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FEATURES OF DEVELOPING CRM-SYSTEMS FOR PHARMACEUTICAL INDUSTRY BY THE EXAMPLE OF CDM OPTIMIZE PHARMA

This paper deals with characteristic features of pharmaceutical industry. The main feature is impossibility of the direct influence on a buyer. Proceeding from the analysis of these features, we have made a conclusion that classical CRM systems cannot be used for the subject area under consideration as they are based on the principles of classical sales cycle.

The paper describes main capabilities of CDM Optimize Pharma CRM system as well as the features which distinguish it from classical CRM systems and make it suitable for use in pharmaceutical industry. Such extended capabilities are Advanced Segmentation, Pre-Call Activities etc.

Key words: *CRM system, CDM Optimize Pharma, CRM systems in pharmaceutical industry.*

Statement of the problem of CRM system development for pharmaceutical industry

Development of CRM systems for pharmaceutical industry involves creation of the product that satisfies the requirements to standard CRM systems as well as specific requirements of pharmaceutical industry.

The following requirements belong to the standard requirements to CRM systems [1]:

1) availability of a single data warehouse with the access to all information about the cases of interaction with a client at any moment;

2) synchronized management of multiple interaction channels;

3) continuous analysis of the collected information about clients and making the corresponding organizational decisions (e. g. “sorting” the clients according to their importance for the company).

Let us consider the main requirements of pharmaceutical industry to CRM systems:

1. Increasing the efficiency of the sales department work;
2. The possibility to store and systemize information about daily meetings;
3. The possibility to enter information into the system with the help of mobile devices;
4. Automatic accountancy;
5. Control over the implementation of company objectives;
6. Accessibility of actual information on the clients for all employees;
7. Effective management of product range and marketing campaigns.

Thus, pharmaceutical industry increases the requirements to CRM system, which leads to changing and extending its functionality as compared with standard CRM systems.

This paper aims at covering the problems and special features of the development and implementation of CRM systems in pharmaceutical industry.

Analysis of Ukrainian market of CRM systems and of the existing CRM systems for pharmaceutical industry

Today there are several solutions ensuring effective application of CRM systems in pharmaceutical industry.

Work [2] describes characteristic features of implementing CRM systems in Ukraine including “vertical” solutions. It is pointed out that Ukraine lags behind the Western European countries as to the development of the culture of CRM systems application, though this gap is being constantly reduced. Recently, CRM systems have become essential for the enterprises that are functioning in the competitive environment.

CRM systems are efficiently implemented at small and average enterprises where return from

innovation is already felt in several weeks. For efficient implementation of CRM systems at a large enterprise an individual approach is required taking into account the specifics of work at each of the enterprise subdivisions as well as their interaction. The effect from implementation is not felt at once but with a certain delay at each of the subdivisions. Complexity of implementation increases the probability of errors, which may lead to the reduction of labor productivity.

In work [3] the requirements to CRM systems in different fields are discussed, in particular, the pharmaceutical industry requirements: the possibility to use a CRM system from mobile phones, automatic construction of daily, weekly and monthly reports, automatic construction of the lists of future visits, automatic management of the product range and of marketing companies, estimation of the "importance" of doctors and clinics.

Let us consider the existing CRM systems in pharmaceutical industry:

1. Brimstone Pharma – a vertical solution based on Microsoft Dynamics CRM. Features: brand promotion management, planning and organization of promo-companies, working with reports and writing analytical reviews on companies, reports about visits that make it possible to record all the necessary information, the tool for visualization of contacts between partners, KPI module for obtaining and tracing the key indices of efficiency.

2. Oracle Enhances Siebel CRM for Life Sciences Industry. Oracle Siebel – the most advanced among the existing CRM systems as it has the largest set of functions. At the same time this system has a number of disadvantages: implementation cost is much higher than the average one, the system is not friendly to poorly prepared users, i.e. to most of the users of CRM systems. Features of the vertical solution of Siebel Life Sciences: improvement of the contact management, simplified determination of territories, extended capabilities for development and control over clinical research, an improved module for controlling test products.

3. C-World from Pharmakon Software [4]. Features: the system capability of flexible adaptation to users' needs; web orientation, simplicity and absence of the complicated adjustment necessity; the possibility to use mobile devices for working with the system; the capability of forecasting and searching for regularities in the accumulated data.

Characteristic features of the pharmaceutical industry in the West

In western European countries the sales cycle in pharmaceutical industry is different from that typical of other industries and namely: advertising campaign – sale – analysis of the sales results – advertising campaign. A distinguishing feature of the pharmaceutical industry is impossibility of direct influence on a buyer due to forbiddance of public advertising of medicines and also due to the fact that solution about the product choice is made not by a buyer but by a doctor who writes the prescription.

Thus, a person who makes a decision on the product choice and a person who pays for the product are different individuals (see fig. 1). This causes considerable complication in the usage of classical CRM systems based on the principles of classical product cycle.

