Construction Maeconomics Conference 2015

Managerial competencies

Klára Šimonová\*1

1 Czech Technical University in Prague, Faculty of Civil Engineering, Thákurova 7, Praha 6 – Dejvice, 166 29, Czech Republic, klara.simonova@cvut.cz

Abstract

The paper focuses on competencies of managers required for project success, for effective teamwork, for managing changes in organizations, and examines associations of competencies with knowledge. The paper aims to provide a compendium of those competencies that are currently perceived as fundamental beyond the traditional Fayol´s planning – organizing – leading - controlling – coordinating. One chapter addresses problems connected to employees, members of teams, who work under alternative (or flexible) work schedules, too. Methods used in this paper are based on literature review. The paper also provides selected recommendations for organizations in civil engineering industry in order not to omit those competencies that, according to research, contribute to required performance.

Keywords

Management; competencies; teamwork

Introduction details

There has been a long search for the universal qualities of an ideal manager in management theory, however, every attempt to classify a feature or nature inevitably leads to certain simplification and even reduction of exception occurrence. During the last eighty years management theory tried to find the right mixture of characteristic, attributes, behavior and competencies of the right leaders that would be applicable in any situation or project. However, the research in this article attempts to show such a simplification is hardly useful. Hence the aim of this paper is to provide an overview of those competencies that are, according to current state of knowledge, believed to contribute to project success and required performance the most.

Throughout the development of management theory, several theories emerged that still are integral components of every management textbook. First management approaches did not reflect the manager as a personality but rather as a professional who organizes and plans the work of others through focus on discipline, time schedules and specialization of operations. Then, in the time around Second World War, new schools came up with the focus on person´s social needs and his or her personality. Only the last decades, beginning with Drucker, have the manager in the center of interest. One of the most widespread textbooks on management in the Czech environment by Veber et al. [12, p. 37], defines competencies as a combination of expertise and behavior, while expertise comprises of both education and experience and behavior includes the acting both in the organization and outside of it.

Core competencies are nowadays perceived as a tool for maintenance and development of competitive advantage of a company, and human resources management should focus on collective learning and enhancement of the core competencies it possesses. The idea came from McClelland´s contribution to human resources management in the 1970´s. Competencies are now widely accepted and attempted to measure in terms of behavior, knowledge, skills, abilities and other measurable characteristics. However, the clusters of competencies differs from need to need, and it can be stated that while for example the International Project Management Association divides competencies to technical, behavioral and contextual, because it matches its needs, other authors devoted rather to human resources development divide competencies between those that can be found either in the organization as such or in its employees. The representatives of the latter are for example Cardy and Selvarajan [3], who classify competencies as employee-level and organizational-level, but also stress out that organizational competencies are anchored in employees. They also divide the employee-level competencies between technical and behavioral competences. Technical competences mean skills and knowledge relate to the job the employee performs and behavioral competences relate more to the personality of the employee, his or her personal characteristics. Moreover, recent studies directly relate competencies to knowledge, either as knowledge formation and learning, knowledge governance etc. It can be summed up that a competency to gain knowledge, to share it, to build a competitive advantage on it, it is also a distinguishable competency, and in the time of developing technologies, intelligent society, organizational learning, however we call it, knowledge is one of the most important key factors for success, see e.g. the research by Pemsel et al. or Ahern et al. [10; 1].

There is always a limitation to a research that attempts to identify one or more core qualities of a manager that would lead to his or her success in his or her work, and that is, apparently, the lack of research on the other side of the problem, what is clearly the opposite, what are the qualities of managers who failed to succeed.

For there is yet another reason in technical fields to stay reluctant to different leadership theories, and that is the rather intangible, hard-to-measure nature of the discipline. The other approach, represented e.g. by Wateridge [13], suggested to start at the opposite side, i. e. first to define what will be considered as success of the project in question, and only then to derive the criteria of success, then to derive the right tools to achieve success, including the right leadership style.

The relatively new theory, called the competence school, understands competence as a unique mixture of knowledge, skills and personal characteristics, that are a combination of fifteen qualities of managers connected to leadership, and these fifteen qualities can be included into one of three clusters: intellectual competencies, emotional competencies and managerial competencies. The representatives of this theory are Dulewicz and Higgs [6] and the clusters and their division is illustrated below in table 1 as used in the research of Müller and Turner [9].

Methodology details

The paper is based on literature review and uses mainly the current, or most up-to-date scientific articles that reflect current situation, and if possible, reflect current situation in civil engineering industry, or their results and recommendations are easily applicable in the civil engineering.

