

The impact of human resources information systems and business process management implementations on recruiting process performance: A case study

Completed Research Paper

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Abstract

This research examines the effects of business process management (BPM) and information systems implementations in secondary service processes. Using a case study of BPM and human resources information systems (HRIS) in the recruiting context at a financial service provider it can be shown that BPM, defined as a structured systematic approach to analyze and continually improve a specific process, and HRIS provide positive effects in terms of cost reduction, increased cycle time, customer satisfaction, and improve quality for secondary service processes in organizations. The results contribute to IS research as they illustrate how combined BPM and IS can be implemented in secondary service processes and provide evidence for the positive effects of BPM and HRIS in this type of processes.

Keywords

Business Process Management, IS Implementation, Business Value of IT, E-Recruiting, Human Resources Information Systems

Introduction

Business process management (BPM) is a combination of tools and measures to enable effective and efficient business processes and to gain a competitive advantage (Hung 2006). It is intensely discussed by IS researchers and practitioners since the late 1980s and especially since Hammer and Champy (1993) introduced the business process reengineering (BPR) approach. BPM approaches are often applied in the industry context primarily focusing on customer-facing or operational processes (Kohlbacher 2006). BPM approaches focusing on secondary service processes are not often reported in the literature and are often neglected by managers in organizations (Kohlbacher 2006, Ulbrich 2006), as BPM is based on the BPR approach which focuses on a radical change of an organization's core processes.

For example for the secondary support process of human resources management (HRM), “no one seems to have developed a business process model of the HRM business processes” (Cakar et al. 2003, p. 191), although “treating the HRM process as a support process [provides] critical support to the key valued-add processes” (Cakar et al. 2003, p. 191). Some of the first ideas analyze the effect of business process standardization on business process performance of the recruiting process (Münstermann et al. 2010). Although, these approaches still only provide snapshots of particular granular effects of BPM for a secondary service process and the positive effects provided by adopting a holistic process view as

suggested by BPM are still unclear (Houy et al. 2011). Moreover, these approaches ignore the implementation of respective information systems that support the corresponding business processes. For example, in a HRM context it is shown that the implementation of human resources information systems (HRIS) provide benefits for the organization (Lang et al. 2010, Eckhardt et al. 2012, Eckhardt et al. 2014), but the full potential might only be realized if a BPM approach is established as well, which has not been intensively focused on by prior research (Houy et al. 2010, 2011).

Hence, further research is necessary to analyze the success of information systems (IS) and BPM implementation in organization, which is why our research aims at contributing to IS research by examining the following research question while focusing on the success of a HRIS and BPM implementation in a particular organization:

What benefits do HRIS and BPM implementation provide for secondary service processes such as the recruiting process?

This research question will be evaluated using a case study focusing on the implementation of a HRIS and BPM implementation for the recruiting process of a financial service provider. The frame of the paper is as follows. In the following section we introduce relevant literature on business process management and the recruiting process in order to develop a research model of business process management in secondary service processes and the corresponding impacts in section 3. Section 4 presents the results of our case study, which will be discussed in the concluding section of the paper.

Research Background

Business Process Management

Definition “Business Process Management”

BPM “*can generally [be] viewed as a collection of process improvement efforts that differ in mission, scope, and approach*” (Houy et al. 2011, p.2). The idea of BPM is based on a process perspective of organizations (Davenport et al. 1990, Hammer 1990) and on the BPR approach (Hammer and Champy 1993). Based on these early approaches several definitions and concepts of BPM have been developed. For example, Elzinga et al. (1995) propose that “*business process management is a systematic, structured approach to analyze, improve, control, and manage processes with the aim of improving the quality of products and services*” (p.119). There are many disparate views regarding BPM (Isaksson 2006, Palmberg 2009), especially, when it is based on the system level, the definitions vary widely (Biazzo and Bernardi 2003). In addition, the approaches and tools suggested for BPM differ both in the literature and in practice and give no clear guidance on how to deploy BPM (Palmberg 2009). Hence, in the following section, we will introduce some business process management concepts in order to explain which one can be applied to the context of secondary business process. These will then be analyzed within the case study conducted in the recruiting context.

