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Business Process Management

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BPM - #1 - PG'06

Overview

- Introduction
- Business process modeling
- Workflow concepts
- Advanced BPM concepts
- Business process management
- Conclusions

BPM - #2 - PG'06

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Introduction

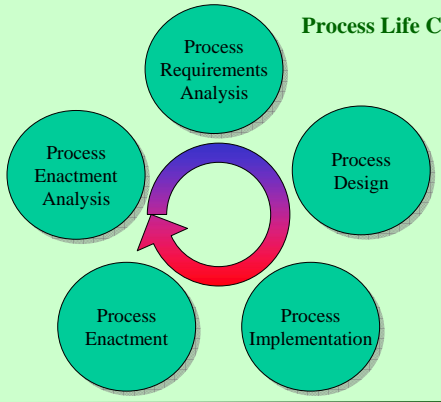
BPM - #3 - PG'06

Business practice

- 'Process' is the magic word:
 - Tight linking of business functions (e.g. for on-demand business)
 - Required end-to-end (order to delivery) business optimization
 - Within individual organizations, but increasingly across organizations
- From function-oriented business to process-oriented business
- Complexity requires automated support

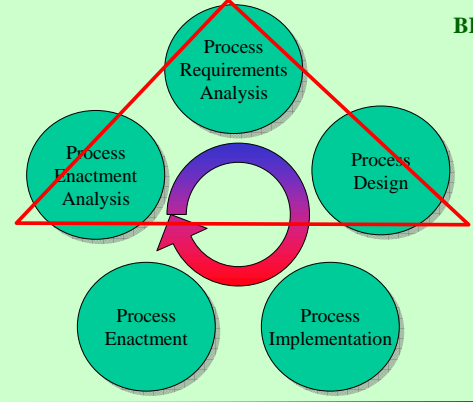
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Process Life Cycle

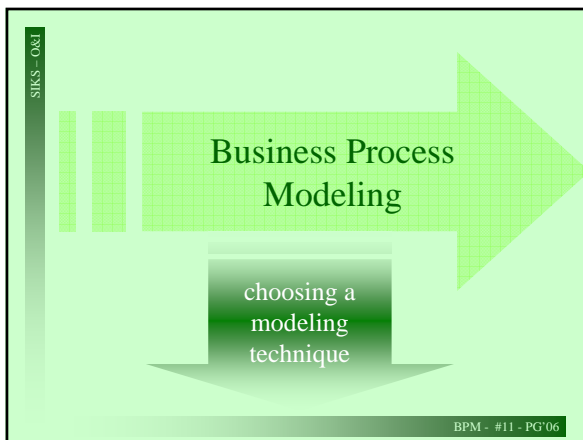
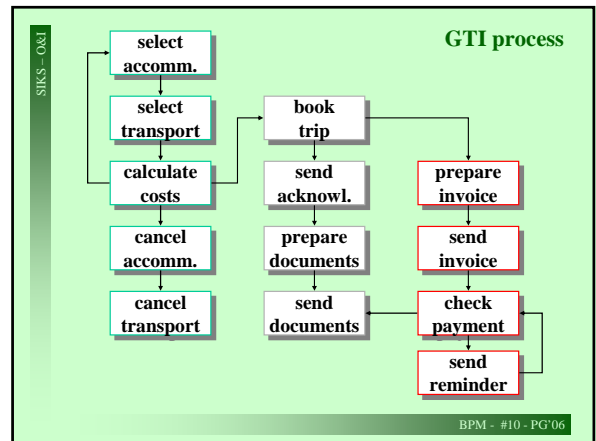
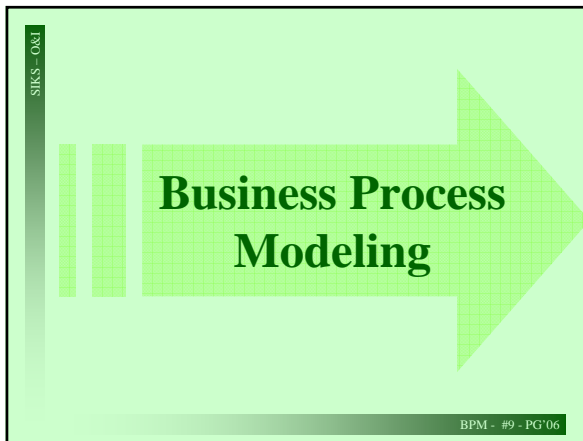
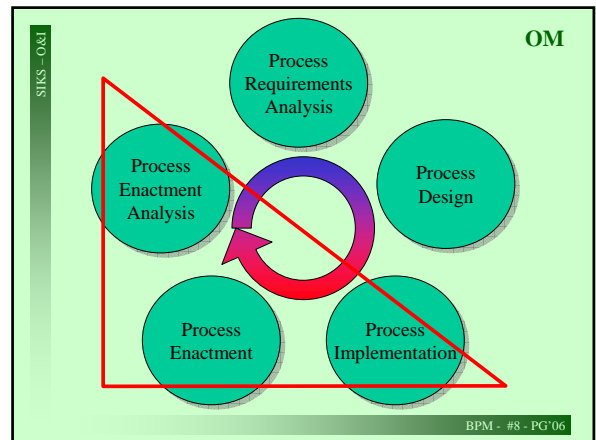
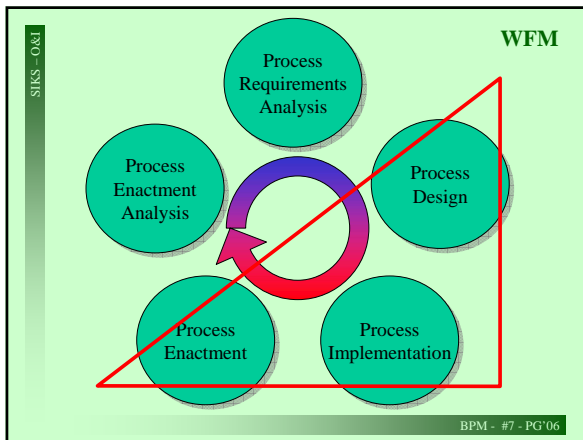


