

KRZYSZTOF GROCHOWSKI / ORCID: 0000-0001-8936-8917

TECHNICAL UNIVERSITY OF BYDGOSZCZ, FACULTY OF MANAGEMENT

STRATEGIC AND PROCESS MANAGEMENT, SUPPORTED BY ERP CLASS SYSTEM – A NEW MANAGEMENT STANDARD

ZARZĄDZANIE STRATEGICZNE I PROCESOWE WSPIERANE SYSTEMEM KLASY ERP
– NOWY STANDARD ZARZĄDZANIA

ABSTRACT: Strategic management is not universally employed by Polish entrepreneurs. What is interesting, the mentioned situation refers mainly to the sector of small and medium-size enterprises (SME). In such case, we should indicate the instruments supporting the process of introducing the strategic management solutions, especially ERP (Enterprise Resource Planning) class systems which support operational as well as strategic planning. The purpose of the present paper is to determine the needs of constructing the awareness of the entrepreneurs, mainly from MSP sector, in respect of strategic and process management supported by available ERP class systems. Lack of the mentioned awareness and lack of the flow of information on effect of vision, mission and processes causes a lack of basis for implementation of the assumptions of strategic and process management. Due to the above reasons, the discussed process should be supported by informatics systems of ERP class. Besides it, the enterprises seek nowadays for the methods of management which would allow optimum utilization of the available resources. It means that they try to find the answer to the following question: how to increase the number of the produced goods or the rendered services with the limited resources? The answer to the mentioned question has been given in the present paper.

Key words: strategic management, process management, ERP class systems, SME sector

STRESZCZENIE: Zarządzanie strategiczne nie jest powszechnie stosowane przez polskich przedsiębiorców. Co ciekawe, taka sytuacja dotyczy głównie sektora MSP (małych i średnich przedsiębiorstw). W takim przypadku należy wskazać narzędzia wspierające proces wdrażania rozwiązań zarządzania strategicznego, zwłaszcza systemów klasy ERP (Enterprise Resource Planning) wspierających planowanie zarówno operacyjne, jak i strategiczne. Celem artykułu jest określenie potrzeb budowania świadomości przedsiębiorców, głównie z sektora MSP, w zakresie zarządzania strategicznego i procesowego wspartego dostępnymi systemami klasy ERP. Brak świadomości i brak przepływu informacji o działaniu wizji, misji, procesów powoduje, że brakuje podstaw do wdrażania założeń zarządzania strategicznego i procesowego. Z tego powodu proces powinien być wspierany systemami informatycznymi klasy ERP. Ponadto, w obecnych czasach przedsiębiorstwa szukają metod zarządzania, które pozwolą na optymalne wykorzystanie dostępnych zasobów. Czyli szukają odpowiedzi na pytanie: jak zwiększyć liczbę produkowanych wyrobów czy też świadczonych usług przy ograniczonych zasobach? Odpowiedź na to pytanie została podana w tym artykule.

Słowa kluczowe: zarządzanie strategiczne, zarządzanie procesowe, systemy informatyczne klasy ERP, sektor małych i średnich przedsiębiorstw

INTRODUCTION

The necessity of constant betterment of management systems is a condition, guaranteeing the development of enterprise. The elements connected with the strategic approach to organization development have a special meaning. The mentioned approach is directed not only to the big enterprises but also to the small and medium-size companies. The complexity and specificity of the small and medium enterprises (SME) makes that the companies are encountered before other (different than in the

case of big organizations) problems, connected with management, especially with the strategic management. In the case of the small enterprises, their strategy is determined not only by the economic factors but also by those ones which result from the proprietary and inter-human relations (Cradazzo, Niebles, Hernández, Hoyos, Santander De la Ossa, 2019). Strategic thinking has some mutually connected features: long-term orientation, systemic and integrating approach to solving the problems, and creativity. When concentrating mainly on

the characteristic systemic and integrating approach to solution of the problems, we think about ERP class systems (Kozłowski, 2015) which combine the strategic activities and other operations in the enterprise, for example, perceiving the enterprise as a system of processes, being closed related each other (Gelard and Ghazi, 2014).

In turn, the activity supporting the process orientation of the enterprises is aimed at constant search for the answer to the question: what is the role of the process orientation in the organizational development of a given enterprise and what are the areas of organization's functioning where the process orientation of the enterprises improves their organizational effectiveness (Baiyerea, Salmelab, Tapanainen, 2020)? Therefore, after some words of introduction, the implementation of the target of the present paper seems to be justified. The target is to indicate the need of constructing – among the entrepreneurs, mainly of SME – awareness of strategic and process management, supported by the available ERP class systems.

