

# Business Process Management

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## Overview

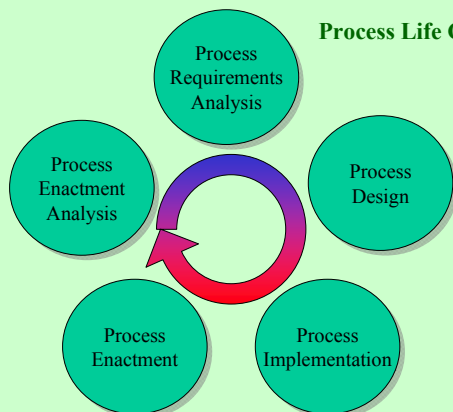
- Introduction
- Business process modeling
- Workflow concepts
- Advanced BPM concepts
- Business process management
- Conclusions

## Introduction

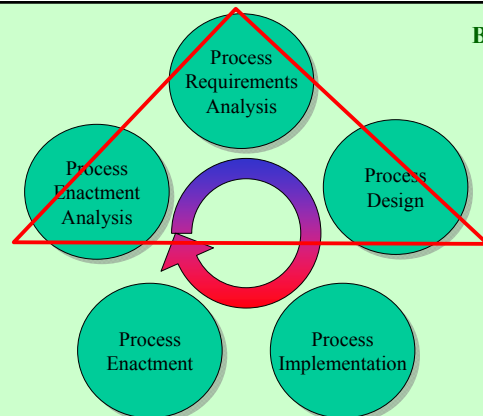
## Business practice

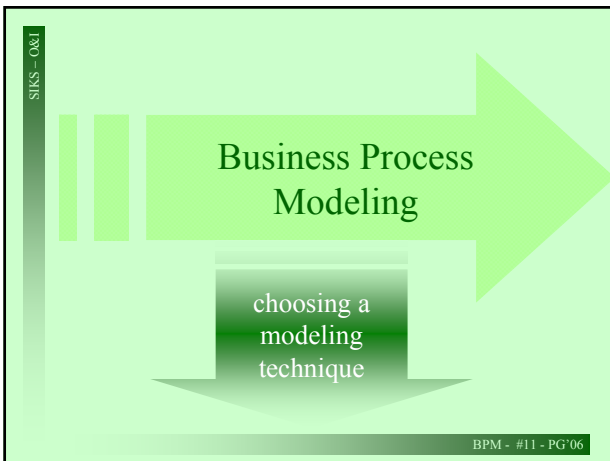
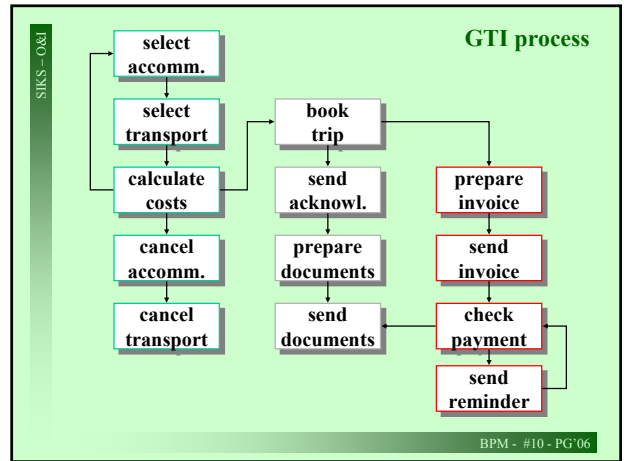
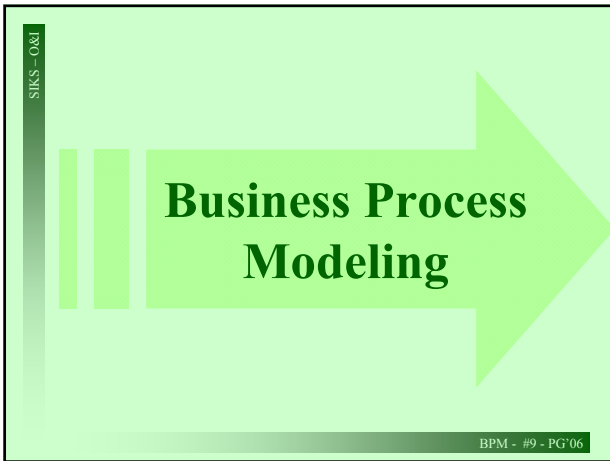
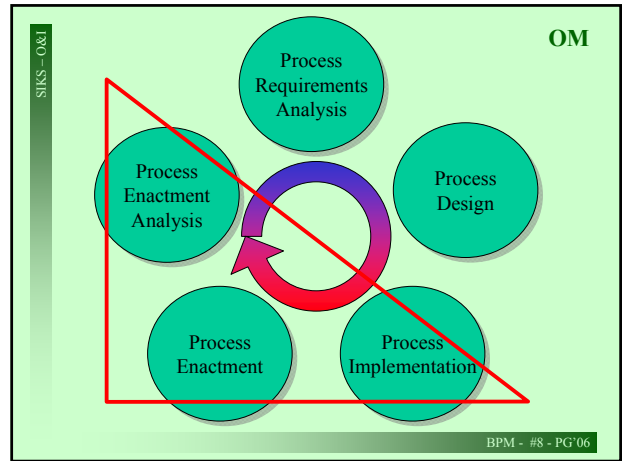
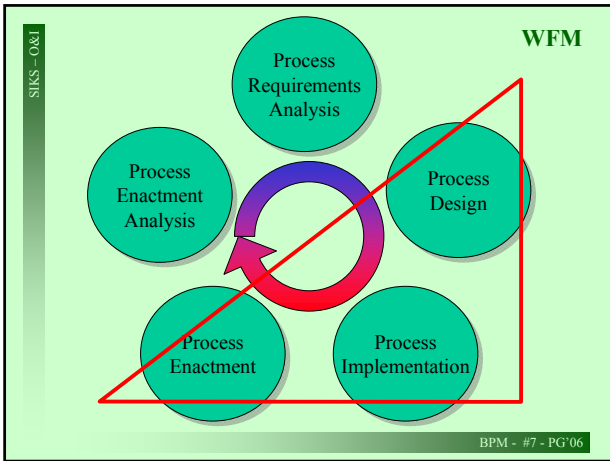
- 'Process' is the magic word:
  - Tight linking of business functions (e.g. for on-demand business)
  - Required end-to-end (order to delivery) business optimization
  - Within individual organizations, but increasingly across organizations
- From function-oriented business to process-oriented business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

