Introduction

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Welcome to the *2010 BPM and Workflow Handbook*. This edition marks the 10th year of publication and each year, in collaboration with the WfMC, we have produced a valuable handbook capturing state-of-the-art in workflow practices and for the past few years we expanded our focus to include articles on BPM along with spotlights on industry niches such as Healthcare, Human Workflow and Government.

This year we focus on *Business Intelligence* to illustrate how Business Process Management and Business Intelligence are increasingly intertwined. Linking business intelligence and business process management creates stronger operational business intelligence. Users seek more intelligent business process capabilities in order to remain competitive within their fields and industries. BPM vendors realize they need to improve their business processes, rules and event management offerings with greater intelligence or analytics capabilities.

This is a book for business people who just want to understand the how and why of process automation and integration in simple non-jargon terms. It is also for the technical practitioner looking for the latest insights into where BPM standards are heading, how others are managing implementations and more.

Throughout the book international industry experts and thought leaders present significant new ideas and concepts to help you plan a successful future for your organization.

- SECTION 1: SPOTLIGHT ON BUSINESS INTELLIGENCE covers a wide spectrum of viewpoints and discussions by experts in their respective fields. Papers range from an examination of the *Knowledge Work and Unpredictable Processes* through to Using *BPM to Drive Clinical Intelligence* and *Predictive BPM.*
- SECTION 2—THE BUSINESS VALUE OF BPM AND WORKFLOW introduces new key concepts and sets out the business case for workflow technology and BPM. This perspective is covered by papers that provide practical information on BPM (including case studies) designed for an audience of business users.
- SECTION 3—STANDARDS AND TECHNOLOGY. BPM standards have evolved from technical nuance to a business imperative. This perspective is covered by papers on system structure and values, operation and scalability issues, written for an audience of Information Technology (IT) professionals.
- SECTION 4—DIRECTORY AND APPENDICES offers an explanation of the structure of the Workflow Management Coalition and references comprise the last section including a membership directory.

SECTION 1—SPOTLIGHT ON BUSINESS INTELLIGENCE

The use of BPM and BI together is not a new concept. Business Process Intelligence (BPI) takes on new meaning and importance as organizations become process-centric and standards and technologies mature and converge. This chapter brings discusses key trends of where organizations are moving toward bringing together products and methodology to improve business performance beyond BPM and BI: Combining the 4 Bs: Business Design + Business Process + Business Intelligence + Business Rules, Event Driven Process Intelligence, and BPI as a Cloud or Appliance.

the state of the art. Subsequently, a team of several researchers developed the solution for the problem. This work has had several validation and verification stages to prove its feasibility and effectiveness, including a prototype developed using a world-class open source BPM tool, and standard programming languages.

STAYING AHEAD OF THE CURVE WITH DECISION-CENTRIC BUSINESS INTELLIGENCE 91

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Customer-related decision points which impact a financial services firm's performance are spread across the customer lifecycle, from acquisition through portfolio management and collections. These decision points which involve risk taking have traditionally been focused on credit risk management, while, as more recently seen from the financial crisis, are taking a more holistic view considering also operational risk requirements which emphasize the importance of more control and to quickly respond to market events and compliance demands. Having more information easily at your fingertips to monitor, measure and analyze performance in business processes which manage these points of risk taking decisions is essential to responding quickly and deftly to competitive and regulatory pressures.

COMBINING KNOWLEDGE, PROCESS AND BI TO DELIVER AGILITY IN A COLLABORATIVE ENVIRONMENT 99

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As a response to the complex interactions between partners, integration of knowledge and business processes represents an important step in improving the agility of the organization. For intensive knowledge based processes Case Management may be used, which provides a real time image on the current events and generates a rapid response to the organization's internal and external events. Business Intelligence (BI) is used at the present for performance management within business processes, helping the organization to automatically detect the problems/opportunities and to initiate corrective actions and/or change business rules in order to optimise processes. The paper provides an approach on the way in which knowledge may be combined with processes and Business Intelligence in order to achieve agility within the collaborative environment.

USING BPM TO DRIVE CLINICAL INTELLIGENCE AND PROCESS OVERSIGHT IN THE ACUTE HEALTHCARE SETTING 115

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The environment of the acute hospital setting is a complex compilation of intricate processes. The healthcare worker is challenged to manage and coordinate many diverse aspects of their patients' care effectively. There is an ever-increasing burden of care options and requirements that need to be considered. The use of business process management to help automate and control patient care has been shown to be effective in improving this care burden. However, the healthcare sector has been very slow to adopt BPM. There are many reasons for this phenomenon. Clinical care processes are very complex and often do not have easily defined beginning and ending points. They tend to overlap and disrupt other workflows based on the details of the individual process. A complex matrix of conditions can change the logic for dealing with event-based data elements and the way a system should react to those events. The clinical users tend to be very mobile and are not electronically connected for extended periods of their day. These are just a few of the challenges facing healthcare process automation.

USING BPM AND BUSINESS INTELLIGENCE TO IMPROVE HEALTHCARE 123

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The healthcare industry has seen an expanding focus on clinical outcomes as they are increasingly tied to reimbursement and meeting regulatory requirements. Hospitals must be able to improve and report on more clinical outcomes than ever before. These demands on the health care organizations require leveraging technologies such as business process management (BPM) and business intelligence (BI) to help tackle these challenges. Recent examples of regulatory requirements related to reporting of clinical outcomes include the

er experience and how to transform customer experience to achieve measurable business goals. Business Process Management and the convergence of technologies *(such as Portals, web 2.0, BI, Content Management)* are two key elements of this transformation and hence we will focus on how the convergence of various technologies led by BPM will help achieve the business goals around Customer Experience Transformation (CET).

SECTION 3—STANDARDS AND TECHNOLOGY 189

developed using this framework are less capable in dealing with the new e-business era which is characterised by an increasing pace of radical, discontinuous and unforeseen change in e-business processes.
This paper highlights the limitation of this traditional framework and presents an alternative framework for designing flexible and dynamic e-business workflow management systems that respond to the continual changes of e-business processes.

Process modeling offers a very effective means for understanding and analyzing what needs to be improved. Process models are also used for many other purposes such as process automation, which increases the effectiveness of process improvement especially when organizations need to react quickly. Although there are numerous studies on various approaches to be separately applied to process modeling and process automation, the relationship and dynamics between the two still remains undiscovered. This paper presents the results of an exploratory study on the usability of process models developed for process improvement to be applied to the automation of processes with selected Business Process Management (BPM) tools.
The case study covers two processes in a software development unit of a large organization. The extended Event Driven Process Chain (eEPC) notation was utilized for process modeling and BizAgi, WebMethods and Intalio BPM suites for automation. A comparison was made concerning time spent to carry out the modeling and automation and the effectiveness of the BPM tools was analyzed.