

G. KALINOVÁ

PROJECT MANAGER AND HIS COMPETENCES (KNOWLEDGE, SKILLS AND ATTITUDE PERSPECTIVES)

Gabriela KALINOVÁ, Ing., PhD.

Lecturer, Department of Economics and Building Industry Management
Research fields: human resource development, project management

Slovak University of Technology
Faculty of Civil Engineering, Department of Economics and Building Industry Management
Radlinského 11, 813 68 Bratislava
Slovak Republic
gabriela.kalinova@stuba.sk

ABSTRACT

The requirements for the enhancement of the competitiveness and the development of project organisations is projected into requirements for individual project managers. The demands made on managers are called managerial competences. The potential of a project manager is regarded as a basis for the rise of competences. The requirements for the successful performance of managerial position are fulfilled by the development of this potential.

For more than twenty years the managerial competences have enhanced the performance of employees and managers of organisations. The competences uncompromisingly reveal disparities between average and excellent managers. From the viewpoint of project organisations, it holds more for the project managers.

KEY WORDS

- project management,
- project manager,
- competences,
- competence model

1. INTRODUCTION

Project management has brought many important elements and new principles and viewpoints into the preparation and implementation of large-scale technical, construction and economic projects. The planning and management of the construction of a building, whether a simple object or a large building, is always very demanding from the viewpoint of a system because a considerable number of interested parties (partners) with different economic interests enter into the process.

Their mutual communication makes high demands on the division of powers, the development of individual competences and responsibilities for decision-making. The existence and degree of the utilisation of formalized and standardized communication interfaces between the interested parties and the correct application of methodological means of communication between the parties interested in the project significantly affect the quality and effectiveness of project management.

In the contemporary world and domestic specialized literature, it has been stated that the most critical point of each project management are the people and their knowledge, abilities and skills.

Professor Pinto [6] stated, "Project management is a philosophy and technique that allows to users the maximum utilization of their potential with limited sources, together with the increase of profitability.... With a look at the future, for the extension of the function of a project manager, the only potential problem in the horizon of the future deals with the ability of managers to properly and effectively use these techniques. The lack of training is a threat for many project managers, and this situation must be remedied. We have to advance in our efforts to build basic standards and rules, so that techniques and steps of this philosophy can be used as much as possible".

In 1987, the Project Management Institute published "Project Management Body of Knowledge for Project Managers". By the publication of the PMBoK the authors illustrated the substance of

project management and showed it as a tool for the generation of the differences between general and technical management [1].

Projects related to construction are called investment projects. That is related to the term "investment construction" which refers to the Building Act No. 50/1976 Coll., as subsequently amended.

The investment process comprises a group of activities preceding the preparation of the project itself, which can be characterized as a feasibility study and project implementation.

The definition of the investment process indicates who executes the operations of this process, i.e. the investment process is a set of operations executed by its participants. The participants are legal and natural persons who are interested in the progress and result of the investment process, directly or indirectly.

Contractual and economic relations are established between the interested parties in the investment process. These are often influenced by naturally conflicting interests of the individual parties.

In order to be able to execute the expected operation, each of the interested parties should have the required qualification as well as enough information about the respective building that they receive from other involved partners. This means that a continuous exchange of information about the building occurs between the participants of the construction process. Practically, for the performance of his work, each participant is dependent on information from the others, and when he does not receive it in due time, he cannot pursue his work which usually causes a delay in deadlines, which also affect costs and the terms. One of the basic conditions for continuous, failure-free and economic implementation of a construction project is the effective solution of information exchanges.

Here the basic problem arises "How can a project manager be prepared for it from the viewpoint of "soft competence". This can be ascertained by diagnostics.

2. APPROACH OF DIAGNOSTICS AND THE PERSONAL DEVELOPMENT OF A PROJECT MANAGER BASED ON MANAGERIAL COMPETENCES

For more than twenty years the managerial competences have enhanced the performance of employees and managers of organisations. The competences uncompromisingly reveal disparities between average and excellent managers. From the viewpoint of project organisations it holds more for project managers.

At present the term "competence" is commonly used according to two basic meanings. The first meaning of "competence", according to the Dictionary of Foreign Words [8], is a power, sphere of action, a reach of power. Linguistically, it is the ability to produce

a linguistic expression and speech (and understand them), on the basis of the summary of knowledge of the system of language we have stored in our memory.