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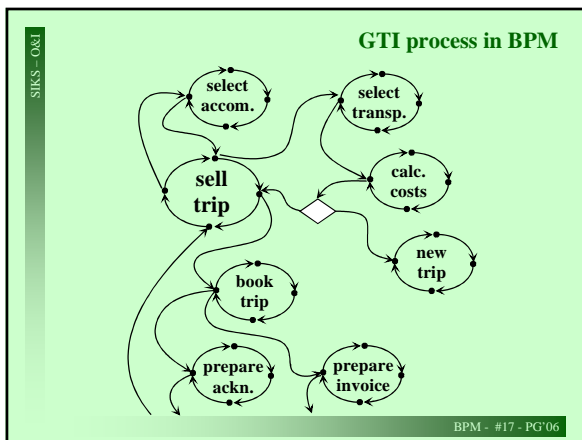
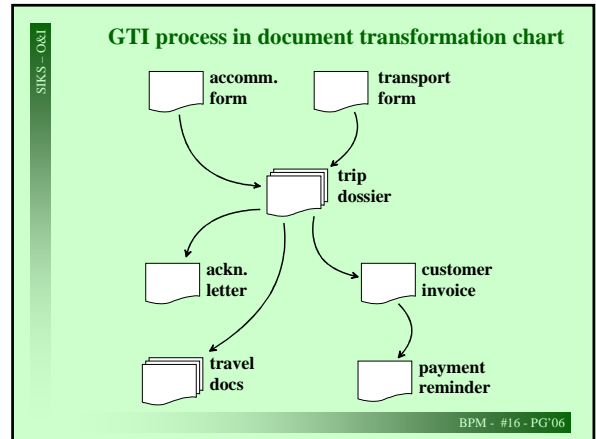
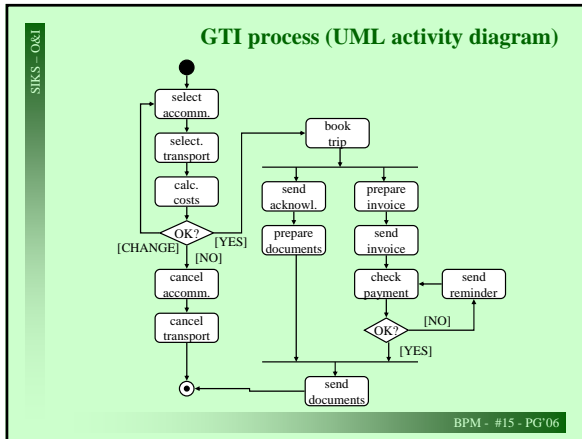
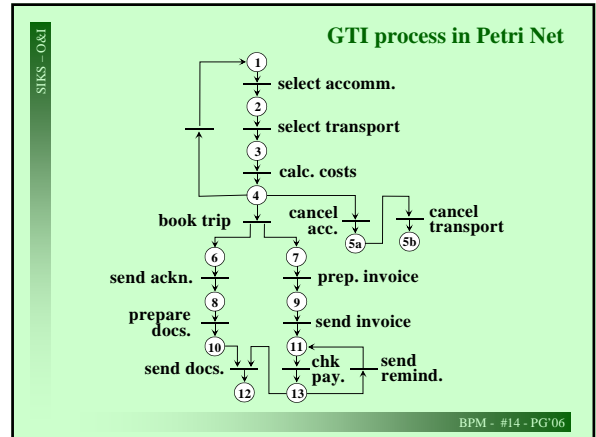
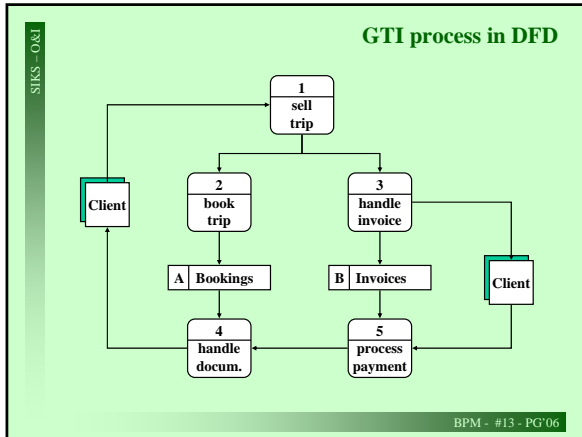
BPR



