

ROLE AND IMPORTANCE OF BUSINESS PROCESSES IN THE IMPLEMENTATION OF CRM SYSTEMS

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Abstract

Business Processes (BP) are nowadays an essential element in any organizational structure of a commercial enterprise. They are employed to understand, manage and coordinate the activities of the company as well as to guide issues concerning the creation of value. Information technologies (IT) are a set of tools that have helped BP to coordinate better and to obtain the desired organizational design. CRM (Customer Relationship Management) systems are an IT focused on the commercial area and consequently on the commercial business processes. This work presents the relationship between these two concepts and the influence that BP have in the implementation process of these kinds of enterprise information systems (ES).

1. Introduction

In terms of CRM, we can argue that this concept and Business Processes keep a close relationship. According to [17], CRM evolved from business processes such as relationship marketing and the increased emphasis on improved customer retention through the effective management of customer relationships. Also, [17] mentions that CRM involves business process change and IT integration in order to work properly.

We can then appreciate that the business processes play an important role within CRM since the organization's workflow has to get through the areas covered by this concept. Furthermore, the CRM implementation normally involves business process change and the introduction of new information technology [4], consequently, there is a significant amount of business process change

that needs to occur to make the CRM strategy more effective.

In this paper, we will introduce the role and importance that business processes have in the introduction and execution of a CRM system since, according to [4], there is a challenge for business process integration in CRM systems. The structure is as follows: in section two, we present an overview of CRM systems; section three shows a brief description of Business Processes and its use; section four details the relationship between these two concepts and, in section five we present the conclusions of this research and further work.

2. CRM Systems

Information technology (IT) has long been recognized as an enabler to radically redesign business processes in order to achieve dramatic improvements in organizational performance [7], [20]. The CRM Systems have gained a significant relevance for companies in the last years. The fact that they focus on a key element, such as customers, has caused the incorporation of these kinds of systems into the organizational structure of the enterprises. The term CRM as such can be used to describe either the software or the business strategy.

2.1. Definition

CRM includes methods, strategies, software and network capabilities that help a company to organize and manage its relationships with customers. It means the collection and distribution of all these data into the core business areas. Its goal is to allow companies to manage in a better way their customers by means of the

implementation of reliable systems processes and procedures to interact with them.

Recently, the concept of CRM has been applied to the companies that wish to be competitive, aided by information technologies, via the deep knowledge of customer preferences and their general data. In the same way, this concept has been extended to other areas such as hospitals, hotels, and even the pharmaceutical industry has adopted some elements.

Some definitions for CRM currently accepted are the following:

- The management approach that involves identifying, attracting, developing and maintaining successful customer relationships over time in order to increase retention of profitable customers [3].
- All the tools, technologies and procedures to manage, improve or facilitate sales, support and related interactions with customers, prospects, and business partners throughout the enterprise [8].
- A business strategy with outcomes that optimize profitability, revenue and customer satisfaction by organizing around customer segments, fostering customer-satisfying behaviors and implementing customer-centric processes [13].
- A comprehensive strategy and process of acquiring, retaining, and partnering with selective customers to create superior value for the company and the customer. It involves the integration of marketing, sales, customer service, and the supply-chain functions of the organization to achieve greater efficiencies and effectiveness in delivering customer value [19].

In the same way, CRM has been used to describe the whole business strategy oriented to customer needs. The main areas covered are centred in service automation, collection and processing of personal data, and self-service. With this, it is possible to integrate and automate the different processes of the company related to customers.

The CRM systems include all the procedures related with sales, marketing and post-sale

customer service aided by software tools. The main goal of CRM systems is to help companies using technology and human resources in order to obtain an analysis of customer behaviour and value. With this, the company can have an automated control of all of its processes related to sales and marketing.

2.2. Relevance

In any area or industry, the effective application of a CRM system is mandatory for the corporative growth and the survival in the commercial environment. Academic research shows that the companies that can obtain loyal and satisfied customers achieve business improvements, lower their acquisition costs and obtain the acknowledgement of their products, resulting in a better financial performance [13].

The last decade presented an incremental in the efforts to integrate ERP systems in the same time the companies were introducing information technologies inside their organizational structure. Currently, such companies are centred in the implementation of CRM systems to retain and obtain customer in a global market represented for the competition [14].

The last year the CRM systems industry showed and expansion in its integration with the other enterprise systems (ERP and SCM), which helped these systems to have more relevance within the organization.

