Business Process Management Practices in a Small Transition Economy – Current Status and Research Opportunities

Full paper

Amila Pilav-Velic
University of Sarajevo
Sarajevo, Bosnia & Herzegovina
amilapilav-velic@efsa.unsa.ba

Olivera Marjanovic
University of Sydney
Sydney, Australia
olivera.marjanovic@sydney.edu.au

Abstract

The main objective of this research is to contribute to an improved understanding of BPM practices in transition economies. The paper offers an overview of the key motives for BPM implementation within different business processes and across industry sectors, as currently practiced by 240 (large and small) companies in a small transition economy of Bosnia & Herzegovina. Being the first of its kind for this particular country, this research also contributes to an important body of knowledge on BPM in transition economies of a particular type. Our research also identifies an important limitation of prior research in this area, where BPM studies are often de-contextualized from their very unique context of transition economies. Consequently, we propose to expand the current research on BPM in transition economies to include further research on BPM for transition economies.

Keywords

Business Process Management, Transition economy, Bosnia & Herzegovina, Survey

Introduction

Relentless global competition has resulted in an unprecedented pressure on many transition economies to adapt to new market conditions in order to survive, let alone remain competitive. In response, many companies are turning their attention to Business Process Management (BPM). This is not surprising given the long history of BPM and its main promise of improved efficiency and cost reduction. As identified by Armistead et al. (1997) more than two decades ago, the main drivers for Business Process Management (BPM) adoption include globalization, changing technology, regulation, stakeholders' actions and eroding of business boundaries. The same BPM drivers remain relevant today, especially for transition economies.

Contemporary BPM research and practice offer many definitions and interpretations of its core concepts and their organizational adoptions. For the purposes of this paper and in line with Skrinjar & Trkman (2013), BPM is considered to include a systematic, analytical, cross-functional and continuous improvement and innovation of organizational business processes at all organizational levels. As Suhendra and Oswari (2011) observed: “BPM is not a point solution or a single product, it is a mandatory business capability that allows the business to take control of its current and future needs” (p.112). When successfully adopted by companies, the so-called process-orientation opens up new opportunities for value creation through improved efficiency and cross-functional integration of organizational silos. Consequently, BPM is seen to contribute to the overall organizational performance and competitiveness, especially in the context of fostering cross-functional innovation (vom Brocke et al., 2014).

Even though BPM research and practices have evolved over the last four decades, so far they have been predominantly researched in Western economies. Recent examples of prominent work by researchers from transition economies, such as Hernaus et al. (2015), Bosilj-Vuksice et al. (2013), Skrinjar and Trkman (2013), and Trkman (2010), all confirm BPM’s relevance for small transition economies.
Companies in transition economies also face numerous BPM-related challenges, just like those in Western economies. However, they also experience some very unique BPM-related challenges created by various external factors, including very challenging contexts they operate in. These companies are also facing difficulties in adopting BPM theories developed for Western economies to their localized business and cultural contexts.

Motivated by these important research gaps and practical problems, our study focuses on BPM practices in a small transition economy of Bosnia and Herzegovina (B&H). We aim to answer the following research questions: (1) To what extent do companies in B&H adopt process-orientation? (2) What drives them to implement BPM? 3) Which business processes are targeted by current BPM initiatives?

This study is important for several reasons. Prior research studies confirm that there are not enough empirical studies in BPM (Segatto et al., 2013). Consequently, there is a significant gap between BPM theory and its organizational applications. By looking into BPM practices of 240 small and large companies in B&H we contribute to empirical studies in BPM. Also by focusing on a small transition economy of B&H we contribute to a growing number of studies of BPM in transition economies, in this case, the first one conducted in B&H. Our research findings will be of interest to other researchers interested in BPM in transition economies, especially those pursuing comparative studies. Based on our insights from this research, we also propose several research directions in BPM that are envisaged to be of particular interest to researchers in transition economies and beyond. Collectively and over time, we aim to contribute to new theoretical frameworks and methods in BPM that could be more suitable for companies in transitional economies that may be interested in, or already practicing innovative approaches to BP improvement and innovation (that may not be known to Western economies). Consequently, we issue a call for research on “BPM for transition economies” rather than currently practiced research in “BPM in transition economies”.

The paper is structured as follows. In the next section we offer an overview of related work, in particular prior research on BPM in transition economies. This is followed by a brief description of our research context – a small transition economy of B&H. The subsequent section introduces our adopted research method, including design of a survey instrument as well as data collection and analysis methods. This is followed by the main research findings leading to the discussion section that offers some important research directions for the future of BPM research, in particular BPM for transition economies. The final section offers the main conclusions, study limitations and our future work.

