

# BPM NEWSLETTER

Issue 2/2013  
September, 2013

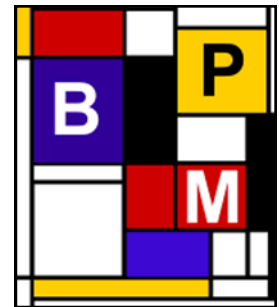
## REFLECTING ON BPM 2013 IN BEIJING

Although the preparations for **BPM 2014 in Haifa** are running at full speed (see for example the Topic Areas described later), this BPM newsletter first reflects on the successful BPM conference in Beijing a few weeks ago. **More than 260 BPM experts from 28 countries attended BPM and its collocated events.** Next to an excellent scientific program the conference featured interesting social events such as the conference reception at the famous Quanjudu Peking Roast Duck restaurant and conference banquet inside the Summer Palace. The general chair **Jianmin Wang** and the organizing chair **Lijie Wen** did a remarkable job. The organization was excellent



and their Chinese hospitality was heartwarming. Well done! The conference also had some new features such as the first BPM Test of Time Award and a panel on the future of BPM. For the conference in Haifa next year there will be additional innovations. Most notable is the

explicit definition of **eight topic areas each driven by two topic champions**. Using the blogs hosted on the [bpm2014.haifa.ac.il](http://bpm2014.haifa.ac.il) website, the 2014 BPM PC chairs (Pnina Soffer, Shazia Sadiq, and Hagen Völzer) facilitate discussions to prepare for BPM 2014 in Haifa.



- Interview with Gustavo Gómez on Bizagi's BPM vision
- Message from PC Chairs of BPM 2014
- BPM Tool Database up and running!
- BPM Use Cases
- Deadline for workshop proposals: **December 1<sup>st</sup>, 2013**
- First BPM Test of Time Award!
- New: Topic Areas
- News from the community



# FIRST BPM TEST OF TIME AWARD

The **BPM Test of Time Award** from now on will be given every two years. At BPM 2013 the award was given to the most influential paper presented at BPM 2003 in Eindhoven and BPM 2004 in Potsdam. The decision was made by the Steering Committee of the BPM conference series and was based on impact of the paper on the BPM field (both from a scientific and practical viewpoint), number of citations (Google Scholar and Scopus), technical quality, and presentation.



The **BPM Test of Time Award 2013** was awarded to **Stefanie Rinderle, Manfred Reichert, and Peter Dadam** for their paper “**Evaluation of Correctness Criteria for Dynamic Workflow Changes**” presented at **BPM 2003** in Eindhoven. The BPM 2003 paper compares actual approaches dealing with adaptive workflows using a set of fundamental criteria. The work focuses on correctness measures to decide whether a process instance can be smoothly migrated to a modified process model or not. Many authors published papers on workflow flexibility since the mid 90-ties. In fact, it has been one of the hotspots

***The BPM Test of Time Award 2013 was awarded to Stefanie Rinderle, Manfred Reichert, and Peter Dadam for their paper “Evaluation of Correctness Criteria for Dynamic Workflow Changes” presented at BPM 2003.***

in BPM research. However, most of the earlier approaches focused on a specific technique or problem rather than a comparative analysis and a comprehensive set of criteria. Yet, there are various notorious dynamic change problems that need to be considered urgently. As such, this paper was an important step towards a more mature treatment of the topic. Today, the topic of flexibility and workflow change is still of the utmost relevance.

Since there were multiple excellent candidates, the Steering Committee decided to also hand out a **Runner-Up Award** to **Ekkart Kindler** for his paper “**On the Semantics of EPCs: A Framework for Resolving the Vicious Circle**” presented at **BPM 2004** in Potsdam. Ever since the definition of Event driven Process Chains (EPCs) in the early 90-ties, there

has been a debate on their precise semantics and the meaning of the OR-join in particular. Kindler’s seminal BPM 2004 paper provides non-local semantics of EPCs as a pair of two corresponding transition relations by employing techniques from fixed point theory. As shown in the paper there are several choices when formalizing OR-join semantics. In fact, Ekkart Kinder provides a semantical framework for formally defining different kinds of non-local semantics for EPCs.

The Steering Committee congratulates the authors of both papers with their excellent work. We hope that the awards will inspire and motivate future generations of BPM researchers.

