

RESEARCH AND ASSESSMENT OF THE ORGANIZATIONAL MATURITY IN PROJECT MANAGEMENT IN BULGARIAN INDUSTRIAL ENTERPRISES AFTER THE EXAMPLE OF THE NORTH EAST PLANNING REGION

ISTRAŽIVANJE I PROCENA ORGANIZACIONE ZRELOSTI PROJEKTOG MENADŽMENTA U BUGARSKIM INDUSTRIJSKIM PREDUZEĆIMA PO UZORU NA SEVEROISTOČNI PLANSKI REGION

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Abstract: *Projects are main organizational form of implementation of changes in Bulgarian Industrial enterprises. Project-orientated management is a basic concept for management of each successfully growing business organization. Each project creates novelty in a situation of high uncertainty, and this requires expert knowledge and experience. The organizational maturity assessment in project management in the industrial sector in Bulgaria is required as a source of competitive advantage.*

The subject matter of research in this report is application of models for organizational maturity in small and medium industrial enterprises, successfully implemented projects, funded by the funds of European Union.

Key words: *organizational maturity, project management, Bulgarian enterprises, north east planning region*

Sadržaj: *Projekti su osnovni organizacioni oblik sprovođenja promena u bugarskim industrijskim preduzećima. Projektno orijentisano upravljanje je osnovni koncept upravljanja svake uspešne i rastuće poslovne organizacije. Svaki projekat stvara novinu u uslovima visoke neizvesnosti, a to zahteva stručno znanje i iskustvo. Procena organizacione zrelosti u upravljanju projektima u industrijskom sektoru u Bugarskoj je potrebna kao izvor konkurentske prednosti.*

Predmet istraživanja u ovom radu je primena modela organizacione zrelosti u malim i srednjim industrijskim preduzećima, uspešno realizovanih projekata, koji se finansiraju sredstvima Evropske unije.

Ključne reči: *organizaciona zrelost, upravljanje projektima, bugarska preduzeća, severoistočna planska regija*

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1. Introduction

At the present stage when the project approach has been recognized as a worldwide standard of work and applies to all successful operating business organizations, certain actuality gain issues related to assessing the level of organizational maturity in the application of methods and tools of project management.

A measure of organizational maturity in project management is the degree of implementation of the project approach in the practice of the enterprises.

Modern economy based on knowledge objectively requires active development of methods and tools aimed at effectively exploiting of the intellectual capital as a source of competitive advantage of the regional and global markets.

The dynamics of the 21st century approves project-oriented management as a basic concept of the strategic management.

2. Models for assessment of the organizational maturity in project management

The concept of organizational maturity in project management in a number of scientific publications is identified by the organization's ability to select and manage projects in a way that most effectively contribute to achieving its strategic goals.

The growth of the organizational maturity in project management is directly related to improvement of the organizational knowledge, i.e. creating organizational, technological and communication conditions in which knowledge and information assist in solving the organization strategic and tactical objectives [1].

In the basis of successful project management lays the knowledge of project teams as a



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group of professional habits, skills, abilities, life experiences, personal and business contacts. For a basic criteria for organization maturity in the project management is adopted its ability to apply project-based approach for achieving strategic goals and objectives.

Nowadays business organizations apply different models to assess the maturity of the organizational project management. According to Ilina O.N., the maturity level of the organizational project management is determined by three elements: methodology, technology and personnel [1]. The maturity of the organizational project management depends on:

- The level of maturity of the project-orientated processes in the organization;
- The level of maturity in applying project orientated technologies;
- The level of maturity of human resources assurance of the project-orientated activity of the organization.

In the industry sector, two types of organizations could be distinguished at the implementation of the project approach:

1. -process-orientated. The specifics of the business of these enterprises is defined by the process approach in the management of the main activity (enterprises with production line). Accordingly, the project management is applied in the internal development of the business organization, restructuring, creating new products and etc.
2. project-orientated enterprises using the project approach in the management, not only for internal development, but also for implementation of main business activities.

In both types of industrial enterprises, the implementation of the technology of the project management is accepted as an objective necessity, which means enterprises to create and develop the system of project management, orienting its actions towards several basic components: personnel, methodology, organizational structure, technologies.

The development of global business objectively requires competent organizations and expert groups to develop standards related to the project management *[2,4,5,6]. Standards can be divided into three groups depending on the main areas of implementation:

1. standards applied to individual objects of management (mono projects, programs, portfolios of projects) regulating the relevant management processes;
2. standards applied to the subjects of management (competencies of project managers, participants in project teams regarding the requirements for knowledge and qualifications and qualification assessment;
3. standards for assessment of the organizational maturity of the project management system.

In the international practice, several models for assessment of the organizational maturity in project management are wide spread [1,5,3]:

- "staged" models of maturity, describing the individual parameters of development of the system for project management. To this group belongs the model of Harold Kerzner Ph.D, MS Engineering and MBA International Institute for Learning), model PMMM (Project Management Maturity Model (PM Solutions), Project Framework model, model Berkley (The Berkley Project Management Process Maturity Model)
- Model Organizational Project Management Maturity Model (PMI) developed in the Project Management Institute in USA, structured by objects of management (mono

- project, programs, portfolio of projects). In this model are presented the levels of maturity specifically for projects, programs and portfolio of projects.
- Models of maturity of the system of project management developed by the school of R. Harris. This group of models includes additional parameters related to personnel management, quality assurance in project management, programs and portfolios of projects.

