CRM SYSTEMS - FROM THEORY TO PRACTICE

Zajačko I. ¹ Klačková I. ¹ Kuric I. ¹
Department of Automation and Production Systems, University of Zilina, Zilina, ¹
ivan.zajacko@fstroj.uniza.sk

Abstract: CRM Systems (Customer Relationship Management) - Customer Relationship Management Systems. The success of any company is determined by customers, their satisfaction with the company's products, their satisfaction with access to them and their willingness to return to the company. That's why every company has to give its customers the appropriate attention and time. However, this can be very difficult in practice.

In fact, customer relationship management often involves lengthy searches for appointment notes, important customer information, and relevant documents. Therefore, this is an inefficient, costly and, in many, unnecessary way of working.

There are software solutions that not only save companies a lot of time, but also help them improve and streamline their customer communications. These solutions are referred to as CRM (Customer Relationship Management) - customer relationship management systems or otherwise customer systems. These systems are no longer hot news anymore, but they have recently gained enormous interest from both users and suppliers. To put it simply, more and more businesses have already recognized that keeping a customer is cheaper than looking for new ones that are not yet disappointed. At the same time, more and more software vendors have noticed that their customers are increasingly taking care of marketing and looking for the right tools for it.

At present, companies are increasingly focused on building, developing and effectively managing their relationships with their customers. One of the reasons for the increased focus on quality customer satisfaction was the change in the competitive environment in the 1990s and the impact of information technology development. The advent of the Internet has been strengthened by the ubiquity of competition.

One of the most effective ways a business can differentiate itself from a competition is a perfect understanding of individual customers and their needs, a personal approach and an excellent level of service. However, if a company has hundreds, thousands or millions of customers, it is impossible under normal conditions to know each other's wishes, needs and preferences. And that is why CRM systems have been developed that, when properly applied, enable a large number of individual customers to understand, tailor their offerings to their needs and wishes, and know and manage their value for society. In summary, simply automating business processes, such as logistics or human resource management, comes with the automation of customer contact.

Keywords: CUSTOMER RELATIONSHIP MANAGEMENT (CRM), CRM PROCESSES,

1. Short view to the past

At the end of the 1960s, some Ted Lewitt (business expert) declared that the basic principle of successful business is the ability to win and retain a customer. He said that a modern business should understand the whole business process as a firm commitment to discovering, creating, encouraging and satisfying customer needs. Lewitt had predicted the key roles of today's CRM systems by 30 years.

Thanks to modern technologies and possibilities of the Internet there is a significant increase in competition - even big suppliers have to worry about small competitors. Without Interne, small competitors would not usually exceed the region's borders. The Internet allows them to reach at relatively low cost customers around the world. In the recent past and today it is possible to trace 4 basic types of CRM systems, differing in the use of computer technology, the degree of automation of activities, the suitability of use for different types and sizes of organizations, and the extent and complexity of:

a) Paper database system

This is the oldest way to keep track of all customer-related activities. It has two great advantages - it does not depend on the use of computer technology and allows easy storage of documents that exist only in paper non-electronic form. It is a system in pure form of individual processes. The biggest drawback is the zero rate of activity automation - endless data copying, yearly database search, manual statistics creation ...

This system was justified when computing was too expensive for every worker to have a computer. Even now, with a wellfunctioning system of this type, we can meet most of the doctors the patient card is a perfect record of our health history.

b) a Microsoft office packed solution

Such a system allows partial automation of some processes and activities. Once you have created an electronic contact database, you can easily automate the filling of templates, forms and tables, or set automatic alerts for important dates. However, the system does not offer the user any document management, analytical and statistical processes, or automation of reporting for colleagues and superiors. It is up to each user to create a system for storing documents or to perform statistical calculations and analysis using a spreadsheet editor. The most common used are Outlook, Excel, Word, Access ...

