

Module of selecting the company development strategic goals in the Enterprise Performance Management System

Valentina Moskalenko
*Department of Software Engineering and
Management Information Technologies National
Technical University «Kharkiv Polytechnic Institute»
Kharkiv, Ukraine
valentinamosk17@gmail.com*

Abstract – The procedure for the strategic goals setting has been considered as a part of the business process for creation of the enterprise development program. For goals selection it is proposed to use the Analytic Hierarchy Process. In consequence of application of direct and reverse analytic hierarchy process, are determined the estimates of changes in the enterprise performance when the goals are reached. Realizing the Analytic Hierarchy Process is carried the comparison of the estimates of changes in the company performance indicators when achieving the goals in question. By analyzing these estimates the potential goals and achievement strategies are selected. Strategies are defined by the aspects of the company development: production, finance, personnel, marketing. The result of this procedure is desired strategic goals selected from among all of such goals which would be less risky, i.e. would be to a lesser extent subject to external impacts. The business process of the development program forming is the basis of the strategic planning module of the Enterprise Performance Management system. Implementation of such a process will permit to realize the strategic alignment and to increase the company efficiency by setting adequate strategic goals.

Keywords – *strategic alignment, strategic goal, development strategy, development program, analytic hierarchy process*

I. INTRODUCTION

Present-day businesses face multiple challenges with regard to strategic management. One of the major challenges is setting the proper strategic goals and development of strategies to achieve these goals. On a practical level the SMART tool (specific, measurable, achievable, relevant, time-based) is widely used to formulate the goal. Its advantage is the elegance, it allows the company to move beyond the fuzzy goal and to set the specific result to be achieved. However, the goal statement does not allow assessing its feasibility. Therefore, the issue of setting goals achievable in the conditions of the functioning company continues to be relevant. Also the task is not only to set a strategic goal, but to select effective achievement strategies as well. Therewith, the company must pay due regard to the factors of the external and internal environment influencing the effectiveness of the strategy implementation and the goals feasibility [1]. Such strategic level tasks are solved within the scope of information systems of the company performance

management: EPM – Enterprise Performance Management (alternative names: CPM – Corporate Performance Management, BPM – Business Performance Management. At the IT market such systems are offered both by major companies like Oracle EPM, IBM Cognos Disclosure Management, SAP EPM, SAS Strategy Management and small enterprises like Host Analytics, Infor, Longview Solutions, etc. However, these systems do not pay enough attention to verification of the strategic goals feasibility and justification of the choice of the company development goals.

II. LITERATURE REVIEW

Presently, to solve the problems of strategic plans implementation, the strategic alignment process is used. Strategic alignment is seen as a tool to achieve the intended goals [2]. By applying the strategic alignment process the company identifies the processes required for strategies implementation.[3].

Paper [4] deals with the resolution of resource conflicts between the strategies, the conclusion is that it is essential to make allowance for changes in resource needs during the strategies implementation. However, no attention is paid to the procedure for these strategies development, the way of the strategies selection depending on the company's desired goals is not given due regard either.

For successful strategy implementation, some approaches for aligning the company's business processes with the strategic plan are proposed [5]. For instance, the proposed methodology for aligning the processes with the ongoing planning [6] allows for strategic alignment in the company. It is based on generation of system charts for all business processes executors. Such charts permit to increase the organizational understanding of processes. The processes are assessed prospectively; the processes strategic significance is determined by linking each process with the strategic goal directly. Such an approach will unambiguously allow all processes to be linked to the company's goals. However, the paper does not show the mechanisms of the company's goals forming depending on the internal organizational changes that can occur during a long period of the goals achieving.

The widespread use got the concept of cascading the company strategy by management levels down to the individual doers. For instance, paper [7] focuses on

building effective communications, which are necessary to convey the strategy to the lowest management level.

Paper [8] proposes to maintain consistency between the strategy and its operative implementation by establishing a direct link between strategic goals, success factors and project performance indicators. Practical application of such cascading mechanisms permits to improve the efficiency of the company's plans in progress; however, their realizeability will depend on the extent to which the goals themselves are adequate with regard to both the external environment and the internal company status. And such issues are practically not touched upon in these studies.

Information technology (IT) is widely used for implementation of strategic management processes. A lot of studies are devoted to the issues of strategic IT alignment. Paper [9] proposes a model for studying the interrelationships between IT capabilities and business strategies; it also considers the IT strategies alignment in the context of the company development. However, these studies contemplate the issues of organization of the analysis forming processes and the development goals revising simultaneously with setting of IT goals mainly on the "proclamatory" (declarative) level.

Thus, reviewing the existing studies in the field of strategic alignment, it can be concluded that the researchers put main emphasis on creating a link between strategies and their implementation, strategies and business processes, projects and operational plans.

