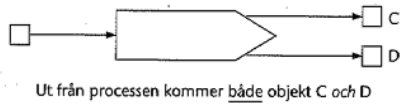
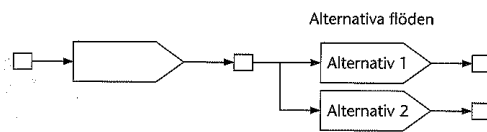


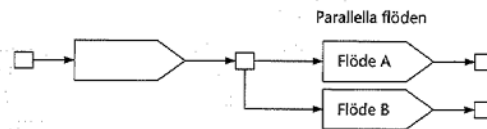
### Bokens modelleringsteknik



### Bokens modelleringsteknik



Figur 6.11 Alternativa flöden.



Figur 6.12 Parallella flöden.

## Förändringsarbete i organisationer

### Astrakans modelleringsteknik

		<b>Process</b> Ett mönster för repeterbart mervärdeskapande agerande (Nilsson) Om pilen är opraktisk, nyttja fyrkant.
		<b>Sakobjekt</b> Företeelser i verksamheten vilka vi producerar, nyttjar, konsumerar eller håller information om.
		<b>Informations- dataobjekt</b> Information ( anges normalt endast som text på flödeslinje ) Dubbellinje för inforesurs / datalager eller "notplan"
		<b>Gränssnitt</b> Allmän notation för gränssnitt (även presentations/manipulation av data) respektive protokollsgränssnitt (förhandling)
		<b>Aktör</b> En aktör är en person, roll eller organisation/enhet vilken deltar i processen i någon form eller är extern intressent / process.
		<b>Händelse</b> Händelse eller tillstånd som utlöser, dvs startar en process eller asynkront på verkar dess förlopp.
		<b>Kontrollpunkt</b> Kontrollpunkter för styrning (gäller främst utvecklingsprocesser) eller benchmarking av processen.
		<b>Villkor, beslut, val</b> Villkor för start eller avslut av process eller val av väg mellan processer. Ritas ibland inom processymbolen.
		<b>Flöde</b> Sak eller informationsflöde. Pilen visar huvudriktning. Text på pilen anger ett informationsflödes innehåll.
		<b>Mål</b> Mål för process eller aktör beroende på koppling
		<b>Problem</b> Problem hos eller relaterad till process eller aktör . Grön ruta för åtgärd.
		<b>Förbättringsida</b> Möjlig förbättring av processerna
		<b>För in som kommentartext</b>

## Förändringsarbete i organisationer

### Att välja modelleringsteknik

Bäst Bokens modelleringsteknik

Näst Bäst Astrakan

Tredje Bäst BPMN

## Förändringsarbete i organisationer

### Att välja modelleringsteknik

*Testa på "halvskarp" uppgift*

*Gruppuppgift*

*3-6 personer i gruppen*

*Argumenterar för (styrkor och möjligheter att använda i projektet) och emot (svagheter och hot mot att använda i projektet)*

*Gör en processmodell över examinationen i en kurs (delprocess)*

*Eller välj en egen process i gruppen*

*Underlag för att ni skall välja modelleringsteknik*

*Du/ni kan även "mixa" modelleringstekniker, men då krävs en definition!*

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## Förändringsarbete i organisationer

# Föreläsning 12

- ✓ Vad är kvalitet inom processmodellering?
- ✓ Vad kännetecknar en "bra" process modell?
- ✓ Lutar sig mot kvalitetstänkande
- ✓ Jan Recker
  - TOWARDS AN UNDERSTANDING OF PROCESS MODEL QUALITY. METHODOLOGICAL CONSIDERATIONS
  - A SOCIO-PRAGMATIC CONSTRUCTIONIST FRAMEWORK FOR UNDERSTANDING QUALITY IN PROCESS MODELLING  
*Australasian Journal of Information Systems Volume 14 Number 2 June 2007*

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## Föreläsning 12

Subject: Invitation to participate in Business Process Modeling survey  
From: "Reijers, H.A." <H.A.Reijers@tue.nl>

How can the understandability of business process models be improved?  
This question is the focus of a study conducted by the Humboldt University of Berlin, Eindhoven University of Technology and the Queensland University of Technology in Brisbane.=20

We would like to ask you to consider taking a few minutes of your time to complete the online survey on process model understandability. The questionnaire has been designed for users of EPCs (Event-driven Process Chains), which means that anyone that uses EPCs to create business process models for whatever purpose is welcome and encouraged to participate.

You will find the online survey under  
<http://www.bpm.fit.qut.edu.au/understanding>.

## Föreläsning 12

- ✓ Clearly, there is a need for rigorous theory to assist the development, usage, and evaluation of process modelling activities in order to enhance the quality of the approaches. Simply speaking, the question can be reduced to:
- ✓ ***What constitutes a 'good' business process model? Surprisingly, this question remains not only unanswered yet but is, in the form "what constitutes a 'good' conceptual model?", a research field that has only recently begun to emerge and that is slowly gaining momentum.***

## Förändringsarbete i organisationer

“understanding of business process model quality”

- ✓ Två spår
- ✓ Datavetenskapligt (automatisera/notation)
  - ✓ Underlag för programmering (conceptual modeling)
- ✓ Organisationsspår (förändring i org)
  - ✓ Vad är kvalitet?

