The Role of Process Owners in Czech Organizations

Martin Hrabal[1], Lukáš Trčka[2], David Tuček[3]

Abstract: *Business Process Management is a widely discussed topic both in business practice and academic environment. The research especially focuses on the technical and methodology issues of process management. This paper deals with the process ownership pillar of Business Process Management as a part of wider research topic focused on the role of human factor in the field. Process owners are traditionally assigned to manage and improve business processes. This paper therefore analyses the survey conducted in Czech organizations, both firms and non-profit organizations, using software applications supporting process management with stress put on process owners and their competencies. The goal is to find out the scope of process owners´ competencies and to test whether the association between process ownership pillar and the level of Business Process Management maturity of an organization exists. Fisher exact test was used to calculate possible association. Results do not indicate such clear association based on the research sample.*

Key words: business process management, process owner, competency management, business process management maturity

JEL Classification: M100

1 Introduction

During the development of Business Process Management (BPM) a new managerial role of a process owner was developed. Process owners are now recognized as an integral part of any organization with BPM initiative. Although terms might differ, nature of the role remains the same. Early promoters of a process orientation stressed the importance of process owners as supervisors of the end-to-end processes, and recommended what they should do. Nevertheless, the gap between what process owners should do and what they really do remains unexplored.

From the authors´ experience as process analysts, the main problem with process owners´ appointment is in the scope of managers´ work, i.e. mere renaming of traditional functional managers to process owners, and utilising Business Process Management Systems (BPMS) and repositories for modelling sub-processes within functional silos of original organization structures. In this paper, we summarize theoretical background and present results of the survey among organizations implementing BPMS in the Czech Republic. Thus, the main goal is to investigate the current state of process ownership pillar within Czech organizations in relation to BPM maturity.

---

[1] Martin Hrabal

Tomas Bata University in Zlín, Faculty of Management and Economics, Department of Industrial Engineering and Information Systems, 737 920 416, hrabal@fame.utb.cz

[2] Lukáš Trčka

Tomas Bata University in Zlín, Faculty of Management and Economics, Department of Enterprise Economics, 774 803 904, trcka@fame.utb.cz

[3] David Tuček

Tomas Bata University in Zlín, Faculty of Management and Economics, Department of Industrial Engineering and Information Systems, 733 690 583, tucek@fame.utb.cz

2 Business Process Management as a managerial discipline

BPM is often understood as a mere software application for process modelling and automation. In fact, BPM is a holistic managerial discipline that focuses on business processes as means of delivering a product valuable to a customer. BPM uses processes as means of achieving organization´s objectives through their management, improvement and governance (Jeston and Nelis, 2014). The authors agree that a business process is any set of interrelated activities which create results valuable to their customers (Hammer, 2003) or simply the way how things are done (Lehmann, 2012; Jeston and Nelis, 2014).

According to Smith and Fingar (2007), every modern management theory such as Six Sigma, Lean, Reengineering or Activity Based Costing has stressed processes and their management. In addition, Davenport (in Jeston and Nelis, 2014) refers to BPM as an amalgam of such methods. For these reasons, in this paper, BPM refers to the managerial discipline and BPMS to the Business Process Management Systems or Suites, i.e. software applications supporting BPM initiatives. As indicated, BPM is a holistic and systemic management discipline. End-to-end processes can be viewed as systems (Smith and Fingar, 2007). Activities as parts of a process with connections and loops among each other, including applications, roles, documentation etc., characterize process´s behaviour. Adding interfaces between processes an organization can conceptualize its value chain (Harmon, 2014) and thus processes become subsystems of wider systems. Similarly, Segatto, Pádua & Martinelli (2013) identified BPM as a systemic discipline.

Such systemic view enables to apply BPM in different areas, e.g.:
- production systems, like energy efficiency models for the mini-load AS/RS, for support of the design process of warehouses (Lehrer, Edl and Rosi, 2013; Lehrer et al., 2010) or logistics processes (Trebuňa, Fiľa and Pekarčíková, 2013);
- quaternary sector (Tučková, 2012) and services such as health care systems too (Tučková, Fialová and Strouhal, 2012);
- management controlling systems of companies (Zámečník, 2014).

Regarding the process measurement performance, some authors, such as Rajnoha and Chromjaková (2009) or Popesko (2010), recommend implementation of Activity Based Costing (ABC) method within the enterprise.