## Process Life Cycle

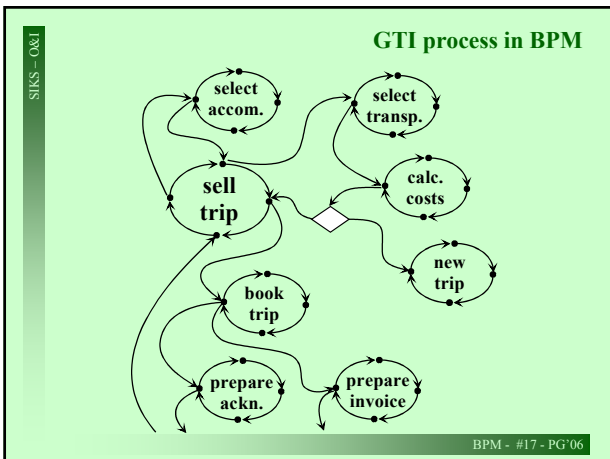
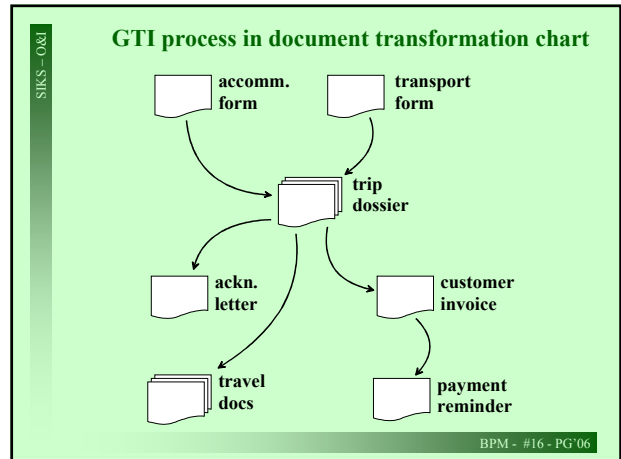
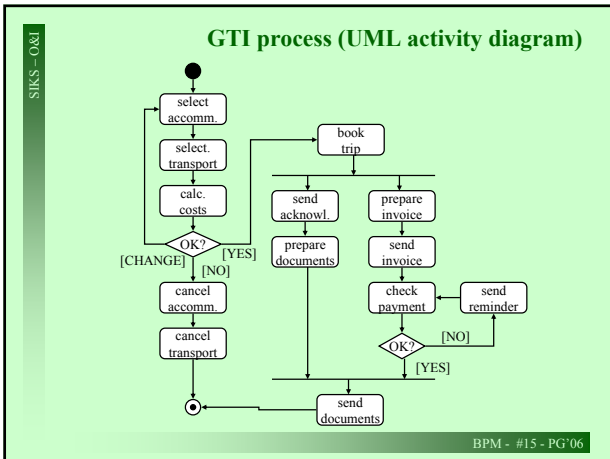
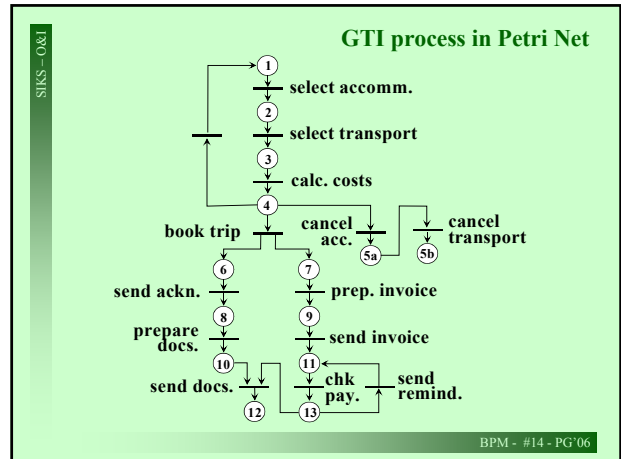
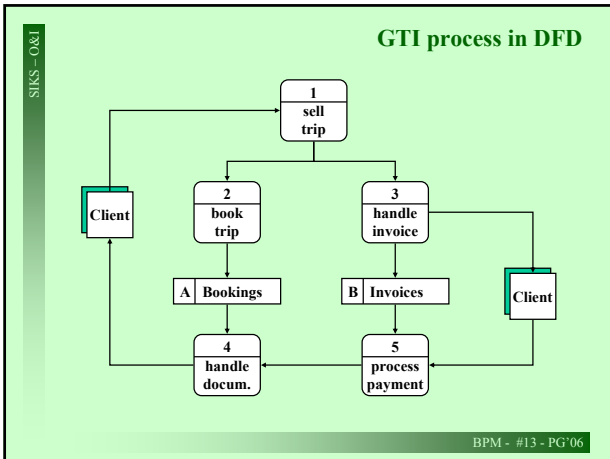