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- ## Process specification techniques
- data flow based ?
 - token based ?
 - event based ?
 - document based ?
 - communication based ?
- BPM - #12 - PG'06

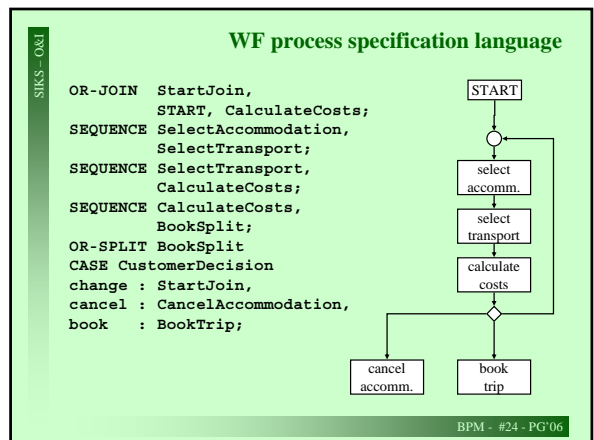
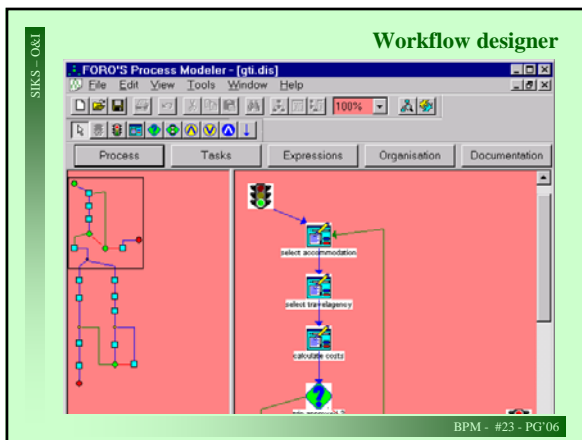
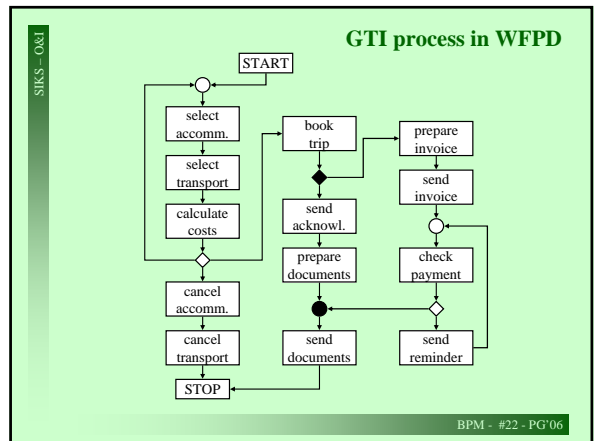
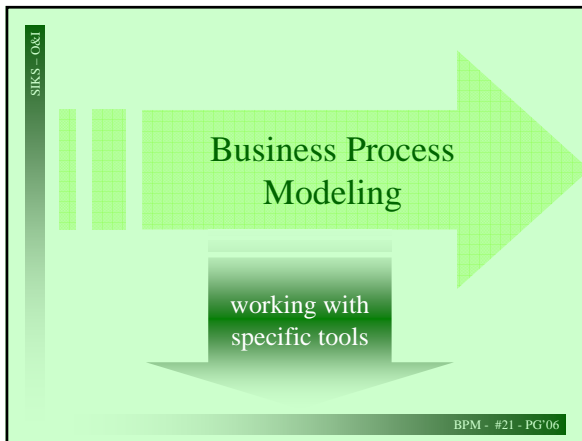


- The perfect choice**
- Choice depends on
 - nature of workflow
 - level of detail
 - intended audience
 - Combination of techniques for
 - different abstraction levels
 - different aspects
 - Consistency with BPMS environment
 - 'independent' modeling tools
 - BPMS-specific tools and details
- BPM - #18 - PG'06

Thinking of Mintzberg

	DFD	Petri Net	UML AD	Doc. TC	BP Map
Simple structure					
Adhocracy					
Machine bureaucracy					
Professional bureaucracy					
Division structure					

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WF activity specification language