The second meaning of the word "competence" accentuates the ability to perform an activity. The term comes from the Anglo-Saxon environment and started to be used according to this meaning, usually under the influence of management literature. The general public substituted the expression "competence" with the expression "ability". In the English explanatory dictionary, The Collins Concise Dictionary, "competence and competency" is the ability to do something or have required knowledge. In the following definition it has the meaning of official authorization.

The difference between the two perceptions can be simply described. The first meaning underlines something that is given to a person from the outside, on the basis of the consensus of others. The second meaning accentuates the internal quality of a person, which is a result of his development a given moment and which allows him to perform. The second meaning is connected with managerial competences and hence with the competences of a project manager [4].

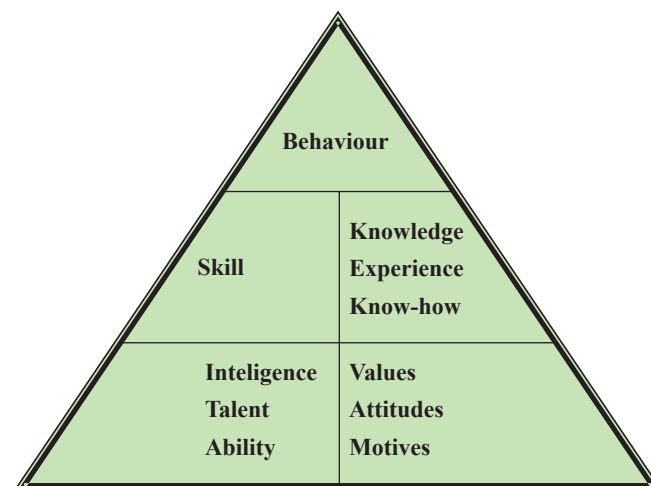


Fig. 1 Hierarchic model of the structure of a competence

In 1959, the human quality (trait) called "competence" was defined for the first time. The author of this idea was Robert White. An important personality, the American psychologist David McClelland, in the article "Testing for Competence rather than for Intelligence" [5] invites those competent for the selection of applicants for a working position to take into account not only the intelligence, but also the competences of an applicant.

In the 1970s McBer, in cooperation with McClelland, introduced the first programme aimed at the evaluation of competences. The main

task was to find the answer to the question of which competences distinguish successful managers from those less successful. They identified five basic competences for the successful performance of managerial work:

- Specialized knowledge,
- Intellectual maturity,
- Entrepreneurial maturity,
- Interpersonal maturity,
- Professional maturity.

The differentiation of the "process from the results" has led to the following definition of the term "competence". "Competence" is a set of characteristics of an employee, he latter has to use in a given position to competently master the tasks resulting from this position. If the employee is competent, i.e. fulfils the tasks at a good or excellent level, it means that the three conditions have been met:

- He has the qualities, abilities, knowledge and experience that he needs for such conduct;
- He is motivated to use such conduct, i.e. he sees in the required behaviour a value and is willing to develop the energy required in this direction;
- He has the possibility of using such conduct in a given environment.

While the first condition concerns the knowledge that can be easily gained, the second condition has a different character. It is more difficult to influence because it involves motives, attitudes, values, beliefs and a philosophy of life. This area belongs among the stable components of a personality. The third condition is related to external conditions and significantly affected by the first two conditions. For a manager to be competent, these conditions have to be met simultaneously. The absence of any of them decreases/precludes competent performance. In this meaning all three conditions are equivalent. If a manager actually wants to give a good performance and it is also requested from him, but he lacks, e.g. knowledge, he will not achieve the expected result. If he is not motivated, he will not endeavour to use the knowledge, although he avails himself of it. If the environment does not allow him to use a competence, his ability and willingness will not help him. From the practical viewpoint it is meaningful to talk about a competence only in relation to a specific task, position or function. Then we can measure the level of these competences in managers.

A **competence model** describes a specific combination of knowledge, abilities, attitudes and other personal characteristics that are required for the effective fulfilment of tasks within an organisation. For the sake of transparency and simple measurement, the knowledge, abilities, attitudes and characteristics are divided into a number of homogeneous groups that are called competences. The utilization of the competence model is multiple for the selection of a manager or for the proposed development needs of a manager,

it is a basis for the evaluation of managerial performance and career planning.

