

The object-oriented program management approach applying in machine-building enterprises activity

Andrii Ukrainets

Management of Organization Department, Lviv Polytechnic National University, UKRAINE, Lviv, S.Bandery street 12,
E-mail: Andrij-y@rambler.ru

Has been grounded the object-oriented program management approach applying in machine-building enterprises activity, as a mechanism of their technical, economic and organizational level increasing. The object-oriented programs implementing is treated as a method of creating the mechanism of machine-building enterprises, which may subsequently become a basis for object system management systematic activity formation.

Keywords: *object-oriented program management approach, the mechanism of management, machine-building enterprises.*

I. Introduction

For many engineering enterprises managers obvious is a conviction that in today's dynamic economic environment the most appropriate approach is to solve problems in real time and provides reactive approach to management. Instead, the ability of successful enterprises to predict changes in business environment, and build a long-term strategy repeatedly demonstrates the necessity of activity in advance. This task may be achieved by object-oriented management approach using.

II. Statistics

The Lviv machine-building enterprises volume of sales in 2012 was – 7,9% (8,4% in 2011) and corresponds to the fourth place among the processing industries on this indicator. Every fifth industrial employer was occupied in branch of machine-building manufacturing, and salary of employers was higher than in the regional economy in general. In 2012, on the development of machine building enterprises was directed 212 mln. Hryvnias of capital investments, which is 1,5% more than in 2011. In 2012 was attracted 99,7 mln. Dol. Of direct foreign investments, or 15,6% of the general industrial volume. The main investors in this sector was Germany (54,7 mln. Dol.), Hungary (16 mln. Dol.) and Cyprus (11 mln. Dol.)[1].

The largest contribution to the volume of sales carried out: Ltd «Leoni Vaerinh Systems UA HMBKh», JSC «Iskra», JSC «L'vivs'kyi lokomotyvoremontnyy zavod», State Enterprise(SE) «Стрийський вагоноремонтний завод», CJSC «Zavod komunal'noho transportu», SE «L'vivs'kyi derzhavnyy zavod "Lorta"», SE «L'vivs'kyi radioremontnyy zavod»[1]. Some of these companies used in their activity program management methods.

Thus, JSC « Iskra» is implementing a program of technical re-equipment, organizational and technical measures, which include: increasing capacity of existing and introduction of new equipment, commissioning of

two high-speed assembly lines, increasing the labor productivity through the production processes automation, optimization of technological processes and structural improvement of the enterprise and others. At JSC «L'vivs'kyi lokomotyvoremontnyy zavod» has been developed technical and economic grounding for the enterprise modernization project (along with a Japanese partner «Marubeni Corporation») and can provide the technological level increasing of the enterprise.

Current trends of market conditions activity increasingly confirm the relevance of object-oriented management approach for given and many others Ukrainian machine-building enterprises in general.

III. Main results

As object-oriented program management we will understand the guidance approved document that unites period of performance, resources and performers of economic, industrial, institutional and other objectives, aimed to the most effective way purposes achieving.

The program is a system of interconnected activities and focused on the most appropriate features of development using [2]. The key idea of object-oriented program management is to develop an integrated system of clearly defined objectives and means of achieving them. Object-oriented management methods can be used for solving wide range of tasks, with limited period of performance and providing an administrative influence that crosses management system of enterprise [3, p.170].

We can cite several reasons of object-oriented management approach applying in machine-building enterprises activity (given below).

1. Able to activate the object-oriented enterprise management in general:

a. Provides for the certain limits and rules of activity establishment, contributes to the formation and adaptation management approach which is held by the integrated planning and the objectives system development. It can initiate creation of a management mechanism which subsequently become the basis for forming systematic activity based on systematic object-oriented management;

b. Focuses enterprises activity on a final result and contributes decision-making process acceleration, increases the level of available resources mobilization[2];

c. Helps to improve a strategic Management system, accordance objectives to required level of concreteness, adequacy of the actual business situation and achieving long-term advantages.