Business Process Management Concepts

In general while conducting BPM, it is important to acknowledge that not all processes are equal (Lee and Dale 1998). Most BPM approaches start with an inventory of the organization’s processes in order to identify the core processes for improvement. The core process owner and the BPM team document and analyze the processes, identify performance problems, select an improvement strategy, and implement changes to the process (Detoro and McCabe 1997). However, these activities which are mainly based on BPR approaches are only one side of BPM. The other side includes a continuous monitoring of process performance, the assessment of results, and continuously implementing improvements (Detoro and McCabe 1997). Hence, BPM is both, a set of tools and techniques for improving processes and a method for integrating the whole organization.

Hence, BPM concepts can either be defined as “a structured systematic approach to analyze and continually improve the process” (Palmberg 2009, p. 204) labeled as BPM in the large (Houy et al. 2011) or as “a holistic manner to manage all aspects of the business and a valuable perspective in determining organizational effectiveness” (Palmberg 2009, p. 204) summarized as BPM in the small (Houy et al. 2011). Whereby, BPM in the small concentrates on single processes or scenarios, comprising a few

isolated processes, BPM in the large focuses on handling complexity and dynamics throughout the whole BPM life cycle including collaborative modeling, configurable process models, and process mining.

As our approach is to analyze the impact of BPM in secondary service processes the following focuses on BPM in the small (Houy et al. 2011). The core activities of BPM in the small involve an understanding and definition of the process, its key activities, and the process architecture (Houy et al. 2011). Moreover, the ownership of the process must be established by defining and appointing process owners. Identifying performance measurements and targets for controlling the process is one key activity of BPM on an operational level so that process improvements can be identified and implemented (Palmberg 2009). Moreover, Netjes et al. define the BPM life cycle for managing business processes with five aspects: Design, configuration, execution, control, and diagnosis (Netjes 2006). Zur Mühlen and Ho (2006) introduce a BPM lifecycle including organizational analysis, specification and modeling, workflow modeling and implementation, workflow execution, controlling and process mining, and business activity monitoring. Houy et al. (2010, 2011) integrate these and other BPM approaches and introduce the concept of BPM containing the following steps: strategy development, process definition and modeling, process implementation, process execution, process controlling, process optimization.

We will adopt the definition of BPM in the small and will focus on the different steps explained by Houy et al. (2010, 2011) in order to investigate the effects of BPM in secondary business processes. Before, we introduce some first ideas of BPM in the recruiting context the following section summarizes prior approaches to illustrate the impacts of BPM on business processes in general.

Impact of BPM on Business Processes

Several authors argue that BPM enables a variety of benefits. For example, Hammer (2007, p. 111) highlights that “in virtually every industry, companies of all sizes have achieved extraordinary improvements in cost, quality, speed, profitability, and other key areas by focusing on, measuring, and redesigning their customer-facing and internal processes“ (Hammer 2007). In this context, scholars name reduction of cost, increasing cycle time, improvement of customer satisfaction, and improvement of quality as the main benefits organizations can realize by implementing BPM (Kohlbacher 2010). Several scholars (see Kohlbacher 2010 for an overview) report that BPM enables positive effects such as speed improvements, increasing customer satisfaction, improvement of quality, reduction of costs, and improvement of financial performance (see Table 1).

**Table 1: Benefits of Business Process Management
(based on Kohlbacher 2010)**

Cost Reduction	Forsberg et al. 1999, Hammer 2007, Küng and Hagen 2007
Customer Satisfaction	Gustafsson et al. 2003, Hertz et al. 2001
Cycle Time	Hertz et al. 2001, Küng and Hagen 2007
Process Quality	Hammer 2007, Küng and Hagen 2007

Before we transfer the use of different BPM concepts and process performance dimensions into the recruiting context, we provide some details on the exemplifying secondary business process of staff recruitment and the corresponding HRIS.

Human Resources Information Systems

We chose the corporate recruiting process as an example of a secondary business process to examine the influence of the BPM concepts of Houy et al. (2011) on business process benefits. The recruiting process was applied to this research approach for a number of reasons: The general importance of recruiting is pointed out by Luftman and Ben-Zvi (2010) who named recruiting as a top issue for executives. The rising importance of the recruiting process is also recognized in practice, since more and more global operating

companies have recently started to increase their efforts to improve their worldwide staffing processes (Laumer et al. 2010).

