BPM: Reflections on a Broad Discipline

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Let’s start broad

Matt Might’s illustrated guide to a Ph.D.
Your view
Zooming out

- Some Ph.D. Theses
  - interaction Petri nets
  - configurable process models
  - conformance checking
  - process compliance
  - behavioral profiles
  - runtime prediction.
BPM 2003 – BPM 2017
BPM 2003 – BPM 2017
BPM Communities

IT/CS

Formal

Soundness
Languages
Properties

Software

Architectures
Interfaces
Middleware
SOA

Business/Adm

IS

Models
Methods
Policies
Enterprise Contr.
Architecture

Org

KPI

[MW, Slide from 2006]
Observations

• Not all areas of BPM research are represented at BPM
  - Some colleagues find it very hard to enter
Observations

- Evaluation criteria have changed
  - BPM tends to ask for 16 page journal papers

1. Positioning in core BPM
   *Out of scope, reject*

2. Strong theoretical findings
   *No technical contribution, reject*

3. Empirical evaluation
   *No empirical evaluation, reject*
Empirical Evaluation

• Is a cornerstone of good research
  - But it can kill innovation, if applied to all submissions

• Not our core competency
  - in writing
  - in reviewing
    • no ee, reject
    • ee, check.
  - “73% of my students would use my approach”

• Would the test-of-time award papers be accepted today?
Implications to BPM conferences

If we accept only papers with a strong empirical evaluation, we kill papers with novel ideas.

We need novelty, and we need to be broad.

Not all BPM papers make it to a business environment.
We have to be 5 years ahead of industry, not 5 weeks.
Research is for creating knowledge, not revenue.
This insight is not new …

- **Efforts to broaden BPM**
  - PC chairs from different fields
  - Add PC members from the broader BPM area
  - Senior PC, to avoid the “that’s not BPM” problem
  - Topic Champions with specific, broad topic areas

- All papers were thrown into one bucket
... but the conclusion is new

• Increase the diversity of accepted papers
  - Some papers are in core BPM, some are in broader BPM
  - Some papers introduce new theoretical findings
  - Some improve a finding and show its value empirically
  - Some investigate the business value of a finding

• Papers need to be thrown into different buckets
  - Evaluation criteria, chairs, and program committees
Thanks to

• The members of the Steering Committee

• Many colleagues of the – broader – BPM community
How to cut the Cake?

• Along the BPM Lifecycle?

• Based on Research Methods!

• BPM 2018 Structure
  - Track I: Foundations (Track Chair: Marco Montali)
  - Track II: Engineering (Track Chair: Ingo Weber)
  - Track III: Management (Track Chair: Jan vom Brocke)
  - Consolidation Chair: Mathias Weske
Track I: Foundations

• Focus
  - Investigation of the principles underlying BPM systems

• You should send your paper to Track I if:
  - It advances the state of the art in BPM through the study and development of formal methods, algorithms, concepts, and architectures
  - It tackles conceptual modelling issues of BPM systems and their environment
  - It investigates novel concepts of BPM systems through the development of proof-of-concept implementations

Computer science perspective
Track II: Engineering

• Focus
  - Design of artefacts and their empirical evaluation in context

• You should send your paper to Track II if:
  - It has a significant technical contribution
  - Its results are empirically evaluated
  - It reports on a system that you designed, with a maturity of at least a prototype that can be evaluated in context

*Information systems engineering perspective*
Track III: Management

• Focus
  - Investigation of BPM methods and techniques and their contribution to business value

• You should send your paper to Track III if:
  - It addresses a solution to an organizational challenge
  - It draws from real-world organizational endeavors in BPM
  - It extends the BPM body of knowledge to better contribute to strategy delivery

Management perspective
Chimera Case Management

- Healthcare processes @ Charité
  - Unfold over time
  - Are driven by staff members
  - Contain structured parts
  - Contain flexible parts
  - Come in variants

- Chimera: Fragment-based case management
  - Process fragments
  - Data classes and objects
  - Lifecycles

[Hewelt, Weske: BPM Forum 2016]
Many options available …
... combined to one process model
Adding an option ...

- Create offer → Validate offer → Send offer
- Change offer → Enter offer restrictions → Validate offer → Send offer
- Create offer → Validate offer → Approve customer → Send offer
- Create offer → Approve customer → Validate offer → Send offer
- Cancel offer
... increases model complexity
Key Idea of Chimera

Create offer ➔ Validate offer ➔ Send offer
Change offer ➔ Enter offer restrictions ➔ Validate offer ➔ Send offer
Create offer ➔ Validate offer ➔ Approve customer ➔ Send offer
Create offer ➔ Approve customer ➔ Validate offer
Cancel offer
Chimera Approach

- Case model contains process fragments
  - Fragments are dynamically combined at runtime
- Case data represented by data objects
  - Attributes and object life cycles
- Cases have a termination condition

![Diagram of Chimera Approach]
Chimera: Foundations

- Concepts, semantics, formal analysis
Chimera: Engineering

- Potential engineering topics
  - Analysis of change, maintenance effort
  - Investigation of process variant management
  - Understandability of case models and process models
  - Runtime evaluation of prototype in context
Chimera: Management

- Potential management topics
  - Which roles in the organization do we need to define, maintain, and execute process fragments?
  - How can an organization improve its agility with Chimera?
  - How can the approach be used to become more competitive?

![Diagram showing the relationships between nodes A, B, C, D, and E with attributes.](image)
BPM Research Value Chain

Foundations ➔ Engineering ➔ Management
Conclusions

• BPM is highly successful
  - Very well managed conference with a strong community
  - With risk of narrowing
  - Opportunity of broadening

• Track structure starting BPM 2018
  - Different buckets
  - Positive feedback
  - More continuity than it might look

• But
  - Not all questions are answered
  - We ask for your feedback and support
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