

Analysis of the Effectiveness of Implementing a CRM System in an Enterprise

Halyna Ryzhkova ^[0000-0002-2874-1797], Yuliia Bartashevskva ^[0000-0002-0300-0693]

Alfred Nobel University, Sicheslavskva Naberezhna St. 18, Dnipro, Ukraine

gryzhkova@gmail.com, bartashevskva@duan.edu.ua

Abstract. One of the main success factors for any company is the competent automation of all its business processes, which is impossible without information systems and technologies. And if earlier information systems, in particular CRM, allowed interacting with customers by tracking their orders and addresses, now this is communication through social networks, almost instant transfer of their data to an agent for processing, and etc. The purpose of this article is to analyze the production of an information CRM system for the effectiveness of an enterprise. The work measured the working time of sales managers in order to determine the effectiveness of its use when working with customers before and after the implementation of the CRM system, ways to improve the practical activities of the department by automating the customer relationship management functions of the enterprise are shown. As a result and as a direction for further research, the expected results are given for monitoring the work of employees and standardizing work with customers, optimizing and increasing the efficiency of use of working time of employees in the sales department.

Keywords: Automation of Managerial Functions, Clients, Implementation of a CRM System, Increasing the Efficiency of Working Time Use.

1 Introduction

The problem statement. In conditions of growing competition, when many manufacturers produce almost identical products, and customers are becoming more demanding, organizations need a clear strategic planning of their activities with a focus on the customer. It is important for the client not only to receive a certain product or service, but also the speed and quality of service, the ability to quickly resolve its problems. Therefore, the effectiveness of the relationship with the client comes to the fore. However, this requires a solution to the problem of processing and storing large amounts of information with the ability to respond quickly to changes. One way to solve this is the implementation of information technologies, such as CRM systems, which can significantly expand the capabilities of enterprise management and customer interaction. The difficulty lies in the fact that recently the number of customer

needs has increased, and customers need a more personalized service, products and services tailored to their needs [1].

Analysis of recent studies and publications. Both foreign and domestic scientists were involved in the development of CRM systems in the activities of enterprises. For example, V.M. Guzhva [2] and J.M. Zhigalkevich [3] considered the need for information technology in enterprise management, M. Fatouretchi [5] argued the efficiency of processes and improving customer relationships, Martsinkovskaya O.B. [4] considered approaches to customer relations management at the stage of decision making. There are also several studies, namely, O.A. Lehky and O.M. Sokhatska [7] considered the effectiveness of digital marketing communications of enterprises, substantiated the introduction of CRM-system to improve the process of managerial decision-making A.O. Malyukina [11].

In the business environment, the need to automate business processes is becoming commonplace. But for medium and small businesses, customer relationship management is often organized without the introduction of automation. As a result, it is impossible to track who has worked, what orders have been made, what calls and to whom they have been made, therefore it has a negative impact on the work of the company, it loses customers, money and the main irreparable resource - time. To our point of view, in this situation, the right solution is to automate and standardize the process of managing customer relationships, that is, to implement a CRM system [6]. The purpose of this article is to analyse the prerequisites for automation of business processes in the enterprise, substantiation of the necessity of introduction of the information CRM-system of accounting of clients, which will allow to increase efficiency of activity of the enterprise.

2 Research Methods

To achieve this goal, the scientific development of domestic and foreign scientists on the problems of automation of the activity of enterprises or individual business processes; data of the State Statistics Service of Ukraine; information on the market of information systems; reporting, regulatory documentation of the investigated enterprise; materials of periodicals; Internet resources was applied. In order to achieve the goal of the study, we used general scientific methods - methods of systematic and structural analysis of facts and results of research. In addition, factor analysis was used to determine the effectiveness of the enterprise, including before and after the implementation of CRM-system.

3 Results and Discussion

To study the implementation of the CRM-system and its impact on the efficiency of the LLC "Holeaf Company" was chosen. The studied enterprise is a production and trading company [9] and has the following main business processes: development of production schedules; development of schedules for the shipment of finished products of the buyer; reception of finished products from manufacturing workshops and its preparation for shipment to customers; receiving finished products from suppliers and preparing them for sale; acceptance of orders for shipment of products; reservation of

products; organization of shipment of products to customers and paperwork related to shipment; organization of product delivery; monitoring the implementation of customer orders and the solvency of customers; control of receivables. They all occur directly in the sales department which includes 12 sales managers. They have equal access to information on the availability of goods in the warehouses of the enterprise. This information is stored in the database “1C Sklad” to which a self-made interface called “Program Zbyt” is connected. The enterprise customer records are handled manually in an MS Excel spreadsheet. Software products used by the enterprise do not allow to create and work with the client base, create tasks and reminders about them; integration with mail, telephony, access sharing, mobile access, reporting, sales analysis, customer segmentation, and more. This reduces the effectiveness of sales. In order to identify the prerequisites for implementing CRM systems in an enterprise, it is necessary to analyze the organization of work with information and identify the key problems that need to be solved through innovation (Table 1).

