Social Business Process Management: Croatian IT Company Case Study

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Abstract

Background: Social business process management is an integration of social software into the business process management (BPM). Its main goal is to overcome the limitations of classical BPM by applying social software principles within the BPM lifecycle. Since BPM is a holistic discipline it is important to also include cultural and social aspects into BPM studies. Objectives: The main aim of this paper is to examine the link between organizational culture, social software usage and BPM maturity in the observed company. Methods/Approach: A case study methodology has been used for this study. An interview has been conducted in combination with a survey approach. Results: Results of the research revealed a high usage of social BPM within the observed company in combination with a high level of BPM maturity and a clan organizational culture. Conclusions: The observed IT company has knowledge intensive processes and uses social BPM to deal with the process change and optimization. The clan culture is, by its characteristics, a favourable organizational culture for social BPM.

Keywords: social business process management, knowledge intensive processes, business process management maturity, process performance index, case study, Croatia

JEL classification: M15

Paper type: Research article, Case Study

Received: Nov 09, 2016
Accepted: Mar 09, 2016

DOI: 10.1515/bsrj-2017-0006

Acknowledgments: This work has been fully supported by Croatian Science Foundation under the project PROSPER - Process and Business Intelligence for Business Performance (IP-2014-09-3729)

Introduction

Business process management (BPM) is a management discipline focused on improving organizational performance by managing its business processes (Harmon, 2007). According to Pritchard et al. (1999) there is a growing understanding of BPM...
usage with the purpose of achieving competitive advantage by improving performance through adopting a process view of business. However, recent work has revealed an increasing awareness of the limitations of traditional approaches to BPM (Bruno et al., 2011). A new term - "social BPM (SBPM)" has been introduced. It describes the synthesis of social media applications like wikis, blogs, forums or social networks with classical BPM. The aim of SBPM is to enhance BPM lifecycle by using controlled participation of external stakeholders from the initial stages of process discovery all the way to final phases of BPM life cycle, such as the phases of process execution and evaluation (Dengler et al., 2010; Erol et al., 2010). Besides, a number of researchers indicate the need for further investigation of the role of organizational culture in BPM and its maturity (Rosemann et al., 2015; Buh et al., 2015). However, further empirical confirmation of those theses should be made. Therefore the research objective of this study is to examine the role of organizational culture and social software usage on BPM maturity in one Croatian IT company.

This work has been fully supported by Croatian Science Foundation under the project PROSPER - Process and Business Intelligence for Business Performance (IP-2014-09-3729). Among others, two objectives of the PROSPER project are (1) to investigate the adoption of social BPM in organizations and (2) to explore different combinations of organizational culture types and different business process maturity levels. With the purpose to achieve stated objectives, the PROSPER research group conducted a series of interviews. One of them is being presented in this paper in form of a case study.

This paper begins by providing the theoretical background through the definition of BPM holistic approach. In this section a BPM maturity model (Process Performance Index – PPI) is described (Röglinger, Pöppelbuß, Becker, 2012). Besides, this part of the paper brings a brief literature review on the organizational culture in BPM and presents the Organizational Culture Assessment Instrument. Moreover, this section also gives an overview of social BPM background. The third section describes employed methodology in form of a case study of one Croatian IT company. Further, the analysis of the research results is presented combined with a discussion. Final section brings a short conclusion with the research limitations and plans for future research.

Background

BPM as a holistic concept

There is an increasing number of authors accepting and emphasising the holistic approach to BPM. According to Rosemann et al. (2005) definitions of BPM range from the focus on IT and process improvement activities to the focus on developing both a culture and strategies receptive to BPM. The holistic nature of BPM requires alignment to corporate goals and strategy, focus on customers, top management commitment, process measurement, improvement and benchmarking. This approach is reflected within the design of BPM maturity models.