## BPR





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



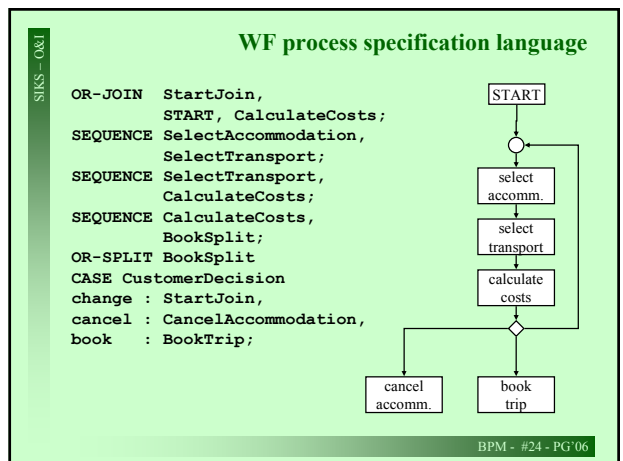
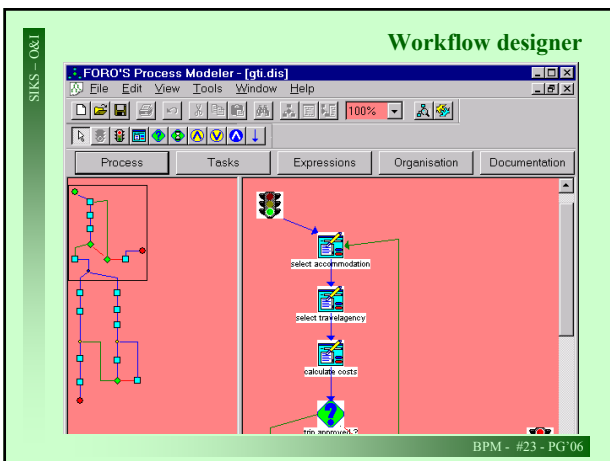
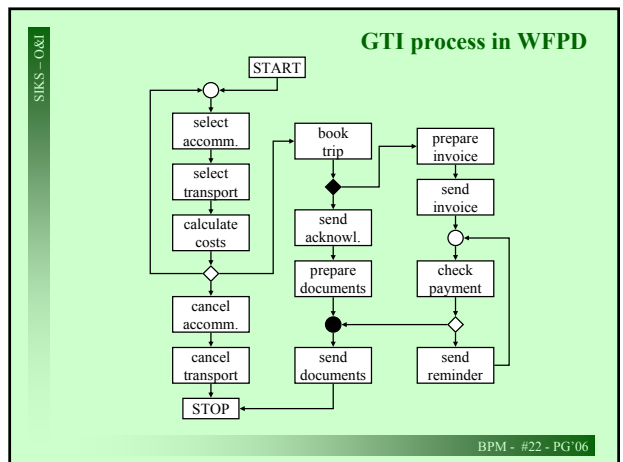
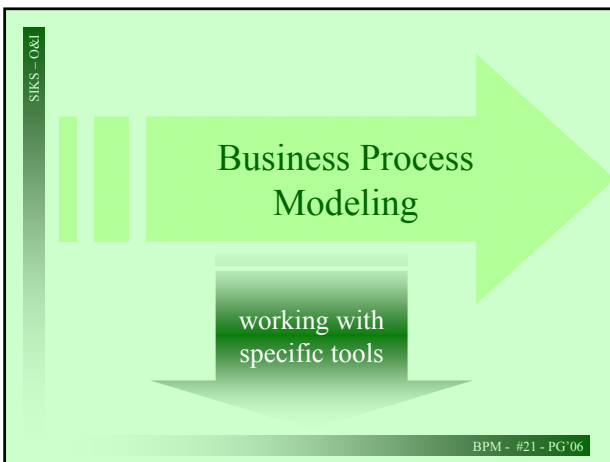
- The perfect choice**
- Choice depends on
    - nature of workflow
    - level of detail
    - intended audience
  - Combination of techniques for
    - different abstraction levels
    - different aspects
  - Consistency with BPMS environment
    - 'independent' modeling tools
    - BPMS-specific tools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