In the case of Outlook, this ambition is to form a system-wide integration article. Basically, it is an electronic filing system that can search and sort contacts in the database and support the automation of electronic communications. On the other hand, sorting and searching functions are limited. The main drawback is the linkage of all activities undertaken with the user, rather than being linked to the individual contacts in the database to which the activities relate. The basic advantage is low cost (programs are now installed on most computers) and automate the most repetitive data filling procedures. A significant advantage is the freedom to organize other necessary processes at their own discretion. Even this system is in most cases combined with the above-mentioned well-known file containing customer cards. Indeed, even the paper diary is not a lot of people willing to leave [1].

c) Programs for contact management and time management

These applications have pioneered truly electronic CRM systems. Even for users who are not 100% of their PCs, they are also comfortable in managing contacts, related documents and schedules. I can perfectly automate not only the processes of filling out documents, but also storing them in history (electronic customer card)

The database is built in such a way that not only contact information is stored in it, but also important business information the size of the company, demand products, purchase volume, etc. The database can be used to search quickly and efficiently for the necessary criteria. The system is not built as a stand-alone application, but it uses broad links to other programs. In particular, contact management and time management systems are a well-developed database linked to the surrounding software world and

thus a unifying element that links individual "Office" applications to a functional whole. Although these systems are not the technological highlights of CRM, they are easy to use and maintain. For small and medium-sized organizations, they are currently the optimal solution to ensure customer care activities.

d) Complete CMR-systems

Nowadays, in the field of CRM, the technological top is made up of extensive electronic systems including 4 basic CRM modules:

- Automation of sales activities
- Marketing activities automation
- Automation of service activities and customer support
- E-commerce

These systems are mainly applied in large and multinational organizations. While previous contact management and time management programs can be considered a good sales activity automation module, extensive systems offer far more options. Very important is the interconnection of individual modules, which enables efficient communication and cooperation both in the horizontal direction and in the vertical direction.

They allow to analyze the customer's affection to purchase. From the CRM point of view, it is primarily the search for patterns and trends in customer behavior. Another valued analytical tool is monitoring customer value and managing it - it is about gaining the profitability of individual customers from available information and estimating their future potential [2]. The main drawbacks are the high purchase price, the need to ensure well trained users and the continued maintenance of the system.

1.1 The usual building of a complex CRM system

Most people with a basic awareness of CRM systems have in mind the automation of marketing and sales processes when describing them. They don't realize that CRM involves far more. In addition, the CRM issue cannot be reduced to software. It is only a support that facilitates and streamlines the functioning of the entire system.

In a basic and simplified form, CRM can be defined as integrating and coordinating marketing, sales and customer service into a unified and comprehensive approach to each customer's care. It technically includes the possibility to use all available communication channels, knowledge bases or web portals.

CRM can be divided into already mentioned 4 modules:

- Sales Activity Automation Sales Force Automation (SFA)
- Marketing Activities Automation Marketing Automation (MA)
- Service and Customer Support Automation Field Service Automation (FSA)
- E-commerce E-business (EB)

1.2 Automation of sales activities

It is perceived as the cornerstone of CRM. The module should allow all traders, possibly external business partners, quick and efficient access to important customer information, work program planning and use of knowledge bases and other sales tools included in the system.

- Main Module Features:
- Contact and Time Management
- Managing New, Unidentified Contacts (Lead Management)
- Management Reporting Tools
- Remote System Access Tools
- Business Partners Management

1.3 Automation of marketing activities

The marketing activities module is the heart of CRM. He plays a key role in creating strategies and tactics for long-term successful customer care. Creators and users of CRM systems are becoming more and more aware of the importance of this module, and will soon take over the dominant role that Automation of Sales Activities has advocated so far. The main function of the module is the Campaign Management.