The recruiting process is known to be the most time and costs consuming process among all HR processes. Also, companies increasingly recognize the importance of a better coordination and management of the numerous different tasks in staff recruitment (Eckhardt et al. 2009, Eckhardt et al. 2012). A particular need for process management in the recruiting process could be emphasized, as this process is anything but a straightforward process due to the fact that both actors in the recruiting process – recruiter and applicant – are highly complex individuals who act in numerous different behavioral patterns and are hard to control (Lang et al. 2009, Weitzel et al. 2009, Laumer et al. 2010). In this context, Keim and Weitzel (2006) show that applicants contact the hiring companies via several different types of media and apply for jobs using different forms of application. To respond to the needs of these different groups of applicants most companies need to establish significantly differing recruiting process forms within their overall staff recruitment. A higher number of variants lead to higher overall process complexity and the strong need of business process management for this secondary business process.

Within companies, recruiters also do not act in fixed standard patterns concerning their individual recruiting process approach (Eckhardt et al. 2014). Recommendations and prior experiences of their workplace referents as well as their individual attitude are all significant determinants for their particular behavior. The behavioral patterns widely vary ranging from a completely standardized behavior supported by an underlying applicant tracking system to a completely unstructured and frequently changed behavior without any straightforward process (Eckhardt et al. 2009). Hence, the recruiting process is highly unstandardized in a lot of companies and therefore interesting and particularly suitable for our research purpose.

The general recruiting process design contains six steps (Münstermann et al. 2010). In the first step “Employer Branding” organizations try to develop a particular image with the help of several marketing activities. Here, it is the companies’ objective to be the applicants’ employer of choice. Within the next step “Candidate Attraction”, organizations try to fill their vacancies within a short time frame. This typically includes the posting of job ads in on- and offline channels. In the “Applicant Tracking” step, organizations manage all incoming applications and the communication with the respective applicants. After the following “Pre-Selection” and “Selection” steps (Laumer et al. 2009, Laumer et al. 2012), the recruiting process ends with the final hire (Laumer et al. 2009).

A process-focused perspective of a HRIS has been proposed by (Lee 2007). The HRIS enables an integrated IT-support for the recruiting process to embed all recruiting tasks with one single system. Hence, the HRIS supports the entire recruiting process from the identification of a vacancy to the onboarding of the hired candidate (Maier et al. 2013). The HRIS provides a common data base for all process steps and enables the management of the recruiting process without any media disruptions.

Hence, implementing HRIS might help to streamline and structure the process in a way that helps to improve recruiting process performance (Eckhardt et al. 2014). For example, when the workflow is managed electronically and the responsible managers are reminded of the remaining tasks, the cycle time of the process can be improved as tasks are fulfilled quicker and idle time can be reduced. Although, the implementation of a HRIS requires financial efforts it can also reduce process costs. For example, when central contracts are negotiated with one global internet job board reduced technical complexity (e. g. only one interface to an external service provider) and therewith lower costs for managing system and process can occur. Furthermore, using standardized online application portfolios (e.g. Strohmeier 2010) the organization reduces the costs of managing the selection steps of the recruiting process as fewer employees can handle more applications more easily and the pre-selection can also be run automatically (e.g. Laumer et al. 2009, Laumer et al. 2010), as these standardized application portfolios can be processed without any media disruptions compared to email and paper-based applications. Regarding the quality dimension, an IT-based approach for managing and storing all information related to the recruiting process also increases the overall quality of the data used in the process. If the applicant tracking system supports the different tasks of hiring managers, HR managers and candidates, their satisfaction with the process could also increase.

Based on the discussed concepts and organizational impacts of BPM and the description of the recruiting process as well as a HRIS, the following section introduces our research model.

Research Model

Based on the literature on BPM, the impacts of BPM on organizational performance and HRIS in particular we will develop in this section an understanding of BPM in the recruiting process and of its respective effects in combination with a HRIS implementation on key performance indicators of the process. Figure 2 illustrates the resulting research model. In the following, each activity will be introduced and the corresponding BPM tasks for recruiting are described based on the underlying work as shown in the previous section.