Companies have acknowledged that they need to integrate CRM systems in order to be competitive and to obtain the maximum performance of their information technologies. Some of them have implemented partially a CRM system and, although this action limits the functionality, it is a great step to integrate the missing elements in a whole system working for the company's benefit.

2.3. CRM Systems Implementation

The CRM systems implementation refers to the process of introducing CRM software within companies, whether it is full-installed or in strategically selected areas. There has been discussion in the last years about the right steps to

follow and the correct approach to implement a CRM system, due to the increasingly failure of implementation projects, joined to the internal factors that appear because of the environment and culture of the company [6].

Implementing a CRM system, as in the case of any enterprise information system, is a complex task. Additionally, given the nature of business processes involved, the way that each company manages their relationships with customers and the adaptation of the current working procedures, these projects usually imply an exhaustive configuration of the original CRM software. The main difference with other enterprise information systems lies in the lack of standards in customer relationship activities in each organization, differing with the activities covered by, for example, ERP or SCM systems. Besides, there are more people with different needs involved and interacting with CRM systems than with other enterprise system.

Currently there are many implementation processes that have been created according to the needs and resources of each company. Such processes and methodologies have been reviewed through time, with the purpose to obtain a better profit of the assigned resources and minimize the implementation time. However, besides all these efforts in these strategies, companies still have a failure rate in the implementation of CRM systems of about 65% [9], being the main reason that the CRM systems do not reach or fulfil the CEO expectative, together with the increase of the original project budget and the user reject of the new system.

CRM systems implementation is viewed as a risky process for the companies due to the general results of failed projects, giving this enterprise information system a bad reputation. The discussion lies in the importance of the implementation phase, however, since each scenario is different, the current methodologies are not enough to perform a good implementation process. There is a need for methods that can integrate the risk factors and the many characteristics of each particular company, being business processes one of the main issues to look

after given their relevance in the organizational structure and their role with CRM systems.

3. Business Processes

3.1. Definition

A business process is a set of linked activities that create value by transforming an input into a more valuable output. Both input and output can be artefacts and/or information and the transformation can be performed by human actors, machines, or both.

There are three types of business processes:

1. Management processes - the processes that govern the operation. Typical management processes include "Corporate Governance" and "Strategic Management".
2. Operational processes - these processes create the primary value stream, they are part of the core business. Typical operational processes are Purchasing, Manufacturing, Marketing, and Sales.
3. Supporting processes - these support the core processes. Examples include Accounting, Recruitment and IT-support.

A business process can be decomposed into several sub-processes, which have their own attributes, but also contribute to achieving the goal of the super-process. The analysis of business processes typically includes the mapping of processes and sub-processes down to activity level.

3.2. Business Process Management

In the last years, there have been various definitions of what can be understood as Business Process Management (BPM). This concept was first discussed in the second half of the last decade, as the business area was looking for models to achieve excellence and performance in its processes. During that time, there were many authors that offered their point of view about BPM, mainly to explain the situation at that time by defining BPM as an approach that "presents a

more comprehensive array of improvement options” and can help organisations “avoid the tendency to fall prey to the hype of a new management fad” [11]. Also, [1] cited the drivers for adopting BPM to be the market globalisation, changing technology, regulation, stakeholders actions and the eroding of business boundaries.

Similarly, [12] mentioned that BPM is “a systematic, structured approach to analyse, improve, control, and manage processes with the aim of improving the quality of products and services”. [23] describes BPM as “a structured approach to analyse and continually improve fundamental activities such as manufacturing, marketing, communications and other major elements of a company’s operations”. [11] suggested that by using BPM the organization could be viewed as a series of functional processes linked across it.

From the previous contributions of the cited authors, BPM is considered as “a customer-focused approach to the systematic management, measurement and improvement of all company processes through cross-functional teamwork and employee empowerment”. According to [23], BPM should be addressed by a set of rules that include issues such as activities mapping, customer focus with linkages between key activities, relying on documented procedures and measured activities, inspiration in best practices and the role as an approach for culture change. In the same way, [11] state that BPM solves many of the problems of the traditional hierarchical structure because it focuses on the customer, manages the main processes between functions and improves them.

In the same line, Business Process Management (BPM) includes methods, techniques, and tools to support the design, enactment, management, and analysis of operational business processes involving humans, organizations, applications, documents and other sources of information [22]. The conduction of BPM should include the identification of the main processes and its documentation, in order to select the improvement strategy and the possible implemented changes to the processes. BPM is both a set of tools and techniques for improving processes and a method

for integrating the whole organisation and it needs to be understood by all employees.

