Implementation of Enterprise Processes to IT Solution for Company

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Abstract: - In the process approach, activity of organization must improve customer satisfaction by meeting their requirements. Implementing this goal must involve identifying links between activities performed in organization and customer requirements in all processes, not just at the stage of final effect. Separation of processes within the organization allows for easier monitoring, acquisition of data on functioning of organization and improvement. The article discusses company's internal processes and their complexity resulting from expansion of the company to new plants. Using a case study of the implementation of one of the Polish ERP systems of Macrologic in several multi-plant enterprises, it demonstrates how it improved the functioning and organization of processes in these companies. The article exploits the case study of process modelling application in one of the Polish ERP systems Macrologic Merit. It has been demonstrated which benefits can be achieved in operation and organization of business processes by implementing an ERP class system that makes it possible to implement enterprise processes directly into an enterprise IT solution. In future, it would be worth checking out how this program works. Currently, program in process management has not been fully implemented in any enterprise yet.

Key-Words: - management processes, Enterprise Resource Planning, IT solution, multi-plant company

1 Introduction

Process in organization and management is most often defined as a set of interrelated activities that need to be performed in order to achieve a particular outcome (most often to meet needs of an internal or external client). Every organization is involved in a variety of processes, such as production, sales, and budgeting. Process approach is a dynamic management approach. Its origins can be traced back to classic management school: in organization of production processes and ergonomic research. Development of this approach can be observed in system analysis, Forester dynamics, analysis and design of management processes [1].

Conducted research [2] allowed to find statistical associations and to define among other things advantages of implementation of process management system in an enterprise. It was also found that specification (description, calculation) of factors determining the use of business process management in an enterprise increases efficiency and effectiveness of organizational processes occurring in an enterprise. Other studies have shown that people and organizational culture are main barriers to transition from functional management to process-oriented management [3].

In-depth analysis and interpretation of data is nowadays one of the most important elements of decision-making for most businesses. Due to growing amount of information and needs related to their analysis, companies are increasingly investing in IT solutions that allow not only collection of records in data warehouses but also their compilation, interpretation and graphic presentation. The ERP (Enterprise Resource Planning) system facilitates making strategic business decisions based on reliable data. It is a key element in maintaining business continuity. It provides easy access to data from all possible areas of the business. In literature, factors influencing the success of enterprise ERP implementation have been quite widely discussed, as well as the need to improve approaches and implementation methods [4-7]. Some of the works are also devoted to the specifics of multi-plant enterprise management and the functioning of their ERP systems [8-10]. In the article a case study of construction of one of Polish ERP has been used. It has been demonstrated which benefits can be achieved in operation and organization of business processes by implementing an ERP class system that makes it possible to implement enterprise processes directly into an enterprise IT solution. In the article using a case study of the implementation of one of the Polish ERP systems of Macrologic in several multi-plant enterprises, it demonstrates how it improved the functioning and organization of processes in these companies.

2 Enterprise process management using ERP system

Process management is a set of continuous and systematic activities designed to plan and control execution of a process to fully realize its purpose. This depends on orientation of organization on processes. Process management characterized by use of appropriate knowledge, techniques, concepts and tools to help define and visualize customer satisfaction improvements. Process management is characterized by continuous verification and streamlining of processes by applying updates and corrections to situations where achieved results are different from those previously identified. Main benefits of using process management in an organization are:

- Creation of a unified character for the organization.
- Orientation of organization to customer satisfaction.
- Defining a "perfect" action plan and establish conditions for easier adaptation of future changes.
- Research, identification and classification of items that need improvement, leading to more efficient business.

Figure 1 shows the process management approach in enterprise management as presented in ISO 9001:2015.