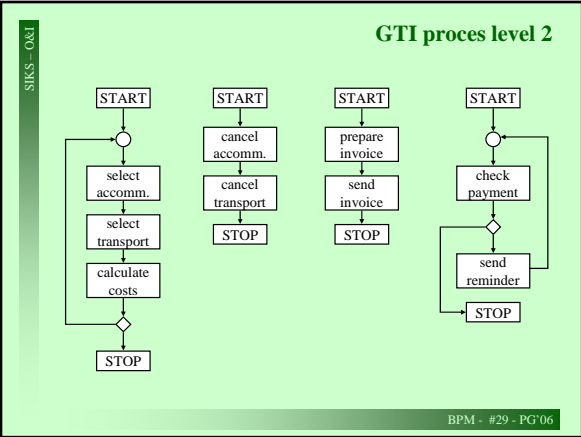
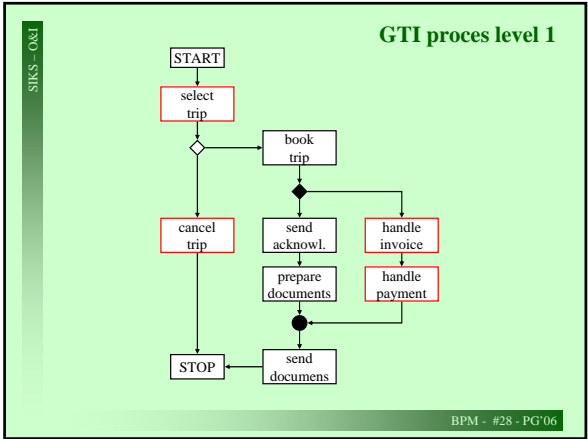
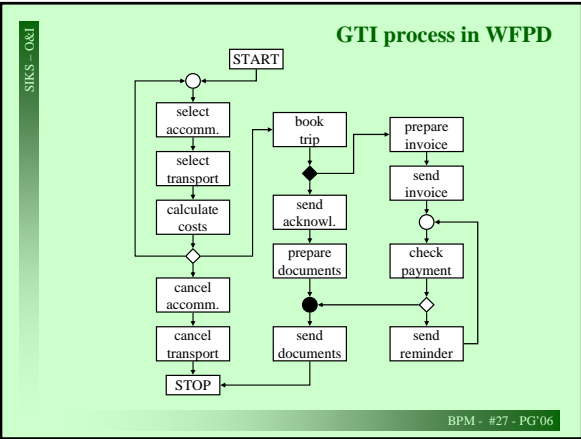
ACTIVITY SendAcknowledgment
DESCRIPTION
 "Preparation of booking acknowledgment letter for customer in MS-Word, printing and sending it."
INPUT = TripBookForm
OUTPUT = TripBookAckLetter
APPLICATION = MS-Word
ROLE = General
AVGTIME = 5
MAXTIME = 15

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Business Process Modeling

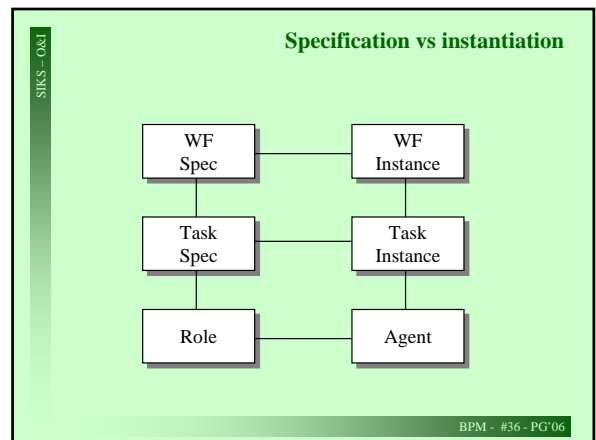
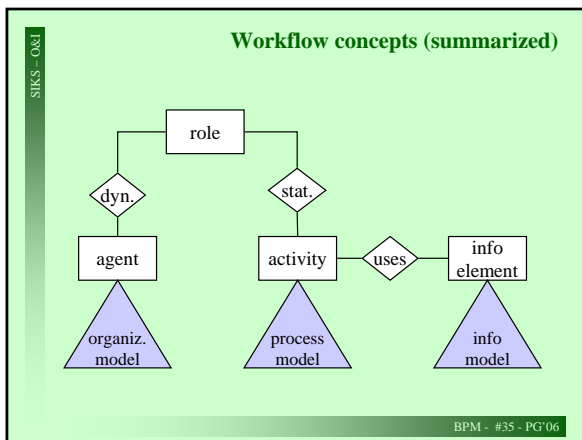
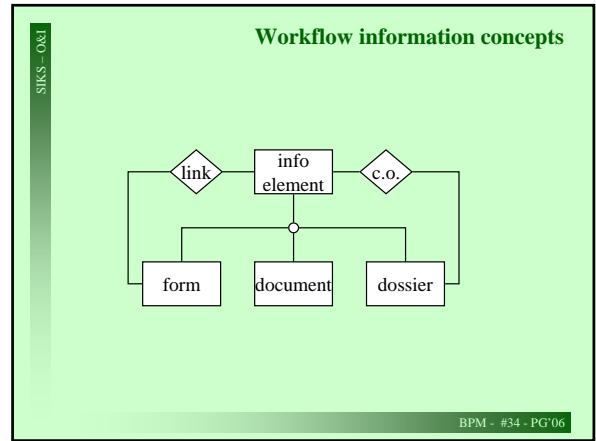
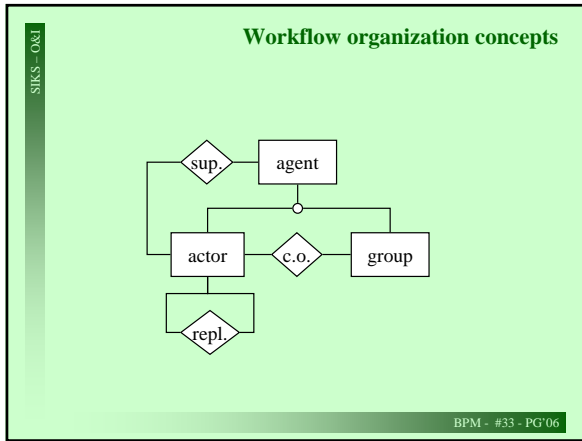
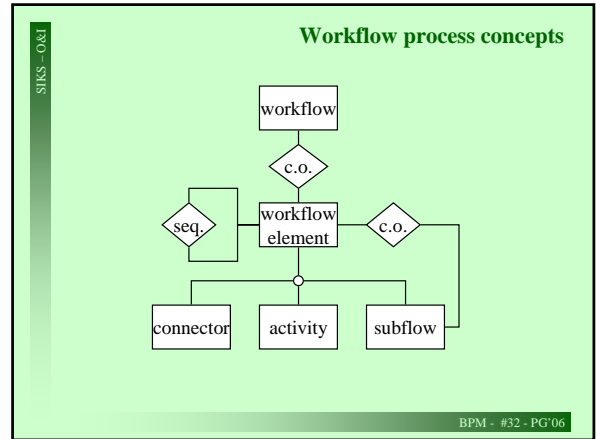
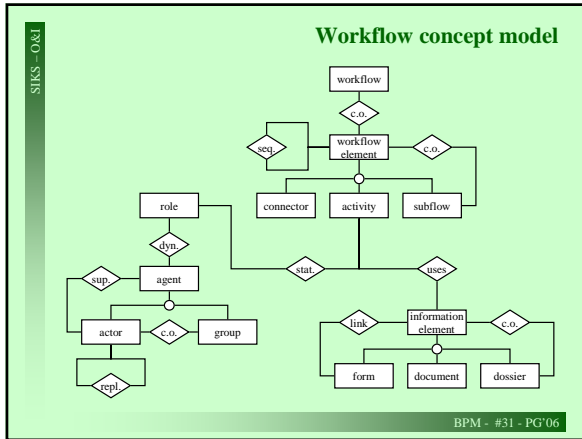
multi-level modeling