Approaches of the creation of a competence model according to Rothwell and Lindholm [7]:

- The prescriptive (borrowed), approach (not to create new competence models, but borrow an "existing model"),
- The combined approach (to specify the behavioural description of the individual competences from a model so that it will correspond exactly to the working position in given organisation);
- The tailor-made approach (to develop a "new" specific model according to requirements).

The choice on approach depends on several factors. One of them is the purpose of the project, its position in the strategy of an organisation, the key objectives, external conditions and others. The thesis is oriented to the third approach, i.e. the tailor-made approach. The criterion for its selection is the flexible, unambiguous orientation to long-term plans of specific project-oriented companies, the continuity and the utilization of formulated values, expectations and the roles of working positions related to project management.

An important contribution to the formulation of the draft competence model is the model of abilities for professional project managers (Duncan, W. R. [2]).

As a basis different types of behaviour of professional project managers observed in many different areas of utilization. It contains a fundamental and coherent system/structure for the achievement or acquisition of competences of a modern successful and future project manager.

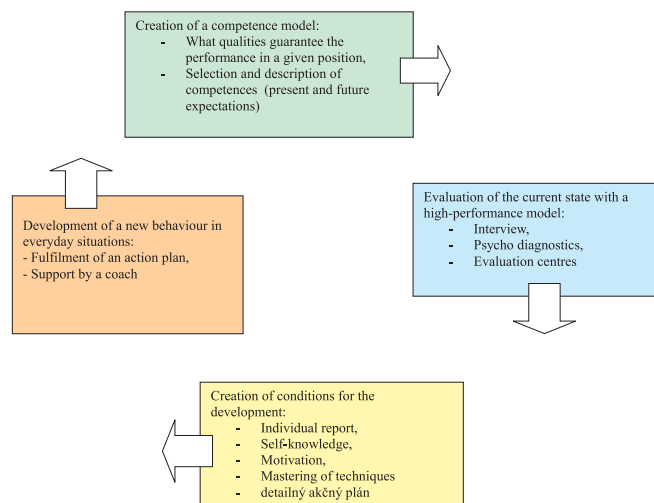


Fig. 2 Model of the development of a project manager

On the basis of the overview of the current state of issues and requirements formulated above, the following model of the development of a project manager has been selected for analysis:

The benefits of the competence-based approach are:

- Competence allows managers to interconnect different types of information with the aim to formulating ideas, conclusions, concepts and prediction of events, identify potential strategies, methods, improvements or changes.
- To integrate old and new knowledge for the identification of what the team does well and what should be changed.
- To be able to choose from the quantity of information the information that is relevant for the strategic objectives of the project.
- To identify different concepts, ideas and strategies as a basis for the application of conceptual flexibility in a project.
- To verify the "bearing capacity" of ideas on the manager himself and on team members, with the aim of motivate critical thinking before making a decision.
- To delegate the creation of ideas to the team members so that they can contribute significantly to the discussion.
- To stimulate the establishment of informal contacts among the team members with the aim of systematically develop ideas for potential changes.

3. DRAFT MODEL OF THE CREATION OF PROJECT MANAGER COMPETENCES

For the purpose of the creation of an analytical-diagnostic and development model of the creation of project manager competences the conditions mentioned above have been transformed into a model, which is graphically represented as a funnel (Fig. 3).

As a basis for the creation of the model company documents were used that are designated as strategic, with a description of the mission and values of the company. Requirements for a project manager that are published in ICB/ IPMA documents, or in the document "Set of qualification requirements for project management experts" [3] were also relied upon.

The following views were taken into account and presented as equivalent:

- 1) The viewpoint of the organization, i.e. the employer, at which the project manager is employed.
- 2) The viewpoint of the international certification of project managers.

The result of the processing of the basic documents (right and left sides of the funnel) is an individual plan for the development of a project manager.