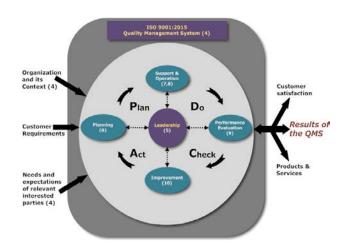


Fig. 1. PDCA model ISO 9001:2015 [11]

Analysis of Figure 1 of the ISO 9001:2015 management process model should begin with resource management, which is equivalent of plan-

to-check-act (PDCA) planning. As part of this step one must secure financial and personal resources to work. In the next step - product realization (understood broadly, also as a service) organization uses prepared resources and configures them according to customer requirements, which constitute an external input. Result is a ready product that is passed on to the customer. Product information (e.g. costs, quality problems, gaps) is on to measurement, analysis improvement. In this step, it is also important to check what customer thinks about product, hence performing satisfaction survey. The key to close a loop is responsibility of management (equivalent to PDCA). Top management of institution analyzes reports of individual processes and decides on the use of their resources. Each loop transition should increase quality of organization.

Process management consists of several steps. First is identification or separation of processes taking place in organization, resulting in a process map. Then, the process modeling is performed, which aims at mapping adopted processes within organization from the point of view of their documentation and analysis. In other words, process modeling is a formalized representation of actual process that enables it to represent its structure and relationships that take place between its elements. Developed process models are a graphical representation of relationships and interactions of processes. Process model also provides a detailed description of what the process should be doing and in which order. In modeling process it is extremely important to define interdependencies between processes so that they can be integrated and matched to achieve intended purpose. In the modeling process it is extremely important to define strategic objectives to be achieved by analyzed process. Process modeling allows organizations to be more transparent, allows them to understand essence of their operations, and enables a smooth introduction of process approach used in the organization.

Dedicated IT tools which level of exploitation undoubtedly depends on the size of organization and the number of processes identified in the organization are indispensable elements of process modeling. In case of using IT tools such as Macrologic Merit, it is extremely important to introduce uniform standardization of processes, i.e. unifying selected types of behavior and actions according to the same formulas that apply to all process members. Standardization allows for specifying and selection of methods in which individual contractors perform tasks.

Next step in process management is to implement previously designed processes. This represents a need to ensure appropriate conditions for their implementation and proper functioning, preparation of personnel and organization for changes. Most common form of implementing processes in an organization is implementation of information systems. Another form is to create and continually update procedures and instructions that are intended to be internal executive acts used in the organization.

At the next stage of process management, detailed and complete analysis and evaluation of processes functioning in the organization is required. Controlling focuses on:

- detection of "faulty" processes and assistance in making changes to optimize the course of nonexpected processes,
- help to deliver most productive processes that provide greatest added value for organization,
- help in design and implementation of new processes to improve efficiency of organization.

In process management, it is also important to improve processes through the use of appropriate techniques (tools, techniques) such as Six Sigma, Lean Manufacturing, Lean Management, Balanced Scorecard, ISO 9000, BPMN (Business Process Model and Notation), UML (Unified Modeling Language), ITIL (Information Technology Infrastructure Library), etc.

Decision-making process in modern businesses requires access to up-to-date and accurate information. This is one of the challenges companies face and a key factor in corporate decision-making. Often, company information is dispersed in several databases or several programs. For example, inventory data is in one database and customer information in another. In many cases, databases are isolated or autonomous systems (not integrated and independent) (Figure 2).

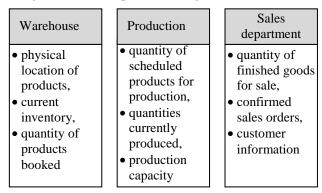


Fig. 2. Structure of the isolated databases systems.

As illustrated in Figure 2, in case of isolated systems, storage, production, sales, and customer information are stored in several databases / programs. Since it is not possible to share information within a single system, it is difficult to use it. Enterprise Resource Planning (ERP) is very useful for making business decisions. This system collects data, organizes and integrates all areas of company's operations and supports resource management, accounting for maximum efficiency. Integration involves use of a common database within a single system, so that the company uses only one set of data. ERP system optimizes costs and inventory, accelerates information exchange, and streamlines communication, helping to improve customer service and shortening fulfillment of orders. The process-based (modular) structure of the ERP System integrates information from various processes taking place in the enterprise, which provides full support for relevant business decisions in companies from different industries, so this system is applicable in both manufacturing, trading and service providing enterprises. Such a structure of ERP system allows to deploy all or selected items simultaneously or in the right order.