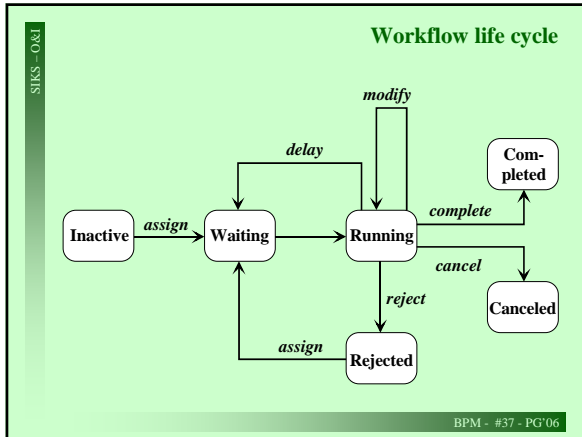
BPM - #26 - PG'06



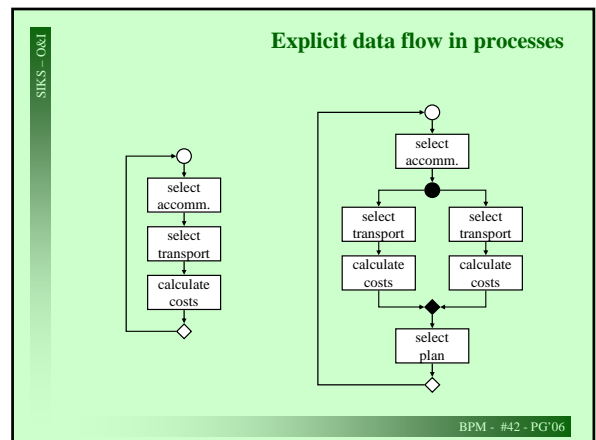
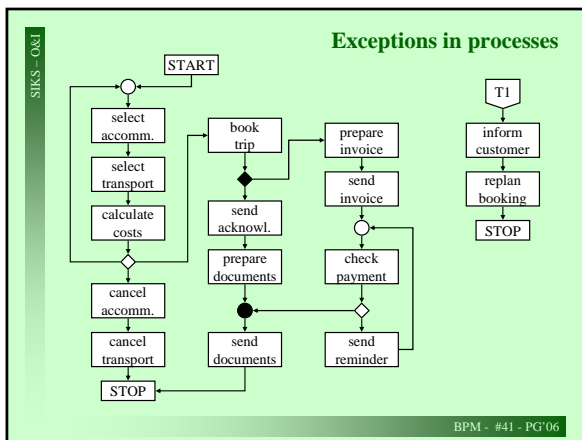
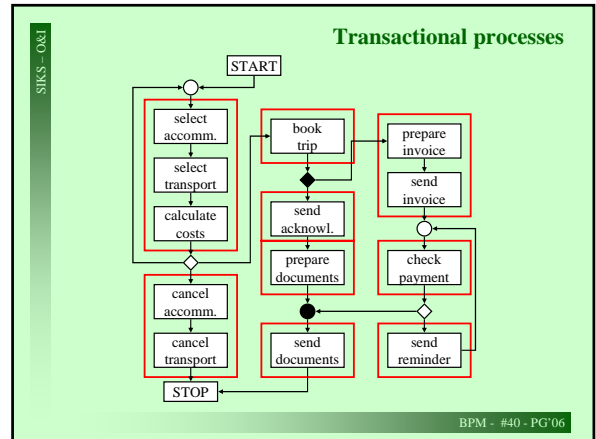
Workflow Concepts