The award is biennial, so **the next BPM Test of Time Award will be awarded at BPM 2015 in Innsbruck.**





## INTERVIEW WITH BIZAGI'S CEO GUSTAVO IGNACIO GÓMEZ

Gustavo Gómez is the CEO of Bizagi, a leading provider of BPM solutions and Platinum sponsor of BPM 2013. Gustavo attended the first BPM conference and also attended this year's conference in Beijing. Wil van der Aalst used this opportunity to ask him some questions.

### Why did you start a BPM company?

*Our experience with BPM started when developing ERP solutions for Apple Computer at the end of the 80-ties. Then we moved into delivering workflow solutions based on Lotus Notes and Microsoft Exchange; after successful delivery, clients often asked for changes which took too long and were costly to implement. Bizagi (an abbreviation of business agility) was born to support the continuous improvement of organizational processes and to provide a powerful yet simple business collaboration tool, that brings business and IT together.*

### How many people are using the Bizagi Process Modeler and why is it for free? How does Bizagi earn its money?

*We have over 2 million downloads of the Bizagi process modeler. We felt that BPM market was tarnished with a negative perception few years ago – too complex and difficult to implement. We wanted to show the business community that it doesn't have to be this way, so we offered Modeler for free to create a community of users who can reap the benefits of BPM with ease and in a fraction of time. In return we gained valuable feedback from the users and made our brand the most recognized within the online search engines. Once the processes are designed, users can implement them with Bizagi Studio without programming, also for free. We only charge for the automation component – the Bizagi BPM Server- that turns*



*BPMN diagrams into running process applications, i.e. when the Bizagi process application is running in the production environment.*

### The new Bizagi Process Modeler 2.5 supports simulation. What other analysis capabilities will be included in the future?

*The process modeler provides simulation and Bizagi process applications provide powerful business activity monitoring and analytical capabilities, including route analysis, user-defined sensors, resource productivity etc. The next logical steps is to link the simulation and run-time analytics.*

### The Bizagi BPM Suite aims to support an increasingly mobile workforce using smartphones and other portable devices. What are the BPMS features required to make this possible?

*An optimal mobile solution must enable*

*the immediate support of new devices (the number is just exploding), must be extensible -in a compatible manner- by clients and partners (no vendor can deliver all industry specific user interface controls involved in processes) and last but not least, provide an optimized user experience for each device. Bizagi came up with an innovative UI design component that fulfills all above goals and enables users to quickly create sophisticated forms that are automatically rendered for every mobile device. Our design is responsive so it automatically creates the optimal display irrespective of the device; this way we shorten the time to market and avoid unnecessary support problems.*

### What are the top 3 capabilities that make Bizagi BPM Suite different from competing suites?

*Clients select Bizagi because we can automate and improve processes faster, enable the collaboration between business*

*and IT (by hiding away technical –albeit necessary– complexities and focusing the discussion on the business process) and scale up to enterprise-wide BPM initiatives where hundreds of processes must be automated (this capability is enabled by the shared and re-usable data model).*

*Furthermore the approach “model once, execute anywhere” is unique to Bizagi (processes run on any modern mobile device and the engine runs natively in Java and .NET environments).*

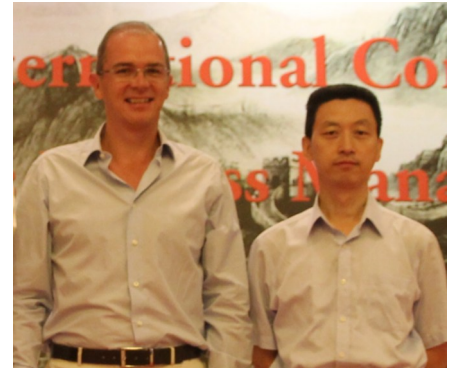
**What can the software industry (i.e., organizations like Bizagi) learn from the research presented at BPM 2013?**

*Plenty. For example, process mining research is advancing rapidly and its many applications in real-life scenarios makes it a very interesting technique for commercial purposes. On the other hand we also believe that researchers*

*can benefit a lot by having a deep look at what Bizagi has to offer, particularly in the terrain of marrying processes and data. Do visit [www.bizagi.com/academic](http://www.bizagi.com/academic) in order to get a free license for research and educational purposes.*

