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RELATIONSHIP BETWEEN THE EXTENT OF IMPLEMENTATION OF THE PROCESS MANAGEMENT PRINCIPLES AND THE LEGAL FORM OF THE BUSINESS AND BUSINESS ACTIVITY

Monika Maříková*, Ladislav Rolínek, Jana Kubecová and Jaroslav Vrchota

University of South Bohemia in České Budějovice,
Studentská 13, České Budějovice, Czech Republic

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Abstract

Nowadays, enterprises are challenged with continuously changing environment and they have to react quickly to these changes. Process management can be a tool that greatly helps businesses in this difficult time to survive (Hora, 2010). Process Management brings a relatively new perspective on corporate governance. According to McCoy et al. (2007) enterprises which implemented rules of process management have a competitive advantage over others. The paper presents the application of the principles of process management in relation to the legal form of business enterprise and business activity. For determining the level of principles of process management the indicator MPP was used (Rolínek, 2012; Truneček, 2005). Based on statistical analysis, it can be argued that there is a relationship between the application of the principles of process management, business legal forms and also business activities.

Keywords: Crisis, business process management, business process management principles

1. INTRODUCTION

Process management are according to Šmída (2007) systems, procedures, methods and tools for providing maximum performance and improving business processes, based on clearly defined corporate strategy, which aim is to meet strategic

business objectives. There are many definitions of process management, in foreign literature referred to as Business Process Management; the definitions shall combine the following: continuous improvement, working at the highest level possible and achievement of maximum performance (Weske, 2012).

* Corresponding author: moni.marikova@gmail.com

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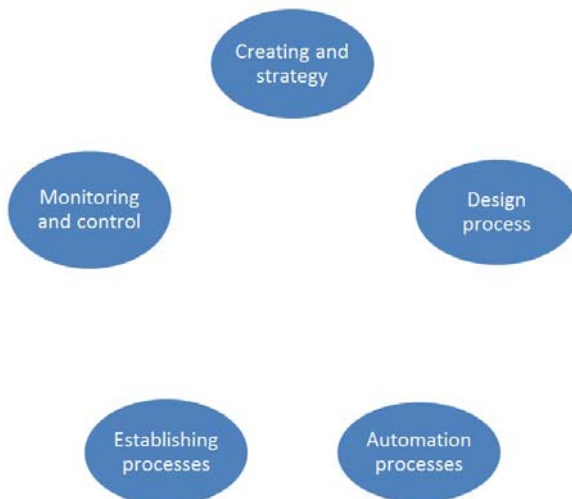
The essence of process management can be expressed using the model of its phases (see Figure 1). These phases provide at their appropriate implementation necessary steps in the design (or description), implementation, automation and the identification of process performance (Software, 2012).

As a business process we understand a set of activities that transform inputs in to output for other people or processes using human resources and tools. Improving business processes in a time of crisis is essential if the enterprise wants to remain on the market. In developed economies, it is customary to continuously improve of business processes, mainly due to ever increasing requirements of customers (Řepa, 2007). In this times lot of companies connect process management with project management (Irani, 2010). During the implementation of process management and decision to implement it is essential to realizing the positives and benefits associated with process management. An important role is also the support of staff and redirect mind-set

throughout the organization with performance measures (Matthews, 2011). Initial thus conviction and determination executives, followed by all employees with the help of practical knowledge about the advantages and benefits of the process approach such as increasing efficiency, increasing productivity, increasing business performance and profitability of an organization (Spanos et al., 2001).

The studies may get the impression that the benefits and positives associated with the process management can only draw in large organizations. This impression is caused by the mismatch research focused on process management in large organizations in contrast to SMEs (Raymond et al., 1998). The series of studies show that the benefits and advantages of process management in large enterprises, with slight differences can also be applied to SMEs using process management (Hale & Cragg, 1996).

Principles of process management can be used as a tool for ensuring the existence of enterprise on a market. Process management can be the clue to maintain the existence during the crisis the right way and using the orientation on continuous improvement, quality improvement at lower cost through economies of scale, for business or public sectors (Jurish, 2013). Better use of business opportunities, art of responding to change all this is the domain of process management (Jeston & Nelis, 2014; Smith & Fingar, 2007).