METHODOLOGY

To evaluate the relations between the strategic and process management and the informatics system of ERP class, the following results were employed: a questionnaire survey and experts' assessment conducted among the transport service enterprises coming from the northern part of Poland. The mentioned survey was finally carried out and processed in 2017. The examined population included 560 SME units. Finally, the trial covered 400 enterprises, available due to the application of the survey questionnaire. There were returned 120 filled questionnaire which constituted the trial. The method of the experts' assessment allowed determination of long-term evolution of implementing the strategic management in small and medium enterprises (MSE) in the future. The group of 12 experts (representatives of business and science) helped also to evaluate the suitability of strategic management in the enterprises.

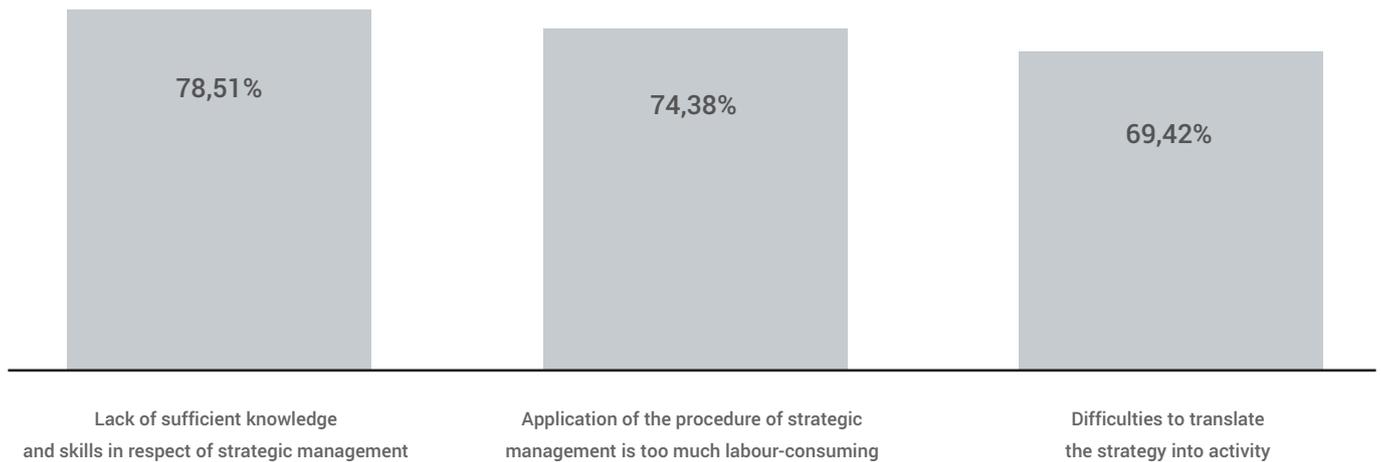
Besides it, the pilot-scale study was carried out among the intentionally selected 14 enterprises, being the leaders of the printing sector on the Polish market and, simultaneously belonging to the sector of small and medium-size enterprises.

The mentioned study was conducted during the international fair RemaDays Warsaw 2020. It was performed in a form of direct survey questionnaire.

STRATEGIC MANAGEMENT IN PRACTICE OF ENTERPRISE

The present intensive economic changes on Polish market are more and more difficult challenge to the stable development and functioning of the enterprises. To act in the conditions of uncertainty and constant risk undertaking, the entrepreneurs and the managing staff should undertake the strategic actions with the aim to solve the problems, being critical to their presence at the market. In such situation, we should create own, unrepeatable conceptions of acting, referring to the present and future changes in the environment. One of such conception is just strategic management, that is, management in perspective of long period, with the fundamental consideration of phenomena in the environment (Nowicka-Skowron, Stachowicz, 2020). Polish small and medium-size enterprises are still learning such approach. The identification of the barriers which discourage the application of such practices is the significant task of the trial to indicate the effective method for introduction of the strategic management conception. The diagram below shows three main barriers, perceived by 120 small and medium enterprises, situated in the northern part of Poland. The transport service enterprises are dominating in the mentioned group.

The application of manager practices in SME is connected with the specified features. Firstly, it refers to the limitation of resources, especially in the period of time management and professional knowledge. It means that the routine of managerial practices is more requiring for small and medium enterprises than for greater companies. Secondly, the lack of the feeling of financial safety in the small and medium enterprises and their big dependence on the smaller number of customers require excessive attention of the managers in order to obtain the results. Finally, the more flat organizational structure requires playing many functions by the employees, with unclear limits and professional duties.