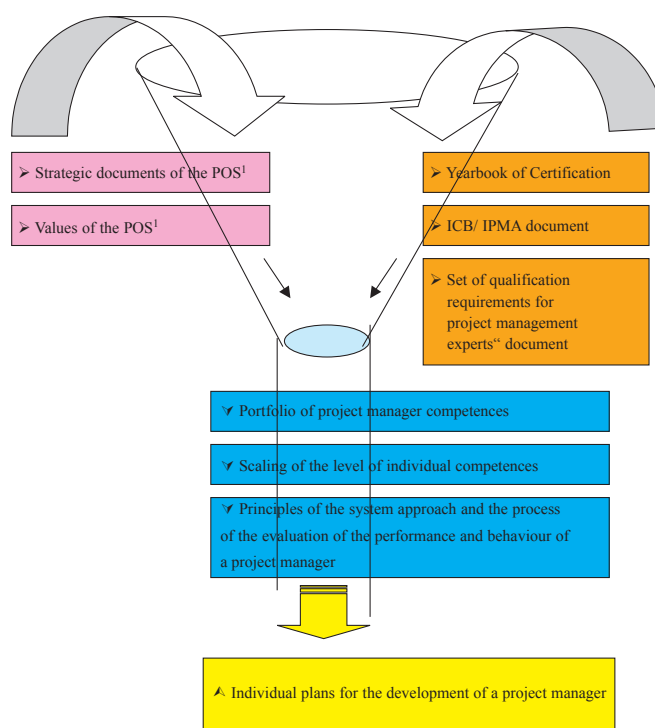


Fig. 3 Draft model of the creation of project manager competences

This model respects the adopted tailor-made approach (Rothwell and Lindholm [7]) and implicitly includes the required behaviour of a project manager.

All the inputs are connected acquired theoretical knowledge from project management (certification system) and communication management (competences of a project manager).

These documents can serve for the preparation of a competence portfolio that can be further developed for levels of the individual competences of a project manager (scaling). It is important for of the assessment of the present and desired/future states.

On the basis of the proposed model of the creation of project manager competences and the three inputs from primary and secondary surveys (interviews with certified project managers, a questionnaire on "Communication interface of involved parties in the preparation and execution of change" and the content analysis of company documents), prepared the final portfolio of project manager competences, was prepared Table 1.

For the eight managerial competences the scaling of the individual competences at five levels A to E were created (from positive to negative behaviour).

Table 1 *Final portfolio of project manager competences*

Field of competence	Managerial competence	Description / Characteristics
Customer orientation	Customer orientation	The project manager proving this competence increases the value of the company on the basis of its understanding of customers and market on which it operates, and on the basis of the quality of the services provided by him. He knows his customers, competitors, suppliers and regulatory environment and knows how to approach them.
Enterprise	Orientation to target	The project manager proving this competence thinks in the context of corporate, long-term operation of the company. The strategic thinking may be applied to a function or a process, product and market, a part of the company or the whole company. This competence requires the ability engage in complex thinking, including analytical and conceptual skills.
	Change management	The project manager proving this competence endeavours through change to improve and develop the company with the involvement of people, with the aim of transforming the company in accordance with new challenges.
Leadership	Behaviour in accordance with corporate values	The project manager with this competence proves the compliance of words and acts, which is manifested by the consistency between what he says and what he does. He is identified and fights for the maintenance of corporate values and is able to take risks in their defence.
	Development of team members	The project manager proving this competence wishes to develop the abilities of others. He is highly motivated by the possibility of influencing the career and development of others.
	Team management	The project manager proving this competence is able to concentrate, guide and build effective teams. This competence includes the ability to manage cross-functional, cross-corporate or project teams, as well as teams in the line structure.
Effectiveness	Cooperation	The project manager proving this competence is motivated to work with colleagues, partners and others on the fulfilment of corporate objectives.
	Development orientation	The project manager proving this competence participates in the achievement of expected results and continuous improvement.

4. CONCLUSION

The successful application of project management in building organisations is perceived mostly from the viewpoint of financial resources, time, products used of computer technology, etc. The survey conducted among people who are involved in project management identified the short-term application of project management. The low experience of project managers does not allow for the full development of important aspects of successful project management, such as the selection and preparation of

team members, the development of cooperation, communication schemes, means of decision-making, acceptance of personal differences, prevention and settlement of conflicts, handling of objections, etc.

The processing of the draft model of the creation of project manager competences allows to orient oneself in the preparation and development of project managers in a project-oriented company.