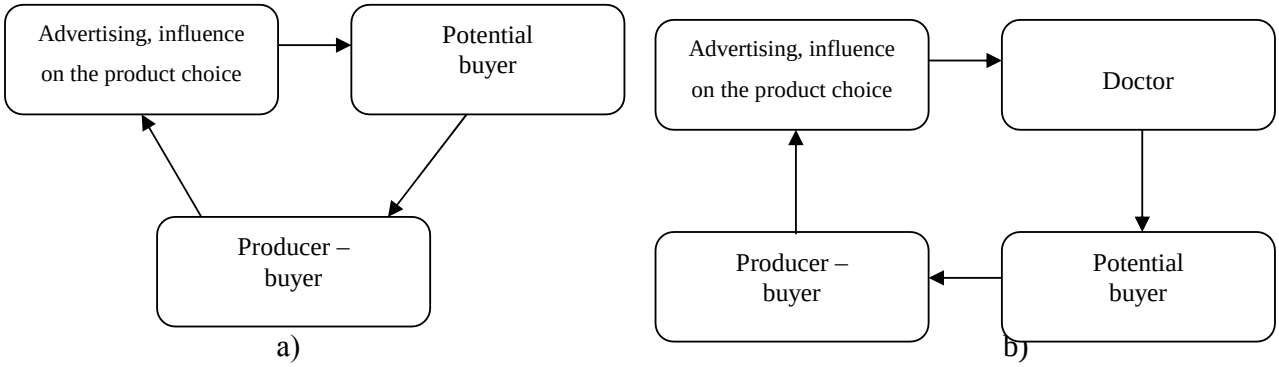

Fig. 1. Typical sales cycle (left) and sales cycle in pharmaceutical industry (right)

Taking into account the impossibility of public advertising of products, personal meetings with doctors (with those who make decisions on the product choice) is the most effective advertising.

In classic CRM systems the work of sales agent (a person who conducts meetings with those taking decisions about purchasing the product) is estimated quiet simply: by the amount of revenue from trade agreements signed due to the meetings conducted by the sales representative. In the pharmaceutical industry such approach is impossible because of the complexity of the sales volume calculation and, therefore, complex mechanisms of labor productivity estimation are required [5].

ABC categorization

As a rule, the possibilities of sales representatives in a company are limited and it is impossible to conduct meetings with all potential consumers. So a problem arises to select potential consumers with whom meetings must be conducted. To solve this problem, all potential consumers could be divided into several categories depending on their importance for the company.

A classical approach is division into three categories – A, B, C. The most important potential consumers who bring or could bring a big profit belong to category A. Usually these consumers make a basis of the company sales base and so they require more attention. Consumers with average buying capacity that are important for the company and bring a considerable profit belong to category B. But their importance for a company is much less as compared with category A. Consumers with low buying capacity belong to category C. They bring an inconsiderable profit to a company. Consumers of category A make on average 20% of all the clients and bring 80% of the total profit [6].

Except classical division into three categories, more complicated variants of categorization exist.

Why traditional CRM systems do not work in the pharmaceutical industry

Many pharmaceutical companies often try different CRM systems, but they are facing problems that also remain in a new system. This often occurs because the basis (a data model) of the system construction is not suitable for the pharmaceutical industry as such. Let us discuss the most typical pitfalls.

There are many objects for which data models in the pharmaceutical industry differ considerably form those used by traditional CRM systems. This is especially true for the following objects:

– contact persons;
– organizations;
– geographical regions and sales areas;
– the product hierarchy;
– actions;
– segmentation.

Data model of a contact person is the most complex data model for understanding and explaining its advantages. Unlike a traditional CRM system, pharmaceutical industry understands the notion of “person” as “contact person” (depending on the context where this concept is used). This differentiation is especially important in the system of medical sciences as in this sphere a lot of people having several places of employment are involved. And the more jobs they have the more complex their representation in CRM will be.

In pharmaceutical industry this example may have the following form:

– a private person – Mr. Anders Hanson
– in a clinic – Mr. Anders Hanson, a doctor (doctor B who prescribes antidepressants)
– in the hospital of Kingston – Mr. Anders Hanson (Doctor A who prescribes blood pressure medicines)
– pharmaceutical industry – Anders Hanson, a famous politician (an authority on all medicines)

How is this problem solved by a traditional CRM system?

1. It creates duplicates: information about individuals is stored separately, but many duplicates are created in the database or

2. One contact person is created and all working relations of this person are registered (in the same way as electronic postal code is registered).

At present many CRM developers realized ineffectiveness of the first method and switched to the second one. Finally, the optimal way of solving this problem is the third variant – creation of a separate object for each position.

While solution of the majority of problems could prove to be simply inconvenient, there are also such tasks that could involve serious problems. Therefore it is necessary to pay special attention to the solution of key problems. Hence, business logic of the data base becomes ever more cumbersome and, finally, a user comes to where he started: each position should be stored as a separate object.

Main capabilities of CRM Optimize Pharma

Advanced segmentation

Each company has its specifics and so strict division into the three categories is often inconvenient. Thus, there arises the task of developing a more flexible solution. Such solution was an improved segmentation module which allows a company itself to determine the number of categories, their names and the criteria of belonging to a certain category. To perform automatic segmentation, two criteria are distinguished: the size of potential orders that a client could place and the client's loyalty to the company. Proceeding from the quantitative analysis of the criteria, the client's assigning to a certain category is determined.