Related Work

Following Roztocki and Wistroffer (2008), we define transition economies as those undergoing a transitioning process from a centrally-planned economic system to a market-driven one. The challenges of transition economies continue to attract a growing community of prominent information systems (IS) researchers. Yet, a very recent overview of related research by Roztocki and Weistroffer (2015) confirms that the related research remains limited to few IS topics such as diffusion and implementation of information and communication technologies (ICT). Most importantly, the same research overview did not report on any research studies related to BPM, as intended in our research project.

We argue that BPM is relevant for any organization undergoing any type of transformation. This is because business processes (BPs) are organizational means of value creation (Harmon, 2010; Hung, 2010; Rahimi, et al., 2016; Rosemann et. al. 2006), and as such inevitably impacted by, or even impacting the intended transformation. As companies in transition economies are forced to innovate their existing business models in response to a new market-driven economic system, any systematic consideration of company’s business processes becomes necessary or even critical.

Although predominantly researched in Western economies, the BPM field is also gaining a momentum in transition economies worldwide, with many prominent researchers focusing on the Eastern European context, also targeted by our research. For example, Skrinjar et al. (2008) investigate the impact of business process orientation on financial and non-financial performance by replicating a previous study by McCormack and Johnson (2001). Their research confirms the impact of BP orientation on organizational performance in transition economies, in this case Slovenian and Croatian economies. Also focusing on BP orientation, Skrinjar and Trkman (2013) analyze practices in creating a higher BP orientation and identify those that are critical at different maturity levels. The results are confirmed by a
survey of 324 companies from Slovenia and Croatia. The critical success factors of business process management are also the focus of another study by Trkman (2010). By combining three underlying theories, namely contingency, dynamic capabilities and task-technology fit, Trkman offers important research insights from a case study conducted in a banking sector in Slovenia. In another study of BP orientation (BPO), Vlahovic et al. (2010) consider turning points that mark different stages of a BPO maturity model. To generate research insights, the authors conducted data mining of survey results collected from companies in Croatia and Slovenia.

In another example from the same research context (Slovenia), Kovacic (2001) focuses on the so-called business renovation projects. The study confirms the importance of business process reengineering (i.e. improvement) in this context, which is motivated by cost reduction, shorter business cycle and quality improvement. The improvement efforts are mainly focused on the key BPs including sales, manufacturing, accounting and finance. Focusing on one of key industry sectors in Slovenia, Gosnik et al. (2015) investigate BPM in manufacturing companies. Their findings confirm that the majority of surveyed companies (self-)evaluate their BPM initiatives as successful.

Looking beyond specific BPs, very recent research by Hernaus, Bosilj-Vuksic and Stemberger (2015) investigates BPM governance within organizations, in particular a pathway from strategy to results. The authors implemented a cross-national survey of 60 Croatian and 51 Slovenian companies, with the results showing the importance of BPM governance structures for operational excellence.

In our final example of a prominent project of BPM in transition economies, Bosilj-Vuksic et al. (2013) expand the disciplinary boundaries of BPM by combining it with another equally important area of business intelligence. The authors conduct a multi-site exploratory case study of four organizations in banking and telecommunications, looking at their performance management practices.

While this overview of important BPM projects in transition economies is by no means exhaustive, it does illustrate the breadth and depth of the current research in this area. We also note that the topics covered are identical to those investigated by the mainstream BPM research. Even more, we observed examples of BPM studies that were replicated from Western economies and applied to the vastly different context of transition economies. Drawing from these findings, our research aims to offer insights into BPM-related practices in a small transition economy of Bosnia & Herzegovina (B&H) that is still recovering from devastating effects of a recent civil war. Compared to other countries from the same region (such as Croatia and Slovenia) that are already members of the European Union (EU), B&H is yet to achieve the same status, let alone the same level of economic development. To our best knowledge, this is the first study of this nature focusing on B&H. The next section introduces our research context.

**Research Context**

Using the well-known classification of different levels of transition economies by Roztocki and Weistroffer (2015), the current economy of Bosnia and Herzegovina (B&H) could be classified as Level 3 transition economy. This level is characterised by «Abrupt abolishment of centrally planned economic system and one-party controlled political system. Simultaneous creation of a new class of entrepreneours and replacement of political elites. Dramatic changes in political entities and redefinition of borders.» (Roztocki and Weistroffer, 2015, p.332). Using another classification by Roztocki and Weistroffer (2011), B&H could be also classified as a developing economy, but moving towards an emerging economy.