Source: (Ag, 2012)

Figure 1. Phase Process Management

2. EXPERIMENTAL

The contribution was created with the support of GAJU79/2013. The basic research sample consists of 187 small and medium-sized enterprises, for the definition of small

and medium-sized enterprises the definition of the European Union has been used (European Union, 2006). Based on the survey of 2010 and 2011, which was conducted with representatives of enterprises during face-to-face interview, both quantitative and qualitative data were obtained (based on in-depth interviews with managers). Private entrepreneurs (77%) dominate in the basic data set, followed by commercial companies (9%), associations (5%), owners associations and cooperatives (3%), and foreigners (2.5%).

The rate of application of the principles of process management was assessed on the base of a composite indicator MPP, which includes the following principles, see table 1.

The company could, on the basis of MPP indicator, obtain maximum of 21 points. As a process-driven enterprise according to this methodology is considered one, which acquired 75% (16 points) of 21 possible points, partially process-driven enterprise is one that gained 6-15 points from 21 possible points and enterprises without process management are those which received less

than 6 points (Rolšnek, 2012).

It can be stated based on the conducted analysis, that the highest rate of process management principles application achieved joint stock companies (see Table 2), were full 56% of companies use process management principles (namely 14 companies). 44% of joint stock companies (namely 11 companies) partly use the principles of process management. There is not a single joint stock company in the sample that is not procedurally controlled.

Limited liability companies are the most common form of business represented in the sample (specifically 134 companies). They show lower level of process management than joint stock companies. Of these enterprises, only 30 (22%) apply principles of process management, the majority of companies with limited liability, namely 97 companies (73%), apply principles of process management only to certain and 7 limited liability companies (5%) do not use, in its management, none of the principles of process management, see in Table 2.

Table 1. Business Process management principles

Principle Process Management	Points
The company has developed a strategy	2
Written form of strategy present	1
The enterprise has developed strategies into plans	1
Process map is processed	3
For processes have defined performance indicators	3
Process performance is regularly evaluated	3
Introduced the ISO	3
Ongoing integration of suppliers (outsourcing occurs)	2
The company is integrated into the supply network	1
Ongoing integration of customers in the form of custom manufacturing (or service provision)	2

Source: (Rolšnek, 2012)

Table 2. Use of process management principles with regard to the legal form of enterprise

Legal form	Principles of process management					
	Do not apply		Partially apply		Apply	
Unknown	0	0%	1	50%	1	50%
The joint-stock company	0	0%	11	44%	14	56%
Cooperative	1	20%	2	40%	2	40%
Natural person	2	13%	13	81%	1	6%
Associations	1	50%	1	50%	0	0%
Al. Limited Liability	7	5%	97	73%	30	22%
Public business	0	0%	3	100%	0	0%
Total	11	6%	128	68%	48	26%

Source: own processing

Natural persons (entrepreneurs), who are in the business sphere largest represented, are only rarely process-driven. Of the 16 individuals only one individual (6%) uses the principles of process management in the management, 13 natural persons (entrepreneurs) (81%) apply in its managerial mix only some selected principles of process management and two individuals (12%) do not use any of process management principles, see Table 2.

Cooperatives are represented in the sample only by a very small number as well as a public company, but it can be said that public companies are in 100% partially process managed (3 companies), cooperatives show the application of procedural principles at two farms in two businesses partially applied and one cooperative do not apply the principles of process management, see in Table 2.