However, the issues of checking the adequacy of the strategic goals actually formed as a result of strategic analysis are almost neglected. Still remains the unresolved problem of selecting of all the goals those that not only would be achieved, but also would allow the company to stay effective. Therefore, still remain urgent the issues of developing effective mechanisms and technologies for formation of potential strategic goals that would be adequate with respect to changing conditions of the company's operation. These technologies should be implemented within the EPM system of the company.

III. PURPOSE AND OBJECTIVES OF THE RESEARCH

A. Study of the process of formation of the company development program

Papers [10, 11] propose the process of forming the company development program that realizes the concept of the strategic alignment. From the goals development to the formation of the company plans system the strategic goals as well as relevant indicators are decomposed down to the budget indicators. Fig. 1 presents the business process of development program forming. Implementation of each procedure results in formation of performance indicators, the company plans and plans of its subdivisions. The effectiveness of this process depends largely on the goals selected. Therefore, the procedure (A2) for forming the company potential goals is highlighted.

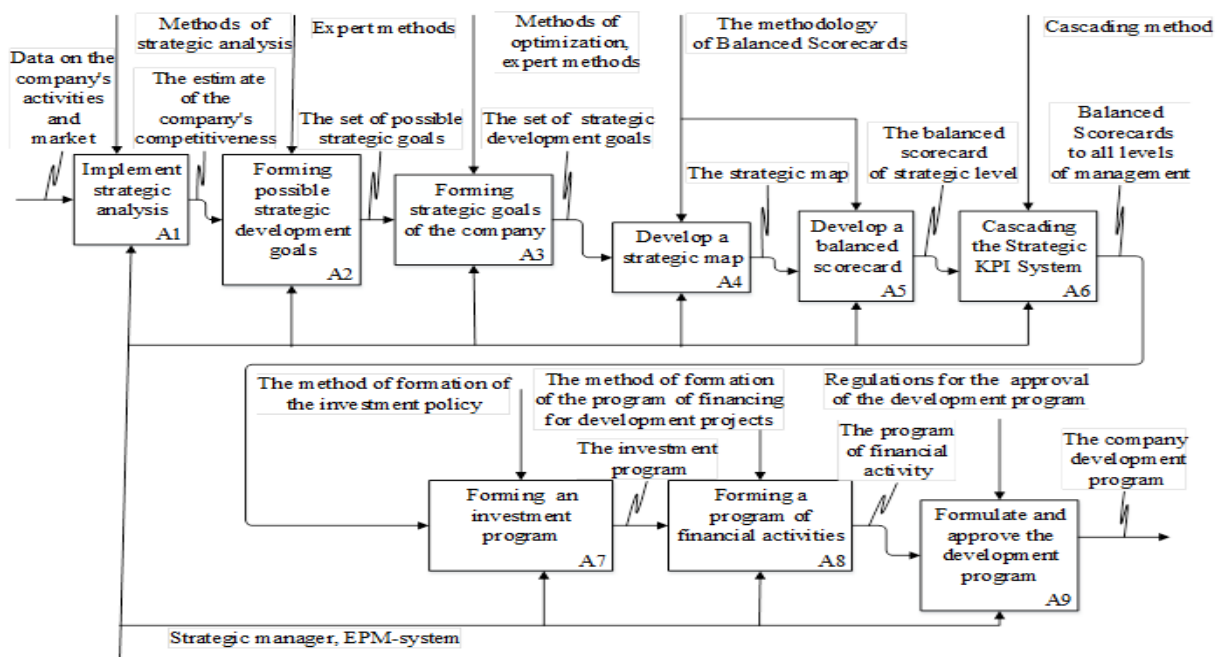


Fig. 1. Business process of the company development program formation

The company management forms the goals based on the on the market situation analysis and the desired prospects of the company development. However, it is necessary to analyze the consequences for the company of achieving these goals in terms of business performance. Also these goals should be checked for feasibility in terms

of the company resource capabilities. And with that done, the selected goals are taken as planned ones and become the basis for the company plans.

Implementation of such a process within the scope of the EPM system will permit to realize the strategic

alignment and to increase the company efficiency by setting adequate strategic goals.

B. Business process of potential strategic goals formation

The business process of forming of the company potential strategic goals is presented in graphical notation IDEF0 (Fig. 2). The company's performance and its market perspective are assessed based on results of the strategic analysis. Previously, the market situation is predicted for the strategic period and the company's competitiveness is assessed Based on results obtained the company management and the owners form the desired goals for the strategic period. However, the success of such goals implementation will heavily depend on the

degree of impact of various factors, as well as the selected achievement strategies.

