

ERP software – the opportunity to bypass the time of crisis

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Abstract: Integrated supply chain management is a business philosophy that focuses on improving and coordinating business processes, on the integration of these elements at the organizational and inter-organizational systems level. The market is becoming harder to forecast and the profit is increasingly difficult to achieve. We have to respond faster to the opportunities which the market sales us. In the context of a global economic crisis in full swing, all areas try to resolve existing problems. How do we know when we need to change and how do we do in order to not have the need to change?

Key-Words: Enterprise Resource planning, Island of data, Integration, Effectiveness, Efficiency

I. INTRODUCTION

"Competition between manufacturers is becoming increasingly less effective in terms of production and product quality - comparable evidence - and increasingly fierce in terms of stock problems and speed with which it is distributed on the market." John Kasarda, Forbes, October 18, 1999. This quote reinforces the belief that supply chain management will be the main determinant of the ability of producers to compete.

Finally, in response to the high cost of creating and maintaining links outside the company boundaries, organizations tried to put the disparate elements of value creation chain under the control of the same relationships. Concentration processes across extended supply chain is necessary, that the movement of production factors seem less expensive than buying them from elsewhere.

Furthermore, new skills gained have enabled more and more the replacing of vertical integration with virtual integration. Virtual exchange of information reduces the time and personnel needed to perform transactions and coordination activities that take place between units of a firm.

Life experience has proven to everyone, that integration into the environment is vital. [7]

Enterprise resource planning system (ERP) has strategic impact on the firm because its integration in the firm's processes and activities directly affects the firm's performance. Therefore many companies try to develop and implement nowadays ERP systems.

The success ERP implementation within the firm is positively related to the firm's leadership dimensions including learning and knowledge with the organization, participative decision-making, motivation and empowerment of employees, power sharing, cross-functional collaboration and communication between

employees and management, experimenting, tolerance for risks.

II. CONCEPTUAL DELIMITATIONS OF ERP SYSTEMS

"If you want to understand everything, you must know its beginnings and evolution." (Aristotel)

Enterprise resource planning systems (ERP) emerged as a way to keep track of inventory systems and have evolved by integrating traditional management functions such as the financial, the payroll system or human resources with other functions, including production and distribution. Currently, ERP systems continue to evolve and have already appeared acronyms such as ERP extended, ERP II, business applications (Enterprise Business Applications) trade management (Enterprise Commerce Management) or complex applications (comprehensive enterprise applications).

Although traditionally, ERP is a complete system of management and control of all resources and business flows, its definition can be extended to areas of CRM (Customer Relationship Management), SCM (Supply Chain Management) etc., placing himself in the eBusiness Suite and becoming a complete management system of both internal processes and managing relationships with partners, customers or potential customers.

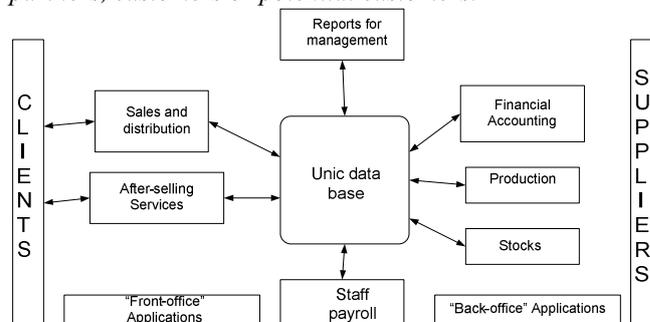


Figure 1. The Structure of an ERP System

How can ERP improve business performance?

An ERP system enables decision makers to carry out comprehensive analysis on the business plan, to achieve better communication in the company, to improve cooperation and interaction between various departments. Through the options for simulating activities and through the flexible and dynamic nature of applications, we can make plans for forecasting, assessment and for trends of one industry in which the company falls in, qualitative analysis, integration with new technologies of e-business and online communication.

Customer Perspective: "How can ERP help me?"