THE ROLE OF BARRIERS TO APPLY THE STRATEGIC MANAGEMENT IN SMALL AND MEDIUM ENTERPRISES

SOURCE: DEVELOPMENT PERFORMED ON THE GROUNDS OF OWN STUDIES

The implementation of the strategic management conception may be supported by the application of instrument of Balanced Scorecard (in Polish: SKW) which allows, inter alia, monitoring of the level of implementation of the assumed strategic (long-term) targets. Simultaneously, SKW creates the conditions for "crushing" the mentioned above barriers e.g. difficulties in transforming the strategy into activity. From the studies conducted in the European enterprises it is followed that the companies that employ SKW in management, obtain better financial results and represent a higher level of innovative solutions. Besides it, a positive effect of SKW on the obtained financial results is stronger in more well-established small and medium-size enterprises (Bochenek, 2019).

The Balanced Scorecard (SKW) in the enterprise may be treated as a key stimulus, used for control of organizational tensions, facilitating communication and supporting coordination. The mentioned SKW may also affect the development of innovative activity of the enterprise from the group of small and medium enterprises and, in consequence, increase of the level of competitiveness (Malagueño R., Lopez-Valeiras E., Gomez-Conde J., 2017).

Another area of the application of SKW includes the conception of controlling the enterprise in advance. Such approach allows constant studying of the discrepancies between the real state and the earlier fixed aim to be implemented in the future, bearing

in mind facilitation of the decision undertaking and the permanent learning of organization. The advanced control has a preventive nature, anticipates hazards and leads to operational changes. The feed-back information improves monitoring of operation and promotes the immediate repair actions.

PROCESS MANAGEMENT AS A NECESSARY CONDITION

The organizational development of the enterprises is shaped from the functional orientation, via the process orientation up to the event-directed one. Besides it, the process orientation of the companies is favourable for improvement of organizational effectiveness, reducing the intra-organizational discrepancies and, simultaneously, improving the coherence of inter-organizational relations (Chmielarz, Zborowski, Biernikowicz, 213). We may state that the more the organization is oriented to the processes, the higher its effectiveness is from the viewpoint of the inside of organization as well as of its environment.

Paul Harmon as being the main consultant and founder of BPT rends Associates has conducted the studies among the world scale enterprises, concerning the process management. The mentioned studies indicated the following most significant features and the meaning of the discussed conception: creation of the architecture of processes (39%), coordination of the activity

in respect of the changes in the enterprise processes (29%), undertaking of big projects and automation and robotization of processes (37%), implementation of the projects in respect of processes' improvement (38%). On the other hand, 65% of the surveyed enterprises indicated that the process management-supporting processes and technologies helped their organizations to improve efficiency, comprehensiveness and satisfaction of the customers. The majority of the respondents stated that their organizations were focused on a gradual improvement of the existing processes and automation of the processes in the enterprises. 59% of organizations participating in the survey are involved in one or more projects covering the total organization. 93% of the examined organizations are involved in many process-improving projects. 79% of the respondents utilized the instruments of process software for modelling of the analysed processes. The developed process models were utilized exclusively by the team for the transformation of the process but 22% of the respondents indicated that the models were available to all employees. The submitted results of the studies indicate the concentration of activity in respect of the process management in the strategic area (construction and betterment of the processes' architecture) as well as in the operational domain (within the frames of improving the processes and the related projects of their improvement and digitalization) (Harmon, Garcia, 2020).

In the present market conditions in Polish enterprises, the development of competences, and flexible adaptation to varying environmental conditions or search for new development possibilities are the necessity. The owners of organization should expect from the process approach as follows: abbreviation of the time of implementation of the orders, abbreviation of the time of introducing the new products to the market, improvement of the quality and keeping the terms, resulting from the agreements, lowering of the service costs, and increase of profit. The implementation of the process-oriented approach has an impact on perceiving the enterprise as "a living and dynamic organism", consisting of many significant and supporting activities, oriented to reaching the defined targets. Such approach in a given organization is

favourable for improvement of its effectiveness and, what is more important, its efficiency (Hammer, 2015).