Prior to 90s, most companies in former Yugoslavia (including B&H) were worker-owned and managed by worker councils made up of worker representatives from the same company. Following the civil war and disintegration of former Yugoslavia, B&H emerged as one of the newly established countries. Soon after, most of B&H’s companies were privatized through very rapid, non-systematic and often ad-hoc privatization processes. Being primarily focused on ownership, abrupt privatization left the existing operational BPs of newly privatized companies largely intact. Externally, local companies lost their markets in neighboring countries, while facing full liberalization of their own local market in B&H.

In this context, continuous improvements of business processes has occurred as a direct response to the very challenging new economic environment. Namely, efficiency and effectiveness of organizational operations and customer-focused approach are considered to be crucial, not only for companies' competitiveness, but also for their survival on the market. The critical issue of market survival is brought
to the surface by the EU integration process of B&H, with the Stabilisation and Association Agreement (SAA) from the 1 June 2015. The agreement “envisages gradual elimination of customs duties for all goods and raw materials” as well as “liberalization of mutual trade in services” (European Commission 2015, p.1). This is expected to impact, quite significantly, the existing market position of all local companies, in terms of their competitive advantage that is currently based on low-cost strategies. Furthermore country-specific social and cultural context are expected to create further challenges for BPM, given that business processes are expected to cross national borders (e.g. integrated supply chains or governmental processes) with neighboring countries that were also involved in the same civil war. By conducting this study we aim to provide a necessary first step, leading to an improved understating of BPM in this challenging context. This is necessary in order to set the foundations for future comparison of BPM implementation and process orientation in B&H, with other comparable EU candidate countries.

Research Method

Data Sample

Our target population for this study included a wide range of companies operating in B&H. In addition to organizations of all sizes, the target population also included equal proportion of manufacturing and service companies from public and private sectors. Moreover, in the random sampling process, locally-owned companies were preferred. Out of 520 initially contacted companies our final sample comprised of 240 companies. Survey respondents were heads of BPM departments (if such existed), otherwise CEOs, CFOs or CIOs.

Survey Design

The data for this study were collected from March through to September 2014 using a questionnaire comprised of multiple-choice and open-ended questions, all guided by the stated research questions. The questionnaire consisted of two parts (A&B). Part A included questions related to process orientation and BPM implementation, existence of formal BPM department and specific business processes targeted by BPM initiatives. Open-ended questions were used to enable survey participants to expand on their answers and consequently provide more richness and depth in collected data. The second part (B) was related to company's profile and included questions such as number of employees, industry, etc. Also, all questions were clearly explained, in order to get valid and comparable responses. To avoid possible misinterpretation of the key terms, we also provided appropriate and widely used definitions of BPM and business processes.

Data Collection and Analysis

In order to obtain a higher response rate, survey was conducted using computer-assisted telephone interviewing (CATI). CATI is a telephone surveying technique in which the interviewer follows an electronic questionnaire provided by a software application. It is a structured system of data collection aimed at speeding up the process of data collection and coding. Prior to each telephone interview, survey questionnaire had been provided to the authorized person in order to give them enough time to prepare their answers. Following data collection, all data were entered into a SPSS 22.0 database. 20% of imported data were rechecked to assess consistency and accuracy. This is followed by an exploratory data analysis, guided by the stated research questions.

Research Results

Figure 1 depicts a distribution of the surveyed companies per industry type. As shown, most respondents came from the manufacturing companies followed by other public services (including public companies, utilities and agencies of federal government). It is interesting to observe that the area of public services, expected to be of critical importance for the EU integration efforts, had the lowest number of respondents. In response to the first research question, our results indicate that 39.9% out of 240 companies have not implemented BPM and large majority (53.4%) have not expressed an intention to do it in the foreseeable future (Figure 2). Qualitative answers to open-ended questions identify lack of BPM-related skills as one
of the key barriers to BPM implementation. Consequently, there is a widespread lack of understanding of what BPM really entails.

Furthermore, as shown by Figure 3, a total of 61.3% companies do not have formal BPM department or even dedicated employees responsible for BPM. Even in companies in which BPM departments do exist, they are mainly informal and often within IT department (14.2%) or at the senior executive level (13.3%).

When it comes to key organizational motives for BPM implementation (Research question 2), Figure 4 shows that the majority of the surveyed companies agreed that BPM enables greater control over their processes (30.5%), ability to increase revenues (29.2%) as well as reduce cost and improve productivity (27.1%). BPM is also seen to provide opportunities for product improvements (27.1%) and increased customer satisfaction and retention (24.5%).