Planning center

The Planning center window allows users to look through the information that is the most important for them without passing from page to page. With the help of this page a user receives an easy access to the list of his meetings that are represented in the calendar and on the map. There is also a possibility of looking through the list of clients that are worth meeting. This list is generated on the basis of a specially developed, flexibly adjustable algorithm. There is also an access to frequently-used contacts (fig. 2).

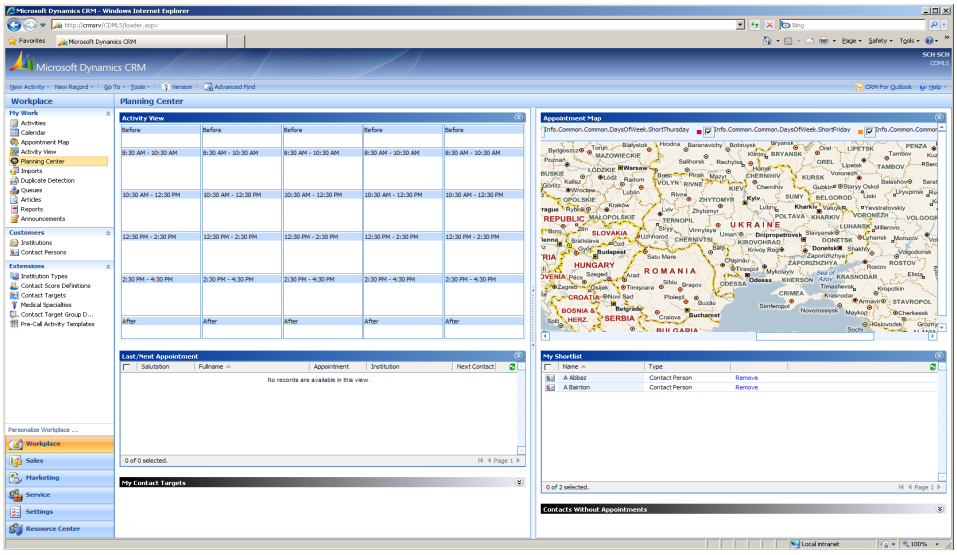

Fig. 2. Planning center page

Precall activities

In order to increase the efficiency of meetings and to simplify the accountancy of conducted meetings, "preparation to a meeting" is used. For this a special template is attached to the standard

form with information about the meeting. The template contains information about subjects to be discussed during the meeting. Besides, fields are provided for recording the client's response to those subjects.

Achieved score

The procedure to determine labor productivity of the sales agent in the pharmaceutical industry is different from analogous procedures used in other industries. Usually labor efficiency is assumed to be directly proportional to the sum of return from the deals signed with the participation of a representative. In the pharmaceutical industry a sales agent does not have any direct contacts with a customer and, therefore, in order to determine labor productivity indirect methods should be used.

One of such methods is accumulation of the score for each deal that is profitable for the company. E.g., for visit to a client who belongs to category "A" a sales representative receives 15 points, for visit to a client from category "B" – 7 points, and from category "C" – 2 points. The more points a sales agent has, the higher his estimate will be. Thus, sales agents are motivated to pay more attention to the clients of the category "A". So, the amount of work conducted in a certain direction can be estimated as well as labor productivity of certain employees.

Solution of the problem of convinient storage of the information about contact persons

The most simple and effective solution to the problem of representing the data about a contact person having several places of employment is separation of the essence of "contact person" notion into two entities. However, the requirement of compatibility with other programs that synchronize their data with the data of Microsoft Dynamics CRM prevents from introduction of two separate entities for storing information about contact persons. All information about contact persons must be stored in one entity.

Let us divide the set of records about contact persons C into two subsets O and P that do not intersect.

$$O \cup P = C, \tag{1}$$

$$O \cap P = \varnothing \ . \tag{2}$$

In this case, for contact persons from subsets O and P different attributes of one entity will be used.

$$A(O) \cap A(P) = \varnothing \ , \tag{3}$$

where $A(X)$ – a set of attributes that is used by any record of set X (attribute A belongs to $A(X)$ if (4) is satisfied). To observe this relationship, continuous functioning of a controller is required, which will make manipulation of forbidden attributes impossible.

$$a \in A(X) \Leftrightarrow \exists x, x \in X, x(a) \neq null \, . \tag{4}$$

Records from subset P contain private information about a person. Records from P – private information about places of employment of this person. Each record from O must contain a reference to one record from set P. If to assume that each contact person has a place of employment, then the following relationship is satisfied:

$$|P| \leq |O| \, . \tag{5}$$

Hence, using special activities, an effective mechanism can be created for storing data about a contact person within a single entity.

Conclusions

The pharmaceutical industry has a number of features that make application of traditional CRM systems inefficient. CDM Optimize Pharma CRM system takes into account all those features, which makes it intuitively understandable and user-friendly both for sales representatives and

managers. The developed solutions are implemented at several pharmaceutical enterprises.

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