Each of the modules can support handling of individual processes in different areas of the company: in sales, supply, stock, production or accounting. The advantage of modular structure of the system, however, is its integrity. Modules linked together represent a functional system, making it more efficient by sharing information in real time.

A complete ERP system with all modules, regardless of industry, is usually chosen by medium and large companies. They receive support for resource management and process monitoring, business operations settlement, and assessment of financial standing.

The use of ERP systems in enterprise management is steadily increasing, however, the quality of data provided by them should be taken into consideration. Conducted research [12] shows that it is very important to match technology to tasks (task-technology fit - TTF). Organizations are embedded in developing environments that poses new challenges. They require continuous adaptation of information systems or organizations to contextual understanding of data quality. Although ERP systems are considered durable, it is important to remember to modify them as their mismatch can affect data quality beyond typical functionality. Ensuring TTF will be an increasingly challenging task with growing non-routineness.

In order to fully utilize the potential of ERP system, its functionality should be extended to

include the planning of resources of its customers and suppliers. The process of creating an extended ERP system must include business partners (customers and suppliers), taking into account different technological and financial statuses of their customers and suppliers. Thus, an effective and flexible, extended ERP system must contain both high-end and low-end solutions, and also understand that full inter-organizational integration may not be possible [13].

Research conducted on the ERP implementation process in enterprises indicate that the assistance provided by external consultants during ERP implementation is essential. Knowledge transfer is an extremely important factor in the success of an ERP system. It has also been proven that passing on knowledge about the technical aspects of ERP systems is more important than effective communication and conflict resolution among members of an organization. It also seems that top management assistance in ERP implementation is less important than acceptance by its users [6]. ERP systems enable businesses to run accounting and manage different areas of business. They can, for support distribution, example. service production. The ERP system is often set up to match the business processes in the company. As a rule, companies operating in a particular industry are pursuing similar business processes. However, some of them implement their own specific processes. The ERP system can be modified and configured to meet the company's requirements in this area.

3 Management in multi-plant company

Managing an enterprise involves making many difficult decisions. Especially in multi-plant companies, managers encounter various dilemmas. Particularly those involved in human resources management are important. The question arises as to how industrial relations in subordinate plants are controlled, but at the same time leaving them with some degree of flexibility? One way to solve this problem is to negotiate at the plant level, but to address certain issues, solutions from the central human resources department can be implemented [14]. It is important to take initiatives in personnel management and to use factors that seem to provide stable industrial relations in circumstances that, as evidenced by experience, tend to favor conflicts. Problems are associated, for example, with the high proportion of the workforce rewarded for the results,

the differentiation of earnings and the difference in earnings between factories [15].

Modern production management allows for higher efficiency of production processes. By using the right IT tools, companies can cut costs, increase productivity, and improve relationships suppliers. To increase customers and productivity of all plants in the multinational corporations develop and implement multi-sector management improvement programs. Numerous studies described in the literature on systems for improving the quality and effectiveness of multiple facilities are systematically carried out [9]. A decisive step towards improving the productivity of multi-plant companies is to embrace their operations with one link, which is the ERP production system.

A separate problem with the operation of large companies is the coordination of multi-site purchasing activities to minimize the total cost of purchase. In the literature, an integrated model of linear programming and multitasking approach has been proposed, which are ideally suited to coordinating purchases in multi-component organizations to achieve global profitability. Proposed model provides an effective coordination mechanism that helps multi-plant organizations and suppliers maintain availability of materials in the right amount, at the right quality and at a minimal cost [8]. On the other hand, it should be noted that supply chain management is suitable both for large multi-plant enterprises and for small organizations [16].

