

# THE IMPORTANCE OF THE IMPLEMENTATION OF INTEGRATED INFORMATION SYSTEMS IN THE RESTRUCTURING AND EUROPEAN INTEGRATION PROCESS OF ORGANIZATIONS

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*Many of the organizations that are part of the public and private domain in Romania have reached the stage in which the existing information systems can no longer comply with the requests of users. Therefore, we are compelled by necessity to use integrated information systems which should be able to control all kinds of data and to allow access to them, to ensure the coherence and consistency of the stored information. Managers must be aware of the importance of the implementation of integrated information systems in the background restructuring of the organization, which can thus become consistent and competitive with the European Union one, so the integration process becomes a real and possible one.*

*Keywords: integrated information systems, ERP (Enterprise Resource Planning), CRM (Customer Relationship Management), SCM (Supply Chain Management)*

*JEL Classification: M15, O30, O32*

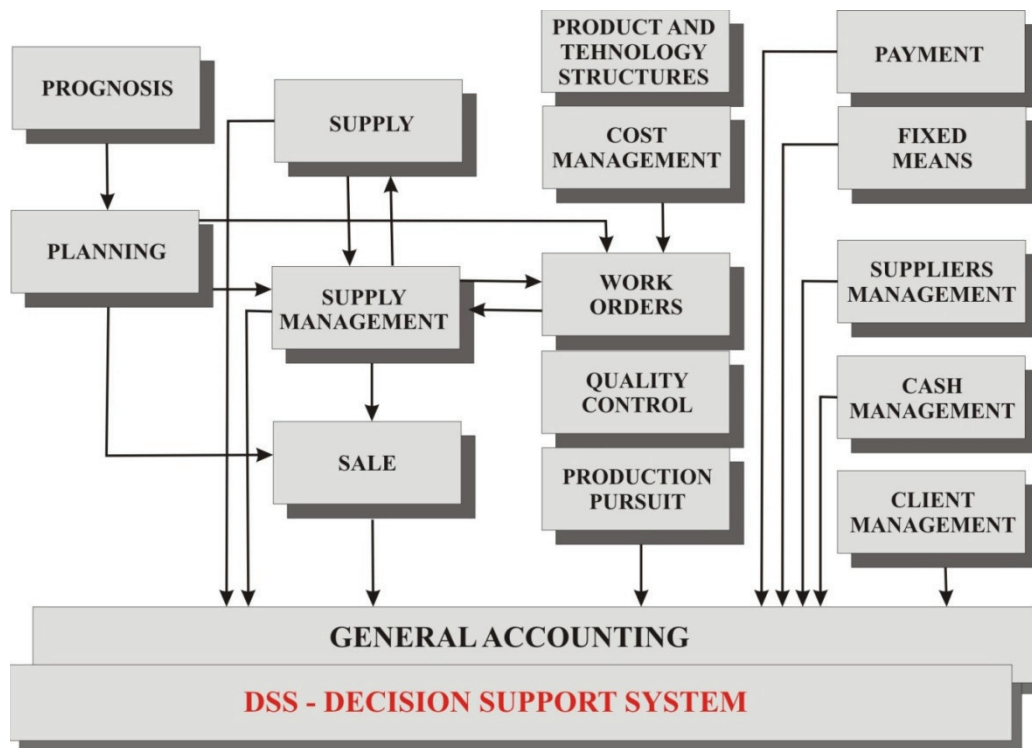
## **1. Introduction**

The economic, social and political environment in which the management decisions are currently made is characterized by a sustained and pronounced dynamics. In this respect, many changes are made in the way the competition is evolving on the market, in the legislative framework, in the way in which the enterprises function and organize, in the industrial and data processing technologies. All these processes lead to an increasing pressure over the managers and to new requirements compared to the way in which the decisions are elaborated and adopted, because the success of an enterprise in a competitive economy depends entirely on the quality of the decisions made by its managers.

Making a decision implies more and more the necessity of having a large package of information as well as an entire process of analyzing and synthesizing it. This ability to collect, process and analyze the necessary information in order to make a decision has long exceeded the human limits, as one must use the highest information technologies to support the decision in its making process. The information technology is nowadays a dominant one as well as a welfare source.

