

Teslenko Pavlo, *PhD, Associate professor*
Department of Information systems
Odessa national polytechnic university

PROJECT MANAGEMENT. THREE LEVELS APPROACH

Projects exchange information, resources and energy with the external environment, are dissipative systems and possess the properties of an open and nonlinear system.

This leads to a contradiction between the nature of the PMS and the main model, which is provided by existing project management methodologies. That is, the reason for the low probability of successful completion of projects is precisely the imperfection of existing project management methodologies. As a consequence, there arises an important scientific and technical problem in the methodological and applied aspects of increasing the likelihood of successful completion of projects begun. To solve it, the author propose a three-level approach to project planning

Keywords: *3-level approach, attractors, evolutionary approach, operational management.*

The life cycle of the project (LCP) determines the different levels of detail of the project information, formalization and presentation of the project.

Despite this, at each stage the project team must make decisions that will largely determine the success of this project [1]. At the stage of initiation and at the initial stages of planning, information is only present in a very enlarged, conceptual form. The project is poorly formalized, the information is poorly structured. The methods of project management at this stage should be adequate and offer solutions in the conceptual plane, rather qualitatively than quantitatively.

At the final stages of planning, the project can be considered fully developed, as far as it was possible. The plan is fully formed and approved, the project is completely formalized, the information is fully structured. Project management methods should return a specific decision, quantitatively calculated, while the solution carries a significant prognostic component.

The stages of implementation and control require rigidly formalized methods of quantitative calculation, for calculating the current project parameters and comparing

them with the planned ones, developing control actions in case of deviation from the plan.

In this article, it is proposed to use different methods at each of the indicated stages of the LCP. The proposed three-level approach can be compared with three grades of planning: strategic planning, tactical and operational.

However, the authors propose to correlate the proposed models and methods with the stages of the LCP and the degree of accessibility and formalization of the project information.

The structure of the proposed approach is shown in fig. 1.

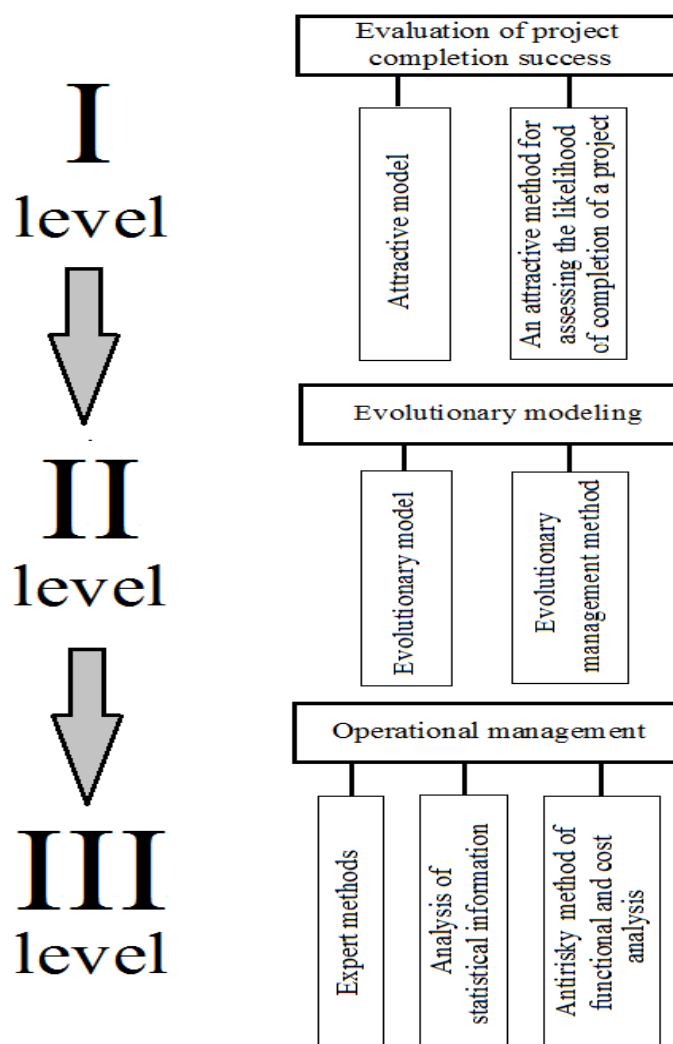


Fig. 1. 3-level approach planning projects

References

1. P. Teslenko, A. Voznyi, V. Baryshnicova, T. Fesenko. Two-level project management system. Nowoczesna edukacja: filozofia, innowacja, doświadczenie – Łódź : Wydawnictwo Naukowe Wyższej Szkoły Informatyki i Umiejętności, Nr 1(5), 2016, pp. 156-162.

2. S. Bushuyev, R. Wagner: IPMA Delta and IPMA Organisational Competence Baseline (OCB) New approaches in the field of project management maturity. International Journal of Managing Projects in Business. Emerald Group Publishing Limited, Volume 2, Issue 7, 2014, pp. 302-310.
3. P. Teslenko, I. Polshakov, D. Bedrii. Strategic management of evolving project-oriented organization. Science and Education a New Dimension, Economics, Volume IV (2), Issue: 94, Budapest, 2016, pp. 33-35.
4. V. Milovanov. "Synergetics and self-organization: Socio-economic systems," Moscow: Book House "LIBROKOM", 2010, 224 p.
5. M. Melik-Gaykazyan. "Semiotic instruments of attractive management," Bulletin of Tomsk State University. Philosophy. Sociology. Politics, vol. 7 (148), 2014, pp. 88-93.
6. P. Teslenko. "Evolution theory and synergetics in project management," Project management and Development of Production: Collection of scientific papers, vol. 4(36), Luhansk: print SNU, 2010, pp. 38-43.
7. S. Bushuyev, D. Bushuyev, V. Rogozina, O. Mikhieieva, "Convergence of knowledge in project management", IEEE 8th International Conference on Intelligent Data Acquisition and Advanced Computing Systems: Technology and Applications, IDAACS 2015, pp. 496 – 500.
8. D. Bedrii, "Functional and cost analysis of research projects taking into account risk", Project Management: Status and Prospects, pp. 23-26, September 2011 [Digests 7th VII International sciences-practice. conf., 2011].
9. Teslenko P. Increasing probability of successful projects complete / P. Teslenko, S. Antoshchuk V. Krylov // Proceedings of the International Research Conference at the Dortmund University of Applied Sciences and Arts took place on June 30th -July 1st 2017 for the seventh time. — 2017. — Dortmund : the Dortmund University. — P. 28-30