**What are the topics that require more attention in terms of research? Can Bizagi provide datasets or use cases to help researchers focus on the real problems?**

*Automatic holistic (not just the process flow) testing is a fundamental aspect of the business agility promise made by the BPM industry. Data virtualization techniques (for an explanation please check <http://help.bizagi.com/bpmsuite/en/index.html?virtualization.htm>) are extremely useful and also highly*



*sophisticated and deserve more academic research. Some Bizagi clients will authorize sharing their real data sets under certain conditions and we would be happy to share some very taxing real use cases with the academic community.*

**Gustavo, thanks for this interview. Hope to see you again at BPM 2014 in Haifa!**

## MESSAGE FROM THE PC CHAIRS OF BPM 2014 IN HAIFA

We would like to take this newsletter as an opportunity to give you some more details on the next edition of the BPM conference and invite you to contribute to discussions on the various aspects of BPM that are covered by the conference.

Over the past decade, the conference has built its reputation by showcasing leading-edge research of the highest quality together with talks, tutorials and discussions by the most renowned thought leaders and innovators in the field. **The BPM conference series embraces the diversity and richness of the BPM field and serves as a melting pot for experts from a mix of disciplines including Computer Science, Information Systems Management, Services Science and Technology Management.**

To further strengthen the role of the BPM conference in this multi-disciplinary context, there will be some innovations in the review process for BPM 2014. In essence, the review process will be arranged by eight topics

and each submission will be related to one or two of them. Two Topic Champions (TCs) are assigned to each of the topics. They promote the respective topic and coordinate the review discussions.

We would like to involve you, the BPM community, in shaping these topics. Therefore, the BPM 2014 website features **eight topic blogs**, in which the TCs publish their thoughts, e.g., on research questions, research approaches, types of submissions, and seek responses and comments from the community. We invite you to check out the blogs hosted on [bpm2014.haifa.ac.il](http://bpm2014.haifa.ac.il) and look forward to your remarks and comments on the BPM topics. So now is a good time to start thinking about the papers you want to submit to BPM 2014 in Haifa!

**Shazia Sadiq, Prina Soffer, Hagen Völzer** (BPM 2014 PC Chairs)





# THOUGHTS OF THE TOPIC CHAMPIONS ON THE BPM 2014 TOPICS

## Human-centric BPM

Jan Mendling and Hajo Reijers

*In recent years understanding of how BPM stakeholders and BPM artifacts are related to one another has increased significantly. On the one hand, this relates to the question how BPM stakeholders can create BPM artifacts of good quality. Research in this area includes guidelines for process modeling, recommendations for process execution, factors of process model comprehension and characteristics of the process of process modeling, to name but a few. Much of this research has focused on process models in past.*

*On the other hand, there has been increasing research on which characteristics, competences and skills of BPM stakeholders are required in order to make BPM work well. In this area, recent research has informed us about the interrelation of BPM and organizational culture, about skills and success factors, and about perspectives on BPM as a dynamic capability.*

## Management issues and empirical studies

Hajo Reijers and Michael zur Muehlen

*Why did people become interested in process management in the first place? To get organizations perform better, that's why. The BPM conference wants to go back to the roots of the discipline by inviting research that takes a managerial perspective on process management. Not so much the models, tools, and technologies are in focus. Rather, typical issues we would love to see discussed are:*

- *Does process management pay off? In what terms? How can we tell?*
- *What is the preferred path of an organization to become process-centered? What are pitfalls in this respect?*
- *Is information technology an enabler for process orientation or are other ingredients of more importance?*
- *How do cultural aspects affect process management initiatives?*



- *What relations exist between process management and other management concepts, such as Lean or Six Sigma?*

## Management of process execution data

Wil van der Aalst and Stephanie Rinderle-Ma

*The management of process execution data is increasing in importance in the BPM community. This is clearly shown in a recent survey (Business Process Management: A Comprehensive Survey) which analyzes a decade of BPM conferences and is also reflected by the papers presented at BPM 2013 and the interest in topics like process mining.*

*Topics in this track include:*

- *Process tracing and monitoring*
- *Process performance measurement*
- *Process mining*
- *Process data warehousing*
- *Data streaming in business processes*
- *Process data analytics and visualization*

## Non-traditional BPM scenarios

Manfred Reichert and Richard Hull

*Despite the widespread adoption of existing workflow management systems, there are many processes not*