It also seems that problems of material flow management in the supply chain, where links belong to the same owner, are similar to those that occur in the supply chain where organizations are not linked by a single owner [17]. In addition, the level of integration between independent companies may be greater than that of formally dependent companies. With this in mind, companies can choose between vertical integration and supply chain management, that is, between the costs and benefits of control, from the owner's position, and those that are rooted in indirect control through relations [10].

In solving all of these and other problems that arise in managing a multi-plant enterprise, ERP system may be helpful. It should be well configured, adapted to the processes taking place in the enterprise and its organizational structure.

4 Structure and functions of Macrologic ERP system

A classic, integrated ERP system allows to manage all business operations. It supports top executives generating statistics, reports, and analyzes, providing information needed to make decisions.

With the use of information technology and modern business processes conducted operational management - production, logistics, sales and marketing as well as in auxiliary activities - accounting, wages and fixed assets are modeled. Thanks to sharing and exchanging information (information flow), it helps to forecast and plan future activities using the full knowledge within the (finance, controlling) enterprise maintenance of quality standards (quality management).

In response to growing competition and declining margins, companies increasingly use optimization of production processes. The whole company benefits because Macrologic ERP Manufacturing provides data relevant to other the areas of management: sales, personnel, finance, and fixed assets. The comprehensive solution makes it easy to record and plan production staff working time, optimize utilization of machines and equipment, and manage budgets in production processes. ERP Manufacturing module provides effective management support at all stages of production: planning, product manufacturing, accounting and reporting for the Management information generated in Macrologic ERP Production is used by other Macrologic ERP modules: Sales, Logistics and Personnel.

The amount of knowledge that companies gather in collecting data makes it often difficult to use the data effectively. Effective customer relationship management, sales processes and logistics within the company are possible through the use of tools provided within the Macrologic ERP Logistics. Two solutions are used to support sales processes: Macrologic CRM and Macrologic ERP Logistics. Used separately or together, support activities in the area of customer acquisition, sales and warehouse management.

Using software in the area of customer relationship management allows preparation of proposals that meet customer needs and requirements, building contact history, and supporting businesses in developing effective promotional campaigns. These activities complement the analysis of the cost and profitability of sales processes for which the logistics department is responsible. In contrast, the use of ERP in the management of sales processes allows companies to increase efficiency of their trading activities, which in practice translates to shorter sales cycles, improved market forecasts, and analysis of shopping carts. This enables total sales management, from procurement, through execution, to delivery to the client.

Human resources processes, starting from selection and employment, through ongoing updating of employee records, payroll, social security and tax settlements, are all needed to begin the process and deliver them effectively. In Macrologic ERP Personnel staff management is not divided into individual tasks. The program works on the entire personnel management process: from the recruitment process to the end of the contract. This allows control of all events to flow smoothly, and supervisors receive all information necessary to consciously shape the future personnel policy.

Especially in multi-plant enterprises, benefits of implementing the program are significant:

- fast data flow between people involved in the recruitment and servicing process,
- ability to adapt the program to needs of organization's staff both at the headquarters and in the subsidiaries,
- faster access to essential employee data for all authorized people,
- ability to react quickly to staff changes in the organization.

Also in the area of enterprise financial management, planning and analysis is much easier thanks to the use of the Macrologic ERP Finance system. It allows to track financial situation, streamline payments and settlement processes, support company's asset management, create current financial reports and forecasts. Multidimensional analysis provides managers with decision-making knowledge and help to develop new strategies in businesses. In every company, a lot of information concerning the business "wanders" down the corridors, between plants, departments, branches, employees. If this information is organized, one can plan systematic operational activities. If the company and its managers are able to analyze this information in the most intricate levels, then forecast, plan and settle accounts, we are talking about an action strategy, and support for this project is the Macrologic Controlling Information System. system Controlling allows to create multidimensional OLAP analysis. Data are collected in many dimensions in the so-called OLAP cubes, which can be freely formed. Multidimensional analyzes enable strategic decision making from the company's point of view. They may be associated with optimizing costs in selected areas of business or choosing the best deals for business partners.