Therefore, before accepting these goals as the planned ones it is proposed to conduct procedures for verifying them for realizability. The first procedure involves analyzing the impact of various factors on the effectiveness and the risk of a failure to achieve the goals, the second procedure is the a verification of their feasibility in terms of the company resource capabilities. Let's have a closer look at the first procedure which in the business process in Figure 1 is presented as A2.

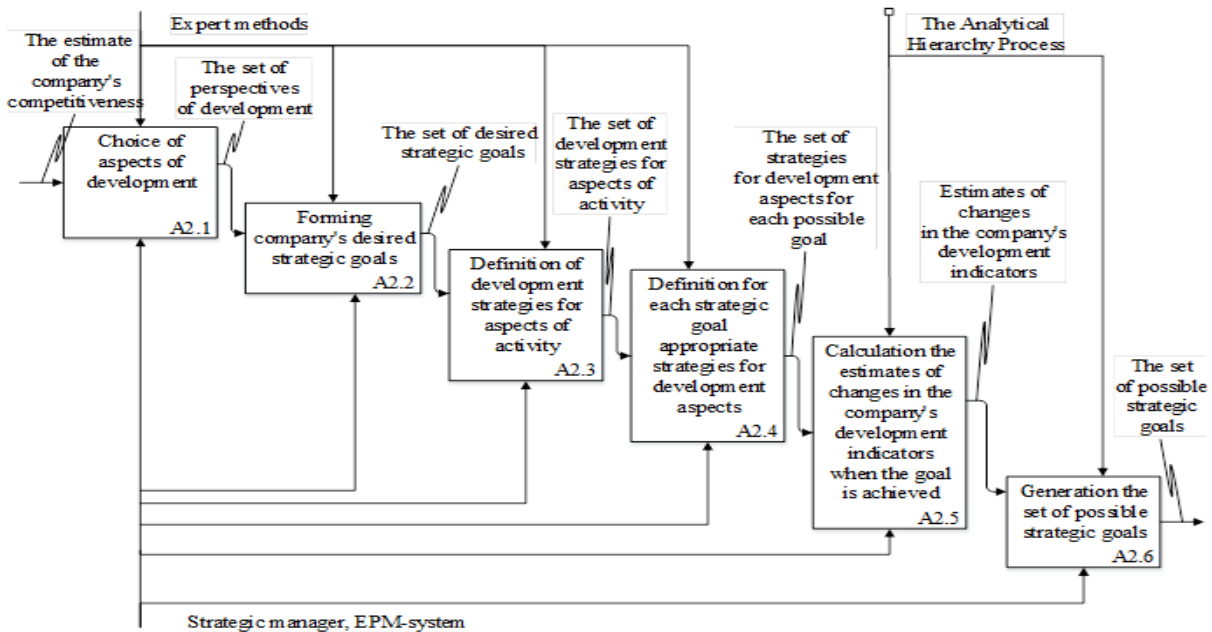


Fig. 2. Business process of potential strategic goals formation

The result of this procedure is desired strategic goals selected from among all of such goals which would be less risky, i.e. would be to a lesser extent subject to external impacts. For these goals potential achievement strategies are identified. Strategies are defined by the aspects of the company development: production, finance, personnel, marketing. For goals selection it is proposed to use the Analytic Hierarchy Process (AHP) [12]. Realizing the direct and reverse process is carried the comparison of the estimates of changes in the company performance indicators when achieving the goals in question. The

proposed business process for goals formation has been implemented for the Ukrainian agricultural company. Three strategic goals were considered: 1) to increase the market value of the business; 2) to enter the top ten market leaders; 3) to fulfill business diversification (Fig. 3). For each goal development scenarios by the aspects of activity were elaborated. Iterative procedures have been implemented in accordance with the AHP for all goals. Priority strategies by the aspects of the company development were identified for achieving each goal.