*adequately supported by such systems. In practice, business processes are often unstructured or semi-structured, knowledge-intensive, and driven by user decisions, business data, or application context. Typically, these processes cannot be straightjacketed into a set of activities with pre-specified precedence relations; i.e., the primary driver for the progress of the process is not the event related to activity completion, but the availability of certain data or decisions made by users. Accordingly, a tight integration of processes, data, and users becomes necessary.*

*Overall, a deep understanding of the challenges imposed by unstructured, knowledge-intensive and data-driven processes is of utmost importance for the further evolution and maturation of the BPM field.*

## Process architectures and platforms

Avigdor Gal and Remco Dijkman

*If a process is a house and activities are its building blocks, then process architecture and platform is the plumbing that makes a house run smoothly. Therefore, we seek excellent plumbers that understand what it takes to run a house and how to build it in such a way as to minimize discomfort to the tenants (e.g., process designers). Nowadays, process designers need to either specialize in plumbing or to find workarounds to avoid infrastructure pit-*

*falls. Therefore, we call on the BPM community in-the-large to propose new and exciting techniques with the overall aim of "silencing the plumbing pipes". We seek software engineers that can suggest suitable architectures. We call on data specialists to allow smooth integration of components and create useful repositories. We call on AI automated planning experts to provide new results in service composition. We call on security specialists to setup our house alarm system and on complex event process designers to ensure efficient and effective analysis of external events. Finally, we seek empirical evaluation measures, datasets, and benchmarks to testify for the success of our plumbing efforts. The BPM community is starving for new and exciting research ideas as well as industrial use-cases. If you consider yourself an excellent plumber and you are not afraid to get your hands dirty, give us your best shot.*



### Process flexibility and evolution

Barbara Weber and Richard Hull

*To effectively be able to manage their business processes, companies must be able to deal with changes in their environment in a quick and flexible way. Examples of such changes include regulatory adaptations (e.g., to the introduction of Sarbanes-Oxley or Basel II), market evolution, changes in customer behavior, process improvement, and strategic shifts. The ability to deal with such changes is called process flexibility and includes the ability to handle exceptions, to deal with unforeseen situations through process adaptations, to deal with evolving business processes, to cope with business process variability, and to deal with unpredictability. Process flexibility and evolution have emerged to a key concern of BPM as indicated by the high number of successful submissions on this topic in the last couple of years.*

*A specific question in this area relates to the creation of lightweight and extensible BPM frameworks. Much of BPM research has focused on large-scale, enterprise-level solutions. Many of the small-scale business processes used at the department level in commercial enterprises, and by many community organizations, are specified and executed in ad hoc ways, often using spreadsheets as an anchor to keep track of progress. There is a rich opportunity for our community to create a lightweight approach to BPM involving the following questions:*

- *What kind of model would you propose as the basis for a lightweight BPM framework?*
- *What real-world application area would be appropriate for testing out and refining a prototype lightweight BPM framework?*
- *What criteria or use-cases should the BPM community use to assess whether one lightweight BPM framework is better than some other lightweight BPM framework?*

### Process modeling and theory

Oscar Pastor and Karsten Wolf

*Concepts and techniques for process modeling are at the core of many approaches to Business Process Management. This topic covers, for instance, the following areas:*

- *Foundations of business process models*
- *Process modeling languages, notations and methods*
- *Reference process models*
- *Process patterns and standards*
- *Artifact-centric business processes*
- *Loosely structured business processes*
- *Automated process composition & synthesis*
- *Process metadata and semantic reasoning*
- *Variability & configuration of process models*
- *Process simulation and static analysis*
- *Business process quality*

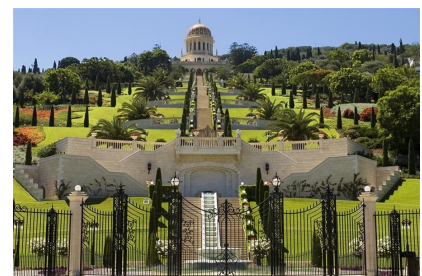
### Process model management

Remco Dijkman and Jan Mendling

*Business Process Management arose in the early 90-ties as a response to the largely functional organization of companies, which was associated with departmental suboptimisation and as a result: client dissatisfaction, inflexibility and a lack of workforce commitment. Business Process Management was supposed to solve these problems, by breaking through the silos of individual business functions and creating more collaboration between departments.*