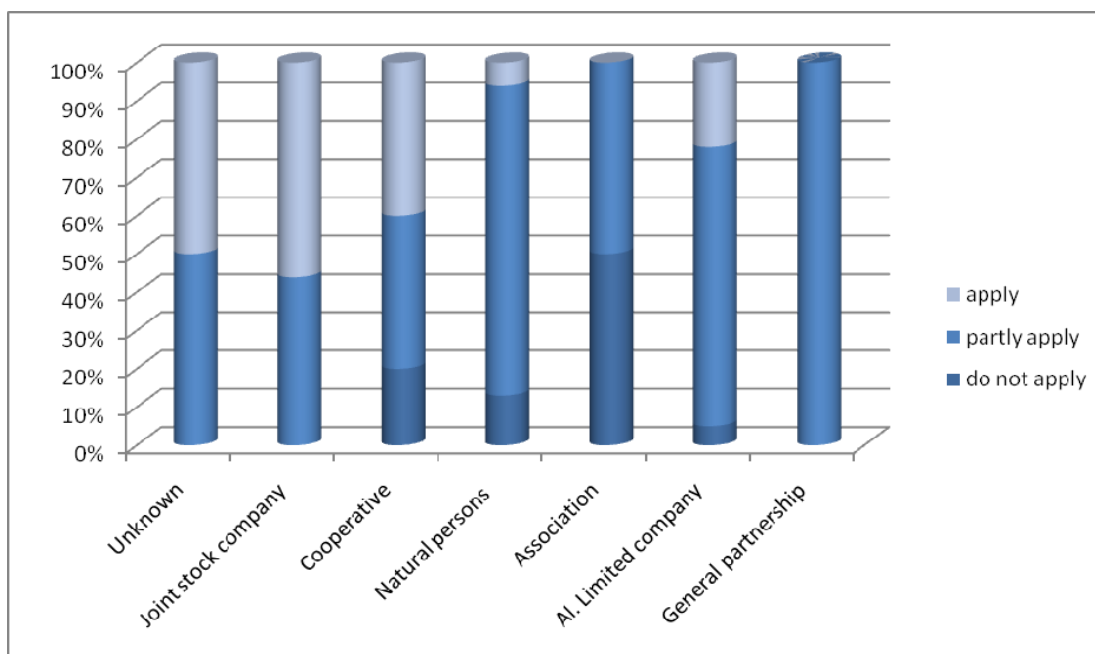
The null hypothesis was tested on the chosen significance level $\alpha=0.05$, to which was formulated following alternative hypothesis.

$H_0 =$ the rate of introduction of the principles of process management is independent of the legal business form.

$NonH_0 = H_A$

The p-value $< \alpha$, therefore we may on the analyzed data, with 95% probability, reject the null hypothesis in favour of the alternative ($\chi^2=23.68925$; $df=6$; p-value=0.0006), which says that there is a correlation between the degree of process management principles implementation and legal form of business.

When distributing SMEs according to their business field it is evident that companies focused on engineering manufacturing, services and transport and construction companies apply procedural principles in its management at the highest rate, see Table 2. Of the 57 production engineering companies, 21 companies (37%) apply the principles of process management and only 3 companies (5%) do not apply the procedural principles at all. The situation is similar for companies that are focused on



Source: own processing

Figure 2. Using principles of process management with regard to the legal form of business (in the research sample)

services, including transport. A total of 15 companies from this category (63%) only apply PM principles to certain processes, 7 companies (29%) apply procedural principles in their management extensively and 2 companies (8%) of these principles do not apply them at all. Enterprises from food industry apply the principles of process

management at least. Of the 11 companies, only one company (9%) uses procedural principles, the remaining 10 companies (91%) use only some procedural principles.

The null hypothesis was tested on the chosen significance level $\alpha=0.05$, to which was formulated following alternative hypothesis.

Table 3. Use principles of process management with regard to business activity

Business activity	Process management principles					
	Do not apply		Partially apply		Apply	
Construction companies	5	10%	34	67%	12	23%
Engineering production	3	5%	33	58%	21	37%
Wood, paper, printers	1	5%	17	77%	4	18%
Food	0	0%	10	91%	1	9%
Trade	0	0%	19	86%	3	14%
Services, including transport	2	8%	15	63%	7	29%
Total	11	6%	128	68%	48	26%

Source: own processing

H_0 = the rate of introduction of the principles of process management is independent of the business.

