The Past, Present and Future of Business Process Management
Prof. Dr. Jan Mendling (WU Vienna)
BPM in the year 2000


How business processes have changed
Turbulent Times for many industries
Old Wisdom by Utterback & Abernathy (1975)
Computerization of Tasks

Computerization of non-routine cognitive tasks

Health

Watson goes to Asia: Hospitals use supercomputer for cancer treatment

By KE SWETLITZ @keeswetlitz / August 19, 2016
Amazon has added more soldiers to its robot army over the past year. The e-commerce giant now has 45,000 robots shuffling products around 20 distributions centers. This is a 50% increase from the 2015 holiday season when the company reported 30,000 robots.
Impact of Computerization on Tasks

Organizing BPM of Today
1) Redesign has changed
Directions for Process Redesign

The Devil’s Quadrangle

Elements of Redesign

- Customers
- Business Process Operation
- Business Process Behavior
- Organization
- Information
- Technology
- External Environment
Putting back the „Design“ into Redesign
The Process Redesign Orbit

Creative

Inward-looking

- 7FE
- BPTrends
- Heuristic Process Redesign
- Positive Deviance
- Six Sigma
- Theory of Constraints
- TRIZ
- Design-led innovation
- NESTT
- Process Model Canvas
- Business Process Reengineering

Outward-looking

- Product-Based Design

Analytical

Transactional

- Crowdsourcing
- Benchmarking
- ERP-driven Redesign
- Lean
Rapid process redesign with the NESTT

Make a real difference

Working collaboratively over the three days of the course, you'll learn to dramatically change organisational processes to achieve a more efficient, pain-free experience for service users.

The NESTT is a rapid process redesign methodology developed by QUT's business process management discipline. It combines approaches from diverse fields like process improvement, agile development, project management and design thinking into a unique methodology.

The NESTT is tailored for complex business processes that require transformational change in a short period. It's a people-focused approach with new ideation tools to ensure a comprehensive design space. User validation and business cases convert this design space into pragmatic solutions targeting the defined success measures.

QUT has conducted a number of successful redesign projects with the NESTT, leading to substantial organisational improvements.

Who should participate

This course is designed for business analysts, project managers, service owners and managers in business improvement units.

Delivery

Where:

QUT Gardens Point
2) Process Monitoring has changed
### Process Mining

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Behavioural Relationships

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Event log:
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10: a,d,b,e,g,h
10: a,d,b,f,g,h
3) The scope of BPM has changed
Factors of BPM Maturity

- Methods
  - Process identification and discovery
  - Process analysis and redesign
  - Process implementation and execution
  - Process monitoring
  - BPM project and program management

- Information Technology
  - Process identification and discovery
  - Process analysis and redesign
  - Process implementation and execution
  - Process monitoring
  - BPM project and program management
Differing BPM Maturity Profiles

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BPM of the Future
1) Future BPM Objectives: Innovative Restructuring of Tasks and Coordination

„The extent of computerisation in the twenty-first century will thus partly depend on innovative approaches to task restructuring.”
Frey/Osbourne 2017
2) Future Types of Technology have Impact on Processes

Automational Effect
- Makes process faster
- Provides scaling
- Potential to reduce cost

Transformational Effect
- Provides new way of coordination with partners
- Provides new way of collaboration with partners

Informational Effect
- Provides transparency
- Makes processes better visible and understandable
Automational Effects: Robotic Process Automation

Sources: https://www.icapps.com/blog/linguistics-behind-chatbots
https://www.reddit.com/r/lego/comments/6ajmq7/lego_computer_desk/
Transformational Effects: Blockchains
3) Future shortcuts in the BPM lifecycle
AB-BPM Architecture

1. Instantiate Client
2. Instantiate Instance router
3. Interact Routing algorithm
4. Update reward

Implementation:
- Version A: Process engine
- Version B: Implemented service
- Database

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