Right now many organizations in the public and private domain in Romania have reached the stage in which the existing applications can no longer comply with the requests of users.

We are compelled by necessity to use integrated information systems (integrated unitary systems in which the management positions, the ones of supporting the management decisions as well as the ones of controlling the activities and processing the transactions between different subsystems should be integrated). Part of the Romanian organizational environments has joined the integration game, as the implementation of integrated information systems means performance, efficiency and business control. The other ones are still hesitating, as they consider the integration a difficult step, a very difficult decision and, most of all, investment to make.



**Figure 1. The functional architecture of an integrated system<sup>889</sup>**

„In order to justify the investment in an integrated system we can take into consideration the following benefits:

- cost reduction by efficient resource planning (energy, water, prime matters, labor force, time) and by avoiding penalty charges (payment delays, violation of the terms of agreement);
- quality information and avoiding operations and data redundancy (single database);
- risk prevention and control;
- anticipation of legal requirements and the facilitation of the their compliance;
- the improvement of the company image and credibility on the market (by product certification);
- the improvement of the internal and external communication, decrease in the response time due to reports and ad-hoc information provided by the system;
- technological openness – (the system architecture allows the integration of new types of e-business applications).<sup>890</sup>

Information integration must be regarded as a continuous process and a long-term strategic investment, since its benefits appear not immediately, but with time. It may be considered as a form of “life insurance” for the company’s information system.

The approach to integration must be realistic and take into consideration two major alternatives:

- internal integration – focuses on the intra-corporate economic processes, covered by **ERP** application suites (Enterprise Resource Planning);
- external integration - combines the services of several suppliers in order to support the extended operations management, information exchange, coordination and cooperation throughout the extended value chain (expansion of the traditional ERP applications by means of “newer” **CRM** - Customer Relationship Management, **SCM** - Supply Chain Management).

<sup>889</sup> Rusu, L. și colab, (2005), Sisteme integrate și sisteme ERP, Editura Risoprint, p.106

<sup>890</sup> Jones, M., Zound, R., *ERP Usage in Practice: An Empirical Investigation*, Information Resources Management Journal, January-march 2006, p. 23-42

## 2. ERP (Enterprise Resource Planning) Systems

### *Defining ERP systems*

An ERP is a complex multimodular software application which integrates the economic processes of the companies in order to optimize and increase their efficiency.

From the functionality point of view, an ERP software covers the following domains of interest of a business: production planning; acquisition management and supply management; interaction with the suppliers; customer relationship management; order pursuit; financial management; human resources management.

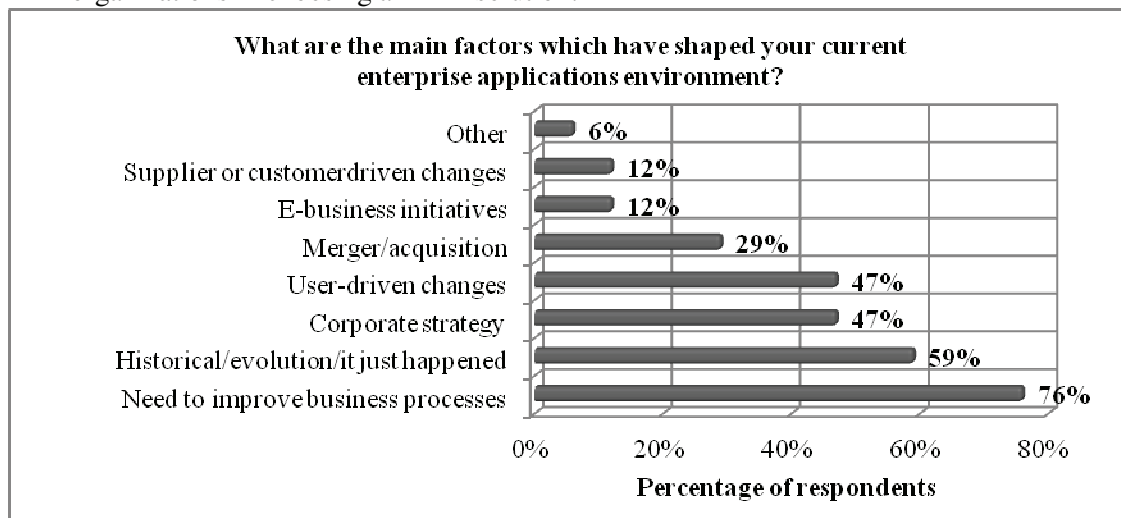
An ERP system achieves the information integration used by the functions and departments of a company, framing them in a single and coherent system.