SIKS - O&I

### Thinking of Mintzberg

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

BPM - #19 - PG'06



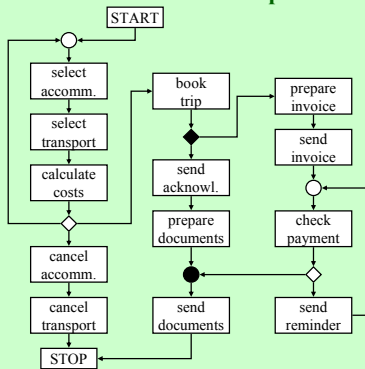
### WF activity specification language

**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

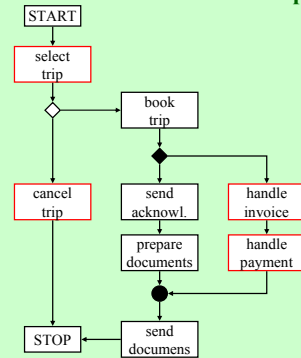
### Business Process Modeling

multi-level modeling

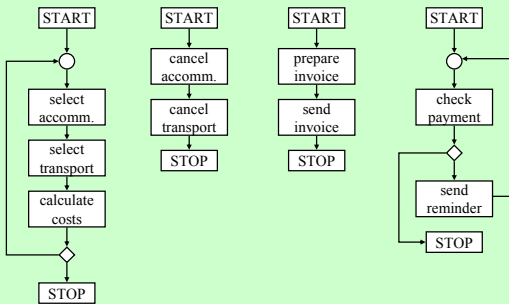
### GTI process in WFPD



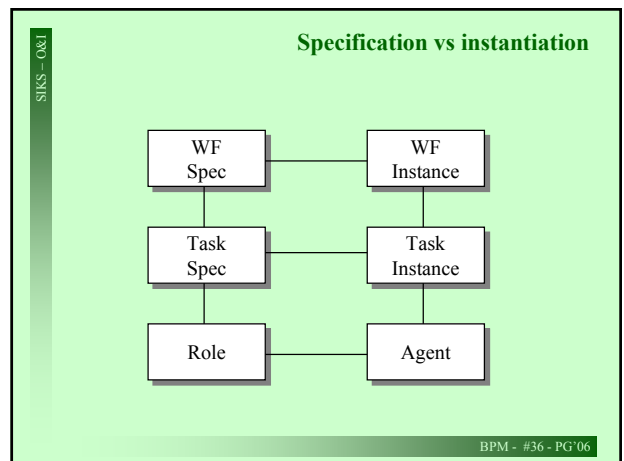
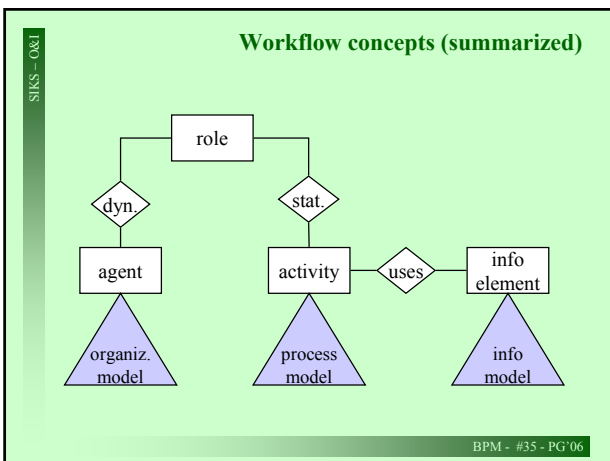
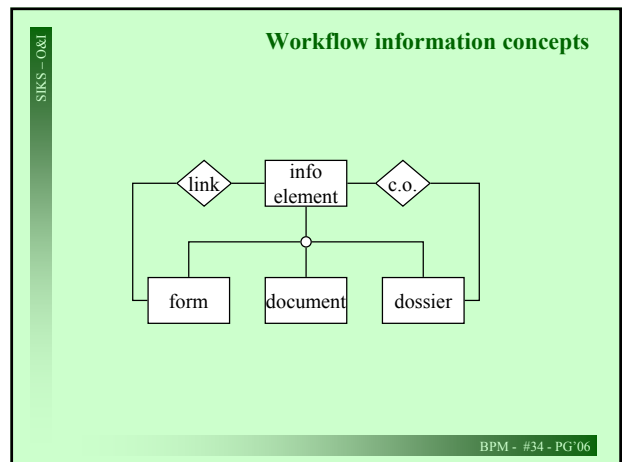
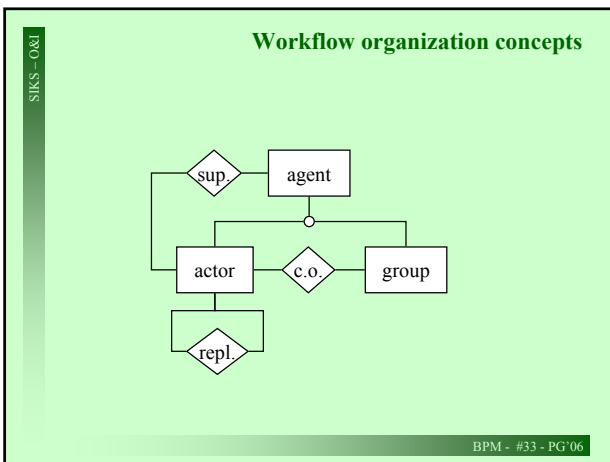
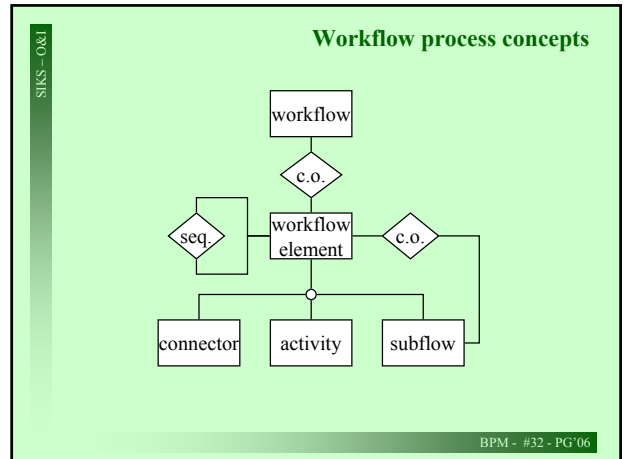
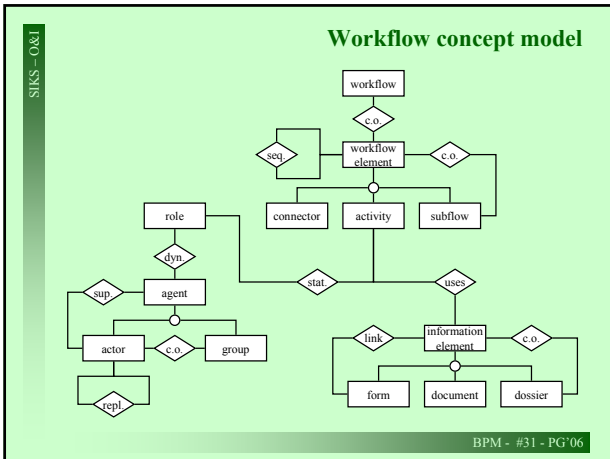
### GTI proces level 1