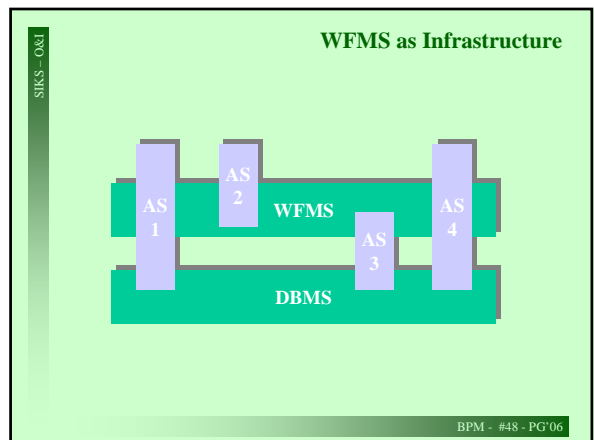
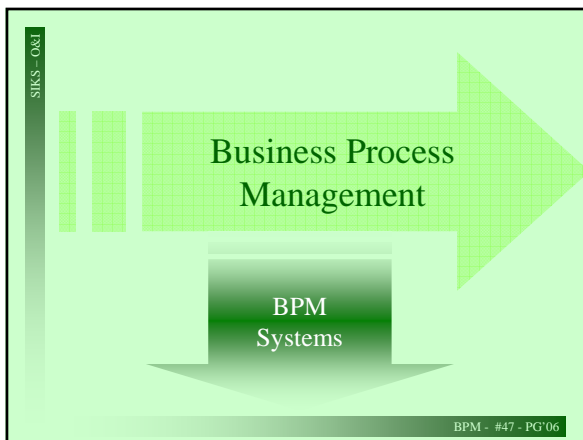
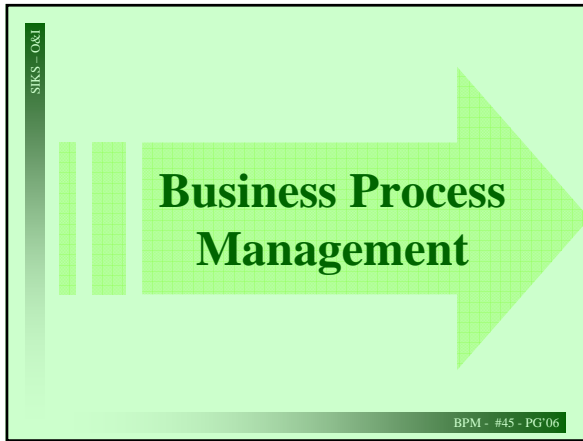
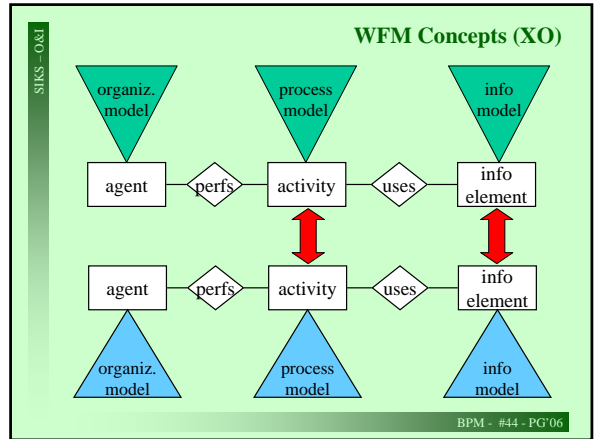
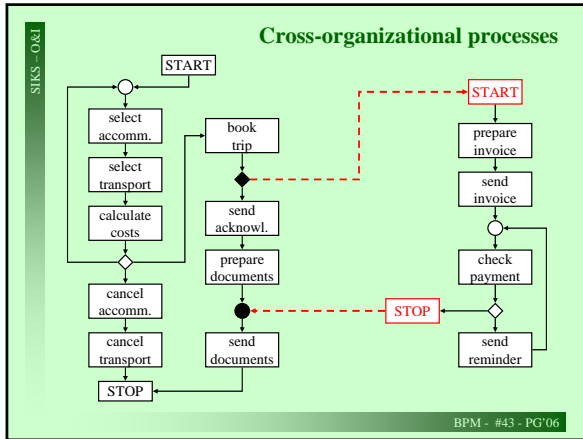
BPM - #30 - PG'06