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## Förändringsarbete i organisationer

- ✓ Inspiration från (Kvalitetstänkande)
- ✓ ISO-9000
- ✓ Usability
- ✓ Graphical Design/Moody

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# ISO 9000

“8 principer” för Quality management

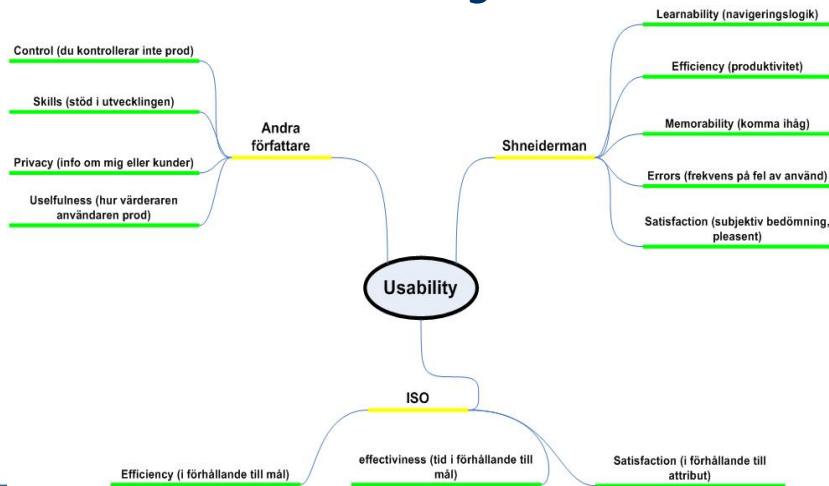
- ✓ **Customer focus:**
- ✓ **Leadership:**
- ✓ **Involvement of people**
- ✓ **Process approach**
- ✓ **System approach to management:**
- ✓ **Continual improvement:**
- ✓ **Factual approach to decision-making:**
- ✓ **Mutually beneficial supplier relationships:**

# Usability

Ben Shneiderman have written (separately) about a framework of system acceptability, where usability is a part of "usefulness" and is composed of:

- ✓ **Learnability:** How easy is it for users to accomplish basic tasks the first time they encounter the design?
- ✓ **Efficiency:** Once users have learned the design, how quickly can they perform tasks?
- ✓ **Memorability:** When users return to the design after a period of not using it, how easily can they re establish proficiency?
- ✓ **Errors:** How many errors do users make, how severe are these errors, and how easily can they recover from the errors?
- ✓ **Satisfaction:** How pleasant is it to use the design?

# Usability



# Moody

Moody [6] presents nine principles for graphical modelling:

- Discriminability**
- perceptual and cognitive limits**
- Emphasis**
- cognitive integration**
- Perceptual directness**
- Structure**
- Identification**
- Expressiveness**
- Simplicity**

# Moody

## **Discriminability**

means easy to see and to differentiate from one another. It discusses the elements of a diagram

## **Perceptual and cognitive limits**

- Perceptual limits: the ability to visually discriminate between diagram elements decreases with their number and proximity. In general, the difficulty of discerning diagram elements increases quadratically with diagram size.
- Cognitive limits: the number of diagram elements that can be comprehended at a specific moment is limited by working memory capacity, which is believed to be “seven plus or minus two” concepts at a specific moment. When this is exceeded, a state of cognitive overload ensues and comprehension degrades. One of the most effective ways of reducing complexity is to divide them into smaller parts, decomposition or modularisation

## **Emphasis**

The most important concepts should be emphasized (highlighted) to bring them to the readers' attention, while less important or background elements should be de-emphasized (lowlighted).

# Moody

## **Cognitive integration**

- Conceptual integration: enabling the reader to integrate information from separate diagrams into a coherent mental representation of the problem.
- Perceptual integration: providing perceptual cues (orienting, contextual and directional information) to aid navigation between diagrams.

## **Perceptual directness**

are representations whose interpretation is spontaneous or natural, in that their meaning can be extracted automatically by the perceptual system.

## **Structure**

Organizing diagram elements by a structure into perceptual groups expands the number of elements that can be shown on each diagram without exceeding cognitive limits.



# Moody

## Identification

Diagram elements (both nodes and links) should be clearly labelled, using terminology familiar to domain experts to help trigger domain knowledge. Internal identification defines the correspondence between graphical conventions and their meaning.

## Expressiveness

Most graphical modelling techniques in ISD use a very limited graphical vocabulary (boxes and arrows) which implies a low expressiveness. We could use the full range of visual variables such as shape, colours, size, value, orientation and texture.

## Simplicity

The number of graphical conventions used in a notation should be limited. Keep it simple, let **simplicity** rule.

# Så...

## **vad är kvalitet när det gäller processmodellering?**

Är det möjligt att diskutera kvalitet hos en modelleringsteknik? Eller  
Skall vi diskutera kvalitet hos enskilda modeller baserade på en teknik? Eller  
Skall vi diskutera kvalitet i själva aktiviteten när modelleringen utförs? Eller  
Skall vi sk\*\*a i det hela?

Vetenskap hos konsulter mm bör/skall lyftas fram och diskuteras/problematiseras inom vetenskapen!