- Facilitate management of current operations
- Optimize inventory

- Improve order fulfillment
- Improve cash flow map
- Integrate financial information
- Improved Customer Services
- Improved production control
- Adapt quickly to changing market conditions

Disadvantages of ERP:

Many of the problems that organizations have with ERP systems are due to inadequate investment in training of personnel involved, including those that implement and test changes and lack of policies to protect the integrity of data in ERP systems and also in the way that they can use them.

Limitations of the ERP system include:

- Success depends on skills and employment experience, including training on how to use the system properly.
- Redesigning business processes to fit the industry standards set by the ERP system may lead to a loss of competitiveness.
- ERP systems are seen often too rigid and too difficult to adapt to specific production flows of companies - this is one of the main causes of their failure.
- Refusal to provide internal confidential information between departments can reduce the efficiency of software.

Costs of ERP solution

Many companies classify ERP solutions as expensive. The cost of an ERP a solution vary depending on many factors and is actually an accumulation of other costs that depend on the specific implementation solution for a particular company: the processes that need to be implemented, the number of users, duration and purpose of implementation.

The emergence of these hidden costs is due to the lack of consistency between the negotiating position and the position during implementation. Secondly, it is the cost of licenses, the service configuration of required additional software (network, database, etc.) and the needs to upgrade hardware. Third, during implementation, with deeper understanding of the beneficial application, solutions or other needs are revealed, which attract additional costs.

Underestimated costs:

- *Training* represents one of the most underrated aspects of the budget.
- *Integration and testing* of ERP package with other software tools company is often an activity whose cost is underestimated.
- *Converting data* from the format required by old applications to that required for ERP systems is an activity that proves to be very costly and difficult to estimate quantitatively.

Risk factors in the acquisition of an ERP:

Given the relatively high costs involved by the purchase of an ERP, it was natural to assume the question „what investment risks raise such a solution?”

The main risk is due to the ignorance and the neglecting of domain specific criteria for selecting an ERP solution close to the customer specific activity, so the configuration is minimized. If not paying sufficient attention to the needs analysis process, the real needs appear much later, during implementation. Not finally, a risk factor is the delay in giving up old applications: although it is not advisable to work in parallel more than two months, customers continue

this practice until half a year. Moreover, giving up from the start to all old applications is extremely difficult because it requires changes in all compartments.

Most important is the fact that implementations fail is not just a material loss of investment in ERP solution. The negative effects are felt in deteriorating relationship with customers, employees, or loss of market share and image.

ERP II

"No business is an island."

The evolution of technology is subordinated to the laws of nature, and is a subject for "natural selection" and "adaptation to environment." These laws express a simple principle: the things that do not adapt do not survive to environmental change. Business and information systems that support them, are no exception to the law of evolution.

ERP II represents the next stage of development for the enterprise resource planning systems.

The technology entered into the communication era, particularly with the growth of the Internet. ERP II represents the ERP systems which are adapting to the reality of the Internet, through changes in functionality, technology and architecture.

The most obvious change is the shift in emphasis from activities focused on the internal workings of the company, to integration and external collaboration.

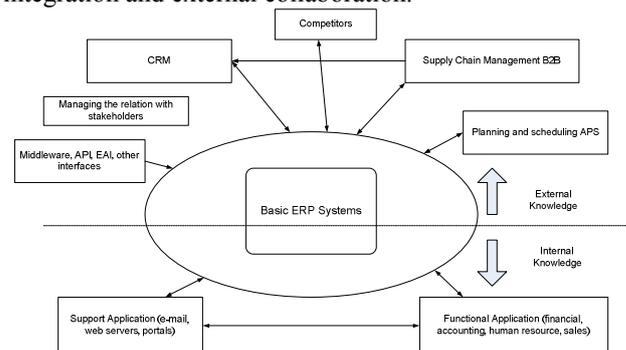


Figure 2. ERP II

Information systems covering all aspects of the enterprise in an integrated way, are called ERP II. Gartner Group, which introduced the term in 2001, defines such systems as "a business strategy and a series of industry specific applications that bring value to customers and shareholders, enabling operational collaboration processes, entrepreneurial and interentrepreneurial. With this new generation of systems, the role of extended ERP is changing, moving from optimizing internal resources of the company (production, finance, distribution and human resources), to inter-organizational collaboration, in creating an effective value chain.