Maturity models refer to certain sequences of stages or levels leading from some initial phase to maturity along desired, logical or anticipated path (Röglinger et al., 2012). During the decades numerous authors developed, described and compared different BPM maturity models (Harmon, 2009; Rosemann et al., 2015). In this research Process Performance Index (PPI) has been used. It is a descriptive model which defines statements for ten BPM critical success factors and describes three levels of BPM maturity. Respondents state their level of agreement on a 5-point scale for ten
success factors, being: (1) alignment with strategy, (2) holistic approach, (3) process awareness by management and employees, (4) portfolio of process management initiatives, (5) process improvement methodology, (6) process metrics, (7) customer focus, (8) process management, (9) information systems and (10) change management. The cumulative score for an organization represents its PPI which describes one of the levels of BPM maturity, respectively: (1) process management initiation (PPI from 10 to 25 points); (2) process management evolution (PPI from 26 to 40); and (3) process management mastery (PPI from 41 to 50).

Organizational culture and BPM
By definition, organizational culture is a complex system of values, customs, ethics, beliefs, and rituals, written and unwritten rules which employees follow and which define the way of doing business within the company (Barney, 1986; Economic lexicon, 2011). Organizational culture can be understood as a way of life within the organization, an organizational lifestyle, which displays the personality of the organization and determines employees' actions and behaviour. According to Schein (1985), organizational culture includes shared invented, discovered or developed assumptions which are considered valid and taught to the new employees.

Although there have been a great deal of researches studying organizational culture as a factor in achieving business success, there are relatively few studies investigating the link between organizational culture and BPM or indicating the influence of organizational culture to BPM (e.g. Alibabaei et al., 2010; Rosemann et al., 2015; Buh et al., 2015). In the sense of holistic BPM approach, organizational culture is a critical BPM success factor (Rosemann et al., 2005). In accordance to that, Sidorova et al. (2010), view it as a central issue in the implementation of BPM. Hribar et al. (2014) reported clan culture to be the most favourable when it comes to BPM adoption. Zairi (1997) introduced specific BPM culture, but never elaborated that idea. However, Schmiedel et al. (2013) conducted a global Delphi study and defined four key values for BPM culture, being: (1) customer orientation, (2) excellence, (3) reliability and (4) teamwork.

When talking about organizational culture within the organization, it is important to understand that there is no consensus on exact types of organizational culture. Literature review revealed that, so far, numerous authors developed different tools for assessing organizational culture and thus have different classification of organizational culture types (e.g. Glaser et al., 1987; Zammuto et al., 1991; Mackenzie, 1995). For the purpose of this research, Organizational Culture Assessment Instrument (OCAI), developed by Cameron et al. (2006), has been used for assessing the current organizational culture of our respondents' organizations. Originally, OCAI assesses both the current and preferred organizational culture of the organizations. Respondents divide 100 points between 4 statements in each of the six groups of statements. In each group each statement represents one of the four types of organizational culture, being: (1) clan, (2) adhocracy, (3) market and (4) hierarchy. The type of the organizational culture with the highest average of divided points is the dominant organizational culture of the observed organization.

Social BPM
Today, a feedback from business practice reports on the shortcomings of classical BPM approaches. Several issues have been identified. “The model-reality divide” describes the divide between designed process models and those executed in
reality (Schmidt et al., 2009). According to Bidder et al. (2010) this issue specially concerns loosely structured and evolutionary processes, also known as knowledge-intensive processes. These processes typically appear in many scenarios, their sequences and participants are not known in advance and they involve distributed and evolving knowledge (Markus et al., 2002). Substantial contribution to these processes comes from human knowledge, while knowledge related to the processes is perishable and quickly outdated (Gronau et al., 2012). Moreover, knowledge intensive processes are ad-hoc processes that emerge spontaneously, cannot be planned in advance and have a high interactivity (Bögel et al., 2013). As a consequence, in designing and execution, knowledge intensive processes require significant flexibility.

The next issue is related to the incapability of BPM to rapidly react to both internal and external events (Cummins, 2008). The standard BPM lifecycle consists of a number of phases that follow ordered steps and procedures while the flow of information and the role of the participants are strictly defined (Nurcan et al., 2008). In this manner, the capability to deal with external events is limited to those which are already built in the structure of BPM lifecycle (Bruno et al., 2011). Besides, the pre-defined BPM roles and actors could impede the flow of information and knowledge sharing among stakeholders. “Loss of innovation” and “information pass-on threshold” are the issues described by Schmidt et al. (2009). Even if the processes are implemented successfully, due the “information pass-on threshold” the ideas for innovation are not passed on to the responsible because this takes too much effort for the user.