During the Strategy Development step the process owner uses the business strategy and objectives as well as the requirements of key business processes to formulate the strategy of the recruiting process and to set objectives of the process. In the Business Process Reengineering step the process owner is able to conduct a BPR project in order to radically and fundamentally change the process. For example, in the recruiting context this step could involve the radical transformation from recruiting to e-recruiting such that the former mainly paper-based process transforms into an IT-enabled one using a HRIS, online applications, and online job advertisements. Within the Process Definition and Documentation step one has to define the sub-processes, tasks, process owners, automated and non-automated actors and their integration as well as to provide a documentation of the recruiting processes containing all key characteristics. In the recruiting context the different tasks of employer branding, personnel marketing, application management, selection and hiring have to be defined and the implementation of a supporting HRIS has to be evaluated. The Process Standardization steps enable a harmonization of the recruiting process in the entire organizations such that all subsidiaries implement and execute the same process (see for an example of the recruiting process, Münstermann et al. 2010). During the Process Implementation step the newly developed process is implemented in the organization such that in the Process Execution step all process employees can work with the new process. The Process Controlling step involves all activities that monitor or control the process execution and provide key performance indicators of the recruiting process. The Process Improvement step uses the results of the Process Controlling step in order to identify inefficiencies of the process and to continuously implement process improvements and to check the alignment of the process with the developed strategy. If the Process Controlling step evaluates a misfit between the recruiting process and the defined strategy the Process Optimization step can initiate a renewed development of the strategy or a new BPR project.

By using this adjusted concept of BPM in the small organizations, they are able to manage and improve their secondary business processes such that the cycle time and costs reduces and the quality and satisfaction of customers increases. When the BPM concept is applied to the recruiting process our first proposition based on the generally evaluated effect of BPM (see section 2) is:

P1: BPM enables an organization to improve business processes in terms of cost, time, quality, and satisfaction

Also regarding the implementation of a HRIS first research approaches in this field (e.g. (Eckhardt et al. 2012, Münstermann et al. 2010, Von Stetten et al. 2008) already observe a positive impact of HRIS in the recruiting process. This impact could be achieved in all steps of the recruiting process for several different performance dimensions. Hence, based on prior research our proposition is:

P2: Implementing HRIS enables process improvements in terms of cost, time, quality, and satisfaction.

Using only these two propositions would neglect the jointed impact of BPM and HRIS implementations as complementarities exist between the implemented components of BPM and the underlying technology (Münstermann et al. 2009; Beimborn and Joachim 2011).

For example process documentation as part of BPM might be on the one side a necessary precondition for implementing integrated applicant tracking systems that should support a recruiting process free of media disruptions. Based on the documentation and standardization of the recruiting process a HRIS can be implemented to support the workflow management (Lee 2007). However, HRIS implementations might also come along with external process standards that need to be implemented in the organization to use the new system to its full extent. Hence, business process standardization is one example of a BPM component that might be induced by technology implementation but might also be a precondition for

implementing an applicant tracking system successfully. Hence, the full impact of BPM and HRIS on recruiting process performance might only be realized as a joint one. Hence, our third proposition is that

P3: Implementing both BPM and HRIS enables more process improvements than implementing either BPM or HRIS.

Figure 2 summarizes our research model. In the following section we will propose evidence for these effects by presenting the case of a Swiss financial service provider who has implemented BPM and a HRIS for its recruiting process.