These informatic systems make the collaborative relationships between firms that have access to them to be faster, more economical and effective, the desire being to create an "ecosystem" based on collaboration, which enables organizations to share knowledge. For this reason, embedded informatic systems enable the development of new ways of management, not only at enterprise level, but also in the network of businesses, redesigning relationships, inter-organizational roles and responsibilities in order to improve the overall level of benefits (so-called "Collaborative Commerce" or "c-commerce").

III HUMAN RESOURCES MANAGEMENT TO ENSURE IMPLEMENTATION OF ERP SYSTEMS (LEADING)

Functionality and organization performance obviously depends on the managers and leaders. They are those who design strategies, the management system and organizational culture and they are also those who manage them, generating efficiency, sustainability, competitiveness and efficiency.

The overwhelming and permanent increase of needs and opportunities forces managers to seek methods to prioritize their day-to-day activities, to focus on what is really at stake and to leave non-value adding efforts aside [8]. The true source of companies and nations welfare must be searched in people, in their *knowledge and competencies*, also in internal processes and in the company reputation [18].

On the other hand, the manager is the one who coordinates and monitors the organization's resources and work of the subordinates so that organizational objectives are met.

The leader is one who may influence others to achieve the aim. Effective leaders are people of vision who communicate effectively with subordinates, good decision makers, they respect individuals and their dignity and they are also engaged in solving tasks [20].

Leadership is the process by which a person sets a goal or directive for one or more people and makes them work with competence and full commitment to achieve them. At the leadership basis is always the team spirit, being the status that reflects the desire of people to think, feel, and behave harmoniously for the achievement of a common goal [15].

In an organization, *human resources* are a pro-active factor in achieving effective activity. To operate, the organization needs people, the right people. People perform their task within the organization, waiting for the leader to establish the route, the purpose, to guide them. The leader has now become a vital element of a successful business. The organization may have all the advantages: financial resources, market position, and the latest technology but if it fails to chapter leadership, they are simply lost and the organization goes down.

We think that implementing leadership in one organization has as much importance as Learning by Developing in the pedagogical base. This is an innovative operating culture which requires students to undertake projects rooted in the world of work and aims to produce new practices and competences. [24] In the same way, the leadership development will increase the collaboration and integration within an organization and will raise the benefits from implementing newer software applications.

Mere possession of quality human resources is not enough to achieve the desired results, but requires a certain material conditions and social climate and management in order to determine not the "use" but the "participation" of these resources to achieve objectives. The man as a resource should not be regarded only in terms of opportunities to do something, but also through the attitude towards what he is doing and towards the organization.

In a process of implementing an ERP system, human resource plays the role of an *agent of change*. This change must be planned, communicated, accepted and performed by employees. Otherwise, implementation of such a system will be only a change of shape and will not lead to desired results. Yet leadership seeks to change the background,

based on altering the old system of values, attitudes, habits, attitudes and implementing a new system of resource management and planning organization. But people are generally reluctant to change and that is why leaders are involved here, where they are emerging as veritable agents of change and are able to lead employees to engage and motivate to act in the desired direction [14].

ERP implementation is materialized as a collaborative effort, which must be based on participation and consensus of all of stakeholders.

In order to implement ERP systems, managers and leaders need to set specific actions that:

- *To gain confidence from suppliers and customers.* Making supply chain automation is even more difficult, since it extends outside the company. Implementing such a system means that each partner must take something from other functions (inventory management will fall in the job of the supplier). Finally, to obtain benefits, compromises are needed and also the efforts to trust others, helping them achieve their goals.