### **The benefits of an ERP system:**

An ERP software offers a series of advantages for the financial management, as it is able to present any time a general view of the company in what concerns the financial status of the treasury, sales, debtors and creditors, current contracts.

According to a survey carried out in Great Britain among the organizations that have implemented ERP applications, we can point out the following aspects:

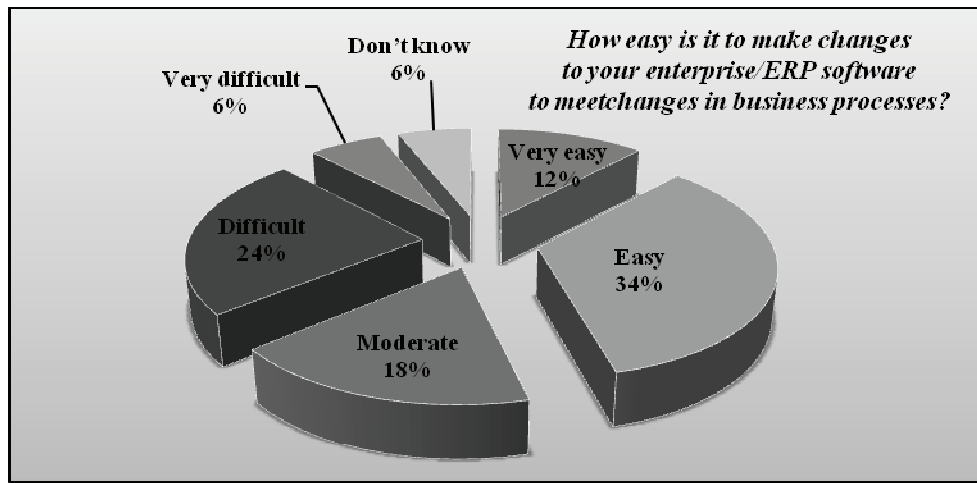
- the organizations have gradually invested human resources, money and technology in order to develop their own ERP systems and in the current financial climate they are trying to consolidate and maximize the results of these investments;
- not all the companies have equally prospered as a consequence of their investments, as many of the organizations have achieved considerably larger benefits using the ERP systems than the others. Among the difficulties encountered we mention: the systems haven't been perfectly set; not all the functionalities of the system have been activated and therefore their efficiency was reduced; the companies haven't ensured and maintained the correct functioning of the system;
- in Fig.no.2 is rendered the share of the factors that have influenced the motivation of the organizations in choosing an ERP solution:



**Figure 2. Key drivers for enterprise systems<sup>891</sup>**

- there are contradictory opinions among the respondents as regarding how easy it is to modify the ERP solutions in order to produce changes in the business processes:

<sup>891</sup> [http://www.conspectus.com/2009/october/downloads/Conspectus\\_ERPSolutions\\_October09.pdf](http://www.conspectus.com/2009/october/downloads/Conspectus_ERPSolutions_October09.pdf)



*Figure 3. Flexibility of the software<sup>892</sup>*

## 2. CRM (Customer Relationship Management) systems

### *CRM: definition and functionality*

"CRM is a complex system that provides a means to improve the experience of a particular client so as he should remain a trusty one; it provides both technological and functional means, in order to identify, attract and keep clients; it provides a single image of the client inside the entire organization." (Paul Greenberg – English analyst).

"CRM extends the sales document from a confidential one, issued by a salesman, to a continuous one that involves the entire staff of a company. It is the art/science of collecting and using the information about the client to strengthen his loyalty and increase his long-term value." (Larry Tuck – American analyst).

