UDC 65.005.8:005.1

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LIFE LONG PERSPECTIVE IN DEVELOPMENT OF A PROJECT MANAGER

Abstract. The life cycle of a project manager is usually described by the roles played in a project and often framed within one of the leading professional project management (PM) organizations. Nevertheless, the development of project managers is by nature many-sided and it might deviate from linear progressive education and career. The life-long perspective is an important aspect of project manager's development, as its dynamics often lasts till the very end of the professional life cycle. Project manager's development can be described in such directions as academic, professional, and personal. In this paper, the author highlights the significant role of life-long learning and those aspects of education, development, and experience, which are relevant for life-long learning in project management; as well as the need to empower such learning which can be addressed though the available PM practices.

Keywords: life-long learning; project manager's development; career path; knowledge and skills

Problem description

One of the roles of education is to provide people with knowledge and skills. The process of acquiring knowledge and skills becomes more and more versatile and deviates from linear progressive education and career. A continuum of learning throughout life has become a focus of European Commission with the recognition that everyone should be able to follow open learning pathways of their own choice.

In case of project manager's learning and carrier we can often observe a multidirectional development which is uneven and dynamic. Besides that project managers faces the challenge not only to get necessary skills for a specific career path, but also to make a decision, whether it worth to get a certification within one of the few global project management (PM) associations. There are always at least two certification systems to choose from; for example IPMA, PMI and APM are wide spread in Europe, IPMA and PMI in the post-Soviet countries.

Thus project managers need to understand where to focus their development and in which of possible directions such as academic, professional, and personal. These directions are represented by diverse standards and frameworks, which have to be considered to facilitate and ensure life-long learning.

State of research and publications

The World Declaration on Higher Education for the Twenty-First Century states that "the core missions and values of higher education (…) are to provide opportunities for higher learning and for learning throughout life, giving to learners an optimal range of choice and flexibility of entry and exit points within the system" (World Declaration on Higher Education for the Twenty-First Century, 1998). This is highly relevant for the sphere of project management, where individuals acquire knowledge and experience through a series of projects, fulfilling different roles. They might spend time in the design function, time as lead designers on a project, and time as project managers, at the same time moving through a series of varied and wide-range jobs not only upwards but sideways (Huemann M., Turner R., Keegan A., 2007).

In project management sphere the development of project managers is often framed within one the leading professional bodies.

The Project Management Institute (PMI) offers "The Project Manager Competency Development Framework" (PMI®, 2002, 2007) called the PMCD Framework. This document provides a framework for the definition, assessment, and development of project manager competence. It defines the key dimensions of competence and identifies those competencies that are most likely to impact project manager performance (PMI, 2007).

The International Project Management Association (IPMA®) has established competence-based approach in the form of International Competence Baseline (ICB) (IPMA Individual Competence Baseline – ICB 4, 2015), (IPMA Individual Competence Baseline – ICB 3, 2006). The ICB provides the official definition of the competences expected from project management personnel by the IPMA for certification using the universal IPMA four-level-certification system.

The Australian Institute of Project Management provides "AIPM Professional Competency Standards for Project Management". "Where an industry or organization wishes to establish project management

competency standards, these [AIPM] generic standards may be used as a foundation upon which the industry/sector can develop its own specific standards which would reflect the industry/sector context" (AIPM Professional Competency Standards for Project Management, 2008) .

In the ICB and "AIPM Professional Competency Standards for Project Management", competencies provide description of a project manager's roles.

Many project-oriented organizations require potential project management personnel to seek certification (Huemann M., Turner R., Keegan A., 2007) within one of the mentioned above professional bodies. Nevertheless, Turner and Müller report that "certification does have a positive effect on successful performance in project but only on highly complex projects, which are not the kinds of projects recently graduated students are likely to lead" (Turner, 2007).

Bredillet argues that it is no longer adequate to base professional development just on transmitting existing knowledge and developing a predefined range of competencies on the basis that one problem equals one solution. Instead, practitioners need to be able to construct and reconstruct the required knowledge and continually evolve their practice, thereby leading to a systemic and dynamic development of their competencies (Bredillet, 2007). Similarly, Savelsbergh et al. state that project managers continuously move from project to project, and it is of particular importance that they shape their own career path in a project-based career (Savelsbergh, C.M.J.H., Liselore A. Havermans, Storm P., 2016).

The life cycle of a project manager is usually described by the roles played in a project. For example, Huemann, Turner and Keegan offer the seven step career model (Huemann M., Turner R., Keegan A., 2007) as a representation of the life cycle for project managers in many high-technology companies (see fig.1).