3.3. BPM Systems

BPM Systems are a set of information systems technology to improve organizations’ abilities to better manage the process of changing their internal and external processes; commonly the technologies that are used for this are called Business Process Management Systems [22], or BPMS. BPMS are able to support business process management because their technical systems are joined to the business processes of the organization’s wider socio-technical system, which they help to manage.

In the same way, [22] describe a BPMS as a modelling, integration, and execution environment for the design, manufacture and maintenance of business process and point out that just as relational database management systems supported the aggregation of business data and the creation of enterprise data models, a BPMS achieves the same for business processes.

4. Business Processes and CRM Systems Implementation

4.1. BP within CRM systems

We mentioned previously that the CRM systems implementation is a difficult task that in most cases has failed to meet the goals of the companies due to many factors related to scenarios and company’s activities. Related to the topic of this paper, we can mention a reason for these unaccomplished goals: the failure of CRM systems to address cross-functional business processes among various roles, departments and functions within a company [10]. Initially, the CRM systems had a database-centric application that limited the flexibility and the ability to incorporate business change, having consequences in what could be done and to what extent for company-specific business processes. Looking to overcome these limitations, the CRM vendors focused on producing business process-based software solutions that were highly flexible and

configurable, enabling a closer view between the system and the operation of the company.

It is mentioned in [10] that the CRM systems do not have the visibility into the majority of the process and sub-processes of the company related to customers, nor can it manage the interactions between them. This process gap is caused because the typical CRM system is designed to handle only a portion of the many tasks required, since they are usually implemented at the group, departmental or divisional level and work with other systems of the company. In essence, many processes lie outside of the CRM system's sphere of automation, since the system loses sight and control of the transaction process as soon as it begins to run through the organization, producing the process gap.

Following this line, [10] proposes that, to solve this called process gap, companies have two choices: to implement a process-centric CRM system or to implement process-centric BPM software. By implementing a process-centric CRM system, they will obtain the integration of the functional areas (sales, marketing, and customer service) at the relational database level; with this it will be possible to control the process flow inside itself and other systems. This option is best suited for companies with no CRM system previously implemented.

The integration of BPM software, being the second scenario, allows the companies to integrate workflow process automation with the CRM, ERP and legacy systems. With this action, the BPM software supports the overall transactions of the CRM system by helping it to automate, manage, monitor and measure its key business processes. Furthermore, the BPM software enables any process to be initiated from multiple points (Internet, phone, e-mail) and then triggers the process rules on the CRM system, defining the appropriate action and routing to be taken along with data required to complete the process and the updates needed.

Following this line, we can establish a correlation between the main elements of a CRM system and the types of business process commonly accepted, as described in the next paragraphs.

Operational CRM

Operational CRM is centred in supporting business processes which includes customer contact (sales, marketing and service). The resulting data is sent to the users since it is required to carry out the activities related to the commercial area. This allows the company to fulfil its processes of sales, marketing and customer service in an efficient and personal mode, creating a direct interaction with their customers.

According to [13], operational CRM supports the following tools:

- Sales Force Automation (SFA): automates some processes related to sales and sales management, this tool is designed to improve commercial productivity.
- Customer support and service: automates service request, complaints, order returns and information requests using elements such as telephones, faxes, e-mail and internet.
- Enterprise marketing automation: provides information about the environment of the company, including its competitors, current market trends and variables. Its goal is to improve marketing campaign's efficiency.

Analytical CRM

Analytical CRM is in charge of the analysis of the information previously collected by the CRM system or from other sources in order to establish customer segmentation and identify their potential to reinforce the relationships. From the data collected, marketing campaigns are created in order to attract more customers and retain those who are already in the company's environment. Data collection and analysis are viewed as a continuous and iterative process. Successful projects inside this CRM area are supported with a data warehouse that is used to save and store the information required.

Collaborative CRM

Collaborative CRM allows the interaction with customers by means of the communication items

of the company (phone, fax, e-mail) and supports the coordination among the users in different areas. It puts together people, processes and data in order to let the company to provide a better service and retention of its customers.

Table 1 present the comparative and connection between BP and CRM systems main elements:

Business Process	CRM Systems
Management Processes	Analytical CRM
Operational Processes	Operational CRM
Supporting Processes	Collaborative CRM

Table 1. Comparative of BP and CRM Systems.

