

BULETINUL INSTITUTULUI POLITEHNIC DIN IAȘI
Publicat de
Universitatea Tehnică „Gheorghe Asachi” din Iași
Tomul LVIII (LXII), Fasc. 4, 2012
Secția
MATEMATICĂ. MECANICĂ TEORETICĂ. FIZICĂ

GOAL SETTING AND GOAL ATTAINMENT IN THE MODELS OF LIFE CYCLE OF DEVELOPMENT STRATEGIES IN AUTOMOBILE TRANSPORT MANUFACTURING SYSTEMS

BY

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Received: November 15, 2012

Accepted for publication: November 20, 2012

Abstract. The paper suggests the determination of the terms “goal setting” and “goal attainment”, there had been considered the content of the process of goal setting and goal attainment in the projects of the life cycle of the strategies for the development of the automobile transport enterprises, developed the structure of the model system of control over the strategic development of these enterprises.

Key words: goal setting, goal attainment, strategic development, life cycle, automobile transport enterprise, project, strategy.

1. Urgency of the Issue

Problems, relating to the strategic development of the automobile transport enterprises, became visual in the Ukraine beginning with the second half of 90-th. The general educational processes, in particular, the tendencies to the globalization and corporation of the world economy acted as the external influencing factors. The internal motives appeared in the result of mass privatization. The native economy entered the stage, when the absence of the scientifically substantiated development strategy becomes a real obstacle on the way to the successful operation of an enterprise.

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Today more and more attention is paid to the research of the issue of the development of automobile transport enterprises. This is due to the fact that the issue of maintenance and development of transport directly influences the national economy, external policy, social stability, scientific and technical progress as well as allows to strengthen the national interests of the country.

The urgency of the issue of the strategic development of the transport enterprises increases under the crisis conditions since the development of the economy of the country depends upon the results of the economic activities of each separate enterprise.

Automobile transport enterprises, as well as any system of other origin independent of the form of property, sphere and range of activity, is subordinated to the life-sustaining activity laws. The possibilities to modify, to transfer to the higher stages of the development, or, vice-versa, to face crisis, requires the enterprise to change the goals, strategies and means for their realization. Learning and taking into account theoretical, practical processes of cycle development of both, manufacturing systems and strategies for their development, enable to stipulate for the state of the manufacturing system in future and for the substantiated decision making in management.

The issues concerning the management in the development of the enterprise had been considered in the scientific works of the famous native and foreign scholars and experts in economy. It should be noted that the significant contribution to the solution of the above issue was made by such scholars as D. Bell, O.O. Bogdanov, N. Viner, V.M. Geets, V.M. Gryniyova, O.A. Yerokhina, Dz. Clark, M.D. Kondratiev, Yu. G. Lysenko, I.R. Prygozhyn and other. The issues of the essence and model mechanisms of the life cycle of the strategies of the enterprise development had been researched by such scholars as I. Adises, S. Bushuev, L. Greiner, O. Kuzmin, N. Stepanenko, O. Melnyk, Zh. Lippit, I. Mazyr, N. Olderogge, V. Shapiro, G. Kozachenko, G. Atamanchuk, N. Nizhnik, V. Tsvetkova and other.

2. The Unsolved Part of the General Issue

Acknowledging the scientific and practical value of the works of the above authors, it is necessary to emphasize, that some issues of conceptual, methodological and methodical character required further researches. Thus, the issues of goal setting and goal attainment in the projects of life cycle of the development strategies for the automobile transport enterprises need to be further researched.

3. Task Setting

The control over the strategic development of the automobile transport enterprises in the conditions of changing environment is the urgent problem in Ukraine, considering the current stage of the development of market economic

relations. The objective of the paper is the system analysis of the goal setting and goal attainment for building the model system of the life cycle of the organization development strategy.

4. Solution to this Issue

Goal setting and goal attainment is the integral component of the functions of strategic development control. The uniting properties of goal setting are realized in the system of strategic planning and provide for the connection of the mission, vision of the strategic goals of the enterprise with the goals of the incorporated subsystems, which operate in the subsystems of business processes. Consideration of the functions, the goal setting and goal attainment in the models of life cycle of the development strategies, it is expedient to specify the essence the terms “goal setting” and “goal attainment”.