Skills required for a new start (Stage 1, fig.1) and becoming a team member (Stage 2, fig.1) can be acquired, for example, through academic education. When an individual chooses a project management carrier in the young age, he or she is more likely to undertake academic education that provides bachelor or master degree with specialization in project management.

The academic side of education can be represented by the European Qualification Framework (EQF). It is a standard that should been taken into consideration for the life-long learning perspective of an individual. Individuals and employers are able to use the EQF in order to better understand and compare the qualification levels of different countries and their education and training systems. The core of the framework consists of eight qualification levels that are described by learning outcomes (knowledge, skills and competence). In the context of EQF, competence is described in terms of responsibility and autonomy (European Commision, n.d.). In general, the EQF recommendations aim to promote lifelong learning and increase employability of workers and learners. Learning outcomes defined by the EQF frame educational programs and its contexts, but the scope and the meanings of competences in the EQF differs from those used, for example, in project management standards. The EQF is not intended to be used for the classification of individual competences (European Commision, б.д.).

Another competencies related to the project manager's development are industry specific competencies, business competencies and – in case of international projects – cultural and ethical awareness (Huemann M., Turner R., Keegan A., 2007).

Stage	1	2	3	4	5	6	7
Name	New start	Team member	Team leader	Junior project manager	Project manager	Senior project manager	Program director
Responsibility			Single function	Several functions	Several companies	Complex projects	Many complex projects
IPMA certification			Level D		Level C	Level B	Level A
PMI certification				PMP			
Education				Certificate	Diploma	MBA, MPM MSc (PM)	

Figure 1 – Seven-step career model (Huemann M., Turner R., Keegan A., 2007)

Innovative and collaborative project structures and increasing prevalence of contract work provide both challenges and opportunities for new career pathways in many industries (Crawford, L., French, E., Lloyd-Walker, B., 2013, S. 1175). Competencies defined according to the industry specific can be, for example, in the following spheres: engineering, construction, information technology, telecommunication technology, organizational change, etc. There are corresponding standards that create another framework for life-long learning. For example, in engineering it may be such standards as NERC (The North American Electric Reliability Corporation), FERC (Federal Energy Regulatory Commission), ANSI (The American National Standards Institute), IEEE (The Institute of Electrical and Electronics Engineers), NEC (The New Engineering Contract), etc.

The purpose of the article

Due to projects' complexity and versatility, the set of competencies required for a project manager is composed not only from specific PM competencies, but it also includes technical competencies, business competencies and cultural and ethical awareness. Acquiring PM competencies, keeping them state-of-the-art, becomes an issue, even for those project management personnel who belongs to a project-oriented organization (Huemann M., Turner R., Keegan A., 2007). The hopes for the benchmarking are not justified since it is a local tool failing to provide effective schemes for convergence (combining knowledge) of different domains, forming new, more effective systems of knowledge (Bushuyev, S.D., Bushuyev, D.A., Rogozina V.B., Mikhieieva, O. V., 2015). The task of this article is to extend the approach to the PM career management with the life-long perspective framed by different aspects of development, education, and experience.

Presentation of the main research material

During an individual's life cycle, three basic categories of purposeful learning activity – notably formal, non-formal and informal learning – can take place at different points of the life cycle. There are two main cycles, which have to be considered in respect of the professional career: student and professional.

For example, in case of an IT project manager, formal learning forms and outcomes consist at least of the sets of academic, IT, and PM elements. There is a linear development in each separate case of learning path. The student life cycle would include bachelor and master degree. According to the EQF, it refers to the levels 6 and 7 (European Commision, n.d.). It can be followed by a doctoral degree (EQF level 8). The professional development, for example in programming,

would lead from the qualification of programmer assistant to programmer senior (IT Job Families, 2016). In PM, an individual grows from participating in projects to directing projects. One may acquire qualifications according, for instance, to PMI certification, starting from Certified Associate in Project Management (CAPM) and developing to Program Management Professional (PgMP).

On the other hand, experience and personal development can be enriched through a foreign language course, internship, living abroad, etc. Trainings, conferences, seminars, and workshops are another modern and well-spread way to keep oneself updated and get new knowledge, and skills. Becoming a consultant is another possible path for project managers.