2.1 Business process and its characteristics

The main problem of traditional management and its functional hierarchies remains in its development of barriers among individual departments (Robson and Ullah, 1996). This fact is called functional silos, which means that employees across an organization including managers and their work are fragmented. The same applies to software applications, information, databases, resources or even business goals. (Smith and Fingar, 2007)

Under these circumstances, the processes are invisible and unmanaged (Hammer and Stanton, 1995). Thus, the idea of end-to-end process management gradually occurred in organizations and was popularized by reengineering gurus, such as Michael Hammer, James Champy or Thomas Davenport. Unfortunately, the ideas of reengineering have become unpopular as many organizations merely downsized or automated themselves. As a result, the third way of BPM has developed (Smith and Fingar, 2007) as a synthesis and extension of previous techniques and methods. The process becomes a principal building block of any organization.

2.2 The Role of a process owner

Process ownership is one of the main pillars of BPM. Early reengineering proponents Hammer and Champy (2003) with Davenport and Short (1990) stressed the importance of process owners. Process owners should be senior-level managers responsible for reengineering of a process, its perform-

ance measurement and further improvement. As processes are often cross-functional a process owner´s responsibility should be also cross-functional (Robson and Ullah, 1996). In traditional organization, these are to be represented by its structure. Individual functional departments with its managers execute particular parts of a process. The task of a process owner is therefore to optimize process as a whole through negotiation with functional managers, performance measurement and improvement projects. A matrix-like organization structure may develop as process models gradually overlap and complement organizational structure. As Nesheim (2011) states, process owners cooperate with functional managers and define the key performance indicators consistently with strategic goals. Nesheim (Ibid.) further identifies these tasks of process owners:

- Standardization of work processes regarding documentation based on best practices. Handling improvement proposals and monitoring activities.
- Competence development by establishing requirements and facilitating strategic expertise development.
- Personnel deployment and allocation of resources.

There exist several terms for a process owner such as process steward (Panagacos, 2012) or process manager (Harmon, 2014). However, the nature of the role remains the same.

Among the main tasks of process owners belong (Panagacos, 2012; Jeston and Nelis, 2014):
- Documentation of a process serving as a standard for activities execution across an organization.
- Process improvement through collecting ideas, initiating changes and leading projects.
- Ensuring smooth running of sub-processes i.e. interfaces between functional departments. Communication guidelines must be clear and documented.
- Process automation and ensuring IT support so that information can be shared and applications are compatible.
- Performance measurement in relation to strategic goals.
- Promotion of BPM within a process management which he or she owns.
- Supporting process and improvement teams during projects and audits.
- Communication with stakeholders and having feedback from improvement initiatives.

An integral part of process owner´s work is also ensuring the right resources and responsibility matrix for activities and competence development (Nesheim, 2010). The empirical research of Kohlbacher and Gruenwald (2011) confirmed that organizations which appointed process owners and delegated them with process performance measurement reached higher performance than organizations which implemented only one of these components. Process ownership also reduces organizational complexity that grows with number of workers in a process, their freedom and number of interactions (Siemieniuch a Sinclair, 2002).

According to the research of Accenture (2013), process owners are the leading force behind the BPM. Almost 75 % of respondents reported that process owners are having an official role in their organization which makes it the most frequently reported role connected with BPM. Mostly, process owners have a supporting role in BPM efforts. They act as leaders or advisors in some organizations.

Why is it important to determine clearly process owners´ competencies? According to Power (2011), misunderstanding of the role is one of the main causes of reverting from BPM initiative to functional management again. As appointed process owners, they did not actually know what to do and many of them were formerly functional managers with a short training. Another problem was their lack of accountability for continuous improvement and influence

2.3 Process of process management

The process of process management is a "meta-process" which can be an application of Drucker´s (Drucker and Maciariello, 2008) description of manager´s work: setting objectives, organizing, motivating and communicating, measurement and developing people. A process owner therefore should:

- Set goals of a process in connection with requirements of a customer and top management´s strategic goals.
- Organize flow of activities within a process, interface with other processes and departments, ensure resources and infrastructure for a process, and develop responsibility matrix and performance measurement system.
- Build a team of process analysts and professionals in process modelling and improving techniques such as Lean, Six Sigma and a process redesign. Motivate the team and communicate with process stakeholders such as involved functional managers and other relevant staff.
- Assess process performance, improvement projects and individual employees who are rewarded accordingly, and identify and develop their potential.

Harmon (2014) suggests a similar model. He identifies these activities in the process of process management:

- Setting goals and planning a process including inputs, outputs and budget.
- Organizing work through ensuring resources, defining roles and responsibilities, designing a process and its success factors.
- Communicating reasons and commitment to employees, managers, suppliers and customers.
- Monitoring process, identifying problems and ensuring corrective actions.

