph.) lack a unified opinion on the essence of the CRM concept, on who is the main beneficiary and on how this concept should be realized to gain maximum output.

2. Client-oriented approach is regarded either in purely theoretical sense (see the works of Payne A., Molino P.) or as the CRM system implementation process that should facilitate customer relations (see the works of Trofimov S., Shuremov E., Kudinov A.).

3. Many works contain but general, quite shallow recommendations and suggestions on how a company should work with its clients to retain the most valuable ones and establish longterm relations with them (see the co-work of Peppers D. And Rogers M.).

4. A lot of marketing specialists (Molino P., Newell Ph., Peppers D. And Rogers M.) don't give any information on the instrumental part of CRM strategy.

Thus we can draw a conclusion that the works on CRM lack a unified algorithm of actions, which led us to the development of a complex CRM concept and a complex of measures on client base management within its limits (see figure):

Iclient segmentation;

segment profit estimate;

segment satisfaction evaluation;

Iclient segment interaction management.



Fig. CRM concept algorithm

* Anastasiya A. Krukova, post-graduate student of Povolzhsky State University of Telecommunications and Informatics; Evgeny V. Kuzmin, PhD in Economics, associate Professor of Povolzhsky State University of Telecommunications and Informatics. E-mail: kaasamara@rambler.ru. The aim of any company is maximizing the profit, obtained via client contact. The profit can be maximized only by effective customer / company interaction and by gaining customer loyalty. To create an efficient CRM model, a company should study the client base structure thoroughly and identify stable groups with certain similar features. This process is called *client segmentation*. For this purpose we shall use one of the key statistic methods - the cluster analysis. The output of segmentation via cluster analysis will be the unified customer groups, or *segments*.

The next structure element of the algorithm is the *profit estimate* of those client segments, on the one hand, and the *satisfaction by the products / services of the company evaluation*, on the other.

To identify the profitability of one group or another, we should regard each group as a separate investment project with its costs, like marketing costs, and profits gained in the end. To evaluate the segment profitability, we can use the index of client profitability throughout their total life cycle. Having estimated the segment profitability, a company aims its advertising policy in the most profitable direction, in the attempt of making those segments most loyal, as long as its profit depends on them. To retain a perspective client, a company should evaluate their loyalty. This requires the transition to another part of the algorithm - customer satisfaction evaluation. The core of this part is quality research methods (SERVQUAL, Simalto etc.), that allow to identify the deviation between customer ideals and expectations and customer perception of the existing supplier ("perception minus expectation"). Having identified the key clients and the gaps in their servicing, we can pass on to the measures on profit maximization. Here we will need an optimization model that will allow to distribute the attraction and retention costs in such a way that the total profit gained from the customers will increase:

$$D = \sum_{j=1}^{m} \sum_{i=1}^{n} D_{ij} = \sum_{j=1}^{m} \sum_{i=1}^{n} \frac{N_{ij} \cdot R_{ij} \cdot f(Z) - Z_{ij}}{(1+r)^{j}} \to \max$$
$$\sum_{i=1}^{n} Z_{i} = Z, \quad i = \overline{1, m}$$
$$Z :> 0$$

where *D* is the sum total of client segments profit in a certain period of time; D_{ij} is is the profit from i-segment in the given period of time; N_{ij} is the number of clients in the given period of time (life cycle); R_{ij} is the profit from each iclient of i-segment in the j period of time, without marketing costs; f(Z) is the parameter, which consists of a functional dependence between the client attraction costs (*Z*) and the speed of client base growth; Z_{ij} is advertising costs (attracting the potential and retaining the existing clients) per i-segment in *j* period;

is the number of segments; j = 1, m is the number of periods.

This model allows to select the most suitable option of advertising budget distribution and significantly increase the profit from all the client segments.

The suggested complex CRM concept is a logically linked, consistent sequence of actions on effective client base management. Each measure in this concept has a tool for its realization. The concept allows both to make a decision on the course of action in the process of customer contact and optimize advertising costs, as well as maximize the sum total of the profit from all the client segments.

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