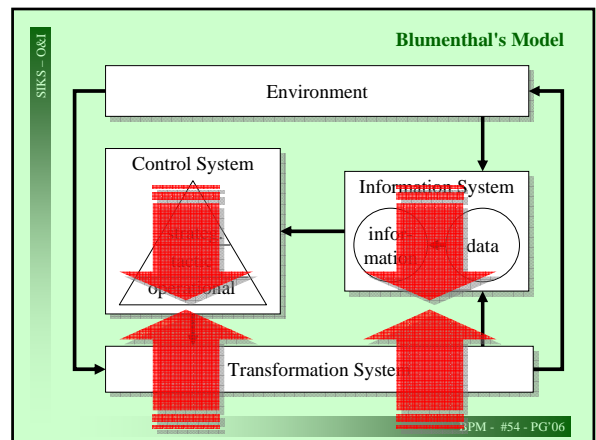
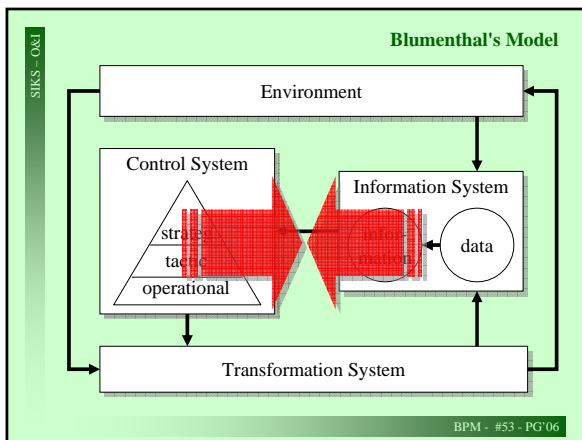
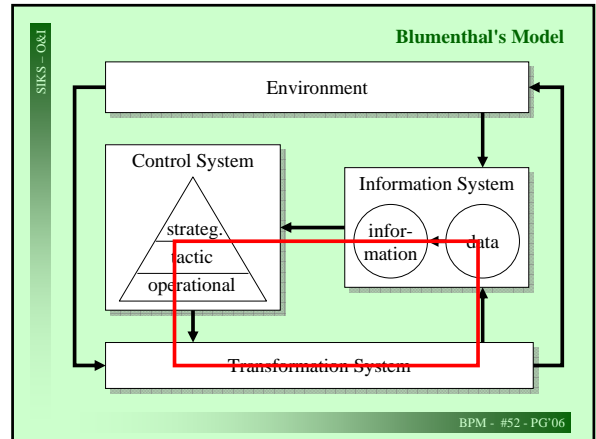
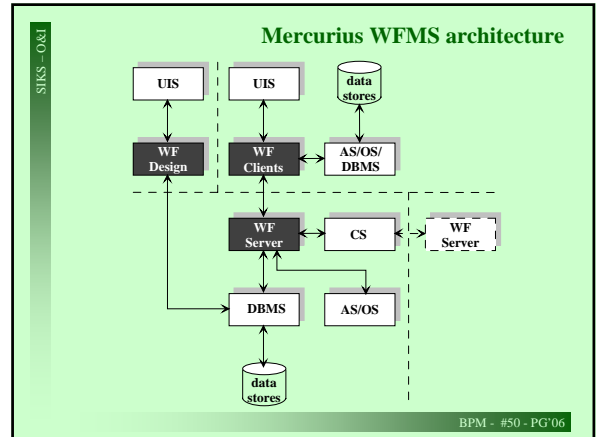
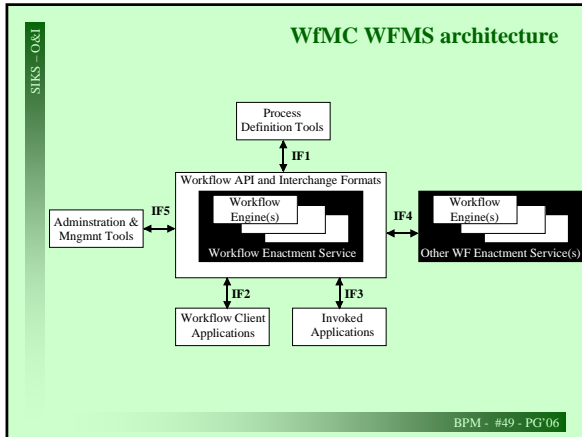