Jeston and Nelis (2014) point out that a senior manager should own end-to-end processes, and line managers should be responsible for individual processes within the end-to-end process. Typical tasks of a process owner are then:

- Specifying objectives and related measures.

- Communicating the objectives to employees executing the process and rewarding.
- Monitoring the progress of the targets and verifying measures.
- Motivating employees in the process, dealing with problems and encouraging improvement.

A comprehensive process of process management is also described by Franz and Kirchmer (2012) who understand BPM as a way of translating strategy into operating processes. BPM must be managed as a process in areas of a process strategy, methods and tools used delivery of BPM outputs, transformation programmes and support of other organizational parts.

As indicated above, process management is a meta-process and thus can be conceptualized through a process model such as proposed model in the figure 1. The advantage of the model is that it can ensure a single way of process management within the organization and therefore align with BPM strategy.

Fig. 1: Process of process management
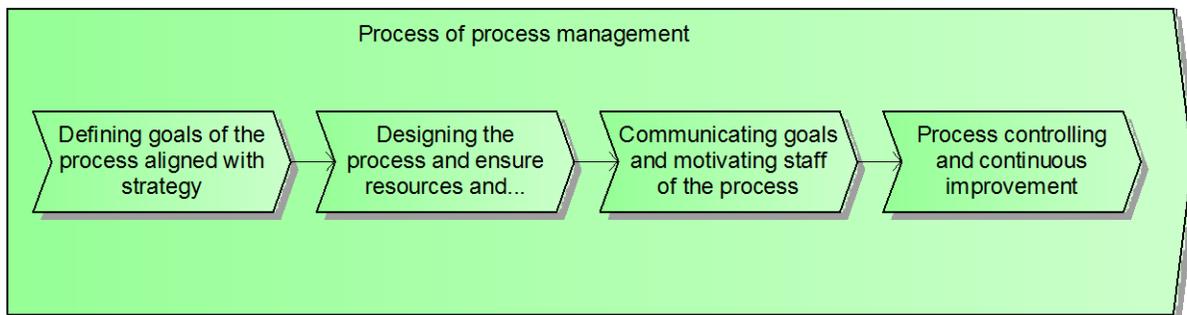
Source: authors

3 Research methodology

The goal of the research is to understand the current state of process ownership pillar in relation to BPM maturity in Czech organizations including the non-profit institutions. This goal can be achieved through the answer to the following research questions:

RQ 1: What is the scope of competencies of process owners in Czech organizations using BPMS?

RQ 2: Is there a relationship between appointment of process owners and BPM maturity of an organization?

To answer these research questions, it was crucial to obtain data about BPM initiatives in Czech organizations respectively information about process ownership pillar and other components of BPM which determine overall BPM maturity of an organization. The process design and model, determination of responsibility matrix for the activities within the process, key performance indicators of the process, continuous improvement and innovation of the process belong to these components.

To acquire data about process ownership and other components within organizations in the Czech Republic, a questionnaire survey was conducted. To ensure mutual understanding, a brief vocabulary of BPM was attached to the questionnaire. The aim of the research design is to understand the current state of process ownership as a prerequisite for an additional research work in the field.

As a sample, organizations with BPM initiative implementing specialized software applications with repositories and other functions supporting BPM were chosen. The questionnaire was distributed through BPMS vendors to address the right organizations. In total, thirty organizations were addressed and sixteen completely filled questionnaires were received.

The sample consists of small organizations up to 100 employees (31 %), medium organizations up to 500 employees (19 %) and big organizations above 500 employees (50 %). The sample includes both private and public organizations, thus the scope of business varies from sales of goods and production to research and development, education, healthcare but also government agencies and local authorities. Nature of capital is mainly Czech; only two organizations reported that capital is from a parent company within European Union and another one stated that capital is from the third country.