Results details

In this chapter, the current discussion of managerial competencies is reflected, since it has become a popular topic in management and human resources management as well concerning training and development of staff and even selection and retention of staff. This chapter therefore focuses on competencies in various contexts – competencies that are required from managers to perform the project successfully and competencies that are believed to lead to high performance, what leadership style (a specific kind of competency) should be adopted to expect project success, what are the competencies that are likely to lead to successful change in an organization, and finally, the chapter also focuses on a competency connected to ability to organizing, planning and communicating in a team where its members work under flexible work regimes.

Competency profile for successful project

Müller and Turner [9, p. 437] conducted a research in order to identify leadership profiles of successful managers. They combine behavioral, temperamental, emotional and mental qualities of leaders and derived particular leadership styles. Moreover, they added another question, and they match different competencies to different types of projects. They argue that successful leadership profiles cannot be easily matched to results of personality tests (such as Myers-Briggs Type Indicator or Belbin´s role test) or to cultural environment, they rather suggest that leadership profiles should be matched to project content or project type, i.e. different in financial industry and at the police. They also highlight the fact that the higher level in the hierarchy of the organization require more emotional competence (higher competence in motivation, conscientiousness, self-awareness or sensitivity), and vice versa, line managers use more of their managerial and intellectual competencies.

Müller and Turner [9, p. 438 - 444] therefore categorized projects by application area (Organizational change, Information and telecommunication technology, and Engineering and construction), complexity, strategic importance and contract type. For Civil engineering, the question of project type by application area would be highly interesting, because it would mean that managers operating in construction industry must show other qualities and competencies than managers in different industries, however, the research has found no significant differences in leadership competencies in project type by application area. Detailed results can be found in table 1. The research used Leadership Development Questionnaire and ANOVA analysis for assessment differences for project type; ANOVA showed no variances in competency strengths. On the other hand, their research shows high correlation of the complexity of project with three competencies: vision, influence and motivation – the more complex project, the more their managers display these three competencies.

Table 1: Strength of competencies of successful project managers (source: Müller, Turner et al., 2010, p. 444)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Competency cluster | Competency | Engineering and construction | Information and telecommunication technology | Organizational change |
| Intellectual | Critical thinking | High | High | High |
| Vision | Low | Medium | High |
| Strategic perspectives | Medium | High | High |
| Managerial | Managing resources | Medium | High | High |
| Communication | Medium | High | High |
| Empowering | Low | High | High |
| Developing | High | High | Medium |
| Achieving | Medium | High | Medium |
| Emotional | Self-awareness | Medium | High | High |
| Emotional resilience | Low | High | High |
| Intuitiveness | Low | Medium | Medium |
| Sensitivity | Medium | High | High |
| Influence | High | High | High |
| Motivation | High | High | High |
| Conscientiousness | High | High | High |

The above mentioned research suggests that out of the management theory, the engaging profile of successful leader should be employed as the most likely to work out. However, this does not fully imply to construction and engineering. The research also suggests that personal competencies should be taken into account when choosing a leader to a project, and that training of managers should not develop only technical skills, but leadership competencies above all.

Müller and Turner´s [8, pp. 26 - 27] similar research conducted in 2007 tried to generalize some results – in particular, that emotional competencies are critical to project success, while managerial and intellectual competencies do not contribute to project success to similar extent. Namely conscientiousness, sensitivity and communication contribute to project success, while the competency of strategic perspective is even negatively correlated to project success. Furthermore, they state that particularly for construction projects, sensitivity and conscientiousness are correlated to project success, while vision is correlated negatively – and they also explain that it is not that engineering managers should lack vision, but rather that it is the responsibility of other people to match the strategy of the organization to the project outcome, because the project manager should stay concerned about the project results and keep the thoroughness.

Required competencies for high performance

Lee [7, p. 434] comes up with the question on competency models, that it is not sufficient to cluster and then divide competencies, but he states that it is necessary to identify the most critical factors that would likely lead to success. He argues that it is far more helpful not to list all the competencies that may have even a small impact on success, but to reduce the competencies into a compact set of critical factors, because he believes that all the competencies are not equally important. He then assumes that this would be supportive especially to those companies that engage in education, training and development of their employees, because human resources development can focus on training of smaller number of required competencies and consequently, the same effort can lead to better result. Though Lee investigated the Taiwanese research and development technical professionals, the self-evaluation technique of respondents participating in the research suggests that every company or industry can make its own list of competencies required for high performance. He suggests focusing on development of high performers´ competencies even – and especially – in times when budgets are tight, while improving the core competencies can be left for times when both money and time is available. The importance of competencies is illustrated by table 2. For the purpose of his research, Lee used the competencies according to Spencer and Spencer.