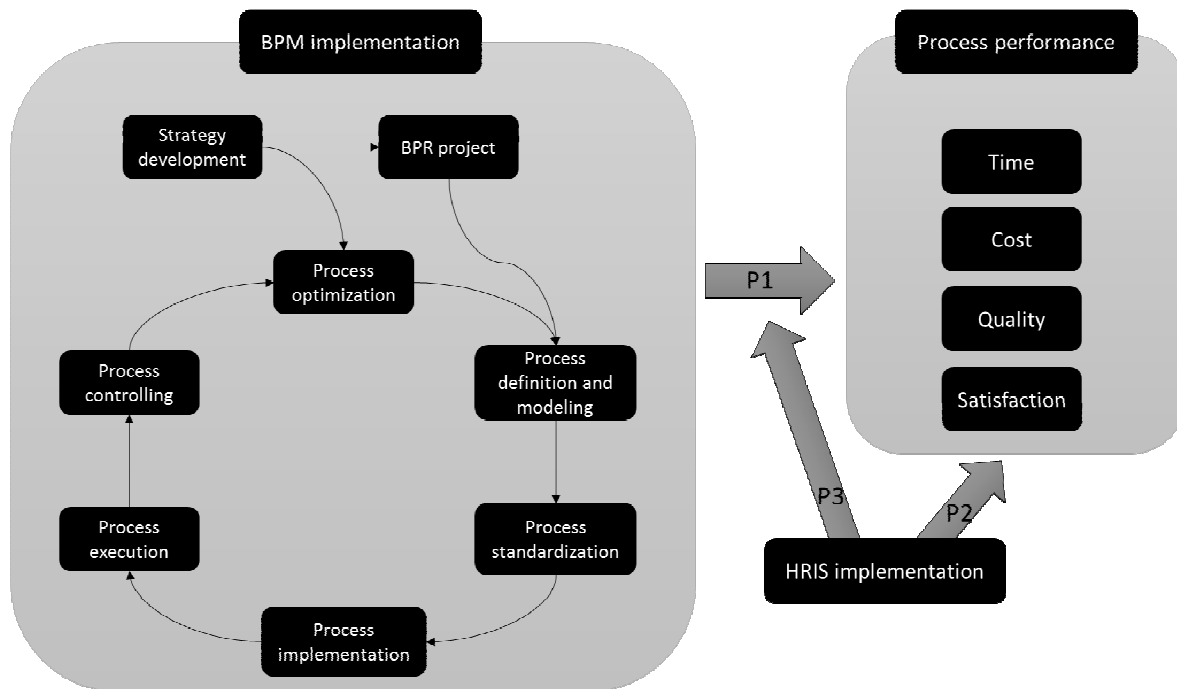


Figure 1: Research Model

Case Study: HRIS and BPM in Recruiting

In order to evaluate the proposed research model a case study has been conducted with a Swiss financial service provider.

Research Methodology

The case study has been conducted in the post-implementation phase. After the organization had implemented the BPM in the small approach for the recruiting process and was executing the process for at least one year we visited the company to conduct interviews with the project management involved, to analyze project documentations and the results of the process controlling step, as well as to discuss the implemented BPM in the small approach with HR management and affected employees. Each interview has been recorded and transcribed. The interviews and the additional materials provided by the company have been analyzed and coded according to our research model by two authors and cross-checked by an additional one.

Using this approach we are able to describe the combined BPM and HRIS approach the organization implemented in its recruiting process and to evaluate the effects the approach provides. The following section describes the approach implemented by the organization and the effects afterwards on key performance indicators will be highlighted.

HRIS and BPM in the Recruiting Processes

The conducted interviews and the provided materials of the organizations have been coded and structured according to our research model. Hence, we will describe in the following for each step what the organization has implemented in order to enable HRIS and BPM in the recruiting process.

Strategy Development

During the Strategy Development step one uses the business strategy and objectives as well as the requirements of key business processes to formulate the strategy of the recruiting process and to set objectives of the process. The requirements for the recruiting process are mainly determined by the labor market conditions. The organization realized the “war for talent” has gotten worse during the last years and several target groups like sales or IT are especially challenging in the context of finding qualified candidates. Moreover, the recruiting process was only supported by IT for a few tasks and every decentralized HR subsidiary has implemented their own processes and tools, for example some published job ads on internet job boards while others remained with advertisements in printed media. Hence, the organization develops a strategy to implement a centralized recruiting supported by a single applicant tracking systems in order to provide better information and services to its candidates and to optimize its personnel marketing activities. As the implementation of the new strategy required a radical change of the recruiting process the organization started with a BPR approach in order to develop a new way of managing and executing the recruiting process.

Business Process Reengineering

The basic idea of the BPR project was to implement an applicant tracking system and to manage the recruiting process according to BPM principles. The first step was to define the new process and to integrate the process in a newly implemented applicant tracking system. Afterwards, the new process and the systems were rolled-out to all subsidiaries making all HR employees have to work in the same process using the HRIS. Moreover, key performance indicators were defined and their measurement has been implemented in the new system in order to enable a continuous improvement of the recruiting process. Each step will be described in the following.

Process Definition and Documentation

The process has been defined consisting of six sub-processes: Plan, Attract, Relate, Select, Win&Hire, and Onboard. In the Plan step the requirement amount of personnel resources is defined and corresponding budget is approved. In the Attract- and Relate steps the organization uses different channels to attract potential and qualified candidates using passive (e.g., job boards, social media, websites) and active (e.g. searching and attracting actively candidates) recruiting measures. For the Select step the organization uses online applications where incoming applications are automatically stored in the applicant tracking system and can be evaluated by the recruiter. In the Win&Hire step the organization provides the selected candidates a job offer and the contract is signed. In the final step the organization supports new employees during their onboarding activities. For each process step the organization has documented the tasks and activities.