The scope of process owners´ competencies and tasks can be analysed through descriptive statistics. But to investigate possible relationship between appointment of process owners and resultant BPM maturity, a statistical testing would be needed. In case of categorical variables, Pearson's chi-square test can be used but it is not appropriate for small samples. Therefore, Fisher's exact test was chosen to calculate the exact probability of the chi-square statistic (Field, 2009).
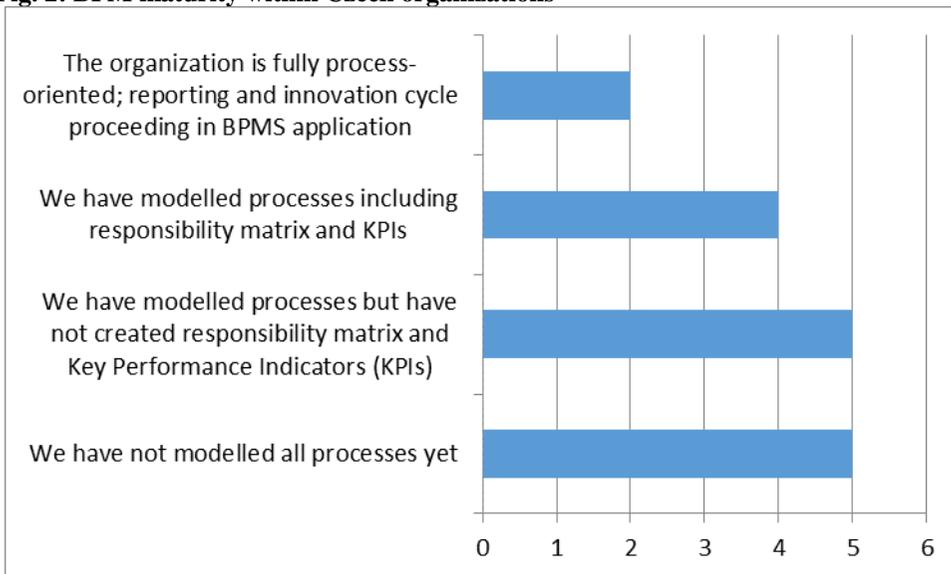
4 Results

The aim of the survey was to obtain data regarding perception of organizations on their BPM maturity level and the scope of process owners´ responsibilities and tasks. Maturity levels were defined as follows:

- We have not modelled all processes yet.
- We have modelled processes but have not created responsibility matrix and key performance indicators (KPIs).
- We have modelled processes including responsibility matrix and KPIs.
- The organization is fully process-oriented; reporting and innovation cycle proceeding in BPMS application and employees work with it on everyday basis.

Results of organizations´ BPM self-assessment are illustrated in the figure no. 2 below.

Fig. 2: BPM maturity within Czech organizations

Source: authors

Generally, ten out of sixteen organizations declare appointment of a process owner role. Figure no. 3 shows the frequency distribution among BPM maturity level. It is slightly less than the result of previous research conducted in 2012 when almost 69 % of managers declared a process ownership assignment (Tuček, Hájková and Tučková, 2012). It is also less than in the Accenture's research. An interesting fact is that one respondent assesses BPM maturity on the third level but without a process ownership, which raises a question of who manages a process, resources, responsibility matrix development and performance management (KPIs monitoring and continuous improvement).

Fig. 3: Process ownership frequency distribution according to BPM maturity
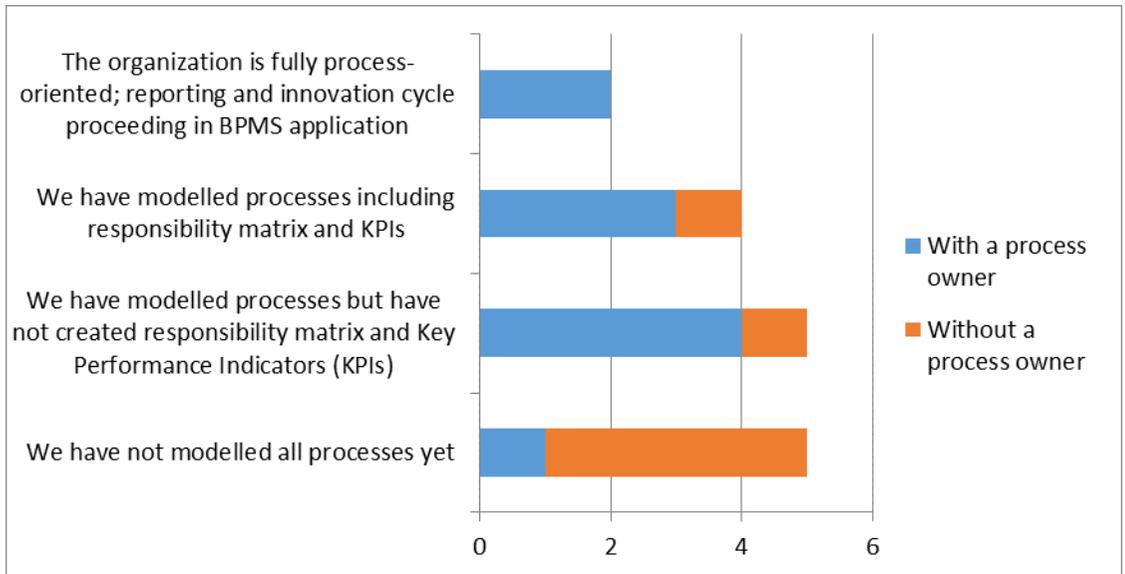
Source: authors