Table 1. Key issues and their consequences when using Excel

Problem	Consequences
Keeping a database of leads and their contacts in spreadsheets without online support	Duplication of work by different employees is possible due to the lack of centralized base of
Manual process of conducting the client by stages of sales	It is impossible to understand at what stages potential leads are located and why they are
Manual analytics	Costs a lot of time; inaccurate data leads to incorrect forecasts for which the company is
Absence of a single reporting base	The sales manager cannot influence the process improvement due to the lack of accurate

The table shows that almost every problem leads to a loss of the potential profit that LLC “Holeaf Company” could gain by keeping the sales process under complete control. The whole process of accumulation and exchange of information in the sales department is as follows: potential customers and contact information is stored in Excel files on the local computers of managers; information about calls made as Excel files is collected from the manager daily / weekly; a separate file for primary telephone calls is maintained either by the manager or the secretary; every commercial offer or contract is formed manually on the basis of templates; the internal reconciliation of discounts, offers and contracts is conducted via email.

Such an organization of the workflow causes significant difficulties in cases when a sales manager leaves the company or it becomes necessary to transfer the customer base to another manager. After a preliminary analysis of the work of sales managers, it was found that there is an uneven spending per client over the past years (Table 2).

Table 2. Calculation of expenses for the content of the sales department

Indicator	2017	2018	2019
The number of employees	12	14	12
Expenses per employee, thousand UAH	12	18	19
Payroll, thousand UAH per year	1 656	3 159	2 861

Cost of sales support, thousand UAH per year	219	281	324
The total value of the sales department, thousand UAH	1 875	3 440	3 185
Number of regular customers	3 911	3 955	4 210
Costs of supporting one client, thousand UAH	0,479	0,870	0,756

Comparing the data with the number of customers, it was found that costs vary disproportionately with the number of customers and sales. This fact gives reason to analyze in more detail the effectiveness of the sales department, emphasizing the personal contribution of each employee of the department to the total sales of the enterprise. The analysis revealed a rather large discrepancy (almost in 2 times) in the performance indicators of managers (Table 3). To clarify the reasons for this difference, monitoring of the use of working time by sales managers was introduced. Within two working weeks, with the help of a specially designed questionnaire, all the actions of managers during working hours were recorded. As a result, a postoperative working day map was obtained (Table 4).

Table 3. The calculation of the effectiveness of managers

Workers	Sales revenue, UAH	Share in sales, %	Deviation from the average value, %
manager 1	20 949 360	8,2%	-0,13%
manager 2	20 693 880	8,1%	-0,23%
manager 3	20 182 920	7,9%	-0,43%
manager 4	19 161 000	7,5%	-0,83%
manager 5	21 971 280	8,6%	0,27%
manager 6	26 314 440	10,3%	1,97%
manager 7	24 270 600	9,5%	1,17%
manager 8	16 350 720	6,4%	-1,93%
manager 9	23 248 680	9,1%	0,77%
manager 10	21 460 320	8,4%	0,07%
manager 11	22 482 240	8,8%	0,47%
manager 12	18 394 560	7,2%	-1,13%

Table 4. Working time map

Operation	Duration working hours, %
Communication with customers by phone	10
Correspondence with clients (e-mail; Viber, etc.)	11
Acceptance of orders and paperwork for shipment of goods	8
Shipment control	19
Sales analysis	1
Resolving contentious issues with other departments	9

Collection of information, work with directories	4
Entering information in spreadsheets	16
Debt control	1
Copying	2
Attending meetings	6
Discussion with colleagues	9
Daily Reporting	3

This made it possible to establish that about 20% of the working time is spent on communication with customers, and less than half of the working time is spent on the main functions (sales) in general. Compiling daily reports that have been generated automatically takes 15 minutes of time. Also, no work day planning system. But, according to [7, 8] in enterprises with effective sales management, sales managers should spend at least half of their working time communicating with customers, at least 5% of their time finding new customers, and at least 15% preparing for communicating with customers. For all other operations - the rest of the time. Considering the above, the company has already become necessary to switch to modern sales organization technologies, namely, to introduce a CRM system in sales management.

According to [10] the most common CRM-systems in Ukraine are: Microsoft Dynamics CRM (USA) Oracle Siebel CRM (USA) Perfectum CRM (Ukraine); SAP (Germany); Onebox CRM (Ukraine); Bitrix24 (Russia) Teamwox (Great Britain); Bloknotapp (Ukraine); Apptivo CRM system (USA) CRM Education (Ukraine); 1C: CRM(Russia). Based on the goals set by the enterprise's management to improve business processes, a list of functions was created that should include a software product: customer base; contact management; calendar and reminder sales management; marketing management; mailing lists; poll; knowledge base; Email client; instructions; business processes (BPM) sales funnel; significant events; integration with MS Word; integration with OpenOffice; filter settings for the desktop; configuration the possibility of expanding the number of jobs; distributed databases; the ability to work through a web client; the ability to work through a "thin client". According to indicators and own requirements of the LLC "Holeaf Company" was chosen Perfectum CRM (Ukraine). On the next stage, the company was recommended to develop its own scorecard for determining of the its market activity (Table 5), based on the most common: the growth rate of the customer base; total number of customers; the number of regular customers; increase in the number of purchases; increase in the average cost of the invoice; growth in gross sales of products and the like.