This includes:

- Sorting database customers into groups and managing individual campaigns for individual groups
- All available forms of communication with customers: e-mail, Internet, phone, or print media
- Evaluation of the campaign conducted by sophisticated procedures, which are also a standard part of the module
- Mutual link between marketing and sales module

1.4 Automation of service activities and customer support

The task of the module is to streamline communication with customers and manage service activities after sale. The basic features are:

- Customer Center communication by phone and Internet
- Field Service

1.5 Electronic trading

It is the youngest module experiencing a strong boom. In most cases, this is a standalone application on an Internet browser access base. It enables automated execution of business in electronic form. It is important to ensure maximum connectivity with other CRM system modules.



Fig. 1 Cloud computing

2. Development trends of CRM systems

The worldwide CRM systems market now has the following features:

Significant growth of the entire sector launched towards the end of the 1990s - growth in 2000 reached 38% worldwide CRM systems have become a global issue - the European and Asian markets show higher growth rates than the American market on which these systems have been pushed forward CRM systems are indispensable to most business sectors, being deployed not only in traditional financial services, telecommunications, or high technology industries, but also in industries including conservative defense industries

The global size of the CRM systems market is currently estimated by experts to be more than \$ 12 billion. USD. In some countries (Europe), the growing use of CRM systems is hampered by strict legislation limiting work with personal data

Accordingly, I can therefore state the following:

- High growth of CRM systems market despite cooling of information technology industry
- The most important trend is the rapid development of Internet-based CRM applications
- CRM systems as a paid service
- Maximum openness of systems with the ability to run with important applications
- Higher modularity of systems Add-on modules can be added to the module providing basic functionality

3. How to avoid the failure of installing CRM systems?

Part of the installation of CRM systems is their failure. Therefore, it is necessary to consider the causes of this frequent phenomenon. On a closer look at the situation, it is possible to recognize the shortcomings on the part of the supplier organization as well as the company itself.

The major shortcomings on the supply side include:

- Small vendor experience with a variety of industries.
 Not only every industry, but every company requires a CRM system tailored to its structure and internal processes.
- Promising too short implementation time and then impetuous deployment without sufficient analytical preparation
- Insufficient training of future system users and their motivation to change thinking and use the benefits offered by the system
- Insufficient advice after installation

On the contrary, problems arising on the part of the sponsor include:

- A biased image of the possibilities and real benefits of the system
- Pressure for rapid implementation regardless of complexity and persistence of people's thinking
- Selling insufficient documents on company processes and information flows to the supplier
- Low level of employee motivation to move to a new customer care system
- Lack of trust between management and employees

Once the implementation bottlenecks are identified, the business needs to follow this procedure so that the errors mentioned above do not happen:

Focusing on internal corporate processes and information flows: every effort should start here. It certainly pays not to rush and to carry out a thorough analysis of all company processes with an emphasis on those that are directly related to customer communications [3]. It will greatly help if a flowchart process map is created for each company department. Thus, the process links between the various parts of the company are well visible and often the internal processes are optimized and streamlined [4].

Choosing an Information System Configuration: There are a number of different systems available in a variety of configurations. When choosing, it is necessary to take into account the transferred process analyzes, business department, organization size, anticipated necessary costs, or future needs.

Fine-tuning the structure of the information system and its linking with other systems used in the company: the adjustment is carried out in cooperation with the system manufacturer, eventually. its supplier to ensure the smooth running of customer care processes and information flows. It should start from comparing automated systems processes with those identified in previous analyzes and identifying areas where the system needs to be harmonized with business needs.

Gradual implementation of the system: It is good to divide the implementation, especially for complex systems used in large companies and intervening in all organizational units. Beginning with the sales department and sales activity automation module, continue with marketing and analytics tools, and then eventually engage service, logistics, and other modules [5]. A necessary part of the gradual introduction of the system is the training of the staff connected with the motivation of the company employees to use the system.

Ensuring Feedback for Implementation Process Control: Continuous control must interweave the entire process from analysis to completion. Valuable control requires the use of measurement methods to quantify parameters. Above all, two basic parameters - the rate of return on investment and the level of relationship marketing achieved - should be subject to control. It is clear in practice that adhering to such a structured process of deploying a CRM system can significantly minimize the risk of failure.