Nowadays, in order to overcome these situations, the researchers propose the integration of social software in the BPM lifecycle (Brambilla et al., 2012; Rangiha et al., 2013; Khider et al., 2015). The purpose is to overcome the limitations with the classical BPM by deploying social software and the collaborative Web (Web 3.0) as a platform for collaboration between individuals and groups in BPM projects (Rangiha et al., 2013; 2014). According to Meske et al. (2013) social media enable participation of all members of an organization and improve a company’s knowledge management. Implementing social BPM enables organizations to establish an “architecture of participation” by which all stakeholders are encouraged and can participate in certain process management task (Pflanzl et al., 2014).

**Methodology**

For the purpose of this paper, a case study methodology has been used. As a valid method, case studies have been used before in BPM maturity researches (e.g. Rosemann et al., 2005; Rohloff, 2009). This case study is based on the interview, which has been conducted in February 2016 as part of exploratory analysis for the evaluation of the draft version of questionnaire within the PROSPER project. As an appropriate case, we sought a company in the IT sector that has knowledge intensive business processes and had engaged in a BPM project in the past five years. A special focus is put on the organizational culture as a driver of BPM implementation success. The interviewees were executives familiar with the BPM implementation progress. According to Gable (1994), case studies should not be exclusively qualitative but rather include an embedded quantitative survey. Following this recommendation, we conducted an interview which lasted about 3 hours and consisted of two parts: (1) a semi-structured interview based on the draft questionnaire and (2) in-depth interview.
First, the interviewees evaluated the statements of PPI framework in order to assess the BPM maturity of their organizations. They rated their organization’s performance success factors using a 5-point scale, with a 1 representing “strongly disagree” and a 5 representing “strongly agree”. Next, the slightly modified OCAI has been used to assess only the current organizational culture of the observed company where the interviewees stated to what extent the statements representing certain organizational culture are similar to the situation in their company. Finally, the interviewers conducted an in-depth interview asking questions related to the social BPM usage within the company.

**Results and discussion**

The total cumulative PPI score has been calculated in order to measure BPM maturity within our observed IT consultant company. The average PPI is 46 – almost the highest on the PPI scale that runs from 10 to 50. The result shows that this company is at the upmost maturity level or “process management mastery” stage of BPM maturity. Further, the interviewees commented each of ten PPI framework factors. The PPI score on “alignment with strategy” success factor is 5: this company is aware that processes should be tightly linked to a strategy; its business processes are executed, managed and measured according to the strategic priorities and situations. The score on “holistic approach” is 5. This shows that the approach to improvement efforts is done “through” a process perspective. BPM practice is institutionalized company-wide and a continuous improvement approach is evident. A “process awareness by management and employees” exists (the PPI score on this success factor is 4), the importance of managing processes when seeking performance goals is recognized by all employees in a company – from top management to individual contributors, but the place for improvements still exists. The score on “portfolio of process management initiatives” is 5: key business processes are well-documented, business process repository has been developed, several business process improvement initiatives were finished and a new one is started. A standard approach to process design and analysis is utilized (the PPI score on “process improvement methodology” is 5). BPMN diagrams and Oracle Process Modeler software are used to model business processes. Process performance indicators and metrics are defined, but process measurement system is still not fully implemented. Consequently, the score on “process metrics” is 4. Strong efforts are made to focus process analysis and design efforts on delivering value to customer (the PPI score on “customer focus” success factor is 5). The process owners are assigned to several core business processes, their responsibilities and authorities are not well-defined, but they still do not monitor process metrics for continuous improvement efforts on a regular basis, thus the score on “process management” factor is 3. The observed company has the highest PPI score - 5 on the “information systems” factor. A potential of information system to provide support to business processes is fully recognized. People and cultural issues are effectively addressed when process changes are introduced; a collaborative IT platform is implemented, thus employees are enabled to suggest and create process content and context, or to share ideas and knowledge on business processes (the score on “change management” factor is 5). Process performance index results for each of the PPI success factors are presented by figure 1.
For the purpose of this study, we have assessed only the current organizational culture of the observed company. Our organization’s OCAI results showed clan culture to be dominant (with the score of 38 from 100) within the organization, while adhocracy is at the second place with the average score of 30 from 100 points. The least dominant organizational culture type in this organization is market culture with the average score of 13 from 100 points.