Table 2: Competencies by importance (source: Lee, 2010, p. 437)

|  |  |
| --- | --- |
| Importance | Competency |
| High-performers´ competencies | Interpersonal understanding, Customer service orientation |
| Favorable competencies | Self-confidence, Interpersonal understanding, Concern for order, Teamwork and Cooperation\*, Customer service orientation |
| Core competencies | Conceptual thinking, Self-confidence, Concern for order, Information-seeking, Teamwork and Cooperation, Customer service orientation |

\*Teamwork and cooperation is here described as a genuine intention to work cooperatively with others.

Relation of leadership style, teamwork and project performance

Yang et al. [14, p. 259] comprehend all the leadership theories that developed until now and point out that the traditional division into transactional and transformational leadership style is not sufficient any more. The transactional leadership style, which is, in a nutshell, a reward for performance, leads only to average performance. Therefore it was believed that transformational leadership style, that is supposed to create challenging environment, motivates by respect, trust, vision shared and formed by leaders who provide inspiration, should be the style that is tailored for project management. However, this has proved so far as non-significant to project success.

Yang, who conducted a survey among civil engineering companies and similar organizations operating in the construction industry, has examined the correlations of leadership, teamwork and project performance. Leadership was divided between transactional and transformational; teamwork was examined in terms of communication, collaboration and cohesiveness. Project success was measured by keeping the schedule, costs, quality and stakeholder satisfaction; project complexity was assessed in terms of industry sector, total costs, typicality, team size, international involvement etc. So, Yang [14, p. 264 - 265] found out that project managers who act in not extreme pole in transactional and transformational leadership and who can contribute to improvement of team communication, collaboration and cohesiveness, are more likely to experience project success in terms of better project performance, while an unambiguous correlation between project complexity and teamwork was not proven. There is a relation between team collaboration and project success for less complex, or smaller, projects, but this does not apply for complex projects. On the other hand, large international projects require high level of team collaboration. However, for the purpose of certain generalization of the findings, it can be stated that in other words, the better team communication and collaboration is, the better outcomes can be expected. And that improving relationships among team members is likely to lead to improvement in project performance.

Competencies and managing change

Organizational changes are sometimes considered as a specific type of a project, where project management techniques and tools and attitudes can be applied, therefore project management skills and competencies can be applied for managing change, too. In the following part of the article, the words change managers and project managers can be also used as synonyms, though both change managers and project managers would argue that it is not that simple and certain rivalry exists in practice. Definitely there are some profound differences between these two types of managers, such as the extent to which it is possible to lean on theoretical background – change management is widely examined and in the center of interest of both academics and management theorists and is an indivisible part of every management textbook, while project management is rather a practical guideline for performing project success, and usually project managers´ qualifications do not include a deep knowledge of organizational change and development. Crawford et al. [5, p. 407] made the effort to review the literature and managerial guides and identified competencies similar and different to project and change managers, as illustrated in table 3.

Table 3: Competencies of project and change managers required for change management (source: Crawford et al., 2010, p. 407)

|  |  |  |
| --- | --- | --- |
|  | Project manager | Change manager |
| Similar competencies | Leadership | Leadership |
| Team development/team selection | Team development |
| Stakeholder management | Stakeholder management |
| Communication | Communication |
| Decision-making and problem-solving | Decision-making and problem-solving |
| Planning: cost, time, risk, quality, scope | Planning/Project management skills |
| Governance, Contract management, Monitoring and controlling: cost, time, risk, quality, scope |  |
| Different competencies | Organization structure | Analysis and assessment |
| Project definition | Creativity and challenge |
| Administration, project reporting and documentation | Initiative and self management |
| Transition management | Coaching skills |
| Change control | Facilitation skills |
| Closing | Presentation skills |
|  | Process design |
| Learning and development |
| Action orientation |
| Strategic thinking |
| Influencing skills |

Since there is a lot of research and evidence that successful organizational change is dependent on good management of human resources and does not matter much if brought to life by project or change managers, there still are two main trends in current project management focus: the first course claims that it should be the project manager to implement organizational change, and the second course suggests that the person in charge should be less technical or project expert and should be concerned more about behavior, that means particularly human resources, organizational development or psychology, as it is clearly and briefly stated in the research by Crawford et al. [5, p. 406]. This research focused on competencies necessary for successful implementation of change, and has several interesting outcomes: firstly, though the theory sometimes differentiates also between project and program managers, in practice it is hardly distinguishable; secondly, project managers focus on stakeholder management, they focus on planning for the project, and communication involves mainly meetings and presentation of the project, and vice versa change managers focus on engagement of stakeholders, they focus on planning to implant the change, and communication leads to management of expectations or selling the change to stakeholders. Therefore Crawford [5, p. 409] claims that project management approach is more likely to be successful in such an organization, where there is a culture of good teamwork and low resistance to change, and that changes to behavior required from employees including the way they perform their jobs should be taken into account, too. Hence Crawford [5, p. 409] developed a guide whether to entrust the change either to a project manager or a change manager, as illustrated by table 4 below.