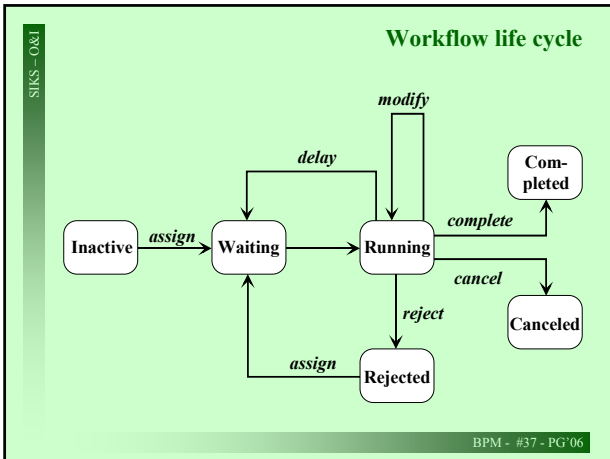


### GTI proces level 2

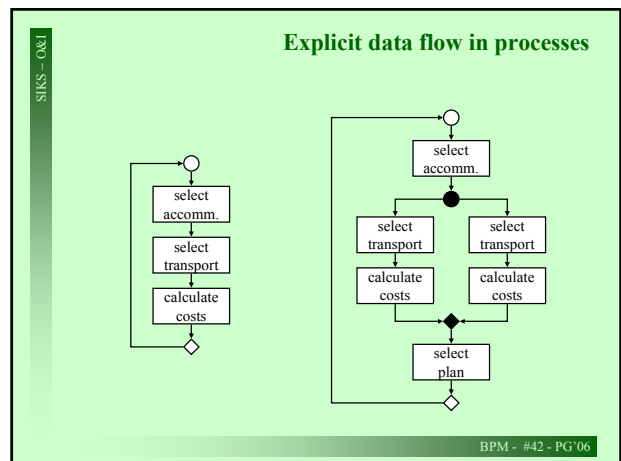
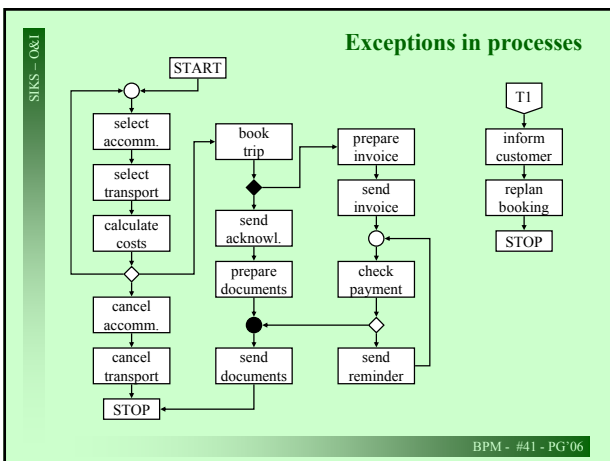
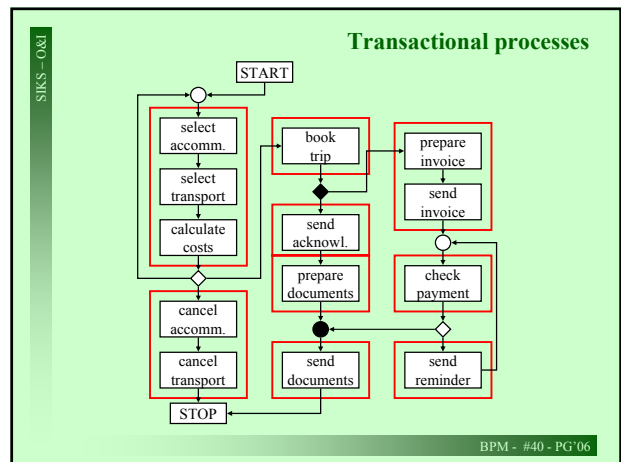