In the case when a process owner was appointed, the question was what her or his tasks and competencies are. Multiple answers were possible. The most frequently stated tasks were reporting to superiors and development of responsibility matrix, both with nine frequencies. Other tasks were performance monitoring and analysis, process design, process innovation, resources identification, KPIs definition, coaching of the team, and rewarding and being rewarded according to the process performance. One respondent used an option "different" to report the task of providing feedback on reports regarding quality methods and tools. Frequencies of respondents´ answers about process owners´ tasks are plotted in the figure no. 4.

**Fig. 4: Process owners´ tasks and responsibilities**
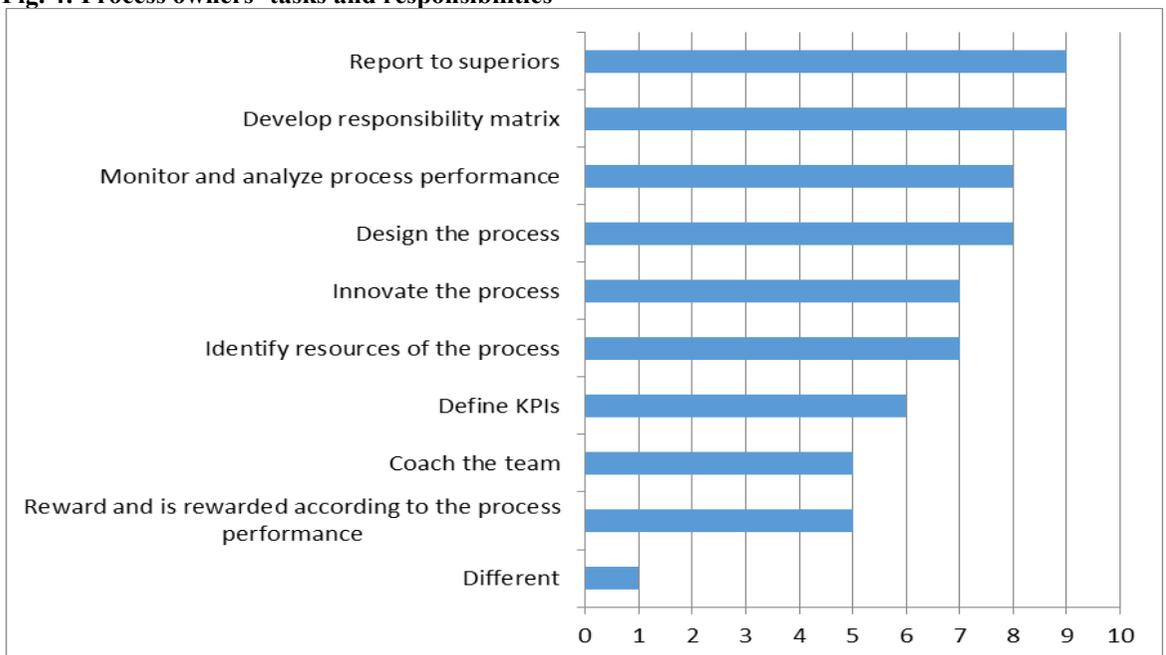
Source: authors

Most common way of a process owner appointment is to choose among existing managers. Eight out of ten respondents stated that process owners were functional managers before. Remaining two respondents declared that process owners who were appointed came up with the start of BPM initiative. Unfortunately, not many organizations are aware of distinctions between discrete functions and horizontal processes, and functional managers and process owners analogously. Other conducted research (Hrabal, Trčka and Tuček, 2014) refers to the tendency of some organizations just to rename managers to process owners without the proper change. Nevertheless, some organizations are aware of the need for change, and process owners are regular managers complementing functional managers. So, during the implementation individual functional managers to design and optimize end-to-end process including performance measurement system development are commissioned. In the end, managers with best results are appointed as process owners.

The last points of interest within the survey were factors affecting a process owner selection. According to respondents, the level of education nor its direction do not affect the selection of process owners. The most important fact is that process owners are mostly selected among the existing functional managers. Only two organizations reported that the person came with the start of BPM implementation as can be seen in the figure 5 below.