During the interview, our interviewees emphasized teamwork, consensus and collaboration as main characteristics of the management style in the organization. Furthermore, the interviewees stressed out that employees consider their leaders as mentors who facilitate and nurture their work but also coordinate and organize them, which enables smooth-running efficiency within the organization. Moreover, interviewees commented that their management is not highly results oriented nor have extraordinary expectations and requirements for the employees so they do not compete with each other but feel strong commitment for the organizations. In the organization, there is a very high mutual trust and loyalty among the employees, as well as commitment to innovation and development. In terms of strategy, observed company emphasizes human development, participation, openness and high trust, while the organizational focus is neither on competitive activities and achievements nor on winning the greater market share. The results of this interview are in line with the theoretical background regarding organizational culture assessment instrument. The overall OCAI score results for the current organizational culture of the observed company are presented by the figure 2.
By definition, clan culture is characterized by high commitment, teamwork, consensus, participation and a friendly workspace while defining success in terms of concern for people and internal climate (Cameron et al., 2006). Furthermore, the core values within clan culture organizations are loyalty, high cohesion, morale and tradition, emphasizing the long-term benefit of individual development (Cameron et al., 2006). On the other hand, the adhocracy culture is characterized by innovativeness, readiness for change, meeting new challenges and risk taking while working in highly dynamic, creative and entrepreneurial workspace (Cameron et al., 2006). The OCAI results, combined with high PPI score of observed company could be the step closer in confirmation of clan culture as the most favourable organizational culture for BPM, as indicated in Hribar et al. (2014).

When looking at the data collected through OCAI online website (http://www.ocai-online.com) regarding current organizational culture in companies from IT sector and from Croatia, the results reveal very similar, almost identical situation between those two. This website has collected 457 responses from IT sector companies and 611 responses from Croatian companies. The results show clan culture to be the dominant culture in both IT companies (OCAI average score being 33.87) and in Croatian companies (OCAI score being 32.03). In both cases, adhocracy is the culture with the least dominant characteristics (with the average score of 19.84 for IT sector and 19.64 for Croatia). Figure 3 presents the results of the comparative analysis of current organizational culture in our observed company, IT sector companies and Croatian companies. Our observed company follows the
trend of IT sector companies and Croatian companies regarding dominant clan culture, in slightly higher extent. Looking at the figure 3, the main difference between our company and overall results can be seen in adhocracy and market part of the chart. Our company has adhocracy culture characteristics expressed in visibly greater extent while market culture characteristics are present in visibly smaller extent.

Figure 3
Comparative Analysis of the Current Organizational Culture of the Observed Company, IT Sector Companies and Croatian Companies

Source: Authors’ survey and data available at OCAI online (http://www.ocai-online.com)

Regarding social BPM results, an in-depth interview revealed high level of using social software for BPM purposes within the observed company. Employees are self-organized and interactively design and change business processes in bottom-up fashion. Their BPM approach highly relies on the idea of giving all participants the same rights to contribute to business process design and change which are based on the ideas and knowledge of a group rather than individual experts or external influences. This kind of approach to group knowledge is highly important for successful management of knowledge intensive processes. Also, the characteristics of a clan organizational culture an in line with the principles of social software which is a very good base for successful social BPM implementation and usage. Moreover, interviewees commented how some of their stakeholders use social software and Enterprise 2.0 tools (e.g. blogs, wikis, social networks, Lync, Yammer) to suggest and create process content and context.
Conclusion

Business processes are the core of the organizations. In that sense, BPM is getting increasing attention among both researchers and organizations. Understanding the holistic nature of BPM brought organizational culture in the light as an important factor influencing BPM. Moreover, social BPM is slowly becoming a popular topic of interest. This paper presented a case study of one Croatian IT consultant and software implementation company which has knowledge intensive processes. This company use social BPM in order to deal with process change and optimization. Having in mind the characteristics of the clan culture which is dominant in the presented company, successful use of social BPM does not come as a surprise.

This paper extends the body of knowledge regarding the role of organizational culture in BPM. However, it has some limitations as well. Since the study has been limited to a single case study, it is not possible to generalize our findings. Further research in this area should be made in order to correct the limitations of this study and shed some more light on the role of the organizational culture in BPM.

References


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