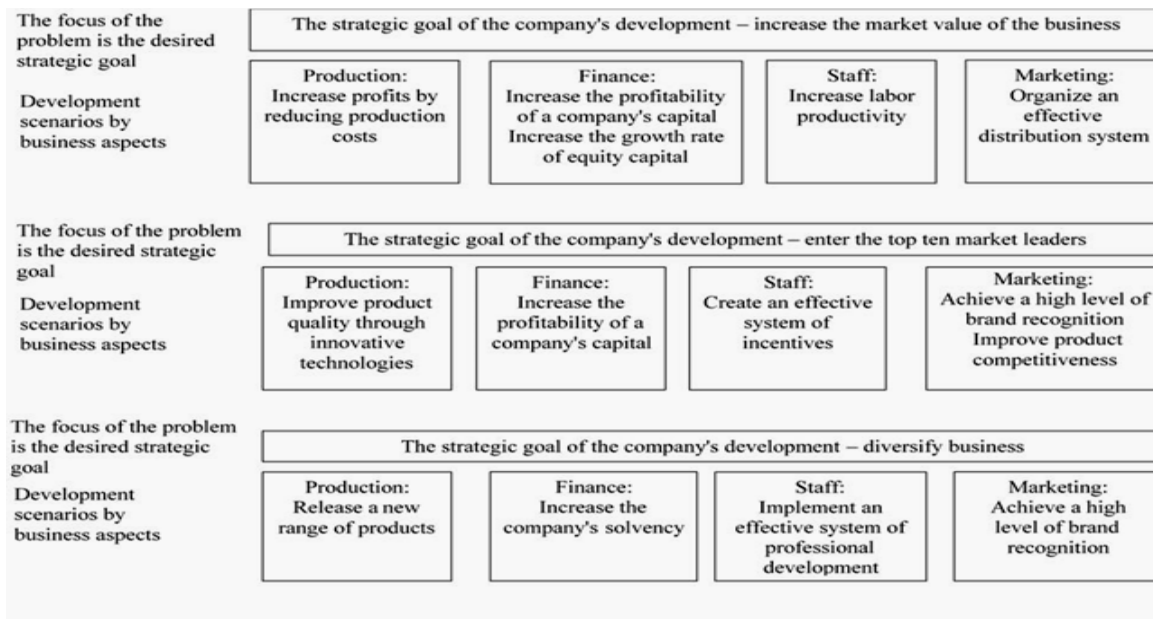


Fig. 3. Examples of development strategies for strategic goals for the Ukrainian agricultural company

IV. CONCLUSIONS

1. The business process of the company development program formation and the business process of forming of the company potential strategic goals are presented.

2. The business process for the strategic goals setting was proposed. For goals selection it is proposed to use the Analytic Hierarchy Process. The result of this procedure is desired strategic goals selected from among all of such goals which would be less risky.

3. The proposed business process for goals formation has been implemented for the Ukrainian agricultural company. Priority strategies by the aspects of the company development were identified for achieving select goals.

4. Mathematical and algorithmic support for other procedures for the development program forming is considered in other works of the author.

5. The business process of the development program forming is the basis of the strategic planning module of the EPM system.

REFERENCES

- [1] L. Á. Guerras-Martín, A.Madhok, and Á. Montoro-Sánchez, "The evolution of strategic management research: Recent trends and current directions", in *Business Research Quarterly*, vol. 17(2), 2014, pp. 69–76.
- [2] B.Heesen, "Effective Strategy Execution, Management for Professionals", Springer-Verlag Berlin Heidelberg, 2012.
- [3] M. Lederer, P. Schott, S.nHuber, and M. Kurz, "Strategic business process analysis: a procedure model to align business strategy with business process analysis methods", in *S-BPM ONE-Running Processes*, Springer Berlin Heidelberg, 2013, pp. 247–263.
- [4] H.Wang, "Dynamic re-alignment: Understanding organizational response to changing business contexts using a conceptual framework for strategic alignment", the Proceedings of the 2008 Australia and New Zealand Academy of Management Conference, Auckland, New Zealand, December 2008.
- [5] D. Morrison, A. K. Ghose, H. K. Dam, K. G. Hinge, and K.Hoesch-Klohe, "Strategic Alignment of Business Processes", International Conference on Service-Oriented Computing – ICSOC 2011, Workshops, pp. 9–21.
- [6] B.McIlrath, and T. Kotnour, "Process alignment for strategic implementation" in *Industrial Engineering and Management Systems*, University of Central Florida, 2002.
- [7] M. Dean, "How To Effectively Communicate Strategy to Employees", 2015, Available at: <https://peakon.com/resources/guides/how-to-effectively-communicate-strategy-to-employees>.
- [8] T. Rahschulte, "Aligning execution and strategy through program management", Paper presented at PMI® Global Congress 2014, North America, Phoenix, AZ. Newtown Square, PA: Project Management Institute, 2014.
- [9] F. K. Y. Chou, E. T.G.Wang, and F.W. Yang, "Realizing IT Strategic Alignment and Business Performance", An Integration of Three Perspectives, PACIS 2015 Proceedings.
- [10] V. V. Moskalenko, T. V. Zakharova, N. G. and Fonta, "Technology of formation of development program as a system of company's annual plans based on key performance indicators", in *European cooperation Scientific Approaches and Applied Technologies*, Vol. 2(2), 2015, pp. 108–124.
- [11] V. V. Moskalenko, Y. S. Berezenko, "The concept of an architectural solution for the service of building a strategic enterprise map", in *Bulletin of NTU "KhPI"*, Series "System analysis, control and information technology", Vol. 55 (1276), 2017, pp. 45–50.
- [12] T. Saaty, "Decision making with the analytic hierarchy process". in *International journal of services sciences*, Vol. 1, 2008, pp. 83–98.