"CRM means an integrated approach of the processes of identification, attracting and keeping the clients of an organization." (Siebel Systems).

*The advantages* given by CRM compared to the traditional marketing are:

- reducing advertising costs;
- focusing the company's policy on the clients' needs;
- quick ascertaining of the efficiency of a campaign;
- the possibility to compete with the main contestants not only on a price level but also through the provided services;
- avoiding extra expenses that are assumed to be made by the less profitable clients and redirecting the resources towards the high profitable ones;
- surpassing the delays arising from the development and marketing of a product (it optimizes the marketing course);
- optimizing the trade channels and the contact with the clients.

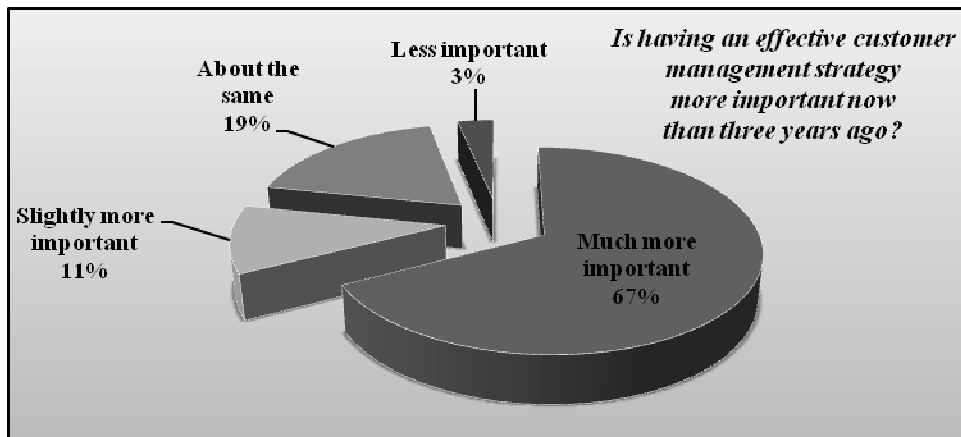
So, placing the client in the centre of the organizations' concern in order to suggest to him the most appropriate products and services is the aim of this new generation of information tools in the Customer Relationship Management category.

According to the surveys carried out in Great Britain among the organizations that have already implemented a CRM System, we can point out the following aspects:

- the companies that provide good services and manage to understand their clients' requirements are those that, generally speaking, can survive and prosper on a long time;

<sup>892</sup> [http://www.conspectus.com/2009/october/downloads/Conspectus\\_ERPSolutions\\_October09.pdf](http://www.conspectus.com/2009/october/downloads/Conspectus_ERPSolutions_October09.pdf)

- in the past, successful companies used to search for their clients instinctively. Nowadays we have to use the CRM systems, but we have to understand very well the fact that a CRM application only provides the process automation of the client relationship management. A company uses the CRM in order to supervise and keep information regarding to its current and future clients. It's not enough to install a CRM system in order to develop and ensure a complete environment for client services. The success doesn't depend entirely on the implementation of the system. A philosophy and a clear strategy for client relationship management have to be developed. O society has to provide a formative support climate and an accurate business environment for the employees in order to completely take advantage of the information systems;
- many organizations have implemented a CRM integrated system to help elaborate a client relationship management strategy. The surveys have pointed out how important these strategies are as opposed to three years before:



**Figure 4. Importance of customer strategy<sup>893</sup>**

### 3. SCM (Supply Chain Management) systems

#### *SCM: definition and functionality*

The Supply Chain Management is a term encountered in the Romanian literature under the name of supply-sales chain management or distribution chain management and it basically refers to optimizing and automating all the economic processes that take place at a level of an enterprise, starting with materials and raw material supply and ending with the production, transportation and distribution processes of the end products.

"The easiest way the supply-sales chain is defined is as an "umbrella" process under which the products are created and delivered to the clients."<sup>894</sup> The efficient distribution chain management secures the necessary amount of goods and services where they are needed, at the right time, in the solicited quantity and at the best price.