- *To overcome internal resistance to change, from the employees.* Implementing such a system outside is difficult, but equally difficult is within the company. If manager fails to convince employees that the use of the new software is beneficial, they will find ways to avoid using it.

- *To provide motivation among employees in order to implement a new system.* The personnel motivating project is an important part on the road to adopt dependable software development principles since highly motivated personnel is a key success factor for producing really reliable, secure systems supporting continuous development. [5]

- *Leaders must stimulate creative thinking of employees in order to find solutions so far unused.* They must encourage employees to "think outside the box" in order to consider all these new solutions. Rather than react to current challenges, employees need to think about the future. Those with extraordinary initiatives should be assessed by the leader and to be encouraged to operate in the field of experimentation.

- *Leaders must create a work environment where experimentation is encouraged.* ERP implementation will take place more easily in an organization where the small-scale experimentation is allowed. Resources available within the organization are directed towards learning and the employees „ are allowed to allocate 15% of the time during the working day to experiment or to do what they want” in the field of knowledge (the 15% rule). The purpose of experimentation is to learn from experience, in an environment controlled by the leader, and in this case the cost of failure is almost not significant. Thus, the leader must create a culture that meets the experimentation and innovation [16].

Multi dintre noi vorbim despre leadership..dar nu il

Many of us talk about leadership, but we do not implement in our daily life and we do not support it on all the plans that merge in human life.

Any effective system for management development should increase the ability and willingness of the person to take control and responsibility for events - especially for themselves and for personal training.

This is not a new concept, but is generally unacknowledged. The standard approach of learning and development, was to learn from people in authority -

teachers, experts, leaders, parents - to get the right answers. In other words, to make things 'right'. In recent years, the approach has changed considerably. The focus has gone from doing things correctly, to learn how to improve, to expand the frontiers of knowledge and performance - in other words, to make better Handcrafts.

Acum, realizarea este reprezentată de faptul că succesul și satisfacția nu provin neapărat din ocuparea unui teritoriu managerial mare într-o companie mare, ci prin apartenența la o organizație eficientă și bine condusă, care știe ce face, încotro merge și cu ce contribuție poate să vină fiecare membru în parte.

Today, leaders and managers must be more ambitious and not to only have a single career. Success usually means rising on hierarchical positions even higher. But in recent years, many of these positions were limited, changed or have become flat. The experience was hard for some managers. They had to depart each other to make room for survivors through diagonal moves and higher responsibilities. In this reality, just the mere fact of having a job is more than one prize and diagonal movements can provide variety and enhance opportunities.

Now the realization is represented by the fact that the success and satisfaction does not come just from higher managerial occupation of a territory in a big company, but through membership in an effective and well-run organization, who knows what and where it goes and what contribution can make each member individually.

Functionality and performance of your organization clearly depend on managers and leaders. They are those who design strategies, and organizational culture and management system that generate efficiency, sustainability, competitiveness and efficiency.

On the other hand, the manager is the one who coordinates and monitors the work of subordinates and the organization's resources so that organizational goals are met.

The leader is the person who may influence others to achieve their goals. Effective leaders are people of vision, they communicate effectively with subordinates, they are good decision makers and they respect their dignity and engage in solving tasks.

On the importance of leadership, all organizations need to feel intense emergence and development of a new generation of leaders capable to engage adaptive mechanisms of development, learning, change and performance.

IV. IMPLEMENTING THE ERP SOLUTION – CASE STUDY

In today's technologies the customer have a lot of difficulties to access the organization's facilities. The customer have problem in contacting the organization. Enterprise resource planning (ERP) system meant a huge step in providing an integrated business environment, as they put together all the data, the applications and the people of a company. [3]

With over 200 products in manufacturing and over 1000 employees, SC FARMEC S.A. is one of the largest manufacturers and retailers of cosmetics and cleaning items (chemicals for households) in Romania and in South Eastern Europe. Besides its own products, SC FARMEC S.A. retails also non-Farmec products using its own network of stores and commercial offices in 14 locations across the

country. 10% of company turnover comes from exports. Among the well known brands of the company are Gerovital H3, Gerovital Plant, Aslavital, Ecovital, Farmec, Doina, You & Me, Obsesie, Farmec 16, Athos Dermofarm, Triumf and Nufar. The company was founded in 1945 in Cluj-Napoca and was fully privatized in 1995.