The model of H. Kerzner⁽²⁾ is one of the most prestigious models for assessing the maturity of the project management to the moment of emergence of the Organizational Project Management Maturity Model (PMI). In contrast to the Project Management Maturity Model, developed by the company PM Solutions, the model of H. Kerzner far more detailed presents the levels of maturity and the methods of transition to higher levels.

It traces the relation between the strategy of the organization and the level of management of projects, as a condition for sustainable competitive advantages. In this model, similarly to PMMM (PM Solutions) are summarized five maturity levels: common language, common processes, common methodology, benchmarking, continuous improvement.

The Berkley Project Management Process Maturity Model demonstrates the active participation of the experts in project management to integrate knowledge and best practices, aiming to increase the efficiency at the project management. The model is based on 5 x 9, developed by PMI (Project Management Institute) of USA and presented in PMBOK (Project Management Body of Knowledge). The best practices in nine knowledge areas and five process groups in the project management are researched. This enables to be determined the current level of maturity and suggested solutions for improving of the organizational management of projects.

Organizational Project Management Maturity Model (PMI) is a standard that ensures an option for any organization to assess and develop effective implementation of projects. This standard contains three interlinked components: knowledge related to the implementation of the best practices in project management, assessment-an instrument, assisting the organization to assess the current maturity in project management and outlining the areas where improvement is needed. For the transition to a higher level of maturity in project management is required improvement that results in achieving the organization strategic objectives.

More and more companies in Central and Eastern Europe adopt the project approach in pursuing global objectives related to value added growth, profit maximization and organizational development.

Models of organizational maturity in project management enable:

- Assessment of the current level of development of the project management system involving external experts and consultants; the main areas requiring improvement of project management and planning of changes in short and long term are outlined. Conducting of benchmarking for the purpose of comparison of their own project practices to those of competitors.
- Certification of companies by determining the level of organizational maturity in project management by selected model.

In the basis of the Organizational Project Management Maturity Model are:

- the best practices in project management, respectively capabilities necessary for the implementation of best practices in specific processes in project management (capabilities),
- the results to be achieved in the implementation of the best practices - key performance indicators (KPI) set in the standard for assessment of the results.

Best practices cover five process groups in the project management identified in PMBOK- initiating, planning, execution, monitoring and controlling and closing. The capability of the organization in implementation of the project management processes is assessed in four stages: standardize, measure, control and continuously improve.

3. Assessment of the organizational maturity in project management of industrial enterprises in The North East Planning Region of Bulgaria.

Industrial enterprises in the country actively apply with project proposals for funding by the European Union. Under Operational Programme "Competitiveness of the Bulgarian economy for 2007 -2013" were contracted and paid off for projects the following sums:

Priority Axis 1 Economic development based on knowledge and innovation

- Submitted 666 projects. Contracted 505 555 000 BGN. Actually paid funds 377 054 000 BGN.

Priority Axis 2. Increasing efficiency of enterprises and promoting supportive business

- Submitted 2453 projects. Contracted 977 332 BGN. Actually paid funds 922 766 000 BGN

Regions in the country	Approved and concluded contracts	Value of concluded contracts
North East	315	226 038
South East	315	345 592
North Central	314	299 349
North West	174	141 471
South Central	549	553 011
South West	1357	926 992

in thousand BGN

Table 1 Concluded contracts for financing projects in areas under OP "Competitiveness of the Bulgarian Economy 2007-2013" [7]

Under Priority Axis 2 priority 2.1 Improving the technologies and management in enterprises procedure „Technological modernization in small and medium-sized enterprises“ in the North East Region – 52 projects to the total value of 47 972 000 BGN are finalized successfully.

In a study conducted among 20 managers of industrial enterprises from the North East Region, successfully completed projects with EU funding for technological modernization, using Project Management Maturity Model (PM Solutions) with five levels of organizational maturity was found:

At starting level are positioned 6 enterprises, which have made their first successful attempts in developing project proposals with the assistance of external experts. The managers of the enterprises successfully have entered on the theory and practice of the project management. The enterprises have a limited number of experts for joining project teams. The

stage of standardizing of documentation has started. There is an interest for adoption of the best practices.

At structural level are positioned 10 enterprises, which successfully implement projects in different priority axis of Operative Programme “Competitiveness of the Bulgarian economy for 2007 -2013”, developed by specialists of the enterprise and with the assistance of external experts. The processes of project management are structured, but not fully documented. The middle level managers need training for participation in project teams. A group of qualified specialists for joining project teams is formed.

At standard level are only 4 companies. These companies successfully implement projects. A full set of management processes is present. Managers are actively involved in making decisions at project management, solving key issues and minimizing risk related to the project’s completion. Project teams have been successfully trained. Audit procedures related to the financing of projects with EU funds are implemented.

Given the above results can be considered that in the industrial enterprises preconditions for a broader implementation of the project approach in the management and building of groups of highly qualified professionals with practical skills for joining project teams are set.

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