Such development becomes more versatile and can take place at different stages of an individual's life cycle. Thus a learning path of project managers deviates from linear progressive pattern and can be represented more accurately by a learning curve (see fig.2) that reflects acquiring of knowledge, skills, and experience unevenly and via different learning forms. The volatile pattern of the learning curve also means that intensity of learning differs from time to time. Nevertheless, its ascending pattern shows that in average the amount of acquired knowledge and experience grows.
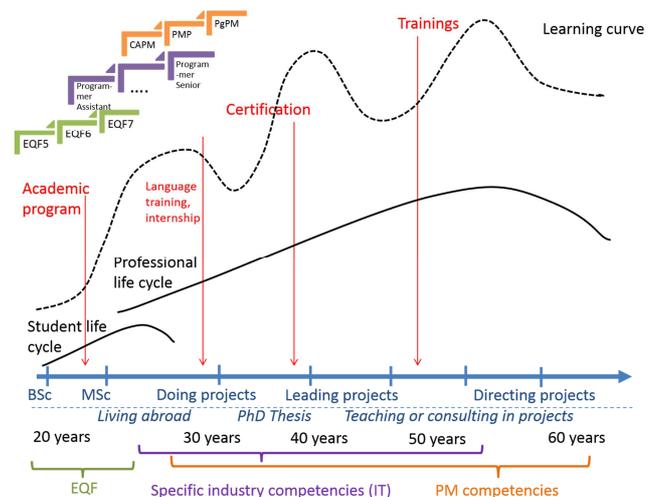

Figure 2 – Competency acquisition within an individual's life cycle [own source]

Scholars and practitioners start using career models and competency development frameworks, but it is a question which incentives are available to rise efforts contributed into the balanced and diverse (specifically for project management sphere) life-long learning. While the field of an individual's competencies gets wider, in general, the capacity and efforts in terms of explicit learning tend to decrease (see fig. 3).
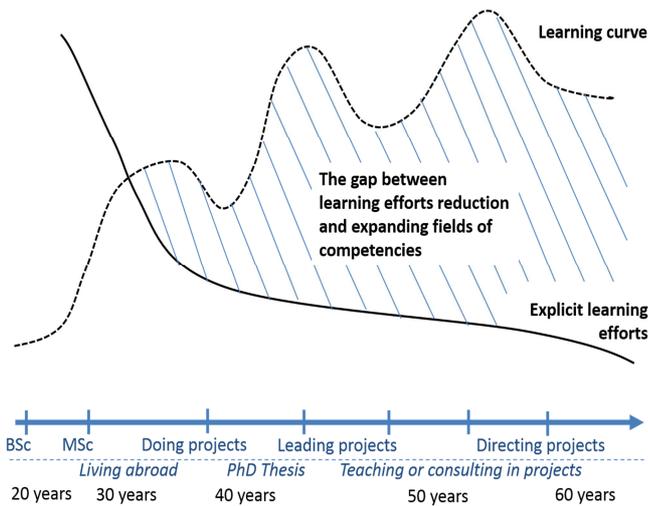
Approaches and tools for life-long learning in project management, which take into account industry specifics and informal and non formal learning activities, should be studied and developed further in respect with this trend.

Figure 3 – The gap between explicit learning efforts and learning curve [own source]

Conclusions

Project managers should be able to embed different aspect of education, experience, and learning in their development, creating a purposeful learning and career path. Although the process of project managers' learning can be represented as an uneven ascending curve, there is a decreasing tendency in the learning efforts of an individual. Further studies on the approaches and tools for project manager's development are required to enable and empower practitioners to manage their own life-long development in project management. These approaches and tools have to ensure the possibility to combine and bridge knowledge and skills acquired from different domains and learning directions.

References

1. AIPM Professional Competency Standards for Project Management. (2008). Australian Institute of Project Management. Retrieved from https://www.aipm.com.au/

2. Bredillet, C. (2007). Projects: Learning at the edge of organization. The Wiley Guide to Project Organization and Project Management Competencies, 168-192.

3. Bushuyev, S.D., Bushuyev, D.A., Rogozina V.B., Mikhieieva, O.V. (2015). Convergence of Knowledge in Project Management. The 8th IEEE International Conference on Intelligent Data Acquisition and Advanced Computing Systems: Technology and Applications.

4. Crawford, L., French, E., Lloyd-Walker, B. (2013). From outpost to outback: project career paths in Australia. International Journal of Project Management, 31, 1175-1187.

5. European Commision. (б.д.). Descriptors defining levels in the European Qualifications Framework (EQF). Retrieved from https://ec.europa.eu/ploteus/en/content/descriptors-page

6. Huemann M., Turner R., Keegan A. (2007). Managing Human Resources in the Project-Oriented Company. The Wiley Guide to Project Organization and Project Management Competencies. The Wiley Guide to Project Organization and Project Management Competencies, 117-142.

