



## Management: Science and Education

Slovak Scientific Journal

Slovak Scientific Journal **Management: Science and Education ~ m:se** is the scientific journal aimed at the presentation of selected theoretical and practical knowledge and experience of general management issues.

The journal focuses on publishing original results of theoretical and applied research and also verified the practical experience of the authors and collectives. It should be focused on the latest trends and theories, current approaches and view on complexity of the management issue and its individual parts. Specific scientific journal portfolio is:

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Management as a problem of **science**, the subject of scientific research (methods tools, models, solutions to the knowledge base of Management Science).

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## INTRODUCTION

Modern management based on applying new management models and methods and using progressive management techniques, methods and procedures has got special importance in current period of continuous transformation and progress of our economy within market conditions of European Union. With arise of theoretical base, knowledge of science and scientific approaches this approach is more actual and interesting.

Management in the meaning of “manage” is applied in conditions of social-economical systems management. All known rules, guides, models and techniques of so-called common management are applied here. This universality is practically essential with regard to activity and progress of businesses in challenging market environment and need of its suitable implementation within different economical and social situations.

Management represents from the most common view complex of universally applied models, approaches, methods and techniques used by assessing resources and reaching goals of business oriented system, which products are material products or intangible services. Management is aimed on creating functional conditions and progress of technically, organizationally, economically and socially independent and operable system, acting and evolving in competitive environment.

By applying management in specific conditions of different systems, more concrete approaches, methods and techniques are finding. These basically arise from common knowledge, are transformed and mainly adapted to more real condition of routine. Therefore also in management, practical solutions and simultaneously also theoretical knowledge should be evolving. Developing the theoretical and practical background is therefore very important. Determination of scope and rate of these two procedures cannot be exactly specified – it will always depend on specific applications.

Scientific articles in this journal present selected actual development trends in management principally in theoretical level. In the some cases it reacts on actual needs of businesses to improve their management activities in order to gain particular competitive advantage within their market. Therefore scientific papers are mapping the newest theoretical trends but in area of practical use of managerial work.

The effort to prepare and publish the scientific papers is to point to chosen process and tool solutions, which cover the complexity and levels of management science.

Scientific articles are based on successful scientific endeavors of particular authors acting on different colleges and universities. Authors describe, evaluate and propose various approaches, models and techniques to immediate applying or as management task support. It is thereby created consistent enough material for explanation, understanding and evolving theoretical questions in these established problems.



*Editor-in-Chief*

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# CRM SYSTEMS TO SUPPORT THE OPERATION OF MEDICAL FACILITIES

MILAN KUBINA – JURAJ VOJTÁŠ

**Abstract:** The article provides a basic theoretical view of the use of CRM systems in general and with regard to specific areas (health care). Health care is an area specific to the deployment of CRM systems, also with regard to the digitization of health care in the Slovak Republic. The COVID-19 pandemic generally accelerates the digitization process in all areas. Telehealth directly gives space to health care, which will enable some tasks to be performed online, thus saving time for patients and doctors. The article was produced on the basis of content analysis of scientific articles and publications.

**Keywords:** CRM systems, health, management, health management, information systems

**JEL Classification:** M15

## 1. INTRODUCTION

Business activities in various industries have been moving to the online environment in recent years. The situation around the COVID-19 pandemic outbreak accelerated this process, and the transformation of the companies took place in an incomparably shorter period than the owners themselves might have planned. However, some industries still exist where the transition to the online environment is limited. For instance, the provision of health care, i.e. provision of medical opinions, which can help with diagnosis and treatment options—especially now when people have to be isolated—without the need to pay a visit to the doctor. CRM (Customer Relationship Management) systems can also be used for these purposes, which can move the doctor-patient relationship to the online environment. The aim of this article is to point out the suitability of their use in the health care sector centered on the theoretical basis of the CRM systems. The article was produced using the content analysis method of documents from primary and secondary sources. The primary sources were mainly expert literature focused on CRM systems and scientific articles. The theoretical overview was supplemented by secondary sources with various service providers' perspectives.