The initial situation of SC Farmec SA

The existence of a portfolio of approximately 200 types of products, involves a considerable effort in tracking the supply and the manufacturing processes. Firstly, Farmec used an upgrade to the computer system used within the company in order to make the company's activity more efficient. Thus, there were implemented several computer applications specific to certain departments. After a while, their number reached 13 and due to the fact that these were made by different technologies, the system was not fully integrated and product integration was performed offline. Also, the production schedule was semi-computerized, which caused the process of production to take place relatively slowly.

The company's needs

As the market has evolved and become more competitive, Farmec was questioned to optimize its business practices and therefore to modernize the information system used. Thus, the company sought to acquire an integrated management system that meets more stringent needs regarding the organization of the production processes. This optimization should enable Farmec to offer customers a high level of services, while establishing a solid base to benefit from technological improvements. Requirements for this optimization process, defined by the company's management aimed at:

1. *Safety*. The technical characteristics of the application must ensure a maximum data protection with the existence of several access levels for different users and departments.

2. *Sorting information*. Within the system, information must be used efficiently. Application should have the possibility to quickly find the information that is needed, without wasting any time with searches.

3. *Rapid response*. It is necessary to allow managers of any hierarchical level to respond in real-time to the information provided the system and to customers' requests by taking the appropriate decisions.

4. *Flexibility and traceability*. The system must provide adaptability to the changing needs of the company. Legislative changes occurring must be easily incorporated into the system therefore to provide the subsequent extension of functionality.

6. *Reduce human error*. The significant reduction of errors due to negligence, incompetence or inattention can be achieved only if introducing the working data into the system only once. Thus the information provided will be of high quality and the inconsistencies will be fully removed.

7. *Reducing costs*. There's a need to closely monitor the resource intensive processes. Supply and production flows must be conducted using the "Just In Time" model in order to minimize the inventory and the fixed capital immobilized in stocks.

8. *Increase the productivity and the efficiency*. The application must ensure a better tasks allocation and the resources saving activity should be clearly implemented with the purpose of productivity gains.

9. *Optimization and integration of the business processes.* Centralizing the enterprise data from all departments into a single database should result in an easy and operative access to information of all the users involved.

In addition to these requirements, generally considered, SC Farmec S.A. presents a number of specific requirements, depending on its particular business and its production activity. The main requirement refers to the production process, which can be compared to the production conducted in the chemical or drug industry.

The solution

From the short list drawn up by a project team, the selected a solution was based on Microsoft Dynamics Nav, but it was also a personalized solution by Brinel for Farmec and answered to all the specific requirements of a manufacturing company, required by the management of Farmec. The proposal made by Brinel integrated all business' divisions in a uniform and functional solution designed to efficiently plan and track all activities within the organization, using financial and physical resources.

Increasing competitive advantage

By treating the orders more efficiently we can provide better service. It is important to treat the orders of products which are not in stock like other sales commands. The system processes and the customer will never fail to tell the difference. You can also specify, that an order must be treated as an input-output order or as a direct shipment to reduce delivery time. We can manage existing stock in several locations (for example, warehouses in Bucharest and Cluj) from a single database.

Whoever answers the phone can give customers the information they need. You can categorize contacts based on the profile structure questions and can customize their approach. For example, a personal profile can provide information about the frequency with which a customer wants to be billed, whether he has individuals or hours of service preferred. Thus, customers can be satisfied by creating lists of actions in the system, and assigning tasks to other users or teams of users.