7. Huemann, M., Turner, R., Keegan, A. (2004). Managing human resources in the project-oriented company. The Wiley Guide to Managing Projects, 1061-1086.

8. IPMA Individual Competence Baseline – ICB 3. (2006). IPMA. Retrieved from www.ipma.ch

9. IPMA Individual Competence Baseline – ICB 4. (2015). IPMA. Retrieved from www.ipma.ch.

10. IT Job Families. (10 March 2016 г.). Retrieved from http://hr.ucf.edu: http://hr.ucf.edu/files/IT_Job_Codes_Titles.pdf

11. Knapper, C., Cropley A.J. (2000). Lifelong learning in higher education. London: Kogan Page.

12. McClelland, G. (1973). Testing for competence rather than for intelligence. American Psychologist. Retrieved from http://www.servicelearning.msu.edu/upload/2.8.pdf

13. MCEECDYA. (2010). The Australian Blueprint for Career Development. Canberra: Miles Morgan Australia, Commonwealth of Australia.

14. PMI. (2007). Project Manager Competency Development Framework (2nd Edition). Project Management Institute.

15. Savelsbergh, C.M.J.H., Liselore A. Havermans, Storm, P. (2016). Development paths of project managers: What and how do project managers learn from their experiences? International Journal of Project Management, 34, 559-569.

16. World Declaration on Higher Education for the Twenty-First Century. (1998). Retrieved from http://www.unesco.org/education/educprog/wche/declaration_eng.htm

17. Kostyrko, T.N. (2011). Univesities of Ukraine: join to the direct of free access. Vistnyk ONU, Vol.16, 1/2 (5/6), 283–289.

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НАВЧАННЯ ВПРОДОВЖ ЖИТТЯ З ТОЧКИ ЗОРУ РОЗВИТКУ ПРОЕКТНОГО МЕНЕДЖЕРА

Анотація. *Життєвий цикл проектного менеджера зазвичай характеризується ролями, що виконуються в проекті, а також нерідко у межах стандартів провідних асоціацій управління проектами (УП). Проте, необхідно зазначити, що розвиток проектного менеджера за природою є різнобічним і таким, що відхиляється від лінійного послідовного навчання та кар'єри. Навчання впродовж життя – це важливий аспект ровзитку проектного менеджера, оскільки цей розвиток досить часто залишається динамічним до кінця професійного життєвого циклу. Розвиток проектного менеджера може бути описаний у таких напрямах, як академічний, професійний та особистий. У даній статті автор підкреслює важливість навчання впродовж життя та таких аспектів навчання, розвитку та досвіду, що мають значення для навчання впродовж життя у сфері УП; а також необхідність стимулювання такого розвитку за рахунок доступних УП підходів.*

Ключові слова: навчання впродовж життя; розвиток проектного менеджера; кар'єрний шлях; знання та вміння

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ОБУЧЕНИЕ В ТЕЧЕНИЕ ВСЕЙ ЖИЗНИ С ТОЧКИ ЗРЕНИЯ РАЗВИТИЯ ПРОЕКТНОГО МЕНЕДЖЕРА

Аннотация. *Жизненный цикл проектного менеджера обычно описывается посредством ролей, которые выполняются в проекте, и часто в рамках одной из ведущих профессиональных ассоциаций управления проектами (УП). Однако, развитие проектного менеджера по своей природе является многосторонним, и оно может отклоняться от прямолинейного последовательного образования и карьеры. Обучение в течение всей жизни – это важный аспект в развитии проектного менеджера, поскольку зачастую это развитие динамично до самого конца жизненного цикла. Развитие проектного менеджера можно описать в рамках таких направлений, как академическое, профессиональное и личное. В данной статье автор подчеркивает значимость обучения в течение всей жизни в сфере управления проектами, а также необходимость побуждать к такому развитию с помощью доступных УП подходов.*

Ключевые слова: обучение в течение всей жизни; развитие проектного менеджера; карьерный путь; знания; навыки и умения

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Link to publication

APA   *Mikhieieva, O.V. (2016). Life-long perspective in development of a project manager. Management of development of complex systems, 28, 6 – 10.*

ГОСТ   *Міхєєва О.В. Навчання впродовж життя з точки зору розвитку проектного менеджера [Текст] / О.В. Міхєєва // Управління розвитком складних систем. – 2016. – № 28. – С. 6 – 10.*