In general, goal setting is a practical understanding of the his or her activity from the point of view of the formation “setting” goals and their realization “attainment” by most efficient means. Goal setting in strategic control over the development is a process of goals formation for the enterprise. The result of the goal setting process is the unique determination of the goals of development and their understanding by managers.

Goal attainment is the mobilization of resources, energy and means to attain the goal. In accordance with (Bazarov, 2002) for the substantive formation and task setting, goal setting and goal attainment of the life cycle of the development strategies by its decomposition, it may be divided into the small life cycles of formation, realization and strategy control.

In such a case the project of the organization development strategy, on the base if the principle regulations of system analysis, may be described by the model

$$P_e = P(P_f, P_r, P_c), \quad (1)$$

where P_f, P_r, P_c are corresponding projects models (subprojects) of formation, realization and strategy control.

The structure of the life cycle of the development strategy of the organization as a project is presented on Fig. 1.

The building process of the model system stipulates for two stages: goal setting and goal attainment

On the goal setting stage there has to be formulated the system goal of the strategic development of the automobile transport enterprise, which generally includes the multitude of local goals, which ensure the attainment of the system or global goal of the enterprise, namely

$$G_s \rightarrow G_{ij}^n \left\{ g_{ij}^n : g_{ij}^n \in G_{ij}^n, n = 1, 2, \dots, N; i = 1, 2, \dots, I; j = 1, 2, \dots, J; \right\}, \quad (2)$$

where G_{ij}^n – the multitude of local goals of the automobile transport enterprise, which must be realized in the projects of the n -th stage of the life cycle of the strategy as for the i -th type of the activity on the j -th time interval, which ensure the attainment of the system (global) goal of the above enterprise.

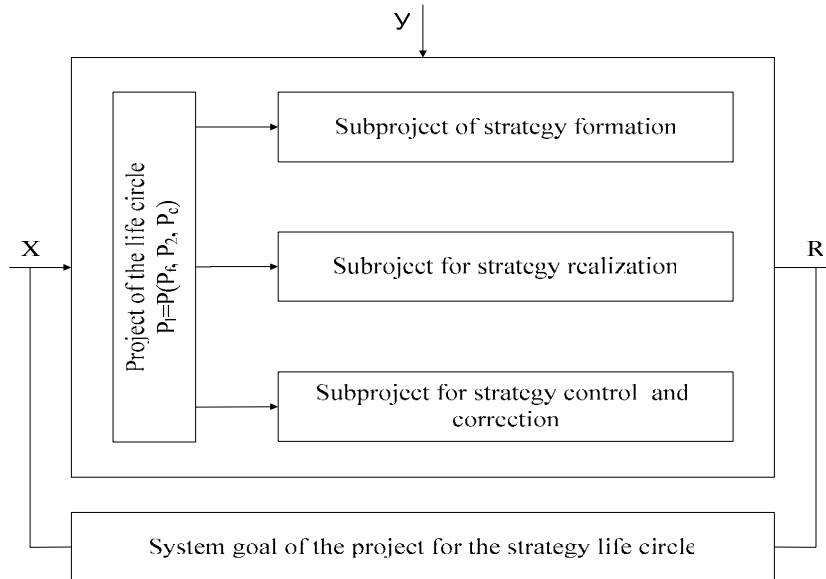


Fig. 1 – Structure of the life cycle of the development of the economic enterprise as the project (X – input parameters, V – environmental influence upon the organization, R – result of the activity of the economic enterprise).

The well formed strategy must answer the SMART principles (S – specific, significant, stretching, M – measurable, motivational, manageable, A – attainable, achievable, acceptable, ambitious, action-oriented, agreed upon, R – realistic, relevant, reasonable, rewarding, result-oriented and T – timely, time-bound).

The analysis of the conditions of development and functioning of the automobile transport enterprise allows to determine the conditions of activity efficiency of transportation, ensuring the working capacity as well as expeditionary servicing as the types (kinds) of the local goals.