Finally, when asked about target business processes (Research question 3), most respondents (47.1%) indicated that they implemented BPM concept in customer relationship management and customer loyalty process given their perception that process orientation has direct impact on customer satisfaction and business results (Figure 5). Also, management and administration (30%), finance and accounting (29.6%) as well as sales (25.4%) are recognized as the next most “fruitful grounds” for BPM implementation.

**Distribution of companies per type of industry**

<table>
<thead>
<tr>
<th>Industry</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture</td>
<td>2.50%</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>42.50%</td>
</tr>
<tr>
<td>Energy</td>
<td>12.50%</td>
</tr>
<tr>
<td>Architecture</td>
<td>2.92%</td>
</tr>
<tr>
<td>Trade</td>
<td>9.17%</td>
</tr>
<tr>
<td>Transport</td>
<td>0.42%</td>
</tr>
<tr>
<td>Communication</td>
<td>2.92%</td>
</tr>
<tr>
<td>Real Estate</td>
<td>1.25%</td>
</tr>
<tr>
<td>Public Administration</td>
<td>0.42%</td>
</tr>
<tr>
<td>Education</td>
<td>2.08%</td>
</tr>
<tr>
<td>Health and Social Work</td>
<td>5.45%</td>
</tr>
<tr>
<td>Other Public Services</td>
<td>20.00%</td>
</tr>
</tbody>
</table>

*Figure 1: Industry distribution of survey respondents*

**Discussion**

Given the perceived business objectives of all surveyed companies to remain competitive or even survive of the world of increased competition expected in not-so-distant future, our findings offer several important insights in relation to BPM-enabled competitive advantage. First of all we note a strong customer orientation (including both local and foreign customers), combined with a very strong focus on BPM in Customer Relationship Management (CRM). This particular combination offers new opportunities for competitive differentiation that could be found in the local expertise (e.g. local 'know-how') and in-depth understanding of the local context.

For example, in addition to transactional processes that are easy to outsource and replicate, CRM-related processes also involve knowledge-intensive business processes (KIBPs) that, by nature are much more difficult to replicate due to the tacit knowledge of process participants.
In essence, BPs involving knowledge work that is complex, situational and non-routine are considered to be knowledge-intensive BPs. “The attributes that are generally associated with the concept of knowledge-intensity are a focus on information interpretation, analysis and application, as well as a high degree of expertise or specialized knowledge. Other aspects associated with knowledge-intensity are high learning requirements, a need for creative, non-routine problem solving and the need for frequent mediated and direct communication” (Eppler, 2006, p.61).
Consequently, KIBPs have been identified as the most important organizational processes today (Davenport, 2010; Harison-Broninski, 2010; Forrester, 2010; Davenport, 2005). This is especially the case with BPs in the area of customer service – the same area that a number of our study participants are focusing their current BPM efforts. The level of localized expertise required for ongoing improvement of these processes offers a BPM-related opportunity for a more sustainable competitive differentiation.

The second important observation is related to the reported cause of the relatively low level of BPM adoption found across all industry sectors. In their answers to open-ended questions, participants identified the lack of BPM-related skills as one of the main obstacles. While workplace environments offer valuable opportunities for development of these skills, we argue that these opportunities are more readily available in companies with BPM practices already in place. For those just starting their BPM-related practices, the only option is to hire suitably skilled workforce. While our study did not include a related study of BPM programs offered by local universities and training organizations, we argue that such a study is necessary in order to gain a better understanding of the available work force.
We also note a surprisingly low response rate from public organizations. This could be explained by a very low level of BPM maturity found across all government agencies. Given the country’s current aspiration for EU membership, we argue that this particular area is of critical importance, both during a transition period and beyond. Also, due to their heavily regulated organizational processes, public organizations are also likely to be interested in ‘process monitoring’, found to be one of the key motives for BPM implementation.

As shown by Figure 1, a majority of study participants come from the manufacturing sector. Looking from the BPM perspective, this is the world of highly repetitive, highly structured, high-volume transitional business processes. While this type of processes used to dominate the world of BPM research and practice, they are increasingly automated and as such offer very limited opportunities for competitive differentiation. For example, the 2010 international survey by Forrester confirms that the so-called knowledge-worker processes are starting to dominate traditional production and straight-through process types often found in manufacturing sector (Forrester, 2010). As pointed out by Harrison-Broninski (2010), in due course most organizations are expected to achieve a similar level of efficiency in their routinized business processes and consequently process automation will be the norm, rather than a source of competitive advantage. While this may be the case with more advanced Western economies, process automation of the same scale and level of sophistication is yet to become ‘the norm’ in transition economies. Yet, possible integration into regional supply chains calls for urgent standardization and improvement (including automation) of the existing manufacturing processes or the local companies face the real threat of being left behind.