Microsoft Dynamics NAV helps to plan and reorganize production to meet new market requirements, ever-changing.

Managing Change

With multi-planning options and business notices we can enter exceptions and last-minute changes, costs, materials and operations being simultaneously redrawn to reflect changes in manufacturing.

Using sampling and booking processes we can improve organization of deposits and we can decrease labor costs. Reservation notes and sampling notes can be added to the company's working methods. Also, you can track the return stock to manage the additional costs such as fees for reintroduction in stock.

The implementation

Microsoft Dynamics Nav includes management, production, distribution, relationship management, services, e-commerce and analysis applications, which can be adapted according to requirements of each company. The solution presented by Brinel neatly folded the specific manufacturing activity conducted by SC FARMEC SA, responding to various

challenges encountered in managing the firm's activities, including: planning the loading of the machines, consumption control, planning the required raw-materials, the inventory control, the integration of all existing applications.

Within the project there have been implemented the following modules: Financial, Accounting, Sales, Purchasing, CRM, Manufacturing and all were integrated into one unified solution. The effective implementation process was scheduled to last approximately six months and it began by integrating the critical areas (financial, accounting) and continued with the implementation of the other modules of the solution. Microsoft Dynamics NAV works for more than a year in Farmec and covers the full range of activities and is customized to the manufacturing activities that are carried out by the company.

Customization

The main requirement of Farmec's specific project was related to the production process. There are two production stages: preparation and packaging. Currently the company is working with the concept of semi-products. In preparation, there are liquid semi-products, with specific recipes for manufacturing. At packing there is finished product that can be packaged and sold as such, or a semi-product packaging, if it enters into the composition of another product (example, packages containing more products: cream, lotion and deodorant). Thus, the application must take into account the material contained, consumption in pounds, the loss of technology and especially the several types of manufacturing recipes.

7.2.2 Customizations

The main requirement of Farmec's specific project is related to the production process that can be assimilated as it is or with production carried out in the chemical or drug industry. Thus, there are two production phases: preparation and packaging. Currently the company is working with the concept of semiproduct. In preparation, there are semi-liquid, with recipes specific for manufacturing and at the product packaging is the option of finite product, where the packaged product is sold as such, or a semiproduct packaging, where it enters into the composition of another product (example, packages containing more products: cream, lotion and deodorant). Thus, the application must take into account the materials contained for consumption in pounds, the loss of technology, but especially the manufacturing recipes which are several types: informational, storing, bulk cosmetics, Metro, Selgros, minimostre, to excise 10%, 5% excise duty, etc..

In determining the ERP customization, is the first report made by the company Brinel with Farmec in setting requirements and solutions. Below is the content of the essay:

NOTE: The following are business requirements and not functional requirements. Comments relate only to possible solutions, subject to detailed analysis.

1. SUPPLY:-tracking and downloading lots from storage depending on the date (Note that the discharge has financial implications, not being able to do without the accounts accept.)

- quarantine problem-solving between the good's invoice entry and registration. The three days when we expect the analysis of the CTC. (The problem is solved by creating a dedicated quarantine warehouse.)

2. PRODUCTION:-work simultaneously with several variations of the recipe. (Navision allows a single certified prescription one at a time. Suppose that I (could) change the program to accept two or more. What happens, and how to calculate the MRP (material requirements plan) if the recipes are different ?)

- Optimization of production based on batch sizes
- Possibility of fragmentation of the forecast sales in several orders, released at different times of the month (The problem is fixed.)

3. SALES: multiple-invoice discounts (The rule is that any adjustment should not invalidate the implementation. Also, there are several variants of solving, including the solutions such 'adjustment of Farmec products'.)

- Printing on invoice the product codes assigned by the supermarket chains.
- Discharge from storage according to the batch and expiry date. (Ibid.)

4. INVESTMENT:-equipment repair plan in relation to the mode of production (actual hours)

5. TRANSPORTATION:-collect and correlate all data related to the operation of a car park with a heritage of 120 cars.

6. CTC-ENVIRONMENT:-join related data analysis reports with batches, both at raw materials, packaging and also at production, to achieve traceability of products.