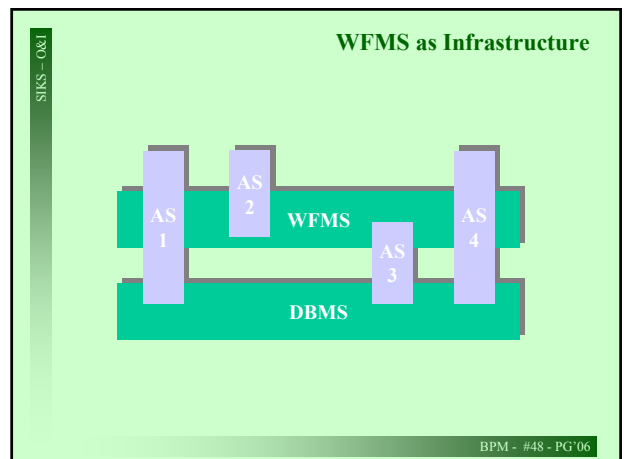
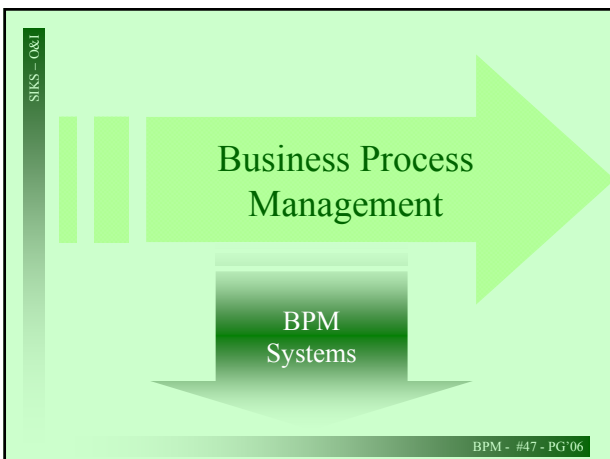
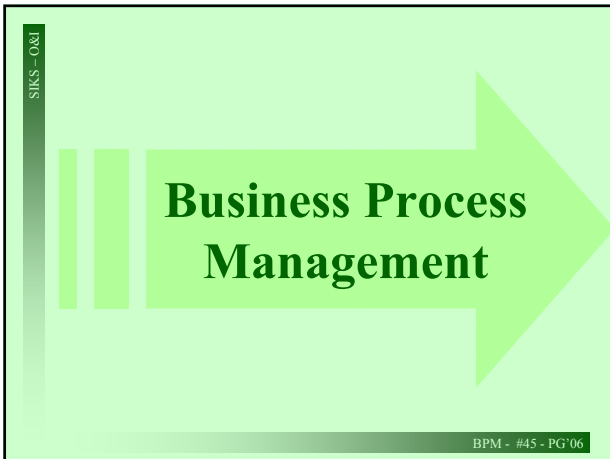
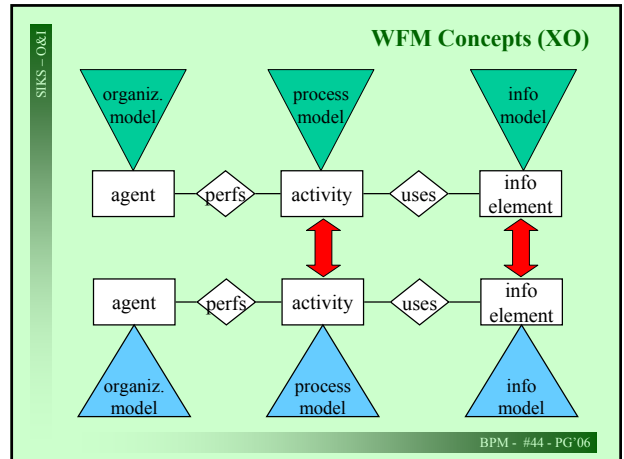
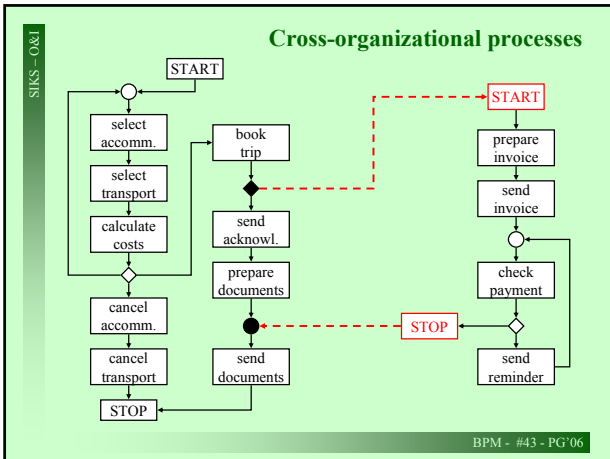
### Workflow Concepts