Table 4: Guide matrix for engagement project or/and change manager (source: Crawford, 2010, p. 409)

|  |  |  |  |
| --- | --- | --- | --- |
| Supportive culture and/or leadership | weak | 3. Project manager with strong Change management skills or Project manager plus Change Manager | 4. Change manager with Project manager |
| strong | 1. Project manager with some Change management skills | 2. Project manager with strong Change management skills or Project manager plus Change Manager |
|  | low | high |
| Degree of behavioral change required |

Crawford et al. [5, p. 410] then suggest that for successful implementation of change, it is not of the utmost importance whether project or change manager was engaged, but what matters most are the competencies possessed by the person in charge.

The research of Battilana et al. [2, p. 422] gets back to the core, and that is the relationship between competencies and leadership and organizational change. They examine three particular competencies derived from contemporary literature and they try to identify the most important competence to the detail, not just naming the competencies by superficial general names. They focused on communication, engagement, and evaluating – in particular: firstly, whether leaders, who are oriented more on people, are more likely to stress all the activities connected to communication of the need for change to the staff, or in other words (or other side of the same dimension), whether leaders, who are oriented more on tasks, are less likely to put stress on the activities connected to communication of the need for change to the staff; secondly, leaders, who are oriented more on people, are more likely to stress all the activities connected to engagement and mobilization of staff, or vice versa, leaders, who are oriented more on tasks, are less likely to put stress on the activities connected to engagement and mobilization of staff; and finally, whether leaders, who are oriented more on people, are less likely to evaluate the implementation of change, while leaders, who are oriented more on tasks, are more likely to evaluate the implementation of change. Though it may seem obvious that person-oriented leadership style is favorable during organizational change, it is not as simple. The above mentioned research of Battilana et al. [2, p. 430] found out that leaders who are better at person-oriented behaviors are more likely to center on the activities connected to communication of the need for change to the staff, while the opposite was not supported; that leaders, who are oriented more on tasks, are less likely to put stress on the activities connected to engagement and mobilization of staff, while the opposite was not supported; and finally, leaders, who are oriented more on tasks, are more likely to evaluate the implementation of change, while again the opposite was not supported at all.

Competencies for teamwork under flexible work hours

The economic crisis is said to be over in the Czech Republic, and thus organizations are often in need to hire new employees and to focus on retaining the good and loyal professionals they already employ. Managers and owners of companies should concentrate especially on satisfaction of their good workers, because the rate of unemployment decreased and so it has become easier than before to leave the company and find a new job. One of the discussed tool to retain employees and contribute to their satisfaction is flexible work regime – it can mean compressed work week (usual working hours compressed into four days a week), flextime arrangement (flexible start and end with core working hours, usually 10 am – 3 pm), occasional home-office, or any other form of working hours different from the classical nine-to-five (or six, respectively) schedule respecting the legal workload of 40 hours per week. Motivating and increased job satisfaction effect is attributed to the possibility to work less hours per week, too, and this implies especially for women in general, not only to mothers with small children. However, managers keep being reluctant to launch any form of reduced work hours or flexible work regime. Their excuses keep the same arguments: it is costly, it is time-consuming to follow their attendance, it is impossible to plan meetings, it is hard to catch the worker when needed. So companies keep offering part-time vacancies only for low skilled jobs and supportive staff, such as receptionists or charladies (evidence can be found at every job portal).

So, that means that emerging competencies, or emerging need for competencies, are the ones that deal with organizing, planning, time management, communication, team building and support of team collaboration and cohesiveness – when taking the time to rearrange the work so that it suits both part-timers and workers with flexible work regimes, when consistently including these people into the team, when establishing new routines. Managers should also quit treating part-timers as peripheral workers and should consider including them in career and development and training plans – as in accordance with keeping them as normal members of the team. [4, pp. 34-35; 11, p. 4]

Conclusion and discussion

The paper brought results of various researches on competencies. We can highlight several conclusions, namely the fact that the higher level in the hierarchy of the organization require more emotional competence (higher competence in motivation, conscientiousness, self-awareness or sensitivity), and vice versa, line managers use more of their managerial and intellectual competencies. The research also suggests that personal competencies should be taken into account when choosing a leader to a project, and that training of managers should not develop only technical skills, but leadership competencies above all. Sensitivity and conscientiousness are correlated to project success. The better team communication and collaboration is, the better outcomes can be expected. For implementation of change, project management approach is more likely to be successful in such an organization, where there is a culture of good teamwork and low resistance to change, and that changes to behavior required from employees including the way they perform their jobs should be taken into account, too. There is also an emerging need for competencies that deal with organizing, planning, time management, communication, team building and support of team collaboration and cohesiveness – when taking the time to rearrange the work so that it suits both part-timers and workers with flexible work regimes, when consistently including these people into the team, when establishing new routines.