A project manager creates synergy. He is a catalyst that finds that outputs resulting from the joint effort of interested parties in the project will be something more than a set of the individual parts.

Customer orientation

A	Building of sustainable partner relations with customers: <ul style="list-style-type: none"> • He establishes strong and durable relations with customers. He builds partnerships. • He adapts the processes on the basis of the development of customer relations. • He identifies opportunities for and threats to customer segments.
B	Forecasting customers and market needs: <ul style="list-style-type: none"> • He has a wide understanding of the meaning of the different types of customers. • He predicts the development of customer needs and the way in which he may proceed. • He identifies the potential for any change in customer needs.
C	Understanding of the customers and market: <ul style="list-style-type: none"> • He is able to describe the characteristics of the market (product, customer, suppliers, competitors,...). • He satisfies the expressed needs of a customer. • He knows the characteristics of a typical customer and his priorities.
D	Orientation to own targets: <ul style="list-style-type: none"> • He orients himself to his own ability to deliver a service to the customer.
E	Negative behaviour: <ul style="list-style-type: none"> • He ignores or is not aware of the customers.

Change management

A	He creates a culture of change: <ul style="list-style-type: none"> • He executes a long-term adaptation on the basis of actual needs. • He openly supports and appreciates changes. • He proposes and implements steps in favour of the enforcement of the required change.
B	He mobilizes the team members to change and innovation: <ul style="list-style-type: none"> • He motivates the others to search for opportunities for innovation. • He influences the team members for the implementation of change. • He is open to receiving suggested tactics for situations or for the reactions of the others.
C	Definition of opportunities for change and innovation: <ul style="list-style-type: none"> • He identifies specific areas for positive change. • He sets clear objectives in the process of a change. • He applies principles and procedures in a flexible way.
D	Understanding and acceptance of change: <ul style="list-style-type: none"> • He shows a positive understanding of change. • He sees situations objectively.
E	Negative behaviour: <ul style="list-style-type: none"> • He actively resists any change. • He sticks to initial approaches and opinions in spite of problems.

REFERENCES:

Orientation to targets

A	Development of strategies: <ul style="list-style-type: none"> • He develops a corporate vision or strategy. • He draws up corporate plans. • He connects his vision to the action plan.
B	He contributes to the strategy beyond his field of operation: <ul style="list-style-type: none"> • He contributes to the planning process. • He makes an effort, even in case of continuous problems. • He achieves high objectives.
C	Definition of his own strategy in a wider context: <ul style="list-style-type: none"> • He thinks about actual issues. • He understands the defined priorities. • He develops concrete considerations of any cost analysis and return on investment.
D	Understanding of his own field of operation: <ul style="list-style-type: none"> • He improves his performance and quality. • He creates his own measures of effectiveness.
E	Negative behaviour: <ul style="list-style-type: none"> • He does not think comprehensively. • He only does what is necessary.

Behaviour compliant with corporate values

A	He builds the organizational structure of a project in compliance with the corporate values: <ul style="list-style-type: none"> • He manages and co-ordinates the project in accordance with the corporate values. • He supports people who audaciously enforce the values. • He motivates people to the creation of a pleasant working environment.
B	He is a model of behaviour compliant with corporate values: <ul style="list-style-type: none"> • He is a model of behaviour for the others. • He encourages the others to behave in compliance with corporate values.
C	Conduct in compliance with values: <ul style="list-style-type: none"> • His conduct is fully compliant with corporate values.
D	Understanding and acceptance of corporate values: <ul style="list-style-type: none"> • He understands the corporate values and managing principles and their importance for the everyday activities of the company.
E	Negative behaviour: <ul style="list-style-type: none"> • He breaches obligations in his favour.

Development of team members

A	Creation of opportunities for career development: <ul style="list-style-type: none"> • He systematically prepares a personal development plan. • He searches for personal development opportunities. • He enforces individual career management with the aim of building the firm.
B	He systematically collects inputs for the individual development by specifying the development needs: <ul style="list-style-type: none"> • He creates opportunities for learning. • He provides support for individual development. • He co-determines individual development needs.
C	He provides feedback for behaviour and sets development objectives: <ul style="list-style-type: none"> • He encourages open discussion of development needs. • He recognizes and appreciates personal development.
D	He provides feedback for behaviour without active support: <ul style="list-style-type: none"> • He tells team members what they do wrong; he does not support their development. • He only uses the technique of example: “Do it like I do”.
E	Negative behaviour: <ul style="list-style-type: none"> • He does not support and is not interested in the development of others.