- At 4 months after the start of the project implementation and with the knowledge gained by Farmec until the moment, the requirements of the first paper can hardly fit the normal flow of project
- The project team within the company S.C. Farmec S.A. did not handle queries and so the project leader has been changed during the implementation, this change of leading increasing the efficiency

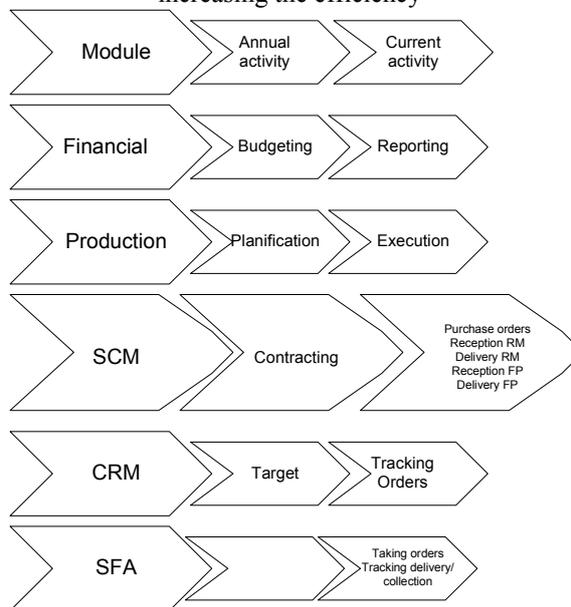


Figure 3. Chevron Diagram for Farmec

Farmec's project statistics

Project duration	Planned 7 months	Realizes: 6 months for basic functionalities + 5 months for adjacent functionalities
Brinel project team		9 resource involved (Project Manager, Financial Advisory, SCM Consultant, Production Consultant, CRM Consultant, Developer, Programmer, Implementer, Support)
Effort		645 days-man, from which 211 for consulting /implementing SCM
Farmec project team		21 resources
Farmec description	Locations	14 branches in the state (deposit+store)
		3 deposits in Cluj
		2 stores in Cluj
		2 production locations in Cluj

Table 1. Statistics for ERP implementation at Farmec

Options for expansion

Currently working on an integration between Microsoft Dynamics NAV and an SFA application. Other developments are related to developing a plan for maintenance of equipment, integrated with ERP production module and a module for tracking the transmission and distribution activity.

Specific issues of implementation

During the implementation the following problems occurred:

- Changing the business model
- Overcoming the time limits and burst-timing the project in two stages: core + addition

Conclusions: estimated and achieved benefits

Benefits of the implemented solution

- The planning and reorganization of production has achieved a reduction of 20% from stocks;
- Manufacturing times have been reduced, time to achieve a ratio decreased by 60%;
- Methods and manufacturing processes can be changed and implemented on the fly;
- The solution provides a high capacity to respond to unexpected changes.;
- The stock can be seen in real time, online at any location. Stocks of raw materials and packaging without movement were reduced by 40%;
- By removing the stock records (completion and accounting), the time spent working with documents was reduced by 20%
- Production forecasting and planning can be much better because of the changeover from the system of direct costs to the system of standard costs;
- The application allows the early determination of a pricing;
- We have achieved savings of 20% at the materials purchase;
- The system provides the ability to bill customers, merchandise and rebates in various forms.