*While we have come far since then, in a way we have replaced old silos with new ones; by creating a process, we also create a new silo. This silo will again be associated with suboptimisation, not just of a department, but of a process. Blame-allocation will still be commonplace between managers and employees of different processes. In some cases, we have not even broken through the original silos: for example, just labeling the sales function 'sales process', does not make it a process.*

*To create a truly process-oriented organization, we must break through the boundaries of both departmental silos and process silos and facilitate better interaction between departments and indeed even between processes. To facilitate that, we must create a detailed map of the processes that are executed in our organization as well as their relations. Only then can we fully benefit from what Business Process Management has to offer.*



See <http://bpm2014.haifa.ac.il/TopicAreas> for more information about the BPM 2014 Topic Areas and the ongoing discussion via dedicated blogs.



## BEST (STUDENT) PAPER AND BEST REVIEWER AWARDS

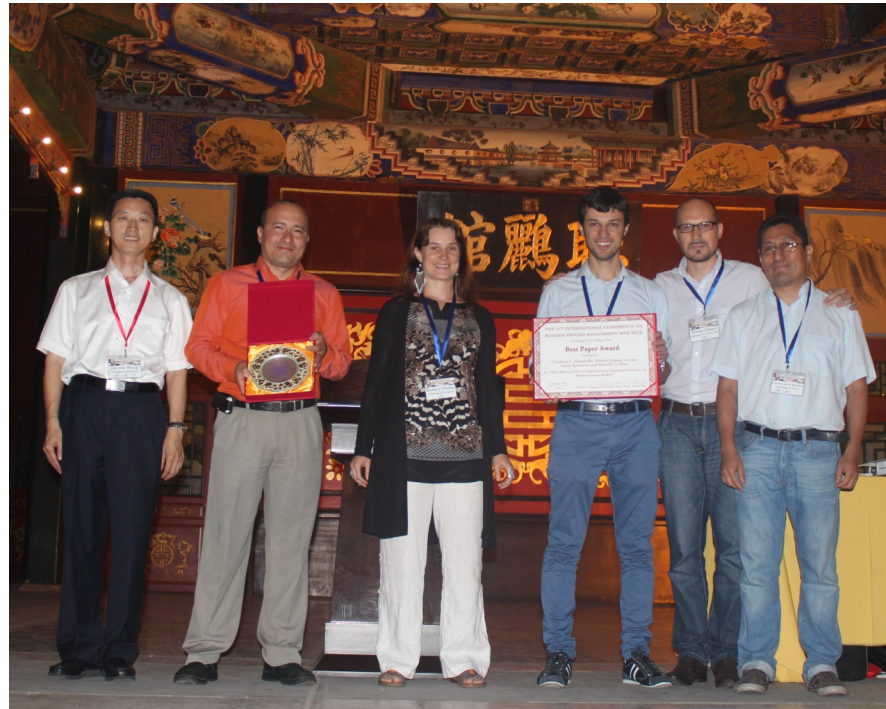
The BPM 2013 Best Paper Award was won by **Chathura Ekanayake, Marlon Dumas, Luciano García-Bañuelos, and Marcello La Rosa** for their paper "Slice, Mine and Dice: Complexity-Aware Automated Discovery of Business Process Models".

The BPM 2013 Best Student Paper Award was won by **Jorge Munoz-Gama** for the paper "Conformance Checking in the Large: Partitioning and Topology" (co-authored by Josep Carmona and Wil van der Aalst).

The BPM 2013 Best Reviewer Award was won by **Rafael Accorsi** of the University of Freiburg.

The awards were announced and handed out by the PC chairs (Florian Daniel, Jianmin Wang, and Barbara Weber) during the conference banquet inside the Summer Palace.

Congratulations to the winners!



## BPM TOOL DATABASE UP AND RUNNING!

At the opening of BPM 2014, the BPM Tool Database was presented. This database is available online via **bpm-conference.org**. The BPM Tool Database is searchable based on desired characteristics. For example, one can search for an editor supporting BPMN and Petri nets running on Windows or a process mining tool supporting both discovery and conformance checking.