Fig. 5: Origins of process owners
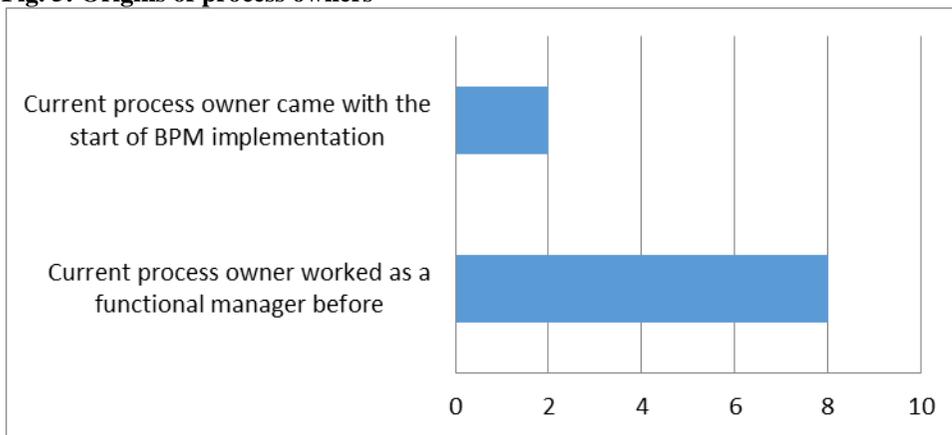
Source: authors

Among other relevant criteria for process owners´ selection are analytical and systemic thinking, former practice in the organization, high standard of computer literacy and knowledge of BPMS, sense for justice and responsibility. The option "other" means the factor specific to the business process managed by the process owner as reported by one of respondents. Frequencies of criteria are shown in the figure no. 6.

Fig. 6: Criteria for process owners´ selection
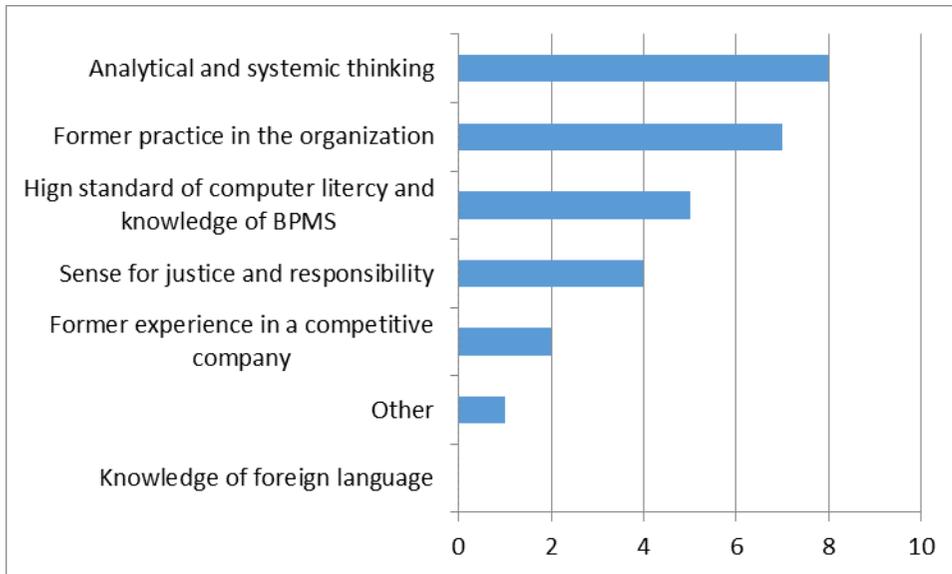
Source: authors

4.1 Association between process ownership and BPM maturity

Management and improvement of a process is a primary task for process owners. So, the premise is that an appointment of process owners within an organization may lead to a higher BPM maturity. To investigate this hypothesis, the Fisher´s exact test was used to calculate whether there is or is not a relationship between these variables. Frequencies for the calculation can be viewed in the table no. 1.