Concerning the production stage, the presented solution provides flexibility in order to increase productivity and to take advantage of the new profit opportunities offered by customers and it helps the company to provide a better service for its customers and to improve its performance indicators. Microsoft Dynamics NAV SC resolves the

following problems of FARMEC S.A. related to the production process:

- Order to be delivered "yesterday" (a flexible planning that controls the deliveries easily and quickly)
- The direct planning of the sale orders (sales orders can be planned and launched quickly and easily directly in the production stage)
- Immediate detection of surplus available (an already „proposed action” the surplus can be easily detected)
- The customer just changed command (can give customers what they want, when you want)
- The increase of the order's quantity (using a "proposed action" the change can be quickly operated)
- Change of the delivery date (the adjustment of the production plan is easily operated with a "proposed action")
- Opportunities for higher order (Flexibility in the Capacity Management helps smooth adjustment of the capacity and maximizes profits)
- Rearranging works (can easily rearrange easily the activities with a visible impact on customer)
- Adding exchanges (simply add new exchanges or additional working hours in the program)
- Raw materials are required in another store (the planning of the raw-materials will detect where the stocks are and if necessary, transfer notes will be made between warehouses to bring the goods to the factory)
- When ordered goods can be delivered? (Using ATP and CTP functions the factory gives realistic delivery times)
- Available to Promise = (ATP) (Check the company's stock available, the planned production, supply plan and transfer orders)
- Capable to Promise = (CTP) = (Check the available production capacity of the company based on planned load)
- Where is my order?
- Respond immediately to the customer (multidimensional tracking allows almost instantaneous response to the customer questions)
- You can easily find out the status of scheduled orders (with production orders on multiple lines and on multiple levels, it can easily handle a scheduled command, accessing a single command, instead of accessing a network of controls)

"The Microsoft Dynamics NAV solution offered by Brinel helped Farmec firstly to increase the efficiency in planning, monitoring and tracking of production processes by reducing working time and by carefully organizing the activities which lead to an efficiency of the whole production process. Also, the replacement of the 13 disparate applications which managed our activities with the Microsoft Dynamics NAV solution led to the reallocation of some resources that managed those applications to some other and more profitable activities in our company" said Mr. Cristian Ani, Head of IT department Farmec.

V. CONCLUSIONS

The largest chaos and discomforts arise when we don't have what we need. The first step to solving them is to understand that they are often generated in an earlier stage. Production or lack of it. And at this stage also the first impression is of chaos. Only after we see what is not seen, certain flows and links, we understand that there is a possible order, priorities and restrictions. The idea is that we must come to see the main existing flows, the contradictions that govern them and the stage where we discover them and

recompose as a whole in the organizational mind and managerial practice. [9]

Many companies are now facing difficulties in coordinating the supply chain and ensuring favorable transport arrangements. Given the drastic need to reduce costs, many companies have already used safety stock and thus increased their dependence to the suppliers, making business more sensitive to fluctuations raised in orders. [31]

Some companies maintained their capital, while the stocks of other have fallen significantly. This allows strong companies to have advantage in this situation, to improve it portfolio.

Due to the crisis, supply chain acquired two tasks:

- It is faster
 - It has a lower intensity
- Chain speed is given by the need to create supply without storage and interruption, without having activities that are without value. Low intensity is due to the obvious decline in demand. The dynamic of logistics is under the sign of one fundamental conflict: "Who is more important? Demand or offer? ". How can we undo the knot created?

The basic argument is that in a world characterized by vertical specialization, goods are produced sequentially, in certain stages throughout several countries - calling this element extended supply chains. Parts of a final good cross borders several times before the product can reach the customer. At each border, the final amount of the asset is registered as an exchange. As a result, when it is a reduction in world income, exchanges should decrease "not only the finished goods value but also the value of all intermediate flows which are collaborating to create the good." [4]

From this assumption, we will construct a scenario in which a liquid channel led to the moment where the exchange affects very seriously the decrease in demand, the effect of this decrease is much deeper as regards to supply chains, as the flow is driven by financial institutions, greatly affected by the crisis.

There are too many empty spaces in our understanding of the nature of the operations of international supply chains. Once data become available, the crisis will give us important material, so we can improve awareness. Finally, you might discover that without supply chains, things were far worse than is now. The crisis actually has the ability to launch instead of encrypting the process of globalization.

"A horse does not run as fast as when he is reached from behind and surpassed by other horses"

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