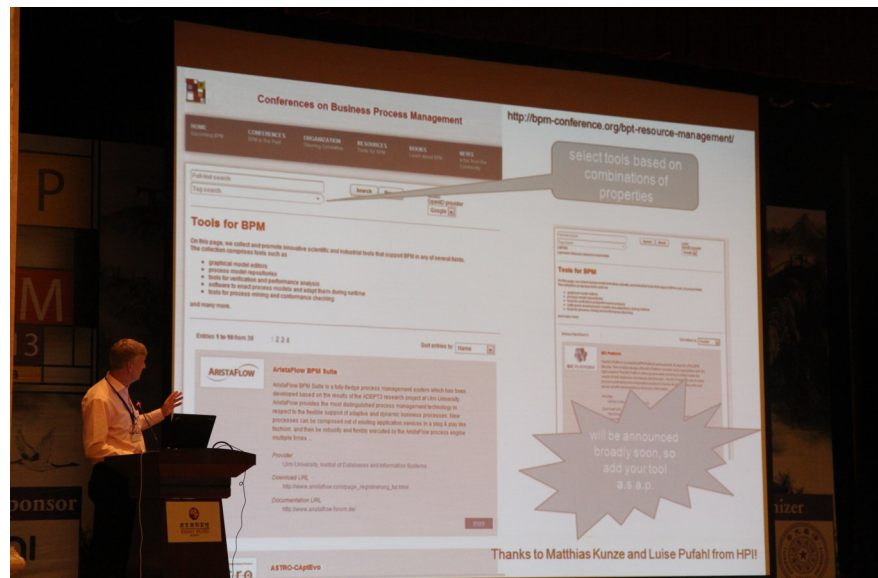
The BPM Tool Database initiative was triggered by **the growing importance of BPM tooling and the need to share software and datasets**. Most BPM papers describe tools ranging from stand-alone analysis tools to full-fledged BPM systems. Moreover, more and more BPM papers are of an empirical nature describing experiments that need to be reproducible.

Currently there are about 50 BPM tools in the database including **business process modeling tools, business process analysis tools** (simulation, verification, mining, ...), **business process intelligence tools, workflow management systems, and BPM suites**.

If you would like to add your BPM tool to the database, see [bpm-conference.org](http://bpm-conference.org). It is very easy to add a tool. Information needed: Provider, Download URL, Documentation URL, Screencast URL, Tutorial URL, Availability (e.g., open source), Model type

(e.g., BPMN, EPC, Petri Net, ...), Platform (e.g., Windows, Linux, Mac OSX), and Supported functionality (e.g., editor, verification, engine, discovery ...).

Please use [bptresourcemanagement@gmail.com](mailto:bptresourcemanagement@gmail.com) for questions and suggestions.



Starting from BPM 2011, the best papers of the BPM conferences are invited for a special issue of **Elsevier's Information Systems**. The first issue appeared in June of this year. The BPM Steering Committee is proud that Information Systems has accepted to publish BPM special issues on a regular basis, which establishes the journal as one of the prime publication outlets for papers in our domain. BPM special issues also continue the stream of successful papers from our community to that journal; among the three **most cited papers** since 2008 there are two papers by

members of our community: "Conformance checking of processes based on monitoring real behavior" by Anne Rozinat et al. in Volume 33(1) and "Similarity of business process models: Metrics and evaluation" by Remco Dijkman et al. in Volume 36(2).



*BPM papers are among the most cited papers in top journals like Information Systems.*

Mathias Weske of HPI Potsdam will give an **online course** on Business Process Modeling and Analysis. Business process models can serve as communication medium for professionals with different backgrounds and expertise, ranging from business administration, quality management and organizational development to process improvement, system architectures and software development.

The aim of this course is to provide a common understanding and a common language to improve the communica-

tion between these professionals during all phases of business process management projects. **This course introduces concepts of business process modeling using the Business Process Model and Notation (BPMN) industry standard.** Participants will learn the elements of process models and their precise meaning.

The course covers business processes within organizations and also interacting processes involving several organizations, i.e., process orchestrations and process choreographies. The course

also looks at techniques to analyze business processes from a formal perspective.