Table 1: Appointment of process owners with BPM maturity matrix

			Maturity				
			Fully process-oriented	Have not modelled all processes yet	Have modelled processes without responsibility matrix and KPIs	Have modelled processes incl. responsibility matrix and KPIs	Total
Process Owner	No	Count	0	3	1	1	5
		Expected Count	,6	1,6	1,6	1,3	5,0
		% within PO	0,0%	60,0%	20,0%	20,0%	100,0%
		% within Maturity	0,0%	60,0%	20,0%	25,0%	31,3%
		% of Total	0,0%	18,8%	6,3%	6,3%	31,3%
		Std. Residual	-,8	1,2	-,5	-,2	

Yes	Count	2	2	4	3	11
	Expected Count	1,4	3,4	3,4	2,8	11,0
	% within PO	18,2%	18,2%	36,4%	27,3%	100,0%
	% within Maturity	100,0%	40,0%	80,0%	75,0%	68,8%
	% of Total	12,5%	12,5%	25,0%	18,8%	68,8%
	Std. Residual	,5	-,8	,3	,2	
Total	Count	2	5	5	4	16
	Expected Count	2,0	5,0	5,0	4,0	16,0
	% within PO	12,5%	31,3%	31,3%	25,0%	100,0%
	% within Maturity	100,0%	100,0%	100,0%	100,0%	100,0%
	% of Total	12,5%	31,3%	31,3%	25,0%	100,0%

Source: author

Based on the Fisher´s exact test, there is not significant association between the appointment of a process owner and BPM maturity. The calculated p-value is 0.5192, which is higher than confidence level of 5 %.

Although process owners are appointed and tasks and competencies are assigned to them, it does not automatically mean that BPM philosophy is implemented and developed. From the calculation of Fisher´s exact test, there is no demonstrable association between process ownership and BPM maturity within the research sample. There are also limits of the research due to a limited size of the research sample and the fact that so-called process owners need not be responsible for a process on end-to-end basis.

5 Discussion

The conducted research pointed out that the scope of process owners´ competencies in Czech organizations are, sorted in descending order of frequency, reporting to superiors, development of responsibility matrix, process performance monitoring and analysis, process design, process innovation, resources identification and KPIs definition. In eight out of ten cases, organizations reported that a process owner was formerly employed as a functional manager. Assessed criteria were, sorted in descending order of frequency, analytical and systemic thinking, former practice in the organization, high standard of computer literacy and knowledge of BPMS, sense for justice and responsibility.

Even though organizations declare assignment of process owners following the agenda described above, the BPM maturity of these organizations does not correspond with it. According to the calculated Fisher´s exact test, it cannot be clearly stated that there is an association between the work of process owners and BPM maturity. One possible explanation may be in the definition of a process for which a process owner is responsible. As previous researches indicated, that processes are often understood as subprocesses within functional silos only. Then, of course, there is no optimized end-to-end process running across functional departments with a single process owner. Other limitation is in the size of the research sample that is not vast enough to indicate general facts.

Another possible reason is a higher education of managers and process owners. Universities themselves, as proved by the researches, do not comply with BPM methodology. Higher education institutions often lack the conceptualization of main processes, i.e. educational activities and research and development activities in form of process models. In addition, process owners and KPIs are not defined.

Further research can therefore focus on the scope of process owners´ activities in the sense of cross-functionality. Additionally, the research can focus on competencies needed, skills and scope of process owners´ work in a form of e.g. a competence model that would further enhance a BPM maturity. During the analytical activities of the research project, there were identified the following opportunities for organizations implementing BPM: definition of a long-term strategy as a basis for process models, increasing BPM maturity by process modelling of core processes, definition of KPIs and controlling system, monitoring the economic efficiency of core processes including their continuous improvement.

6 Conclusions

The conducted research points out the main tasks and competencies of process owners in Czech organizations. These tasks include reporting to superiors, development of responsibility matrix, performance monitoring and analysis, process design, process innovation, resources identification, KPIs definition, coaching of the team, and rewarding and being rewarded according to the process performance. Required competencies are e.g. analytical and systemic thinking, former practice in the organization, high standard of computer literacy and knowledge of BPMS, sense for justice and responsibility. Although many organizations with implemented BPMS assigned process owners with the clear agenda, BPM maturity does not correspond with this fact. Possible reasons may be found in the definition of a process in the end-to-end logic. Therefore, continuing qualitative research in the role of process owners and other roles focused on their competencies can be recommended. Competent process owners would support development of BPM maturity and success of organization´s goals.

References
Accenture - BPM Governance in Practice. (2013). Retrieved November 12, 2015, from http://www.researchgate.net/publication/259755325_Research_Study_-_BPM_Governance_in_Practice

Drucker, P., & Maciariello, J. (2008). *Management* (Rev. ed.). New York, NY: Collins.

Field, A. (2009). *Discovering statistics using SPSS: (and sex and drugs and rock 'n' roll)* (3rd ed.). Los Angeles [i.e. Thousand Oaks, Calif.: SAGE Publications.