The problem of reengineering is also important in the activity of organization. For enterprise, it means a fundamental new rethinking and a radical transformation of designing the processes, leading to a breakdown improvement of the contemporary measures of reaching the results (such as costs, quality, service and rate). Four key words of the discussed definition are: fundamental, radical, dramatic and, first of all, process; this key word shows that the work in the contemporary organizations should be focused on processes and not on labour posts, functions or tasks. The managers should avoid concentration on single elements of the process (such as obtaining of order, purchase of materials necessary for a given operation, warehouse activities etc); they lose the sight of a wider i.e. delivery of the products to the customer. We should combine the mentioned single elements of the particular processes into one effectively functioning system (Anand, Fosso Wamba, Gnanzou, 2013). Here we absolutely need computer system of ERP class; it will be discussed more widely in the further part of the present paper. The particular operations entering the composition of the mentioned system are important but they have a small meaning for the customer if he does not obtain the ordered products. We may, therefore, say that Business Process Reengineering is a method for reversion of industrial revolution and constitutes a new beginning in searches for better models of labour organization. To meet the requirements of the more and competitive contemporary market, we need higher flexibility of internal business procedures and internal communication. The mentioned changes must include the total chain of internal communication, being dependent, of course, on the outside signals. The conception of process management may be certainly helpful in coping with the discussed challenge.

STRATEGIC AND PROCESS MANAGEMENT AND ERP CLASS SYSTEM

The integrated computer system of ERP (Enterprise Resource Planning) class should be perceived as a system, optimizing business processes, both internal and those ones, occurring in

the nearest environment of the enterprise. It is manifested by offering of ready instruments, giving the possibility of automating the data exchange with the cooperating units in the total logistic chain. The confirmation of such method of interpreting the role of ERP class system may be found in the studies, conducted among the enterprises – participants of the International Fair RemaDays 2020.

According to the report of the Institute of Studies on Market and Public Opinion, it is considered (Bytniewski, Matouk, Hernes, 2018) that in Poland:

- 67% of the studies companies think that ERP system should be distinguished by the following features: practical suitability, connections with the service of business processes, optimization and automation of everyday tasks;
- 40% of the examined companies evaluate the possibility of adapting the system for the structure of the company;
- 36% of the tested enterprises stress that ERP system should be a complex support for all areas in the company.

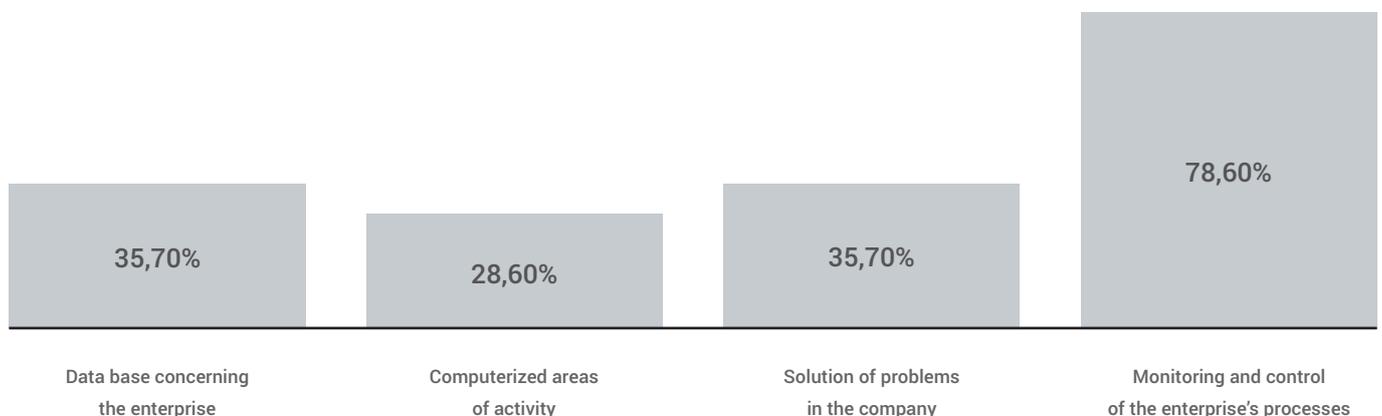
When taking the above results into consideration, we may observe that the role of connection of ERP class system with the service of business processes is found on the first place. We may, therefore, already now to state with a big conviction that idea of process management with the application of ERP class system is a fundamental factor responsible for the implementation success.

Nowadays, if we want, however, to construct a whole awareness of the complex support of all enterprise's activity with the

application of ERP system, we have, in parallel, to be subjected to Fourth Industrial Revolution, being also called Industry 4.0. The system of ERP class is one of the elements of the mentioned revolution and, moreover, it allows the measurement of effectiveness of the employed solutions (Basl, 2017). Industry 4.0 in the contemporary enterprise should be found in the set of the key factors of the success.