$NonHA=H_0$

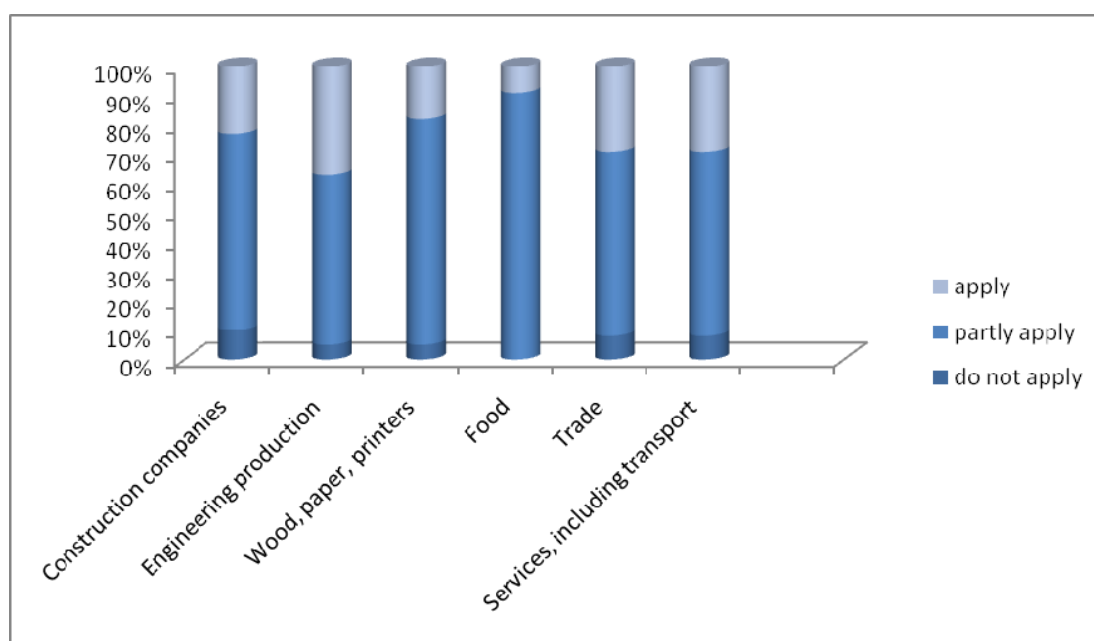
The p -value $< \alpha$, therefore we may on the analyzed data, with 95 % probability, reject the null hypothesis in favour of the alternative ($\chi^2=12,97384$; $df=4$; p -value=0,0114), which says that there is a correlation between the degree of implementation of the principles of process management and business activity.

3. CONCLUSION

This paper presents the extent of application of the process management principles at small and medium-sized enterprises in the Czech Republic in relation

to their legal form and business activity. The MPP Indicator is used in the analysis. For the purposes of the research, data gained on the basis of structured interviews carried out in 187 small and medium-sized enterprises were used.

Based on the Chi-square test, it can be argued that there is a relationship between the extent of implementation of the process management principles and the legal form of the business. As far as the research data are concerned, the limited liability companies constituted the biggest portion (134 companies) of the whole sample. The research showed that 22% of these companies applied the principles of process management entirely, 73% applied the principles only partially and mere 7% of the companies did not apply any of the principles at all. It is the joint-stock companies, which are using the process management by far the most, in particular,



Source: own processing

Figure 3. Use of process principles management with regard to business activities

56% of them use the process management principles (14 companies) entirely and 44% use it partially (11 companies). Within the analysed sample, there was no joint-stock company that wouldn't operate under the process management principles. The smallest portion of the sample constituted the individual entrepreneurs (natural persons), of whom only one entrepreneur applied the principles of the process management (6%), 13 entrepreneurs applied the principles partially (81%) and 2 of the analysed group (12%) did not apply the principles at all.

In the examined sample, it was also successfully proved through the Chi-square test that there is a relationship between the application of the process management principles and the business activity of the enterprises. The principles mostly apply in companies, which operate in the field of engineering production (37% of the

companies use the principles, only 5% do not), followed by services, including transport (63% of the companies apply the principles partially, 29% extensively), and construction companies (67% of which apply the principles partially, 23% to a large extent). The process management is least applied in the food industry, where there is only one company (8%), which uses its principles.