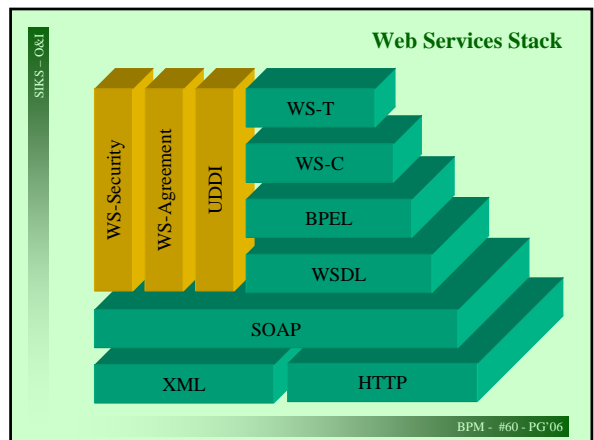
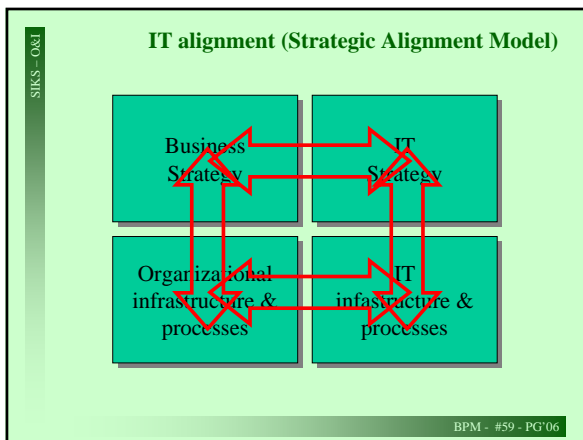
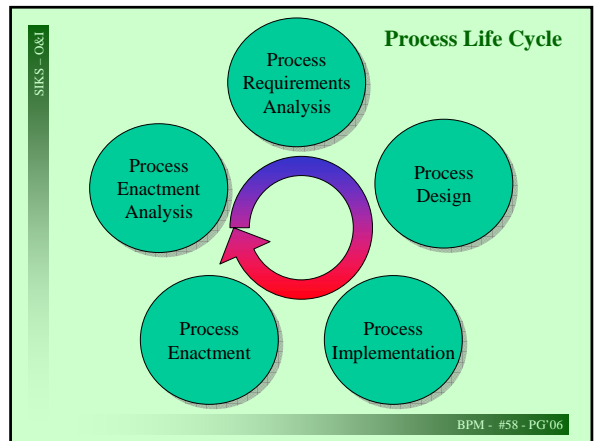
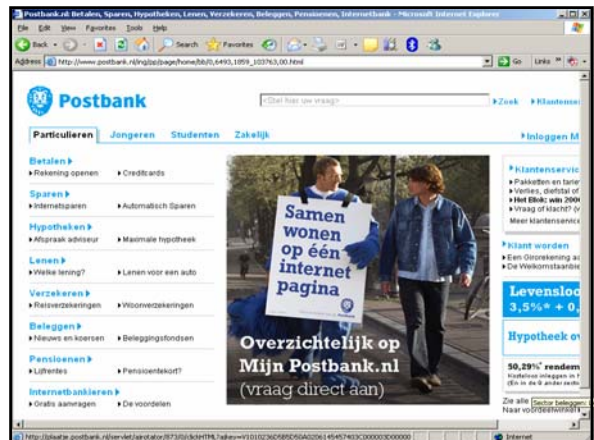
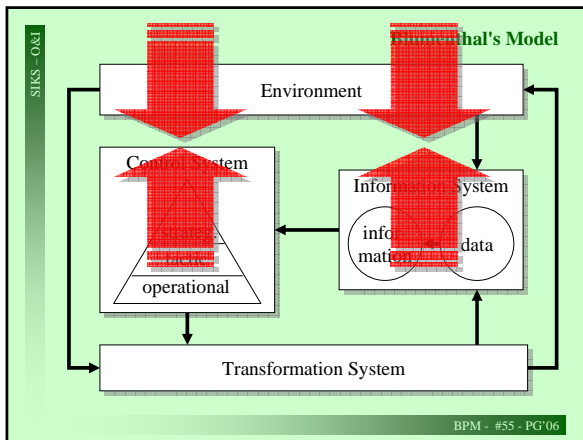


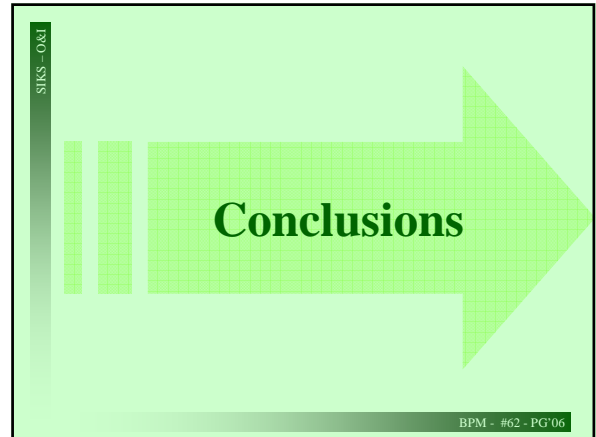
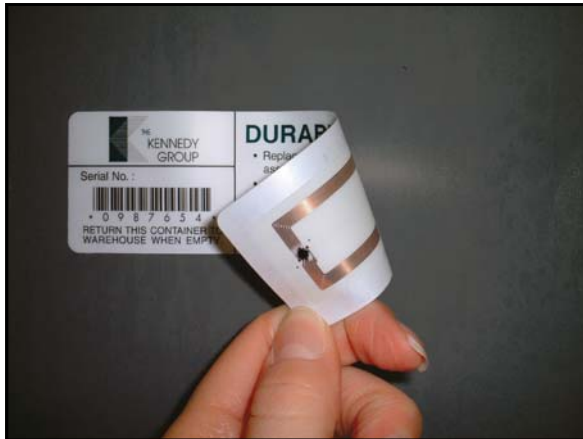
- ### Advanced business process aspects
- Transactional processes
 - Exceptions in processes
 - Explicit data flow in processes
 - Cross-organizational processes
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Business process modeling

- Many approaches to process modeling
- Practice often based on (informal) petri net variants – but quite some confusion
- Integration required of organization, information, and process model
- Multi-level and/or multi-aspect modeling required for complex applications
- Advanced aspects required for complex applications (but adopted by practice ?)

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Business process enactment

- Workflow management integrates aspects of classical control cycle
- Workflow management not yet as generally accepted as database management
- Standardization lags behind
- Choice between structured (WFMS), semi-structured (CHS) and unstructured (GW)
- Heavily influenced by emerging Web standards (e.g. BPEL)

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