The software base contains a rich set of predefined, standardized processes that allow for quick launch. Each organization has its own habits and requirements resulting from its "know-how". Therefore, standard processes are defined in the first step. However, if they require changes - any modifications to the processes are possible. This facilitates the BPMN process modeler - a tool that allows to change defined processes, and most importantly, every change is immediately reflected in the ERP system. Managers can quickly adapt existing processes in the company to Macrologic ERP, because the modeler allows to create very different processes tailored to the individual needs of the enterprise. The process modeler, built into the ERP system, and constant process information provide a bird's eye view on the company. It is an easy way to identify barriers and blockades in the business. Recognizing what needs to be improved (with measurable indicators in the process diagrams), each manager can simultaneously make changes to the way the company operates and the ERP system. If an organization, for example, develops (creates new plants) or restructures, the manager can easily change processes by modifying diagrams. By using a process modeler, any company can easily adapt existing processes and add new ones to the system. The program will automatically reflect changes for all employees affected by the process.

5 Examples of implementation of Macrologic ERP in multi-plant enterprises

There are many companies where implementation of ERP system has brought tangible benefits. Some of them will be discussed on the example of ERP Macrologic implementations in selected multi-plant enterprises. The Industry Group, which is a worldclass expert in implementing projects involving machinery and equipment for the mining industry, can be the first example. The quality of company's products has been confirmed by numerous Polish and international certifications and customer trust expressed in long-term business relationships. Implementing Macrologic ERP enabled the company to reduce IT maintenance costs. In addition, Industry Group has significantly improved the implementation of financial management processes, which is particularly important in the case of a parent company. Implementation of the Production module contributed to the improvement of production processes, especially in strategic planning, which translated into unit productivity growth of 20%, production increase of 30% and reduction of failure compensation buffer up to 24 hours. The company had also succeeded in increasing the efficiency of warehouse management and improving customer service, which helped to reduce inventory by 40%. The benefits of raising the work culture of the organization are also important. In another example of ATLAS Group one of the dynamic growth drivers are new acquisitions that are important both in expanding the offer and in increasing the scale of operations. Following the centralization of human resources operations at the ATLAS Group, it was necessary to introduce a common IT system that would improve HR and payroll while preserving the specifics of individual companies. Diversified personnel policies, several work systems, and various wage regulations required the use of IT solutions that would enable evolutionary staffing and payroll adjustments in the companies they acquired to be in line with company rules. Also, in a distributed organization like ATLAS, it was necessary to introduce employee self-service, which facilitated access to their own HR-payroll data. The decision to introduce extended billing periods prompts us to look for tools to automate the activities of creating graphics and to facilitate the control of planning and accounting of working time in accordance with the Labor Code. company headquarters also needed improvements in delegation service. Each year, ATLAS accounts for several thousands of domestic and overseas business trips. On the one hand, the Company sought to facilitate the control of the use of company and private car delegations and, on the other, would ensure compliance with legal regulations.

Due to the fact that the companies of the Group have different business profiles - production, mining, transportation or power industry - and their own organizational characteristics (e.g. different remuneration systems), ATLAS has sought a solution that would take these differences into account.

Implementing a system that supports group management usually means "stiffening" the rules of action to unify principles throughout the group or even centralizing HR and payroll. The Company wanted the system to allow organizing the service in subsidiaries in a way that have a common environment within the Group, but at the same time maintaining its own, effective logic. Macrologic proposed a flexible solution that met these

expectations. The proposed system allowed, among others handling various remuneration systems within the Group.