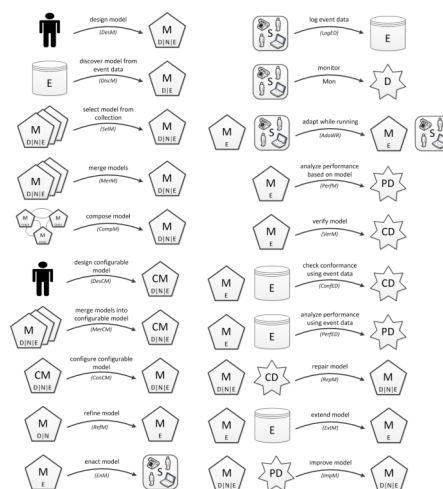
The course is free of charge, and successful participants will be awarded an **openHPI certificate**. The starting date is 28th of October 2013. More information on the course can be found at <http://openhpi.de/course/bpm2013>.



An initial set of **20 BPM Use Cases** was presented at BPM 2012 ([http://dx.doi.org/10.1007/978-3-642-32885-5\\_1](http://dx.doi.org/10.1007/978-3-642-32885-5_1)) and was further detailed in **Business Process Management: A Comprehensive Survey**, ISRN Software Engineering, 2013 (<http://dx.doi.org/10.1155/2013/507984>). Authors of BPM 2013 papers could indicate the BPM Use Cases they aim to support and report missing ones. The **top 6 BPM Use Cases** are DesM, ExtM, VerM, DiscM, ImpM, and RefM (see <http://www.win.tue.nl/~wvdaalst/etc/BPM-Use-Cases/BPM2013-panel.pdf>). In the next

step of the discussion, people are encouraged to **propose additional use cases or alternative ways to structure the BPM discipline**. A template is provided via <http://www.wis.win.tue.nl/~wvdaalst/etc/BPM-Use-Cases/BPM-Use-Cases.htm>. Next to structuring and reflecting on the BPM discipline, the goal is to create a special issue of the **BISE (Business & Information Systems Engineering) journal** by Springer, related to the BPM Use cases.

Send an e-mail to [w.m.p.v.d.aalst@tue.nl](mailto:w.m.p.v.d.aalst@tue.nl) if you would like to contribute to the discussion and special issue of BISE.



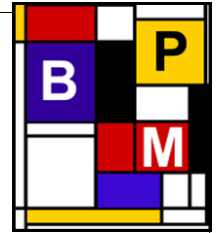


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*The goal of this newsletter is to further strengthen the  
BPM community that has been formed over the last decade.  
The newsletter appears twice per year. Input for the  
next newsletter is welcome (e.g. activities related to the  
BPM conference, interviews, contests, new datasets, tools,  
etc.).*

## EVENTS AND ACTIVITIES OF THE COMMUNITY



Springer's **Lecture Notes in Business Information Processing** series provides the possibility to turn excellent PhD theses on BPM topics into published monographs. See the [call for exceptional theses](#) which also describes the requirements.



The **minutes of the meeting of the IEEE Task Force on Process Mining** that took place at BPM 2013 can be found [here](#) or accessed via <http://www.win.tue.nl/ieeetfpm/>.

The **European BPM Round Table** provides a European infrastructure composed of 21 national round tables.

Members of the roundtable met at BPM 2013 to make plans for 2014. See <http://www.bpmroundtable.eu> and the [BPM Round Table Movie](#).



The workshop chairs **Jan Mendling** and **Fabiana Fournier** distributed the first **Call for Workshop Proposals** for BPM 2014. All workshop papers will be published by Springer as a post-workshop proceedings volume in the series **Lecture Notes in Business Information Processing (LNBIP)**. Please **submit your workshop proposal** before **December 1st 2013**. See <http://bpm2014.haifa.ac.il> for instructions.

See <http://www.dagstuhl.de/13481> for the upcoming **Dagstuhl Seminar** on "Unleashing Operational Process Mining" taking place in November 2013.



The conference banquet of **BPM 2014** will take place in the **Knights' Halls of Acre**: an underground complex, built and used by the **Hospitallers Knights** in the 12th century.

**Lior Limonad** and **Barbara Weber** will be demo chairs of BPM 2014, **Marcello La Rosa** is tutorial chair, and **Matthias Weidlich** is publicity chair.

**BPM 2015 will take place at the University of Innsbruck** in the center of Innsbruck. Innsbruck is the capital city of the federal state of Tyrol in western Austria. **Barbara Weber** will be the general chair of this event.