The limitation of all the research mentioned in this paper is apparently the lack of comparison – mainly comparison with projects that were not as successful as expected. The other limitation, or perhaps the suggestion for future research, is the correlation of soft skills acquired before becoming a successful project manager with the competencies trained and developed as a consequence of an identified need during the performance.

The importance of this research comes mainly from the fact that various researches focus on success of project and found correlation with soft skills and emotional competencies, namely communication. And these soft skills such as communication are hardly ever trained during university studies and usually are not part of the curricula at technical faculties. Hence these competencies should be either in the center of interest in organizations that either train graduates as new employees or future project managers, or technical faculties that can realize that technical competencies are sufficient for workers, but not for leaders. And who do they want to raise, workers or leaders?

References

1. AHERN, T., LEAVY, B., BYRNE, P. J. Knowledge formation and learning in the management of projects: A problem solving perspective. International Journal of Project Management, 32 – 2014, pp. 1423 – 1431. Doi: 10.1016/j.ijproman.2014.02.004.
2. BATTILANA, J., GILMARTIN, M., SENGUL, M., PACHE, A.-C., ALEXANDER, J. A. Leadership competencies for implementing planned organizational change. The Leadership Quarterly, 21 – 2010, pp. 422 – 438. Doi: 10.1016/j.leaqua.2010.03.007.
3. CARDY, R. L., SELVARAJAN, T. T. Competencies: Alternative frameworks for competitive advantage. Business Horizons, 49 – 2006, pp. 235 – 245. ISSN: 0007-6813.
4. CORWIN, V., LAWRENCE, T., FROST, P.J. Five Strategies Of Successful Part-Time Work. Leadership and Management in Engineering, ISSN 1532-6748, 01/2002, pp. 34 – 39.
5. CRAWFORD, L., NAHMIAS, A. H. Competencies for managing change. International Journal of Project Management, 28 – 2010, pp. 405 – 412. Doi: 10.1016/j.ijproman.2010.01.015.
6. DULEWICZ, V., HIGGS, M. J. Assessing leadership styles and organizational context. Journal of Managerial Psychology, 20 – 2005, pp. 105 – 123. ISSN: 0268-3946.
7. LEE, Y.-T. Exploring high performers´ required competencies. Expert Systems with Applications, 37 – 2010, pp. 434 – 439. Doi: 10.1016/j.eswa.2009.05.064.
8. MÜLLER, R., TURNER, R. Matching the project manager´s leadership style to project type. International Journal of Project Management, 25 – 2007, pp. 21 – 32. Doi: 10.1016/j.ijproman.2006.04.003.
9. MÜLLER, R., TURNER, R. Leadership competency profiles of successful project managers. International Journal of Project Management, 28 – 2010, pp. 437 – 448. Doi: 10.1016/j.ijproman.2009.09.003.
10. PEMSEL, S., WIEWIORA, A., MÜLLER, R., AUBRY, M., BROWN, K. A conceptualization of knowledge governance in project-based organizations. International Journal of Project Management, 32 – 2014, pp. 1411 – 1422. Doi: 10.1016/j.ijproman.2014.01.010.
11. ŠIMONOVÁ, K., ŠAFRÁNKOVÁ, J. M. Current challenges of HR management. Construction Maeconomic Conference 2014. Available online at: http://www.conference-cm.com/podklady/history5/Prispevky/paper\_Simonova\_Safrankova.pdf (accessed 30 Sept 2015)
12. VEBER, J. et al. *Management. Základy, moderní manažerské přístupy, výkonnost a prosperita*. Praha: Management Press, 2009. ISBN 978-80-7261-200-0.
13. WATERIDGE, J. H. IT projects: a basis for success. International Journal of Project Management, 13 – 1995, pp. 169 – 172. ISSN: 0263-7863.
14. YANG, L.-R., HUANG, C.-F., WU, K.-S. The association among project manager´s leadership style, teamwork and project success. International Journal of Project Management, 29 – 2011, pp. 258 – 267. Doi: 10.1016/j.ijproman.2010.03.006.