Advancing BPM Research for Transition Economies

Previous exemplary research by Trkman (2010) offers a very strong critique of the current state of BPM research supported by relevant literature. “BPM has mostly remained in the fad phase and papers still mainly describe what BPM means; what it constitutes; how it should be used” (p.30). The same study also observes that consultants and researchers continue to publish similar papers on these topics.

Our analysis of the related work on BPM in transition economies confirms numerous empirical studies (both quantitative and qualitative) designed to contribute to an improved understanding of the current process-related practices across different industry sectors. We also found the topics to be identical to those studied in contexts of more developed (Western) economies, such as the effects of BP orientation, critical success factors, BPM governance, BP and strategy alignment and so on. In some instances, prior studies from Western economies were replicated in transition economies, with research questions found to be relevant in both contexts.

However, we also observe an important, even fundamental limitation of prior studies. While researchers do study BPM in the context of transition economies, they do not investigate any characteristics of BPM that might be unique for transition economies. In order words, they study BPM in “de-contextualized” organizations, without enough emphasis placed on different characteristics of transition economies that need to be understood beyond organizational boundaries. A prime example of this limitation is the researchers’ approach to organizational strategy and the so-called strategic alignment of BPM – widely considered as the key elements of modern BPM. As previously argued by Trkman et al. (2013) and Trkman (2010), the fit between the business environment and business processes is needed. This is typically achieved through an alignment between organizational strategy and business processes. Similar statements are also found in other studies of BPM in transition economies as outlined in the previous section of this paper. We argue that in the case of any transition economy this alignment or even the strategy formulation process, are both very different activities from those in more developed economies.

Therefore, we propose to extend the current studies of “BPM in transition economies” with a new direction we term “BPM for transition economies” focusing on unique features of BPM that could be only identified and studied by placing the companies in a wider economic, societal and even geo-political context. Rather than replicating the current BPM topics from Western economies, we envisage that our collective multi-disciplinary focus on BPM for transition economies will offer new insights and perhaps even new, yet-to-be discovered research topics and industry practices in BPM. This may also lead to better foundations for a more appropriate comparison among different counties. We argue that the current practices of comparing the outcomes of BPM as practiced in Western economies with those in
impoverished transition economies, or even among different transition economies are not appropriate. This is because they do not consider contextual differences and their possible impact on organizational implementations of BPM.

Very recent literature offer some evidence in support of our argument for BPM for transition economies, by providing some examples of business processes that should be localized in different ways. For instance, Kahanna (2014) provides a very strong argument for the so-called contextualized intelligence “Despite 30 years of experimentation and study, we are only starting to understand that some managerial knowledge is universal and some is specific to a market or a culture” (p.59). For example, even simple processes of payment and product delivery have context-specific characteristics that need to be understood first before they could be managed. “We need to understand so many things better than what we currently do: How do they prioritize spending given their extremely limited resources? What forms of communication will they respond to?...The answers to those questions will differ from Mumbai to Nairobi and from Nairobi to Santiago” (Kahanna 2014, p.68). The author’s observation that “even good companies have a really hard time” (p.62) trying to apply good practices and lessons learned across different contexts, in our view also applies to BPM. This in turn opens new opportunities for future studies in BPM for transition economies, well beyond the existing studies of BPM culture, as discussed by vom Brocke et al. (2011), as well as the other ‘soft elements’ of organizational context.

Conclusions, Limitations and Future Work

The main objective of this research is to contribute to an improved understanding of BPM practices in a small transition economy of Bosnia & Herzegovina. Being the first of its kind for this particular country, our research also contributes to a growing body of knowledge on BPM in transition economies, as currently practiced by a growing number of researchers from the same and other geographical regions.

The paper offers an overview of the key motives for BPM implementation across different business processes, as currently practiced by 240 companies in B&H from different industry sectors. We consider the main research findings in the context of the observed transition economy, linking the observed BPM practices with the broader economic objectives of remaining competitive or even surviving in a fiercely competitive European market. We also offer some suggestions about a possible focus on knowledge-intensive processes and BPs in public sector that could contribute to the same objective. Apart from identifying examples of knowledge-intensive BPs, our study does not consider these processes in more detail. We see this apparent limitation of our current study as an important direction for future BPM in all transition economies.

Our research also identifies an important limitation of prior research in this area, where BPM studies are de-contextualized from their very unique context of transition economies. Consequently, we propose to expand the existing research direction of BPM in transition economies to include yet-to-be investigated BPM for transition economies. We see this as an important and exciting area of our future work and invite other researchers to join us in discovering new BPM methods and frameworks.

REFERENCES