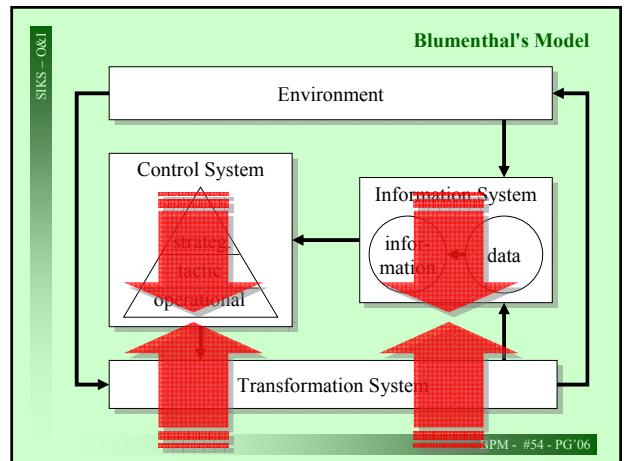
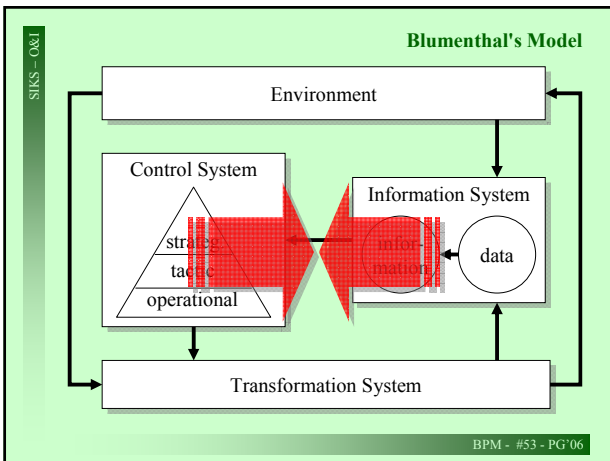
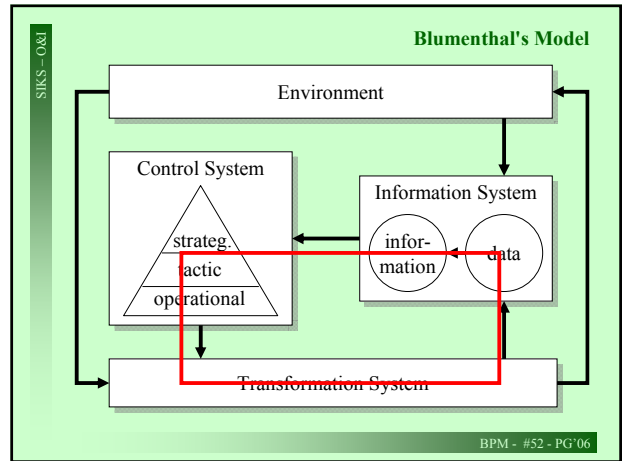
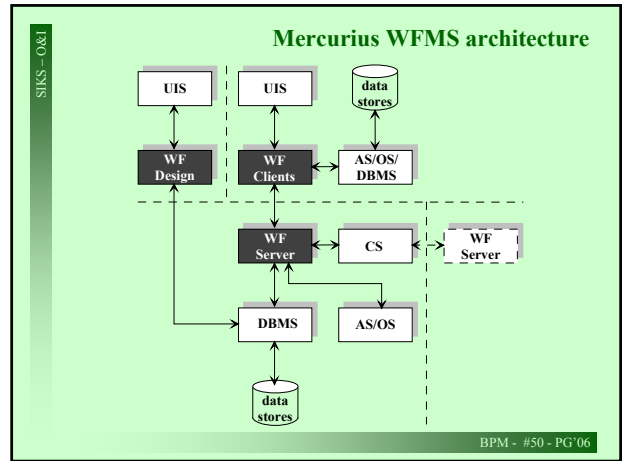
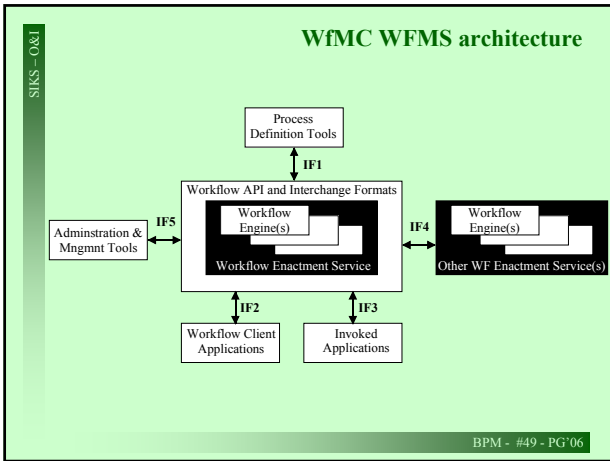