Table 5. Targets of the effectiveness of the implementation CRM

Indicator of efficiency	2019	1 year after the introduction of CRM	Deviation
Total number of customers	4210	4580	8,8%
Total number of personal contacts	520	610	17,3%
Total number of calls	28800	33860	17,6%

Total number of contacts	29320	34470	17,6%
The total number of new customers per year	267	370	38,6%
Cost indicator for 1 new customer, thousand UAH	0,756	0,315	-58,3%
Total sales, thousand UAH	255480	314200	23,0%

It was noted above regarding the requirements for information CRM systems and the importance of adapting them to the particular functioning of the company in relations with customers, the functionality to solve the tasks posed by the management of the company. The goal-setting will ensure the successful implementation of the project and, as a result, will entail changes and improvements both in the near and long-term prospects. Thus, the short-term effects after the introduction of CRM include: automated interaction between departments; improving information support for processes; improving customer satisfaction; sales growth due to focus on profitable customers; improving the quality and speed of customer service; improving sales efficiency; improving the quality and speed of customer service; increase staff productivity. And the long-term effects after implementation CRM include: improving the quality of working conditions for decision making; improving customer satisfaction, increasing staff satisfaction; increase profits by identifying the most profitable segments and offering them the best customer value; increased profits through cross-selling; increasing customer satisfaction; increasing staff satisfaction; increasing profits by increasing the percentage of successful transactions; increase profits by reducing transaction costs; profit increase due to the possibility of increasing the number of served potential customers.

Thus, the consumer is seen as the core of the CRM concept, and the implementation technology provides for the mutually agreed implementation of the following functions [12-13]: contact management; communication management; forecasting; opportunity management; order management; sales analysis; document management optimization.

4 Conclusions and Prospects for Further Research

At the end of the article, we consider the expected results and prospects for further research, which are possible with a further analysis of indicators after the introduction of a CRM system in the LLC "Holeaf Company". First of all, not to lose potential customers, add 430 new contacts per month, 500 new calls to potential customers per month, which can increase the number of customers by 9% a year after the start of implementation. Secondly, to control the work of employees and standardize work with clients. At the same time, information about all incoming and outgoing contacts will be located in one storage, from where it can be obtained in real time. Thirdly, it will help the management of the enterprise to analyze the work and plan further more consciously due to the accumulated statistical base, since under the conditions of using the CRM system, all working information in a standardized form will be collected

in one common base; optimize the work and increase the efficiency of the use of working time by employees of the sales department.

5 Acknowledgement

This publication is part of the research work carried out at the Alfred Nobel University jointly by the departments of entrepreneurship, trade and exchange activity and information technology, commissioned by the management of LLC “Holeaf Company”.

References

1. Baashar, Y.M., Mahomood, A.K., Almomani, M.A., Alkaws, G.A.: Customer Relationship Management (CRM) in Healthcare Organization: a Review of Ten Years of Research, 2016 3rd International Conference On Computer And Information Sciences (ICCOINS), Kuala Lumpur, 2016, pp. 97-102.
2. Guzhva, V.: Information Systems and Technology in Enterprises: Educ. Manual. KNEU (2001).
3. Zhigalkevich Z.: Information Technology in Enterprise Management of the 7th All-Ukrainian Scientific and Practical Conference with International Participation. Modern Approaches to Enterprise Management, Kyiv, Ukraine, April 26 2016, p 23.
4. Martinkovs`ka, O.: Modern Approaches to Team Management in the Context of Project Implementation. Regional Aspects of the Development of Productive Forces (21), 102--108 (2016).
5. Fatouretchi, M.: The Art of CRM: Proven strategies for modern customer relationship management. Packt Publishing (2019).
6. Telina, A.P., Izbachkov, V.F., Petrov, I.R.: Information Systems: Textbook for Universities. PETER (2011).
7. Lehky, O.A., Sohatskaya, O.M (2017): Effectiveness of Digital Marketing Communications: from Goal Setting to Outcome Evaluation. Marketing and digital technologies, vol. 2, p. 4-31.
8. Trofimov, S.: CRM for Practitioners. AutoCode (2016).
9. Holeaf Company LLC. Mode of access: https://youcontrol.com.ua/en/catalog/company_details/32501973/
10. Yurchuk, N.P.: CRM-Systems: Peculiarities of Functioning and Analysis of the Ukrainian Market. Scientific Bulletin of Uzhgorod National University. Series: International Economic Relations and the World Economy 23 (2), 141--147 (2019).
11. Malyukina, A.O. (2015): Justification of the Implementation of CRM-System for Improving the Management Decision-Making Process at the Enterprise. Scientific Bulletin of Polissya, vol. 1, p. 85-90.
12. Shovkoplyas, S.: How to Increase Competitiveness with the Help of CRM. Office (34), 12--18 (2005).
13. CRM - Customer Relationship Management and Business Process Control. Mode of access: <http://u-s-c.com.ua/crm/>