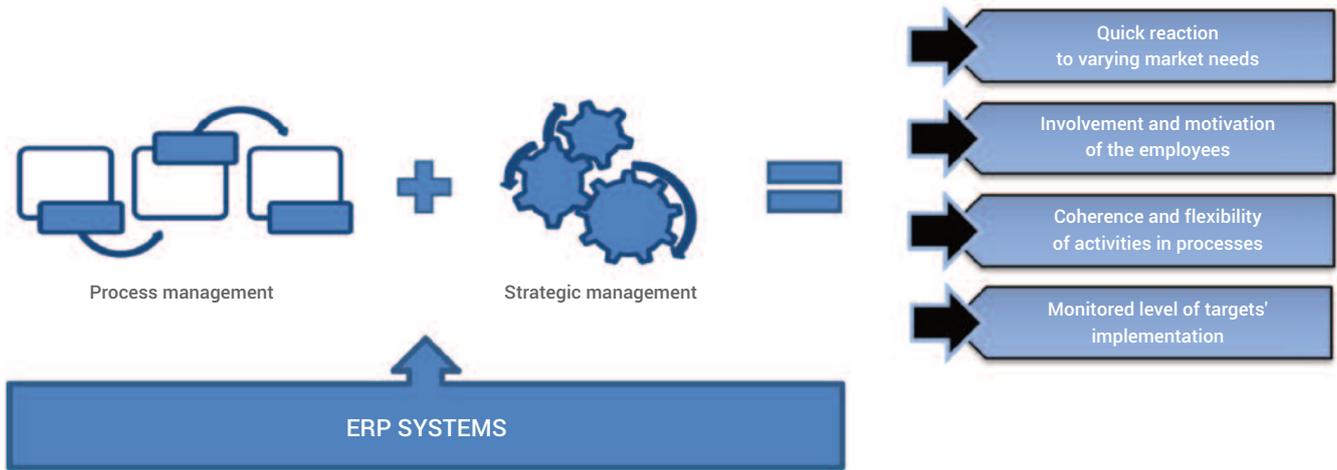
Introduction of ERP class system is the extremely requiring process. The preparatory phase is crucial for the whole process of implementing ERP. The more accurate the preparation is, the more successful the introduction process is, eliminating simultaneously the potential hazard to the company (Alavi, Peivandzani, Mirmohammadsagedhi, 2021). Firstly, the chosen ERP system must be adapted – in cooperation with the experts – to the nature of the company, type of activity, management of financial agenda and logistics. We cannot, of course, forget about verification whether a given company is managed by processes. If it is not so, we must absolutely introduce the mentioned conception. The choice of the appropriate ERP supplier has also a great impact on the success of implementation.

The answer to overcome the barriers not allowing introduction of strategic thinking in small and medium-sized enterprises means the appropriate hardware of the discussed conception; it is possible with the defined system of ERP class (Grochowski, 2019). We may also state that the strategic management exists outside the time, space and resources when supplying the innovative solutions of the rising problems of the company in



MEANING OF ERP SYSTEMS FOR ENTERPRISE

SOURCE: DEVELOPMENT PERFORMED ON THE GROUNDS OF OWN STUDIES



SOURCE: OWN ELABORATION

the field of competitiveness. The strategic thinking includes some mutually related features i.e.: long-term orientation, systematic and integrative approach to solving the problems and creativeness (Ivančić, Jelenc, Mencer, 2021). When paying attention to “systemic and integrative approach to solving the problems”, we mean ERP class systems. In such case, the function of combining the strategic activity and other operations in the enterprise is implemented. The discussed solutions exist already on the market although they function mainly in big enterprises. However, with the appropriate implementation of the mentioned solutions, there is a possibility of supporting small and medium-size companies (Haddara, Zach, 2012). The diagram given below shows the management model of the contemporary enterprise, including the problems discussed in the present paper.

The integrated RERP systems become the instrument driving the creation of new management standards and conceptions. They improve the business processes and strategies of the enterprises activities, owing to which their competitiveness is increased on the requiring and dynamic market (Estébanez, Trigo, Belfo, 2016). Therefore, the “prescription” for success of organization, irrespectively of its size, has been submitted.

CONCLUSION

In ERP class systems, the implementation of the activity in the enterprise is measured by the creation of the detailed data

base of information, constituting the basis for developmental plans in the long-term perspective (Ionescu and Podaru, 2014). They are the high-quality data which have a great meaning in undertaking the strategic decisions (Gullkvist, 2013).

The owners of the examined enterprises inform about the necessity of finding the answer to two important questions: “How to achieve the appropriate market position?” and “How to increase or at least maintain the level of the offered products in the situation of limited access to the resources?” Without elementary capacities of strategic and process management it is difficult to satisfy the mentioned needs.

Making an access to complex information on the processes of strategic and operational management to, first of all, employees of the enterprise is a meaningful solution for the contemporary companies. It means development of apparently simple management operation, that is, efficient communication inside the enterprise. In the implementation of such thesis, the computer system of ERP class may be undoubtedly helpful.

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