The chain management allows the administration of the expanded processes of the enterprise, integrates both the internal and external processes, secures flexibility and transparency in the development of a business from the raw materials that are necessary to the production supply stage to the delivery towards the end consumer.

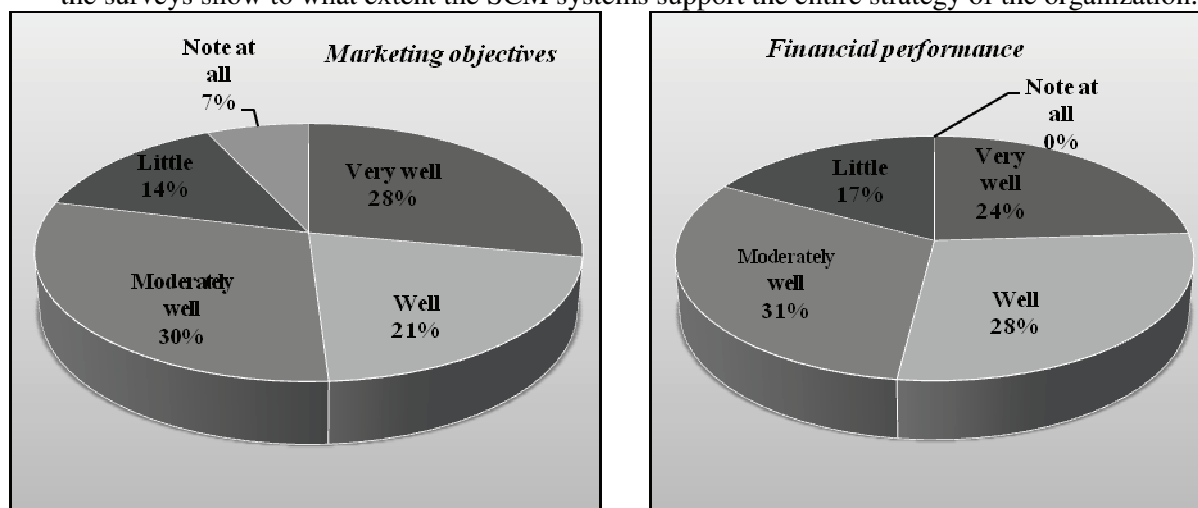
The web expansion as a means for the economic transactions to take place and to develop a business-to-business communication, together with the development of new web based SCM technologies, achieve the transition from linear interactions to the network model. We are now talking about the interdependent distribution networks. The enterprises are heading for real time operating by dividing the information and interconnecting the processes with the ones of the business partners.

<sup>893</sup> [http://www.conspectus.com/2009/june/downloads/Conspectus\\_CRM\\_June09.pdf](http://www.conspectus.com/2009/june/downloads/Conspectus_CRM_June09.pdf)

<sup>894</sup> Meșniță, G., *Introducere în afaceri electronice*, Editura Junimea, Iași, 2002

According to the surveys carried out in Great Britain we can point out the following aspects:

- the British companies continue to invest in SCM technology, in spite of the uneven results and, sometimes, despite the current economic recession;
- a particular aspect for present-day organizations is to ensure the supply chain. They are designed to support the global business strategy, both in terms of management and marketing aims support and also of financial performances;
- the surveys show to what extent the SCM systems support the entire strategy of the organization:



**Figure 5. How well do your supply chain operations support the overall strategy of the business?<sup>895</sup>**  
**Conclusions**

The passing to the appliance of some restructuring and changed modern methods and to real-time distributed processing of the information using new approaches like: ERP-Enterprise Resource Planning, CRM-Customer Relationship Management, SCM-Supply Chain Management, is a fact both in the private and public domain, which has to be treated accordingly.

In Romania there already exist a whole series of integrated information systems implementations provided by well-known companies such as: SAP, ORACLE, SIVICO (the first place in providing ERPs in Romania).

The rising number of integrated systems implementation confirms the fact that managers (in public and private domain) are aware of the importance of this solution in the background restructuring of the organization which can become thus compatible and competitive with those of the European Union. Therefore, the integration process becomes a real and possible one.

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