Process Standardization

The newly defined recruiting process has been standardized as it is implemented in the new applicant tracking system and each subsidiary is expected to work with the new system and the new process. This enables an organization-wide integration of tasks and information of the recruiting process. Furthermore, each subsidiary can benefit from the experiences of the organization to continuously improve the different steps of the recruiting process.

Process Implementation and Execution

In 2008 the organization finally implemented the HRIS and the new recruiting process. Since this point of time all employees have to work with the new system and perform their tasks of the new recruiting process.

Process Controlling

A major component of the implemented BPM approach is process controlling. For managing the process the organization has defined key performance indicators in order to continuously improve the process based on observable facts indicating inefficiencies in the process. Based on the developed strategy the organization has defined key performance indicators for time, quality, cost, and satisfaction dimensions like “Talent-on-Time“, “Brand Strength“, “Offer Acceptance“ (ratio of signed working contracts with the company and the company’s made offers), “Efficiency“, and “Quality of New Hires“. The collection of these key performance indicators started with system implementation.

In the Attract and the Relate phase the number of the job ad page visits is observed. Additionally, the new approach offers the possibility to track the number of these online applications, which have been completely filled out by the applicants. This helps the company to monitor how many job views are necessary to generate completely filled out applications. Moreover, the applicant tracking system in use offers the information, via the media channels the candidates are attracted to apply and these applications are gathered.

For the HRIS and BPM approach, it is essentially important to track down the time of each process step in order to avoid process inefficiencies. Therefore, the Time-to-Hire was split up in granular single process steps to provide transparency in terms of overall and individual process step time. Cost transparency is another important issue during the Win&Hire phase. On the one hand, the company gathers information on the cost for open unfilled positions, as well as on the other hand on the cost of each individual process step. For a further improvement of the recruiting process, the company also evaluated the candidate experience with individual process steps in the Win&Hire as well as the Onboard phase. The system also provides the possibility to ask candidates for reasons why they rejected a contract offered by the company in question.

Process Improvement

Based on this knowledge, the company also started to further improve and revise their process steps. First evaluations after the system implementation showed that candidates are satisfied with the information provided but are slightly dissatisfied with the company’s response time concerning their submitted application. In relation with the gathered key performance indicator Talent-on-Time, this led to a further process improvement initiative, as both stakeholders (candidates and operating department) were dissatisfied with the status quo.

With the help of the gathered process time, the company was able to increase process efficiency, as too much time went by between the incoming application and a first evaluation by the responsible recruiter. As a result, the company focused and improved this process step. In general, the organization started to improve the newly implemented recruiting process based on the information derived from the different steps of the BPM in the small approach.

Business Value of HRIS and BPM in Recruiting

Both the implementation of the HRIS and the use of BPM have led to several significant improvements and value contributions for the company. Starting with the implementation of the new system and the BPM approach it was first made possible to reveal the value contribution for the company. The company was able to assess that they reduced their total cost in staff recruitment by fifty percent between 2007 and 2010. Especially, the cost for job postings and the cost per hire could be reduced, as depicted in Figure 3 (left side).

Furthermore, the HRIS also helped to reveal a value contribution in personnel marketing. The number of visitors of the career website increased significantly as well as the impressions per job ad (see Figure 3 – right side). Based on the key performance indicators gathered in the process controlling the company found out, that adjustments in the personnel marketing strategy (e.g., reduced number of offline job ads and increasing use of online job boards) led to more visitors on the career website and to less impressions per job ad.