## 2. CRM—CUSTOMER RELATIONSHIP MANAGEMENT

The CRM system belongs to the so-called internal company systems to draw data. The main function of the CRM system is customer relationship management, i.e. permanent tracking of requirements and creating long-term relationships between the company and the customer based thereon. (Hittmár, 2011) The CRM information system of a company is responsible for handling and saving a lot of data on customers and their interactions. The data is obtained from many internal and external sources. These systems are mainly used for communication and customer registration, order execution, and reports generation. (Lendel, Kubina, 2018) Customer relationship management can be characterized as an integrated approach to identify, acquire, and retain customers. (Lendel, Kubina 2018)

CRM system solutions provide companies with various important data needed, for instance, to improve the understanding of customers, customer retention,

profitability, and the like. (Okeke, 2016) CRM is essential because it puts the customer first. CRM is connected with technologies called CRM systems and CRM software. CRM systems are tools that gather customer data in one place. Afterward, users can work with this data and use it for trading. Different CRM systems can have different goals, but they have three basic purposes, which are:

- Provision of information
- Streamlined customer data records
- More efficient efforts (Ryanetcrm, 2017)

CRM is any strategy or approach that uses data to improve and build relationships with customers. It provides valuable data and knowledge about the audience and also provides the tools needed to collect and manage information about people. (Mailchimp, 2021) In the 1980s, customer attention became important for entrepreneurs. However, they did not know much about their customers. Businesses started collecting data and, for instance, questionnaires, public surveys, and interviews were used for that purpose. The data obtained was used by companies primarily for marketing purposes. (CRM, 2021) The development of approaches to CRM can be summarized (by Lehtinen, 2007), as follows:

- 1980 – 1990: automation of customer services and reaching savings by using call centers.
- 1990 – 1995: records of customer relationships and customer understanding.
- 1995 – 2000: creating value for customers and improving the value of product offers.
- 2000 – 2005: CRM development and companies are changing the culture while focusing on customers.
- 2005 – 2007: creating structures and processes of a customer-oriented company.

Currently, CRM is the center of all customer-oriented efforts. With the right CRM system, a company can provide customers with timely and automated communication that is tailored to the customer's receiver. (Larkou, 2020)

Three basic dimensions exist for successfully building customer relationship management, which (according to Kubina, Lendel, 2018) are:

- People

- Processes
- Technologies

CRM software is the system itself or a system of tools that helps businesses collect, analyze, and organize data. This system may look different in various areas. It may (Mailchimp, 2021):

- Assist sales representatives and identify past interactions.
- Provide basic and contact information for the provision of services to customers.
- Provide marketers with details for campaign targeting.

Finding a compromise between the ambitions and customer needs is a priority for a healthy business. If a business focuses too much on customer satisfaction, it can be counterproductive. Consequently, this can result in rigid production that hinders the company from reaching its innovation and development potential. (Chlebovský, 2005) Several CRM management systems exist on the market. However, they are primarily (Kulpa, 2017):

- Operational—usually relating to marketing, sales, and services.
- Analytical—the main focus is the analysis of customer data.
- Collaborative—sharing customer information with a third party.

A CRM strategy can be defined as a set of strategic decisions. Customer relationship management is executed based on that. Built on this strategy, decisions are made about the possible need to innovate relationship management. The CRM strategy is a way whereby a company defines its business and combines two important elements, which are (Kubina, Lendel, 2018):

- Education and relations
- The skill of the company and customers

The company should regularly review the CRM strategy in terms of its time relevance. If a company finds that its strategy is not current and does not fulfill its main function,

it should be changed, or a new strategy should be created. The basis for creating a CRM strategy is to clarify the process whereby it is created. It is closely linked to the company's strategy and must thus reflect its basic features. (Kubina, Lendel, 2018)

Before selecting a CRM system, it is necessary for the company to define its size, budget, customers, and goal of the company. When deciding which system to establish, a strategy for its use is also prepared. The strategy is not universal, and a single type of strategy will not make much sense for different businesses. (Garvin, 2021)

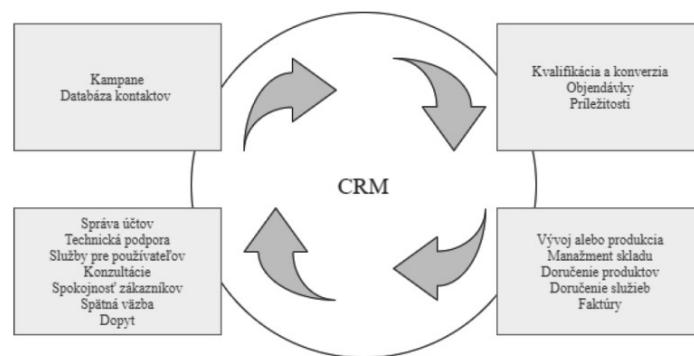
As CRM is built internally throughout its organization, it directly affects a number of current and future processes. Business processes that involve customers can only be managed if a company knows them well. A company should also know the qualitative and quantitative parameters of all company processes. These processes can be classified as follows (Kubina, Lendel, 2018):

- Customer communication processes
- Information transfer process
- Analytical processes
- Management and control processes
- Auxiliary processes

The basic structure of the company's activities vis-a-vis customers consists of marketing, sales, delivery, and support. The complex sales process thus goes through all the phases shown in the figure below. The efficiency of the whole process, therefore, depends on the main departments of a company. Every CRM system should provide support for this entire sales process. (Sprinxcrm, 2021) The following figure shows the complex CRM process.