References

Ag, S. (2012). Intelligent Guide to Enterprise Bpm. BookPatch.com.

European Union. (2006). The new definition of small and medium-sized enterprises: User guide and model declaration. EUR-OP.

ОДНОС ИЗМЕЂУ ПРИМЕНЕ ПРИНЦИПА ПРОЦЕС МЕНАЏМЕНТА И ОБЛИКА ЛЕГАЛНЕ ФОРМЕ КОМПАНИЈЕ

Monika Maříková, Ladislav Rolínek, Jana Kubecová, Jaroslav Vrchota

Извод

У данашње време, компаније се суочавају са изазовом континуиране промене окружења и морају реаговати брзо на такве промене. Процес менаџмент може бити алат који значајно помаже предузећима да преживе у комплексном периоду времена («Hora», 2010). Процес менаџмент доноси релативно нову перспективу корпоративном управљању. Према ауторима «McCoу» са сарадницима (2007) компаније које примењују правила процес менаџмента имају компетативну предност у односу на остале. Овај рад представља примену принципа процес менаџмента у односу на легални облик пословања компаније као и у односу на пословну активност. У циљу одређивања нивоа примене процес менаџмента, коришћен је МПП индикатор («Rolínek», 2012; »Truneček«, 2005). На основу статистичке анализе, може се закључити да постоји однос између примене принципа процес менаџмента, легалне форме пословања као и пословних активности.

Кључне речи: криза, управљање пословним процесом, принципи управљања пословним процесом

- Hale, A.J., & Cragg, P.B. (1996). Business process re-engineering in the small firm: A case study. *INFOR*, 34 (1), 15–27.
- Hora, K. (2010). Process management in time of crises. University Tomášeubati in Zlíně. Cit. online: https://dspace.k.utb.cz/bitstream/handle/10563/11548/hora_2010_dp.pdf?sequence=1
- Irani, Z. (2010). Investment evaluation within project management: an information systems perspective. *The Journal of the Operational Research Society*, 61 (6), 917-928.
- Jeston, J., & Nelis, J. (2014). *Business Process Management*. Routledge.
- Jurish, M.C. (2013). Key Differences of Private and Public Sector Business Process Change, Petra Wolf and Helmut Krcmar e-Service Journal, 9 (1), 3-27.
- Matthews, J.R. (2011). Assessing Organizational Effectiveness: The Role of Performance Measures. *The Library Quarterly: Information, Community, Policy*, (81) 1, 83-110.
- McCoy, D., Sinur, J., & Bill, R. (2007). Key Issues for Business Process Management. Cit. online: http://www.gartnerinfo.com/bpmresearch/BPM_KeyIssuesNote.pdf
- Raymond, L., Bergeron, F., & Rivard, S. (1998). Determinants of business process reengineering success in small and large enterprises: An empirical study in the Canadian context. *Journal of Small Business Management*, 36 (1), 72–85.
- Řepa, V. (2007). *Process management and models of processes*. Grada Publishing a.s.
- Rolínek, L. (2012). *Process management in SME's*. University of South Bohemia in České Budějovice. Faculty of Economics.
- Smith, H., & Fingar, P. (2007). *Business Process Management: The Third Wave*. Meghan-Kiffer Press.
- Software, A. (2012). *Intelligent Guide to Enterprise Bpm*. BookPatch.com.
- Spanos, Y., Prastacos, G., & Papadakis, V. (2001). Greek Firms and EMU: Contrasting SMEs and Large-Sized Enterprises. *European Management Journal*, 19 (6), 638–648.
- Šmída, F. (2007). *Introduction and development of process management in the enterprise*. Grada Publishing a.s.
- Truneček, J. (2005). *Knowledge management in organizations*. Professional Publishing. Brno.
- Weske, M. (2012). *Business Process Management: Concepts, Languages, Architectures*. Springer Science & Business Media.