From this point, some issues can be addressed:

- Analytical CRM is committed with the collection and analysis of data related to customer and marketing, providing value information for decision taking support and strategic directions in the sales area. Since the management processes include operations such as the ones cited before, the relation between these elements is pointed out.
- The operational processes are the core of the business, producing the actions that give the company their main goals. Operational CRM centres on all the activities related to sales, marketing and customer service, meaning the whole commercial business processes.
- The supporting processes act together with the management processes, giving them sustainable actions in order to carry out the main business processes of the company. Similarly, Collaborative CRM supports the relations between users across the organizational structure and aid in the actions of operational CRM.

4.2. BP in real CRM systems implementation cases

Academic research in the CRM field has published case studies of the implementation process in order to know the companies' experience with this projects. These studies have been made in particular companies with different business types, throwing interesting results about

CRM systems implementation whether it was successful or not.

In most of these case studies, there are references to the role of BP in the implementation development. A manufacturing company had some difficulties in changing its BP to make them the core orientation, despite the managers knew the current developments in BP, system integration and information, and the importance of a customer-centric strategy. All these factors joined with a lack of knowledge of CRM and its benefits, which conducted to the fail of the implementation.

Other study presented an on-line retail company, who had to emphasize the management processes in the commercial area along with the integration of the information and processes that interacted with customers, enabling a direct interaction between customer service and the organizational structure. Similarly, a software company that implemented a CRM system successfully highlights the role of IT from a support function to an essential enabler of business process development.

However, not only the commercial companies have decided to implement CRM systems. There are cases of other type of companies such as banks and hotels in which BP have been used to create superior customer value and to reengineer the organization around customer focused processes; with this, the CRM system was applied to gain customer insight, build relationships, enable customisation and provide new opportunities for service distribution, interacting with the existing BP.

The next table summarizes the issues presented in previous paragraphs:

Company Type in Case Studies	BP Role
Manufacturing	Difficulties to change BP to make them the core orientation
Software	IT as an essential enabler of business process development.

On-line retail	Integration of the information and processes that interacted with customers.
Hotel	Reengineering of BP around customers.
Bank	Use of BP to obtain customer insight and build long-term relationships.

Table 2. Role of BP in different CRM scenarios

4.3. BP for CRM implementation processes

In section 2 we stated that implementing a CRM system was a difficult task. One factor for this difficulty is the complexity of the business processes involved, mainly those related to handle relationships with customers and the ones that describe work procedures related to CRM field of action.

To manage this issue, the implementation process of a CRM system should support the specific business processes and change them when necessary, adapting the required issues to the use of the system. Some authors ([4], [18]) mention that a key element for the success of CRM systems implementation is the adequate reconstruction of business processes to meet the new workflow between business units.

CRM systems and business processes share, as we can appreciate, a close relationship inside the organizational structure of a company. Since the area of action of these information systems is a core source for commercial processes, there is a commitment for the successful integration of both elements, given that to achieve real implementation of the CRM strategy it is important to have the right technology for automating and improving the business processes, associated with managing the company's relations with its customers, largely in the areas of sales, marketing and after-sales service [15].

Moreover, the implementation of CRM also involves redesigning the business processes of the customer-oriented company (marketing, sales and

after-sales) to achieve the objectives that have been previously defined and to improve customer satisfaction and loyalty [2]. From these results, we must consider the role that business processes play during the implementation process of a CRM system, since they may be a clue factor for the success of the strategy.

5. Conclusions and further work

We have realized that CRM is not only IT for marketing, sales and service; it is a cross-functional, customer-driven, business process management strategy that maximizes relationships and encompasses the entire organization using the technology available. Companies that achieve the whole functionality of a CRM system obtain an important commercial tool to compete in their global market with a well-planned strategy.

The relevance that Business Processes have been obtaining in the last years has caused that nowadays they work together with IT and IT processes for the benefit of the organization. In the topic of this work, companies should address CRM as a complex and combined concept requiring appropriate business processes and integrated systems; viewed this way they can achieve an improvement in the quality and efficiency of the business processes related to the commercial area.

For a further work in this line, a deeper connection between CRM systems and Business Processes-BPM will be addressed, referring to how and in which way the implementation process can be supported and positively influenced by the existing business processes of the organization. The main goal of this research will be to define in a useful manner this relation, in order to integrate this information in the development of a methodology for CRM systems implementation that can be applied to reduce risks using BP as a main element.

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