Thus, the target level for the stage of the formation of the strategy G_{ij}^1 it is possible to write as follows

$$G_{ij}^1 = G_{ij}^1(G_{1j}^1, G_{2j}^1, G_{3j}^1), \quad (3)$$

where G_{1j}^1 – the multitude of the local goals in the projects of the stage of the strategy formation as for the activity concerning the transportation on the j -th

time interval; G_{2j}^1 – the multitude of the local goals in the projects of the stage of the strategy formation as for the activity concerning the provision of the working efficiency of technical vehicles on the j -th time interval; G_{3j}^1 – the multitude of the local goals in the projects of the stage of the strategy formation as for the activity concerning the expeditionary servicing on the j -th time interval. Correspondingly, it is possible to write the target level for the stage of the realization of the strategy G_{ij}^2 :

$$G_{ij}^2 = G_{ij}^2(G_{1j}^2, G_{2j}^2, G_{3j}^2), \quad (4)$$

and the stage of the control and correction of the strategy,

$$G_{ij}^3 = G_{ij}^3(G_{1j}^3, G_{2j}^3, G_{3j}^3). \quad (5)$$

On the base of the model of goal setting there will be built the model of goal attainment as for the following algorithm, which stipulates for the determination of:

1) multitudes of functions, F_{ij}^n , which must be realized in the projects of the n -th stage of the life cycle of the strategy as for the i -th type of activity on the j -th time interval for the attainment of the set G_{ij}^n :

$$G_{ij}^n \rightarrow F_{ij}^n \{f_{ij}^n : f_{ij}^n \in F_{ij}^n, n = 1, 2, \dots, N; i = 1, 2, \dots, I; j = 1, 2, \dots, J\}; \quad (6)$$

2) multitudes of the tasks, O_{ij}^n , which must be solved in the projects of the n -th stage of the of the life cycle of the strategy as for the i -th type of activity on the j -th time interval for the realization of the set F_{ij}^n ,

$$F_{ij}^n \rightarrow O_{ij}^n \{O_{ij}^n : O_{ij}^n \in O_{ij}^n, n = 1, 2, \dots, N; i = 1, 2, \dots, I; \dots j = 1, 2, \dots, J\}; \quad (7)$$

3) multitudes of methods and models, M_{ij}^n , which must be used in the projects of the n -th stage as for the i -th type of activity on the j -th time interval for the set O_{ij}^n

$$O_{ij}^n \rightarrow M_{ij}^n \{m_{ij}^n : m_{ij}^n \in M_{ij}^n, n = 1, 2, \dots, N; i = 1, 2, \dots, I; j = 1, 2, \dots, J\}; \quad (8)$$

4) multitudes of the algorithms, A_{ij}^n , which must be used in the projects of the n -th stage of the life cycle of the strategy as for the i -th type of activity on the j -th time interval for the solution of the set O_{ij}^n :

$$M_{ij}^n \rightarrow A_{ij}^n \left\{ a_{ij}^n : a_{ij}^n \in A_{ij}^n, n = 1, 2, \dots, N; i = 1, 2, \dots, I; j = 1, 2, \dots, J \right\}; \quad (9)$$

