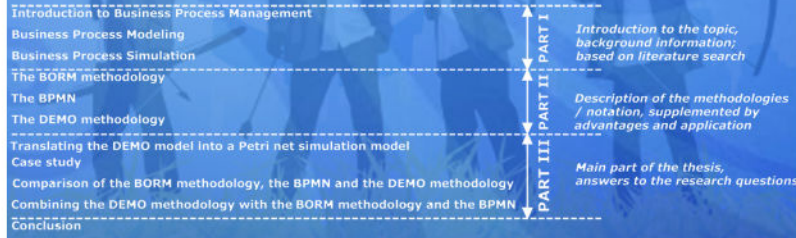


— Diploma project aim

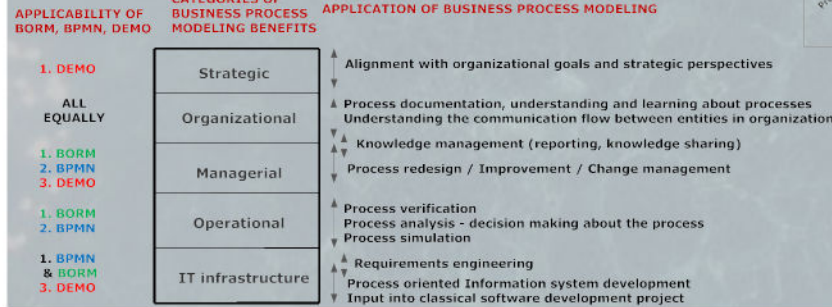
Goals of the Project

- 1) What are the advantages and strengths of the BORM methodology, the BPMN and the DEMO methodology and which one would be applicable for which purpose of process modeling?
- 2) How to translate the DEMO model into a (high-level) Petri net simulation model?

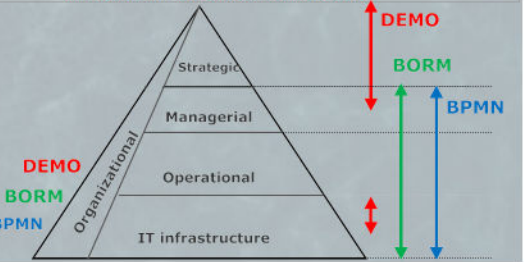
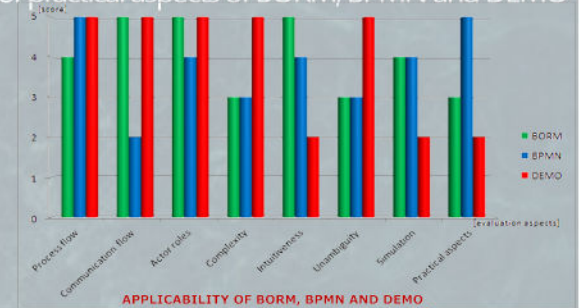


- Comparison and Results
- Comparison viewpoints:
- Purpose and motivation
 - Advantages and disadvantages
 - Strengths and weaknesses
 - Applicability in practice
 - Support of simulation

Application of BORM, BPMN and DEMO based on Business Process Modeling Benefits:



Comparison of practical aspects of BORM, BPMN and DEMO

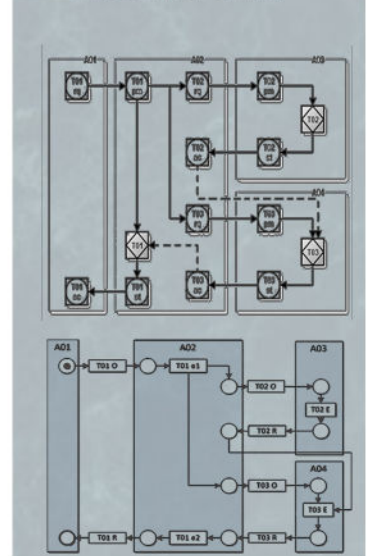


— Diploma project statement and background

Business Process Modeling and Simulation: DEMO, BORM and BPMN

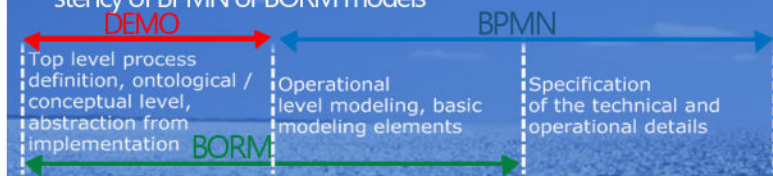
- BPM (Business Process Management) - management oriented concept to deal with the organization and its processes
- The core step in BPM is Business Process Modeling (BPM)
- For process (re)design and optimization, BPM needs to be complemented with simulation
- Business Process Simulation allows:
 - comparing design options
 - optimizing processes based on performance analysis
- Large amount of available process modeling methods and methodologies => difficult to choose one
- The thesis focuses on:
 - BORM (Business Object Relationship Modeling)
 - DEMO (Design and Engineering Methodology for Organizations)
 - BPMN (Business Process Model and Notation)
- DEMO methodology does not support simulation – considered as its main drawback

— Translation of DEMO model into Petri net"



— Final conclusion

- DEMO is very different to BORM and BPMN-Each can be used for a different purpose
- Instead of competing, then can complete each other in 2 ways:
 - The DEMO model can be used as an input into BPMN modeling project
 - The DEMO methodology concepts can be used to improve consistency of BPMN or BORM models
- DEMO finishes where BPMN starts
- DEMO captures the social interaction within the enterprise (communication and cooperation)
- BPMN captures the technical details of the organization's processes (flow of activities and information)
- BORM is quick and easy to use and understand and overlaps the border of DEMO and BPMN



— Potential for future research

- The DEMO methodology and simulation – enhancement of the method of translating DEMO model into Petri net, implementation of the translation in a case tool
- Combination of the DEMO methodology with BPMN

— Contribution

Paper "Translating DEMO Models into Petri Net": presented at EOMAS 2013 (Valencia, Spain), published as a book chapter in Enterprise & Organizational Modeling and Simulation. Lecture Notes in Business Information Processing, Vol. 153, Springer-Verlag Berlin

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