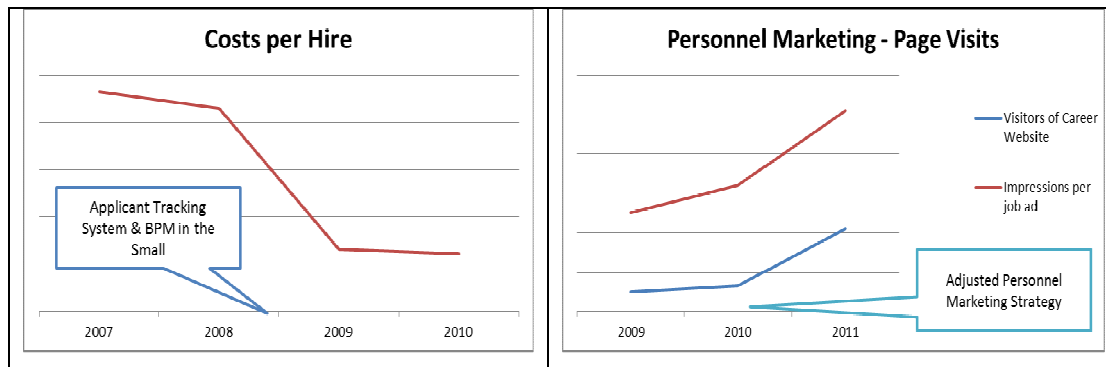


Figure 2: Benefits of HRIS and BPM implementation

Discussion and Implications

“No one seems to have developed a business process model of the HRM business processes” (Cakar et al. 2003, p. 191), although “treating the HRM process as a support process [provides] critical support to the key valued-add processes” (Cakar et al. 2003, p. 191). With our case study we provide a HRM business process model for the recruiting process and highlight the benefits IS and BPM enable for secondary service processes. However, our study is also limited by the fact that it focuses only on one organization and on one IS and in the observed organization only the recruiting process is investigated. Hence, further approaches, investigations in additional organizations as well as in different types of IS (e.g. enterprise content management, Laumer et al. 2013, social media, Maier et al. 2014, enterprise resource planning) or in other departments besides the recruiting one are necessary to provide more general results of the joint impact of BPM and IS implementations on process performance. Nonetheless, the single case of BPM and HRIS implementation presented in this paper has several implications which will be discussed in the following.

The process model proposed by our research focuses on the BPM in the small approach and on the one particular process. It is based on process models for “a structured systematic approach to analyze and continually improve the process” (Palmborg 2009, p. 204). The core activities of BPM in the small involve an understanding and definition of the process, its key activities, and the process architecture (Houy et al. 2011). We propose based on Houy et al. (2010, 2011) the concept of BPM in the small for the recruiting process containing the following steps: strategy development, business process reengineering, process definition and modeling, process implementation, process execution, process controlling, and process optimization. The case study conducted illustrated that these different steps have also been implemented by the organization observed, meaning that our suggestions are just a first step towards a business process model of HRM business process as demanded by BPM literature (Cakar et al. 2003). Nonetheless, we only provide evidence of a single case study of one particular process that the proposed BPM in the small approach is suitable for secondary service processes. Hence, additional approaches focusing on additional service processes are necessary in order to verify or modify the proposed concept.

In terms of positive BPM effects the case study indicates that BPM in combination with HRIS implementations enables an organization to improve the entire time-to-hire as well as the time span of several sub-processes like the time-to-interview and time-to-publish-job-ads. The case study indicates that based on the process analysis and controlling, the organization was able to detect the bottlenecks of the process and to improve their processes in terms of cycle time. The recruiting services are offered to internal and external customers on a standard service level. Especially the fact that the organization is able to come up with a hiring decision faster than in the past enables better results of the process in terms of accepted job offers. Moreover, BPM and HRIS enable an organization to reduce the costs of the recruiting process such that the process costs, the personnel marketing costs, and the costs-per-incoming application decrease. As illustrated by Figure 3 the organization was able to reduce hiring costs by 50 percent and to save over one million CHF based on the reorganization of the recruiting process and on the results of the process analysis and controlling of BPM. It also increases the satisfaction of customers such

that internal managers of several business departments are more satisfied with the recruiting department as well as candidates are more satisfied with the recruiting process. Internal managers are more satisfied as the process is more transparent based on the BPM and HRIS implementation as it is documented and monitored and the results of the process in terms of qualified hires increase. Consequently our research contributes to IS implementation research as we are able to show that in secondary service processes, which have not been extensively focused on by neither BPM researchers nor practitioners, BPM and IS provides value to the organization. Furthermore, we are able to show that especially the combination of IS and BPM implementations enable positive effects. Nonetheless, the results are limited as we only provide evidence based on one case study. In order to increase the generalizability of the results additional approaches are needed. An empirical study of the recruiting process or other secondary service processes might extend our results and enable a better understanding of different BPM approaches implemented in combination with IS by organizations and their effects on process performance and the entire organization.

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