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#### **Working Paper**

Financial benefits of business process management: A critical evaluation of current studies. Main issues and findings

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# im Dialog

## Weidener Diskussionspapiere

Financial Benefits of Business Process Management -A critical evaluation of current studies

Main issues and findings

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Diskussionspapier No. 4 Juli 2007

### Financial Benefits of Business Process Management

#### A critical evaluation of current studies

#### Main issues and findings\*)

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#### **Abstract:**

The paper addresses the business value discussion of IT focussing on Business Process Management (BPM), where BPM is understood as an integrated management concept with IT as a critical enabling technology. To answer the question if there could be any financial benefit effects due to implementation of BPM an analysis was made based on secondary as well as field research methods. The results of the study examination and the real case studies prove that Business Process Management provides significant financial benefits for companies.

#### **Abstrakt:**

Dieser Aufsatz liefert einen Beitrag zur Diskussion um die Frage der Wertschöpfungsleistung der Informations- und Kommunikationstechnik (IuK) in Unternehmen. IuK bildet heute immer häufiger die Basis zur Realisierung moderner betriebswirtschaftlicher Konzepte, so auch dem Business Process Management (BPM). BPM versteht sich als integrierter Management-Ansatz, der zur Verbesserung der Leistungsfähigkeit eines Unternehmens wertvolle Hilfestellung leisten kann. Welche Effekte tatsächlich erreicht werden können, ist allerdings umstritten. Durch die Analyse aktueller Studien und ergänzender Interviews mit BPM-Verantwortlichen aus der Praxis, wurden insbesondere die finanziellen Auswirkungen von BPM-Projekten untersucht und nachgewiesen.

#### **Preamble**

Business Process Management (BPM) is one of the outstanding issues in today's business management discussions. Due to the availability of sophisticated information technology like Workflow Management Systems (WfMS), Business Process Modelling Tools, Enterprise Application Integration EAI or Service-Oriented Architecture (SOA) the potentials of process-centric approaches to managing business operations are apparent.

Nevertheless many companies are rather reluctant in realizing these promising opportunities. One of the reasons for this may be the fact, that CEOs and CIOs are concerned about the "hype" effects of new technologies. Many technologies have been overestimated at the beginning of their diffusion, which could be very disappointing for those who act as early adopters. Back in 1995 Gartner Inc. first described this effect with it's "Hype Cycle". Actually in their Hype Cycle for Emerging Technologies 2005 they placed BPM technology (BPM Suites) as one of the top hype issues [Gartner 2005]. In this phase, "a frenzy of publicity typically generates over-enthusiasm and unrealistic expectations. There may be some successful applications of a technology, but there are typically more failures" (Gartner Inc.). Although there are a multitude of (mostly qualitative) arguments for implementing BPM, there is little proof that BPM also can generate financial benefits for a company.

To answer the question if there could be any financial benefit effects demonstrated with the implementation of BPM a joint research project was started between the faculty of business at the University of Applied Sciences, FH Amberg-Weiden and Siemens AG, Industrial Solutions and Services, Group Information and Operations. Within the scope of this work, a study (diploma thesis) was carried out to analyse relevant studies in this field and to supplement these findings with practical cases done by own field research.

This paper gives an overview of the main issues and findings of this study.

#### **Objectives**

The focus of the study is to prove that consequent implementation of Business Process Management not just results in qualitative but also in financial benefits. In order to prove that these financial benefits exist, a series of informal interviews were conducted with process managers, executives and consultants from Siemens AG and other organizations.

Additionally a structured examination of current studies on BPM was done. In order to identify if there is already any evidence that implementation of Business Process Manage-

ment creates measurable financial benefits relevant studies were analyzed. Beside financial results, the examination should give an overview about the state of the affairs of Business Process Management in Europe and the United Kingdom as well as in the United States.

Altogether this diploma thesis should act as a driver for companies and managers to invest in BPM because it pays off. Therefore the paper also should give recommendations to companies and managers for a successful and effective implementation of a holistic Business Process Management.

#### Content

The full paper is structured as follows. The second chapter gives general information about reasons for companies to take action in BPM projects. It is depicted how BPM approaches can emerge out of different market and organizational developments. Also commonly accepted goals of Business Process Management mentioned.

In chapter three there is a classification to show the embedding of BPM as a whole, common BPM methods and common quality methods and information technology within an organization.

The fourth chapter contains the statements of currently relevant studies about BPM. The section begins with determining the current level of interest and involvement and statements about current actions in Business Process Management. Furthermore comments on drivers for BPM and currently efforts in BPM were described. Statements about potential inhibitors and facilitators complete this chapter.

Chapter five contains real case studies describing the current situation of the organization, implemented BPM approach and achieved financial benefits and key learning. These topics contain results from the interviews.

The last chapter is a conclusion describing key success factors and the importance of change management of a BPM implementation. Closing, a recommendation by ten factors supporting successful Business Process Management is listed.

#### **Study Approach**

The study was conducted from October 2006 to March 2007.