Franz, P., & Kirchmer, M. (2012). *Value-driven: Business process management: The value-switch for lasting competitive advantage*. New York: McGraw Hill.

Hammer, M. (2003). *The agenda: What every business must do to dominate the decade*. New York: Three Rivers Press.

Hammer, M., & Champy, J. (2003). *Reengineering the corporation: A manifesto for business revolution*. New York: HarperBusiness Essentials.

Hammer, M., & Stanton, S. (1995). *The reengineering revolution: A handbook*. New York, N.Y.: HarperBusiness.

Harmon, P. (2014). *Business process change: A business process management guide for managers and process professionals* (Third ed.). Amsterdam: Elsevier/Morgan Kaufmann.

Jeston, J., & Nelis, J. (n.d.). *Business process management: Practical guidelines to successful implementations* (Third ed.). New York: Routledge

Kohlbacher, M., & Gruenwald, S. (2011). Process ownership, process performance measurement and firm performance. *International Journal of Productivity and Performance Management*, 60(7), 709-720.

Lehmann, C. (2012). *Strategy and business process management: Techniques for improving execution, adaptability, and consistency*. Boca Raton, FL: CRC Press.

Lehrer, T., Edl, M. and Rosi, B. (2013). Energy efficiency model for the mini-load automated storage and retrieval systems. *International Journal of Advanced Manufacturing Technology,* 70: 97–115, DOI: 10.1007/s00170-013-5253-x.

Lehrer, T., Sraml, M., Potrc, I. and Tollazzi, J. (2010). Travel time models for double-deep automated storage and retrieval systems. *International Journal of Production Research,* 48(11), 3151-3172. DOI: 10.1080/00207540902796008.

Nesheim, T. (2011). Balancing process ownership and line management in a matrix-like organization. *Knowledge and process management: the journal of corporate transformation*, 18(2), 109-119. DOI: 10.1002/kpm.377

Panagacos, T. (2012). *The Ultimate guide to business process management*. USA: [Place of publication not identified].

Popesko, B. (2010) Activity-based costing application methodology for manufacturing industries. *E+M: Ekonomie a management.* 13(1), 103-114.

Power, B. (2011). "Where have all the process owners gone", HBR Blog Network, No. January 7. Retrieved April 10, 2015, from https://hbr.org/2011/01/where-have-all-the-process-own.

Rajnoha, R., and Chromjaková, F. (2009) Activity based costing and efficiency of its application in the wooden houses production. In*: DREWNO-WOOD. Poznaň: Instytut Technologii Drewna*, Poland, 52, (181),105 – 127.

Robson, M., & Ullah, P. (1996). *A practical guide to business process re-engineering*. Aldershot, England: Gower.

Segatto, M., de Pádua, S. I. D., & Martinelli, D. P. (2013). Business process management: a systemic approach? *Business Process Management Journal*, 19(4), 698-714. DOI: 10.1108/BPMJ-Jun-2012-0064.

Siemieniuch, C. E. & Sinclair, M. A. (2002). On complexity, process ownership and organisational learning in manufacturing organisations, from an ergonomics perspective. Applied Ergonomics, 33(5), 449–462.

Smith, H., & Fingar, P. (2007). *Business process management: The third wave* (4th Anniversary ed). Tampa, Fla.: Meghan-Kiffer Press.

Trebuňa, P., Fiľo, M., and Pekarčíková, M. (2013). *Supply and distribution logistics* 1.ed., Ostrava: Amos.

Tuček, D., Hájková, M. & Tučková, Z. (2013). Utilization Level of Business Process Management in Czech Enterprises – Objectives and Factors. *E + M Economics a Management*. 2013. 16(2), 81-98.

Tuckova, Z. (2012) Importance of Knowledge Services in the Czech Republic and Germany: A Case Study In: *Proceedings of the 13th European Conference on Knowledge Management.* Spain: 1202-1210.

Tuckova, Z, Fialova, S., and Strouhal, J. (2012) Health Care Systems: Comparative Analysis from Czech Perspective, *International Journal of Mathematical Models and Methods in Applied Sciences*, 6(2), 297-304.

Zamecnik, R. (2014). The measurement of employee motivation by using multi-factor statistical analysis In: *2nd World Conference on Business, Economics and Management (BEM)*. Antalya: SciencePark Res, Org & Counseling Ltd; Acad World Educ & Res Ctr; Hacettepe University, Turkey, Vol. 109, 851-857. DOI: 10.1016/j.sbspro.2013.12.553.