### 3. CRM IN HEALTH CARE

The term health care is defined as a set of tasks performed by health experts, including the provision of medical devices and administration of drugs. It includes prevention, treatment, diagnosis, midwifery, nursing care, and the like. (Act 576/2004 Coll.)



Upper Left: Campaigns, Contact Database  
 Lower Left: Account Management, Technical Support, User Services, Consultations, Customer Satisfaction, Feedback, Demand  
 Upper Right: Qualificaton and Conversion, Orders, Opportunities  
 Lower Right: Development or Production, Warehouse Management, Product Delivery, Service Delivery, Invoicing

**Figure 1** CRM Complex Process (Sprinxcrm, 2021)

The provision of health care includes various services, which are the following (Slovakia, 2018):

- Outpatient care is covered by a single practitioner who is in charge of medical records and is responsible for the ongoing care of a patient who does not require the continuous provision of health care for more than 24 hours.
- Institutional health care is a form of health care whereby the patient's health requires the continuous provision of health care for more than 24 hours.
- Pharmaceutical care is a form that involves the storage and control of medicines, the administration of medicines, and the provision of information on medicines and medical devices.
- Nursing care is a form provided by the nursing facility's staff. They must meet the conditions provided for the medical profession.

The term e-health was used before 1999. For the first time; however, it was used in marketing rather than medicine. It helps to effectively promote health care, increase quality, foster new relationships between patients and health care professionals, and educate doctors through online resources. At the same time, it enables the faster exchange of information. (Eysenbach, 2001)

The digitalization of health care is beginning to be widely deployed. It helps to facilitate cross-border patient care and also to fully develop electronic records. It is of great importance in the field of health care even during the COVID-19 pandemic.

People are very sensitive to information about their health, and therefore, it is important to pay attention to data security when digitizing. It means that electronic medical records and personal data of patients require high security to be in line with the regulations applicable. It is possible to define telehealth as part of electronic health care and the provision of services over long distances. Telehealth is used in an emergency as well as in intensive care, for instance, in chronic patients. For continuous monitoring of the patient, remote monitoring is possible by way of special devices, to control their vital functions. It can be assumed that this is the future of health care provision. (Goldmann, 2021) Telehealth is the use of information and communication technologies to provide health care at a distance. It includes the detection and recording of the current health status and physiological data and analysis to find the relationship between the data and their relevance. (Lehotský, 2014) Telehealth is widespread in the world and brings visible benefits not only for patients but also for health care providers. In Slovakia, this is a relatively recent and starting industry challenged by strict financial restrictions. Through remote monitoring, it is possible to make various measurements, e.g. via a manometer, thermometer, oximeter, or ordinary digital scale. (Bitto, 2020)

When analyzing the potential risks of health care provision, the most common cause of adverse effects is

incorrect or non-existent communication between individuals (doctors). In health care, misconduct can lead to disaster, which is why they try to set up processes to minimize these risks (Marx, 2015).

Health care constantly relies on old systems hindering innovation, which is very inefficient. Nowadays, patients are looking for easy access and possibility of personal treatment. Health care CRM helps identify new health care opportunities, helps improve internal processes, automates billing, and provides comprehensive patient management. It also helps communicating directly with existing patients via email or video calls. (Alkhaldi, 2020)

In its traditional form, the CRM system helps companies manage data and cooperate across departments, tracking the customer in everything they do. In health care, CRM is mainly used to organize information, improve internal and external communication with patients, and optimize team cooperation. It helps to identify potential patients and add them to different channels and marketing funnels. (Salesforce, 2021)

#### 4. CONCLUSION

The CRM information system is an integrated approach and belongs to internal business systems. It manages customer relationships, monitors their requirements, and puts them first. CRM software provides a wealth of information needed for multiple departments of an organization. When choosing a CRM system, it is important to take the size and the goal of the company that it wants to achieve by implementing the CRM system into account.

The CRM application architecture consists of a communication, operational, and analytical part. A market survey should be conducted, and staff should be trained to work with this type of system before CRM is implemented.

When using CRM for marketing purposes, it is possible to focus on web marketing or e-mail marketing. The benefits are, for instance, better targeting and finding new people. However, the use of CRM also brings disadvantages, such as loss of records or loss of human access to customers. E-health can be expected to make great—and not just technological—advances in the future. Telehealth has begun to provide long-distance medical care. However, CRM can also be used in health care, where IS innovations and implementations can bring a number of benefits in the health care provision. The global health care CRM market was worth \$8.8 billion in 2018 and is expected to reach \$17.4 billion by 2023 according to MarketsAndMarkets. (Alkhaldi, 2020)

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