In the case of the Polonia Logistyka company, dynamic development of the company and establishment of new locations in the field have led to a situation, in which previously used IT solutions became ineffective. Difficult flow of information on transport orders, their profitability, use of transport fleet, and the exchange of this information between departments have been serious barriers to operations of the company. Therefore, the management board has decided to purchase and implement a solution that would collect all relevant information regarding transport and forwarding orders on the one hand, and on the other it would allow access to them from various locations of the Company. Additional requirement expected by the management board was that the solution managing transport operation should communicate on-line with other systems used by the Company. As a result of works carried out, the basic aim of the project was to connect all branches of the company to a single information exchange system. Thus, the management of Polonia Logistyka was given the opportunity to analyze the current condition of the whole company through cross-analysis reports on, among other things, orders, costs of service or sale of services.

This is the basis for taking strategic activities for faster and more effective business development. Employees of Polonia Logistyka have been able to work remotely from virtually anywhere where is access to the Internet. The vehicle loading visualization mechanism allows for better planning of the use of means of transport, and the route planning mechanism facilitates optimization of journeys. This greatly improved the work of sales representatives who at any time can check the load on cars and properly plan further orders. It has managed to largely eliminate empty passages of cars, which significantly influenced the optimization of costs. On the other hand, the route planning mechanism allows firstly to optimize the route, and secondly, drivers receive a fully-defined route, which in turn affects their performance. This creates a possibility to handle more transport orders. In addition, any driver, regardless of the car used, has the possibility to accurately record fuel and route settlements. The cost analysis of car usage (also from the finance and accounting program) provides accurate accounting for drivers. Communication between forwarding software and accounting and finance programs have completely eliminated errors that had occurred earlier when transmitting data between the previous system was done manually, and significantly improved performance of accounting department.

6. Characteristics of the process ERP system on the example of Macrologic Merit

A classic, integrated ERP system allows to manage all business operations. It supports top executives generating statistics, reports, and analyzes, providing information needed to make decisions.

With the use of information technology and modern systems, business processes conducted in operational management - production, logistics, sales and marketing as well as in auxiliary activities - accounting, wages and fixed assets are modeled. Thanks to sharing and exchanging information (information flow), it helps to forecast and plan future activities using the full knowledge within the controlling) (finance, and enterprise (quality maintenance of quality standards management).

Let's look at a sample company: production, trade, logistics and service, in which many people work every day. Although there are various processes in each, the organizational structure of most of them is based on departments. The departments are silos that work side-by-side, which along with the development of the company tend to communication barriers increase between themselves, and the potential of their work is measured independently of each other. That all bother to introduce changes that are forced by the dynamically changing market. However, it is enough to change the perspective to take control of the processes. The ERP system allows you to look at the company from a bird's eye view; to see the processes and remove the barriers dividing the respective departments. It allows you to measure the efficiency of your tasks, find bottlenecks, and by modifying individual activities, you can optimize the performance of your processes and streamline the flow of information in company.

Traditional **ERP** (Enterprise Resourcing Planning) systems help to manage company's resources in different organizational divisions. Macrologic Unlike them, Merit supports management of defined organizational operations processes. This is how company's computerization is consistent with its natural function. Software works horizontally, parallel to activities being performed, integrating all roles and departments within the company. Such systems enhance awareness of processes taking place in companies, increase business activity of companies and, therefore, their competitiveness.

In Macrologic Merit all processes taking place in the company can be reflected. This allows managers to monitor, measure, and modify processes they are running. In the system they are presented in a form of diagrams, which in case of changes in a way of operation can be easily redesigned and adapted to needs of the company. System automatically reflects modifications for all employees affected by a process. Managers, thanks to process information also delivered on mobile devices, can effectively respond to potential employee performance issues and thus streamline processes in future. In addition, by using an individual desktop for a given workplace, managers will be able to quickly introduce new employees into their responsibilities.

Employees in turn will be able to effectively carry out their activities. They will have access to information and functions that relate exclusively to those processes in which they participate. What's important, with the system of alerts, they will schedule work and will respond immediately to changing situation. They will also have sufficient documentation for systems, instructions for doing things, often in the form of movies. This will enable them to obtain necessary information themselves for execution of a task. Work will be facilitated by a friendly and intuitive interface.