Team management

A	He builds a culture based on high performance: <ul style="list-style-type: none"> • He builds high-performance teams. • He removes barriers or provides sources for the advancement of the team. • He attracts and builds strong leaders (personalities).
B	He involves and empowers team members in a solution: <ul style="list-style-type: none"> • He creates a sense of responsibility in the team. • He assumes personal risk when delegating important responsibilities to team members. • He appreciates and recognizes the initiative of team members.
C	He involves the team in the solution of tasks: <ul style="list-style-type: none"> • He welcomes opinions in the formulation of decisions. • He encourages the open expression of ideas of what should be done on the team. • He allocates responsibilities on the basis of the individual abilities of team members.
D	He explains what and why something should be done: <ul style="list-style-type: none"> • He determines the standards and performance objectives. • He shares information proactively, without being invited to do so.
E	Negative behaviour: <ul style="list-style-type: none"> • He does not assign tasks. He does not co-ordinate the work.

Cooperation

A	He builds partnerships: <ul style="list-style-type: none"> • He also builds partner relations also among team members. • He facilitates the sharing of best practices.
B	He actively uses teamwork: <ul style="list-style-type: none"> • He sees advantages in teamwork. • He endeavours to understand and respect different interests and feelings of the others • He makes compromises in favour of the larger good without losing the target from his sight.
C	He actively supports other interested parties: <ul style="list-style-type: none"> • He actively supports the interested parties without being requested. • He understands both emotions and the explicit content of information.
D	He supports on request: <ul style="list-style-type: none"> • He is used to working independently. • He helps when asked for help. • He is not proactive when co-operating.
E	Negative behaviour: <ul style="list-style-type: none"> • He actively refuses and hinders any cooperation.

Development orientation

A	Self-confidence: <ul style="list-style-type: none"> • He tackles extremely difficult situations. • He reacts constructively. • He comes up with new solutions or methods.
B	He works with motivation <ul style="list-style-type: none"> • He assumes higher responsibility. • He learns from errors. • He identifies possibilities for the motivation of team members.
C	He works to do things better <ul style="list-style-type: none"> • He wants to do things better. • He applies the knowledge (in the practice).
D	He only works on assigned tasks <ul style="list-style-type: none"> • He works to fulfil the task correctly. • He uses fundamental principles or “horse-sense”.
E	Negative behaviour <ul style="list-style-type: none"> • He does not care to do his work well.



SLOVAK JOURNAL OF CIVIL ENGINEERING

2008/1 PAGES 29 – 36

REFERENCES

- [1] **DUNCAN, W. R. (1996)** *A Guide to the Project Management Body of knowledge*. PMI Standards Committee, Four Boulevard, Newtown Square, USA, ISBN 1-880410-12-5
- [2] **DUNCAN, W. R. (1998)** *Project Manager Competence and Competencies*. Project Management Partners, ISBN 1-880650-13-3
- [3] **International Project Management Association. (2001)** Knoepfel, H, Pannenbäcker, K., Caupin, G., Seabury, C.: *Certification Yearbook*
- [4] **KALINOVÁ, G. (2005)** *Competencies for project managers*. In: Proceeding of 7th specialized conference with international participation. VUT FS Brno, pp. 238-242, ISBN 80- 214-2832-5
- [5] **PINTO, J. K. (2001)** *Project Management : The Future*. New York, Wiley, ISBN 1-394- 33422-3
- [6] **ROTHWELL, W. J., LINDHOLM, J. E. (1999)** *Competency identification, modelling and assessment in the USA*. In: International Journal of Training and Development, Vol. 3, No. 2, ISSN 0-04-054091-c
- [7] **McCLELLAND, D.C.(1992)** *Testing for Competence Rather than for Intelligence*. In: International Journal of Training and Development, Vol. 22, No. 8, ISSN 0-07-00807-0
- [8] **www.ipma.ch**
- [9] **www.iso 10006.com**
- [10] **www.pmi.org**
- [11] **www.sppr.sk**
- [12] **www.aipm.com.au**

