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Jan vom Brocke • Michael Rosemann  
Editors

# Handbook on Business Process Management 1

Introduction, Methods,  
and Information Systems

 Springer

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*to my wonderful wife Christina*

from Jan

*to Louise, Noah and Sophie – with love*

from !Michael



# Foreword

Business Process Management (BPM) has emerged as a comprehensive consolidation of disciplines sharing the belief that a process-centered approach leads to substantial improvements in both performance and compliance of a system. Apart from productivity gains, BPM has the power to innovate and continuously transform businesses and entire cross-organizational value chains. The paradigm of “process thinking” is by no means an invention of the last two decades but had already been postulated by early economists such as Adam Smith or engineers such as Frederick Taylor.

A wide uptake of the process paradigm began at an early stage in the manufacturing sector, either as a central principle in planning approaches such as MRP II or as a factory layout principle. Yet, it took an amazingly long period of time before the service industries actually recognized the significance of processes as an important organizational variable. The ever increasing pressure in the ultimate journey for corporate excellence and innovation went along with the conception of a “process” as a unit of analysis and increasingly appeared in various disciplines.

As part of quality management, the critical role of process quality led to a plethora of process analysis techniques that culminated in the rigorous set of Six Sigma methods. In the information technology discipline, the process became an integral part of Enterprise Architectures and conceptual modeling frameworks. Processes became a “first class citizen” in process-aware software solutions and, in particular, in dedicated BPM-systems, formerly known as workflow management systems. Reference models such as ITIL or SCOR postulated the idea of best (process) practices, and the accounting discipline started to consider processes as a controlling object (Activity-based Costing). Universities are now slowly starting to build Business Process Management courses into their curricula, while positions such as business process analysts or chief process officers are increasingly appearing in organizational charts.

However, while the role of processes has been widely recognized, an all-encompassing discipline promoting the importance of process and providing integrated BPM methodologies has been lacking for a long time. This may be a

major reason why process thinking is still not as common as cost awareness, employee focus, or ethical considerations.

BPM is now proposed as the spanning discipline that largely integrates and completes what previous disciplines have achieved. As such, it consolidates how to best manage the (re-)design of individual business processes and how to develop a foundational Business Process Management capability in organizations catering for a variety of purposes and contexts.

The high demand for BPM has encouraged a number of authors to contribute and capture different facets in the form of textbooks. Despite a substantial list of references, the BPM community is still short of a publication that provides a consolidated understanding of the true scope and contents of a comprehensively defined Business Process Management.

It has been our motivation to fill the gap for a point of reference that reflects the holistic nature of BPM without compromising the detail. In order to structure this Handbook, we defined BPM as consisting of six core factors, i.e., Strategic Alignment, Governance, Methods, Information Systems, People, and Culture. These six factors had been derived as part of a multiyear global research study on the essential factors of BPM maturity.

We now present a Handbook that covers these six factors in two volumes comprising more than 1,500 pages from over 100 authors including the world's leading experts in the field. Different approaches of BPM are presented reflecting the diversity of the field. At the same time, we tried to provide some guidance, i.e., by means of the six core elements, to make it easy to open up the various facets of BPM according to individual preferences. We give further comment on that in the "how to read this book" section.

Both volumes together reflect the scope of BPM. Each volume has been organized to have its own focus. The first volume includes the introduction to BPM and concentrates on its Methods and Process-aware Information Systems. The second volume captures in three sections: Strategic Alignment, Governance, and People, and Culture. Both volumes combine the latest outcomes of high standing BPM research with the practical experiences gained in global BPM projects.

This first volume is clustered in three sections.

1. A set of five introductory chapters provides an overview about the current understanding of the aims, boundaries, and essence of BPM. We are particularly proud that we were able to secure the contributions of the global BPM thought leaders for this critical section.
2. The second section is dedicated to the heavily researched area of BPM Methods covering, in particular, process lifecycle methods such as Six Sigma and the essential role of process modeling in 12 chapters. Further, complementary chapters discuss process simulation, process variant management, and BPM tool selection.
3. The third section covers Process-aware Information Systems and elaborates in nine chapters on the foundational role of workflow management, the agility that



results from service-enabled business processes and the new potential related to the uptake of recommender systems or collaborative networking tools.

We are very grateful to the outstanding, carefully crafted, and responsibly revised contributions of the authors of this Handbook. All contributions have undergone a rigorous review process, involving two independent experts in two to three rounds of review. The unconditional commitment to a high quality Handbook required, unfortunately, in some cases, rejections or substantial revisions. In any case, all authors have been very responsive in the way they addressed the requested changes. We are very much aware of the sum of the work that went into this book and cannot appropriately express our gratitude in the brevity of such a foreword.

While producing this Handbook, the authors' enthusiasm was truly interrupted as we in the community were confronted with and saddened by the tragic loss of two of the most inspirational BPM thought leaders the world has seen. Michael Hammer, founder of the Business Process Reengineering discipline and maybe the most successful promoter of the process paradigm passed away in September 2008. Shortly after, Geary A. Rummmler, a pioneer in terms of the role of business process as part of the corporate search for organizational performance died in October 2008. We are honored that this Handbook features some of the last inspirations of these two admirable individuals; we also recognize that the BPM community will be a poorer place without them.

A special expression of our gratefulness goes to Karin-Theresia Federl and Christian Sonnenberg, Institute of Information Systems, University Liechtenstein, who brought order and discipline to the myriad of activities that were required as part of the compilation of this Handbook. We hope that this Handbook on Business Process Management will provide a much appreciated, sustainable summary of the state-of-the-art of this truly exciting discipline and that it will have the much desired positive impact for its future development and uptake.

*Jan vom Brocke & Michael Rosemann, June 2010  
Vaduz, Liechtenstein, and Brisbane, Australia*



# How to Read this Handbook

This book brings together contributions from BPM experts worldwide. It incorporates a rich set of viewpoints all leading towards an holistic picture of BPM. Compiling this Handbook, we did not intend to force all authors to go under one unique doctrine. On the contrary, we felt that it is rather the richness of approaches and viewpoints covered that makes this book a unique contribution. While keeping the original nature of each piece we provide support in navigating through the various chapters.

- *BPM Core Elements:* We identified six core elements of BPM that all authors are using as a frame to position their contribution. You will find an introductory chapter in volume 1 of this Handbook explaining these elements in detail.
- *BPM Cross-References:* We asked each author to thoroughly read corresponding chapters and to include cross-references to related sections of the BPM Handbook. In addition, further cross-references have been included by the editors.
- *BPM Index:* Both volumes have a detailed index. In order to support a maximum of integration in each volume, also the keywords of the other volume are incorporated.
- *BPM Who-is-Who:* We added an extended author index to each volume serving as a who-is-who. This section illustrates the individual background of each author that might be helpful in contextualizing the various contributions to the BPM Handbook.

We very much hope these mechanisms might help you in choosing the very contributions of the BPM Handbook most suitable for your individual interest.



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