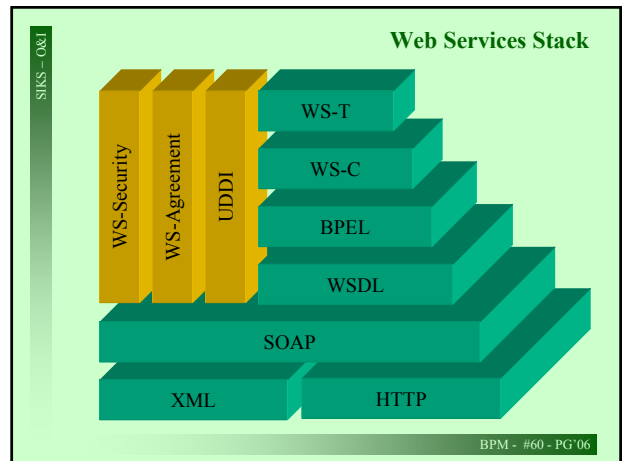
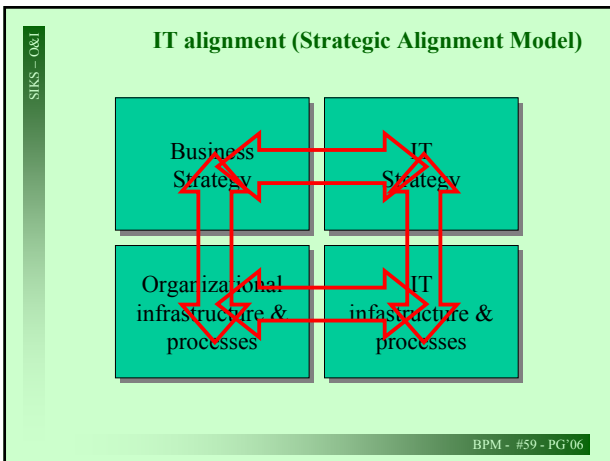
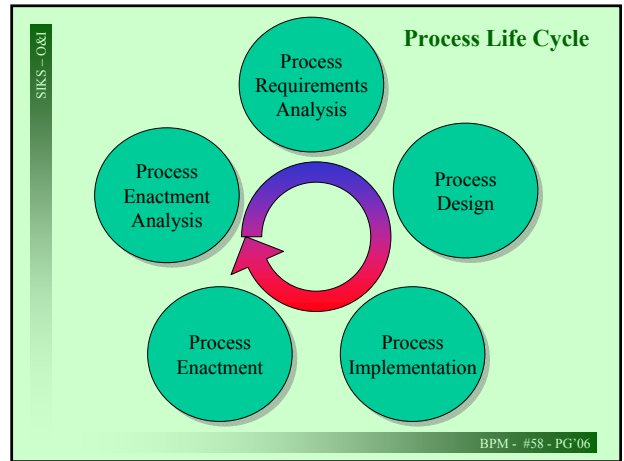
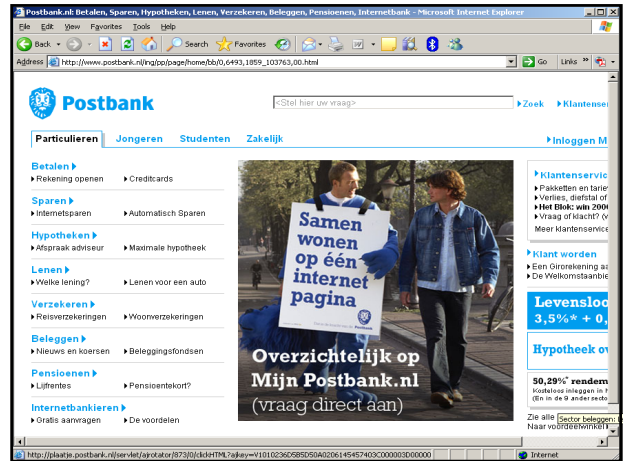
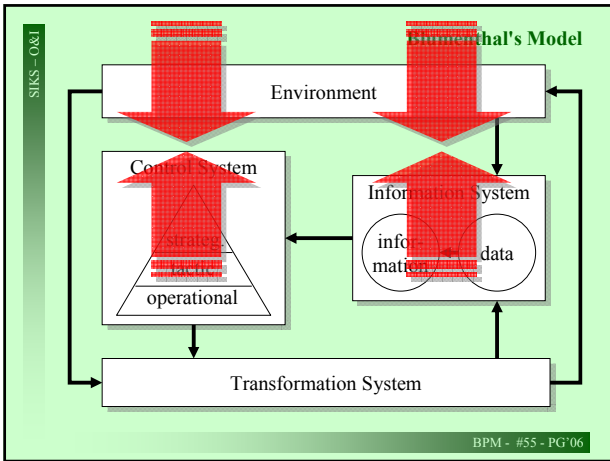


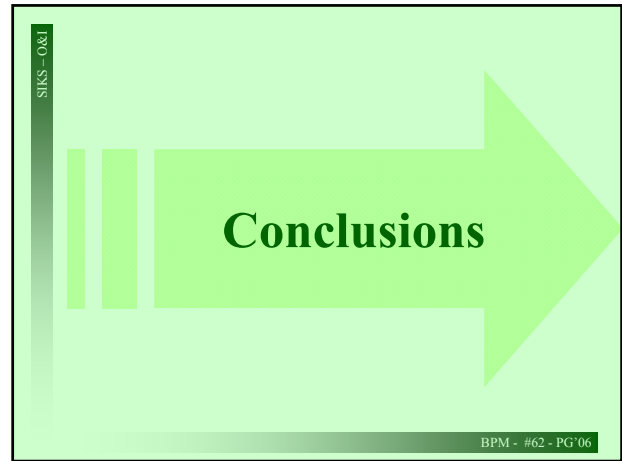
- SIKS - O&I
- ### Advanced business process aspects
- Transactional processes
  - Exceptions in processes
  - Explicit data flow in processes
  - Cross-organizational processes
- BPM - #39 - PG'06











ISO-SIKS

### 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 ?)

BPM - #63 - PG'06

ISO-SIKS

### 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)

BPM - #64 - PG'06