Macrologic Merit [18] software is intended primarily for medium-sized companies. The system is also available for smaller organizations - and can be configured both for their needs and financial capabilities. Functionality of solution is not limited to use in selected industries, and ability to freely define how software works with the built-in business process modeling tool demonstrates universality of Macrologic Merit. The system also includes tools for graphical business process modeling in BPMN notation. This solution allows to easily adjust operation of the system to changing business needs, as well as actual processes within the company.

The software is equipped with a set of almost 200 predefined, universal processes. In future, it will be supplemented by standardized maps of processes tailored to specific needs typical of selected industries. Processes defined in system cover areas of human resources, property, sales, purchases, stock management, production and finance and accounting. Predefined processes allow for quick establishment of solution, and built-in modeler makes the system easy to adjust to meet individual needs of the business. System is also prepared for operation in the cloud computing model.

Macrologic's new operating system interface is based on a comprehensive, personalized workstation that makes it easy for employees to perform tasks assigned to them. When developing software interface, the goal was to optimize how Macrologic's new ERP system was used to handle ergonomics and productivity. Cockpit also has features that allow user to launch processes available to him, and interface helps to ensure that data is entered and processed further.

From a management perspective, use of Macrologic Merit's built-in graphical metrics and process analysis tools makes it easy to control current flow of business processes, and to implement improvements reported by employees.

Importantly, software is equipped with an interface that is supported by dedicated, locally installed applications, and - via a web browser. Other solution mentioned above is also to allow free use of software by means of mobile devices.

From a management perspective, use of Macrologic Merit's built-in graphical metrics and process analysis tools makes it easy to control current flow of business processes, and to implement improvements reported by employees. Software allows to modify the course of operations directly through ERP system. When working on Macrologic Merit, special emphasis was placed on ability to easily customize software and change the course of standard processes even by people without IT skills.

Implemented solutions also facilitate the process of adapting employees to work with the ERP system. In addition, users can access information about the overall course of processes in which they participate directly from the system. They can also contact people who have performed similar tasks in the past. Macrologic Merit is also part of a knowledge base that contains instructions for performing specific actions.

7 Conclusion

Modern management can be considered as a single sequence of decisions and creation of conditions for effective implementation of the decision. Management should be treated as a form of practical decision-making activity concerning the best use of existing assets, capital, and human resources in order to fulfill the assumed tasks to ensure sustainable business growth. The process-oriented approach to business management, although found justified in business results, is practiced in Polish companies much less often than in Western organizations. Process approach is to improve quality of management, increase the speed and efficiency of organization, and brings a better adjustment of company's operations to market situation. An additional benefit is to reduce cost of organization.

Making decisions requires transforming information into a collection of variants and choosing the best one - final decision (optimal), instruction for further action. So the quality of information, its up-to-date, becomes crucial in the management decision-making process. IT is an indispensable tool of modern management. Supporting the decision-making process by an ERP system brings measurable benefits. This system collects data, organizes and integrates all areas of a company's operations and supports resource management, accounting for maximum efficiency.

The case study of the implementation of ERP Macrologic discussed in this work confirms this thesis. Especially in the case of multi-plant enterprises, the effects of information integration are clearly visible. It is important that the ERP system allows unification of certain solutions, at the same time individualizing and adjusting them to the needs of individual plants.

ERP software is designed to help companies streamline their operations, but can also complicate them if the new system does not meet user expectations as a result of incorrect decisions during implementation. We need to involve employees in cooperation with the managerial staff and the system vendor so that the company gets practical software that improves the efficiency of its business processes.

In order to better analyze the impact of ERP system implementation in multi-plant enterprises on management effectiveness in the future, quantitative studies assessing the change in economic categories, such as costs and revenues, must be conducted. On the other hand, the implementation of an ERP system based on processes occurring in the enterprise requires a detailed analysis of these processes.

In future, it would be worth checking out how processing ERP system works. Currently, program in process management has not been fully implemented in any enterprise yet.

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