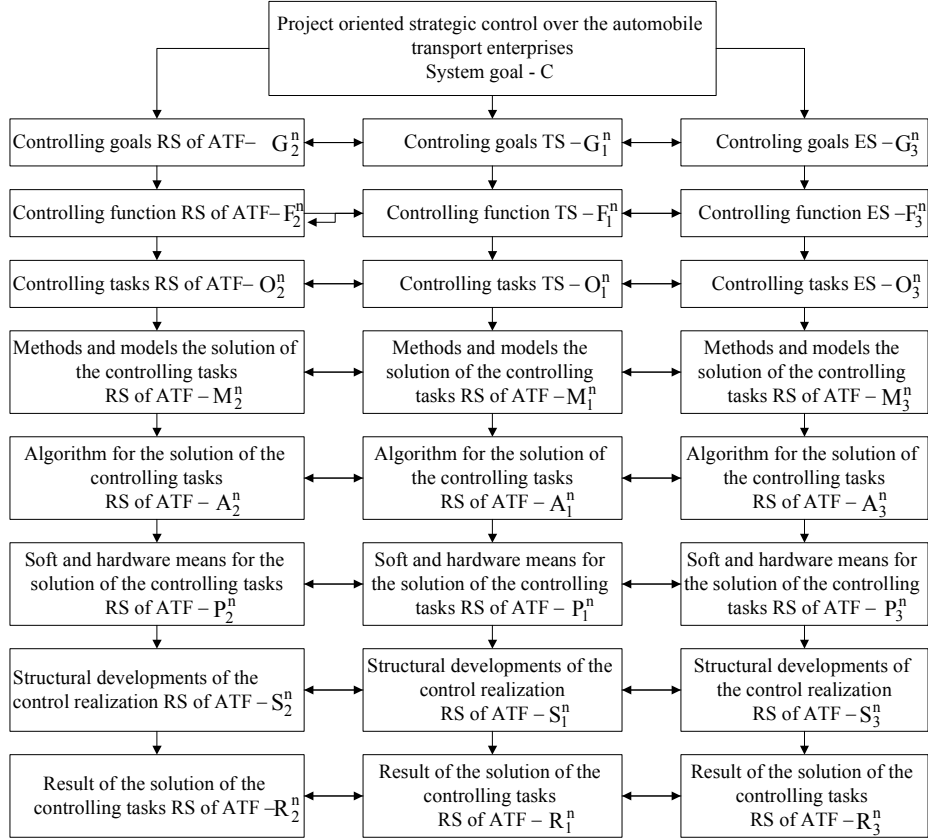


Fig. 2 – Structure of the control model of the transportation system (TS), ensuring the working capacity automobile transport facility (ATF) (repair system (RS) of ATF), expeditionary services (ES) in the projects of the life cycle of the strategy life cycle of the development strategy of the automobile transport enterprise.

5) multitudes of soft- and hardware means, P_{ij}^n , which must be used in the projects of the n -th stage of the life cycle of the strategy as for the i -th type of activity for the solution of the set A_{ij}^n :

$$A_{ij}^n \rightarrow P_{ij}^n \left\{ P_{ij}^n : P_{ij}^n \in P_{ij}^n, n = 1, 2, \dots, N; i = 1, 2, \dots, I; j = 1, 2, \dots, J \right\}; \quad (10)$$

6) multitudes of structural formations, S_{ij}^n , which are being realized in the projects of the n -th stage of the life cycle of the strategy as for the i -th type of activity of the set O_{ij}^n

$$P_{ij}^n \rightarrow S_{ij}^n \left\{ S_{ij}^n : S_{ij}^n \in S_{ij}^n, n=1, 2, \dots, N; i=1, 2, \dots, I; j=1, 2, \dots, J \right\}; \quad (11)$$

7) multitudes of the results, R_{ij}^n , the solutions in the projects of the n -th stage of the life cycle of the strategy as for the i -th type of activity of the set O_{ij}^n

$$S_{ij}^n \rightarrow R_{ij}^n \left\{ r_{ij}^n : r_{ij}^n \in R_{ij}^n, n=1, 2, \dots, N; i=1, 2, \dots, I; j=1, 2, \dots, J \right\}. \quad (12)$$

In accordance with the above, the structure of the model system of controlling over the strategic development of an automobile transport enterprise may be presented as is shown on Fig. 2.

5. Conclusions

The structure of the system model for controlling over the strategic development, suggested on the base of the system analysis of the processes of goal setting and goal attainment in the projects of life cycle in the strategies of development the automobile transport enterprises, allows to coordinate the short term interests with the goals of attainment of the long term stable advantages on the market, which will provide the enterprise with the relative independence on the market state in the period of temporary worsening of the market conditions and to keep the potential possibilities on the high level.

REFERENCES

- Bazarov T.Yu., *Staff Management: Textbook*. Masterstvo, 2002.
 Blank I.A., *Principles of Financial Management*. Nika-Tsentr, 1999.
 Radionova N.V., *Anti-recessionary Management*. Textbook for colleges. M. YuNITI-DANA, 2001.
 Lange O. *Introduction to the economic cybernetics*. Progress, 1988.

FORMULAREA SCOPULUI ȘI REALIZAREA SCOPULUI ÎN MODELELE PRIVIND CICLUL DE VIAȚĂ PENTRU STRATEGIILE DE DEZVOLTARE A ÎNTREPRINDERILOR DE TRANSPORT AUTO

(Rezumat)

Se studiază structura modelului pentru controlarea strategiei de dezvoltare a întreprinderilor de transport auto, care să permită coordonarea intereselor acestora pe piață pe termen scurt, cu realizarea obiectivelor pe termen lung, astfel încât întreprinderile să obțină o independență relativă în perioadele de înrăutățire temporară a stării pieței.