2. Systemness of solving the enterprises problem situations:

a. The program serves as a platform based on which can be formed a new management and economic system, new approaches to management. Each program provides for comprehensive solution to a specific problem. Considering the high level of domestic machine-building enterprises compared with the leading manufacturers, it is necessary to implement a complex of measures simultaneously on all the plans of activity: manufacturing, marketing, finance, human resources and information technology;

b. Helps to reduce the divergence of interests in various functional services of enterprise during the implementation of objectives and contributes to the finding the shortest way to achieve them;

3. Represents a mechanism of comprehensive complex technologies and management systems implementation:

a. New technology often requires a new organizational principles traditional, formally defined vertical connections unable to satisfy requirements of modern technology;

b. Creates a culture of objective performance and able to achieve high level of efficiency use of resources, combine the efforts of employees from different spheres.

4. Often used in the process of innovations implementation:

a. Highly effective method which provides a possibility of shortest way to intend objectives and create conditions for the innovations implementation process acceleration;

b. Can provide both the complexity and the necessary flexibility (adaptation) process improvement of innovative activity [4].

c. Used as a method to improve the efficiency of enterprise innovative activity planning, when actions of innovative project implementation organizationally stand out from the general flow activity

Usually considered that implementation of object-oriented program management is used by large enterprises, because entails the need for substantial financial and labor costs. Although this approach may also be effective for smaller enterprises that are functioning in a relatively stable environment [3, p. 176].

Although there are some difficulties in a way of the object-oriented management approach implementation in machine-building enterprises:

1. Successful implementation of object-oriented programs directly depends on the position of top management, their professional literacy[5];

2. Usually the implementation of this method stipulates necessity for involved in the activities on the program employees to perform additional work;

3. The objectives and tasks formulation, which is given much attention during the formation of the object-oriented program may contain purely formal character and does not reflect the real enterprise development priorities as they are seen by top and middle managers[2];

4. Often occurs the complication of management system, appears cumbersome system of document management regulation, increases the risk of bureaucratic tendencies[2];

5. Often foresees the necessity to solve conflict situations, among the functional managers and project managers.

One of the most important factors that determine the successful object-oriented program implementation is a leader of its development and implementation. His expertise in innovative developing problems of enterprise, knowledge about the state of internal and external

environment, relationships with the collective and the ability to establish such a relations is very important factor for success.

Conclusions

Actuality of the object-oriented program management applying to a machine-building enterprises is grounded by the following reasons: 1) this approach creates preconditions for object-oriented approach activation to enterprise management in general; 2) ensures the consistency on problem situations solving in technological, marketing and organizational directions; 3) provides an complexity in complex technologies and management systems implementation; 4) is an effective instrument of planning and innovations implementation.

The difficulties in a way of the object-oriented management approach implementation in machine-building enterprises are: 1) the great significance makes an awareness by top management that othe object-oriented program implementation is important; 2) usually employees has to perform additional work; 3) the objectives and tasks formulation may contain purely formal character; 4) increases the risk of bureaucratic tendencies; 5) often occur a conflict situations among the functional managers and project managers.

References

- [1] Central Statistical Office in Lviv region. "Until the Day of machine building", lv.ukrstat.gov.ua [Online]. Available: http://www.lv.ukrstat.gov.ua/ukr/si/press/2013/r560913_116.pdf [Accessed: Sep. 18, 2013];
- [2] I. E. Nikulina, D. S. Lukov, B.S. Mozholyn "Sovremennye osobennosti celevogo upravlenija organizaciej" ["Modern Features object-oriented management in organization"], *Izvestija tomskogo politehnicheskogo universiteta – Proceedings of Tomsk Polytechnic University*, vol. 309. no. 3, pp.190-193, 2006;
- [3] D. I. Cleland, W. R. King *Sistemnyj analiz i celevoe upravlenie* [Systems analysis and project management] Moscow, "Sovetskoe radio" 1974;
- [4] S. N. Pysaryuk, "Adaptivnoe programmno-celevoe upravlenie jekonomicheskij jeffektivnost'ju predprinimatel'skoj dejatel'nost'ju predpriyatija" ["The adaptive program-oriented management of economic efficiency of entrepreneurial activities in enterprise], *Visnyk Khmel'nyts'koho natsional'noho universytetu - News of Khmelnytsky national university*, vol.2 no. 2, - pp. 103-107, 2011;
- [5] V. I. Zaharchenko, N. M. Korsikova, N. M. Merkulov *Innovatsiynny menedzhment: teoriya i praktyka v umovakh transformatsiyi ekonomiky* [Innovation Management: theory and practice in conditions of the economy transformation]. Kyiv: Center of Literature, 2012.