Project initialization	Literature research	Interviews	Analysis and Completion
<ul> <li>Define approach</li> <li>Define criteria for analysis</li> <li>Define appointments</li> <li>Kick off</li> </ul>	<ul> <li>Analyze studies</li> <li>Analyze literature</li> <li>Design of interview guideline</li> </ul>	<ul> <li>Select and contact participants</li> <li>Conduct interviews</li> <li>Prepare protocols and agree with</li> </ul>	<ul> <li>Analyze interviews</li> <li>Design diploma thesis</li> <li>Design Management Summary</li> </ul>

Figure 1: Study approach

#### **Definition and classification of BPM**

Throughout this paper, Business Process Management is understood as "An integrated concept of management, organization and controlling, which provides a target oriented control of business, management & support processes and aligns the whole enterprise to satisfy needs of customers and other stakeholders (employees, vendors, investors etc.) [cf. Schmelzer, Sesselmann, 2006].

There are close connections and relations between several management concepts and BPM. In this study BPM is seen as an approach embedded into strategic management. BPM supports overall management approaches like Total Quality Management (TCM) and Value Based Management. BPM itself includes implementation of methods, quality models and is supported by information technology. Finally, an effective Change Management approach should accompany the BPM implementation. Figure 2 gives an overview of commonly used approaches in the scope of the studies analyzed.

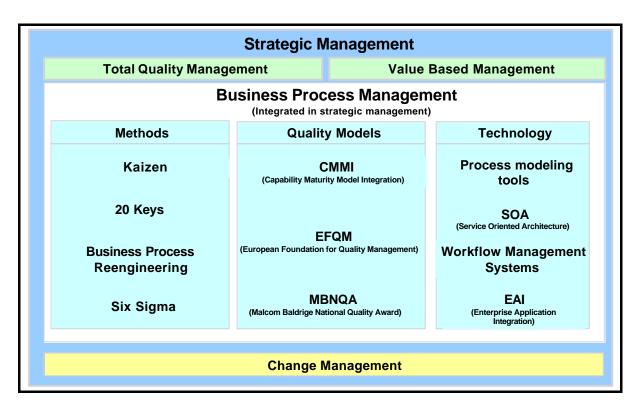


Figure 2: Classification of BPM

#### Study analysis

An examination of thirteen relevant studies about Business Process Management brought the following results;

- ♦ Level of interest and involvement in BPM grows steadily
- Kinds of process efforts, companies are currently engaged in: development of enterprise process architecture, major redesign projects, standardization of heterogeneous processes and controlling of process capacities
- ◆ Drivers for BPM activities are: reducing costs, improving productivity, government requirements like Sarbanes-Oxley (SOX)
- Quality models play an import role in implementing successful BPM
- ◆ Operating figures performed better (sales, operating income, ROI) after implementation of BPM.

#### **Net financial benefits**

The results of the study examination and the real case studies (see figure below) prove that Business Process Management provides significant financial benefits for companies. Every interviewed company or business unit has been creating measurable net financial benefit through consequent implementation of BPM. That matter of fact supports the thesis of a cause-effect relationship between implementation of BPM and financial benefits.

Organization	Methods	Net Financial Benefits	Processes	
GRAMMER	20 Keys	€1.200.000	Production, Logistics	
Siemens Division	СММІ	€ 15.000.000	Software Engineering	
Siemens Group	VGP (Six Sigma)	€72.000.000		
Siemens Med CT	Business Process Management	Doubling of operational results		
Management Engineers Consultancy	Process Optimization	20-50% cost savings	All Process Families	
	ancy BPR 15-25% cost savings		All Process Families	
Boeing A&T C-17 aircraft program	MBNQA / PBM	Net asset turnover improved by a factor of seven since 1994		
		Return on sales nearly threefold		
		83% cost reduction	Production	

Figure 3: Net financial benefits

#### **Key results**

The analysis of the practical interviews brought the following results;

- Consequent implementation of Business Process Management creates measurable financial benefits
- BPM methods provide 'quick wins' as well as sustained results
- Organizations which rate higher on process maturity also rate higher on organizational performance
- Companies have only achieved such significant improvements of financial and organizational performance with consequent implementation and development of BPM
- ♦ There are many ways of doing effective Business Process Management

Recommendation

Finally, the outcomes of the real case studies were combined with lessons learned emerged

out of a survey among successful BPM practitioners by Jean-Philip Pritchard and Colin

Armistead from the business school of Bournemouth University, UK [Pritchard, Ar-

mistead, 1999]. The result is a list of recommendations to achieve sustainable success in

Business Process Management. The recommendations involve mainly cultural change and

strategy aspects:

1. Clear vision, a long-term focus and management commitment

♦ Link BPM with strategic programs

♦ Allow time to develop a process approach

♦ Consider the impact of BPM strategy on team and task level

2. Structured approach

♦ Align BPM approach with organizational structure

♦ Balance integrated approach and focus

♦ Integrate BPM into performance measurement system

3. Permanent Change Management

♦ Communicate goals and progress

♦ Create awareness and integrate affected stakeholders

• Ensure role model behaviour of leaders

♦ Train competencies

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