The worldwide CRM systems market now has the following features: Significant growth of the entire sector launched towards the end of the 1990s - growth in 2000 reached 38% worldwide CRM systems have become a global issue - the European and Asian markets show higher growth rates than the American market on which these systems have been pushed forward CRM systems are indispensable to most business sectors, being deployed not only in traditional financial services, telecommunications, or high technology industries, but also in industries including conservative defense industries [6].

4. Conclusion

Customer Reletionship Management (CRM) has recently been heavily employed not only by software developers, solution vendors, but also by customers themselves. It can be said to be a fashionable hit in recent years. What is the development trend of CRM?

The approach has changed, from the original focus on productivity and profitability to focus on customer value. A genuine competitive advantage is no longer achieved through profits from operational efficiency or through product benefits, but through greater customer knowledge. The paradox is that in the past many CRM systems have, by their conceptual focus, actually diverted their attention from the increased focus on the customer and considered it to be a product. Operational CRM systems were used for customer care through product campaigns and call centers.

CRM has become a hit because it has promised to increase business turnover through campaigns to attract new customers and keep old customers on the one hand and save costs through productivity gains on the other. The main trend now is to focus on a rapid and measurable return on investment with respect to the final profit, as many past promises have never been realized. One consequence is the increasing trend towards analytical CRM. Directing has changed from increasing automation and commoditization to intelligence and uniqueness.

We can best illustrate the difference in these two approaches through a call center example where we can choose either Operational CRM to increase the number of calls a trader can make per day or analytical CRM to increase the number of calls made. We can say that we need both, but as the market is increasingly sensitive to the costs that both approaches require, it is a current

trend to choose one, based on parameters such as the need to improve customer dialogue, product production time and cost.

The strength of the Central and Eastern European region lies in the willingness to adapt to the speed of the market and to accept the historical data acquired by individual firms about their customers. However, these historical data are often stored in old systems, which in turn requires a broad portfolio of options to access them. However, such data is clearly a competitive advantage for the local organization, as opposed to global or local competition, which is unable to benefit from this advantage. The biggest challenge in any project is to consolidate all customer data while maintaining the consistency and quality of the data [7]. Many projects have not been successful in the past, as new customer data warehouses have begun to be deployed and all historical data stored in old OLTP systems has simply been ignored.

5. Acknowledgement

We cooperate with VIPO, a.s. In the near future, we plan to contribute by introducing a new CRM system to achieve better insight into customer needs and requirements, timely handling of claims and more comfortable collaboration and customer care to achieve higher profits.

This article was made under the support of project APVV-17-0310. Project title: Implementation of the 4th Industrial Revolution Principles in the Production of Tyre Components.

6. Literature

[1] J. C. Injazz and P. Karen, "Understanding customer relationship management (CRM): People, process and technology," *Business*

Process Management Journal, vol. 9, pp. 672-688, 2003.

- [2] F. Buttle, Customer relationship Management: Concepts and Tools: Oxford:Elsevier, 2004.
- [3] R. Iriana and F. Buttle, "Strategic, Operational, and Analytical Customer Relationship Management: Attributes and Measures."

Journal of Relationship Marketing, vol. 5, pp. 23-42, 2006.

- [4] M. Raisinghani, "CRM systems in German hospitals: illustrations of issues & trends," *Journal of Cases on Information Technology*, vol. 7, pp. 1-26, 2005.
- [5] D. Gefen and C. M. Ridings, "Implementation Team Responsiveness and User Evaluation of Customer Relationship Management: A

Quasi-Experimental Design Study of Social Exchange Theory," *Journal of Management Information Systems*, vol. 19, pp. 47-69, 2002.

- [6] J. Dyche, *The CRM Handbook: A Business Guide to Cusomer Relationship Management:* Addison-Wesley, 2002.
- [7] T. S. H. Teo, P. Devadoss, and S. L. Pan, "Towards a holistic perspective of customer relationship management (CRM)