



**UiO • Institutt for informatikk**

Det matematisk-naturvitenskapelige fakultet

**INF3290**

**1: Informasjonsinfrastruktur som rammeverk**

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# Rammeverket

- Informasjonsinfrastruktur (II) er rammeverket
- Primærlitteratur: *“Design theory for dynamic complexity in information infrastructures: the case of building internet”* av Ole Hanseth og Kalle Lyytinen

Table 1 Applications, platforms and information infrastructures

Property/Type of IT system	Application	Platform	Information infrastructure
<i>Emergent properties</i>			
Shared	Yes, locally and through specified functions	Yes, across involved user communities and across a set of IT capabilities	Yes, universally and across multiple IT capabilities (Star and Ruhleder, 1996; Forra, 1999)
Open	No, closed by user group and functionality	Partially, depends on design choices and managerial policies	Yes, universally allowing unlimited connections to user communities and new IT capabilities (Weill and Broadbent, 1998; Kayworth and Sambamurthy, 2000; Freeman, 2007)
Heterogeneous	Yes, partially and mainly by involved social groups	Partially, mainly by social groups but also by technical connections	Yes, increasingly heterogeneous both technically and socially (Kling and Scacchi, 1982; Hughes, 1987; Kling, 1992; Edwards <i>et al.</i> , 2007)
Evolving	Yes, but limited by time horizon and user community.	Yes, and limited by architectural choices and functional closure	Yes, unlimited by time or user community (Star and Ruhleder, 1996; Freeman, 2007; Zimmerman, 2007)
	Linear growth	Mostly linear growth	Both linear and nonlinear growth (Hughes, 1987)
	Evolution bounded and context free	Evolution path dependent	Evolution path dependent (Star and Ruhleder, 1996; Forra, 1999; Edwards <i>et al.</i> , 2007)
<i>Structural properties</i>			
Organizing principle	Direct composition of IT capabilities within a homogeneous platform	Direct composition of a set of horizontal IT capabilities within a set of homogeneous platforms	Recursive composition of IT capabilities, platforms and infrastructures over time (Star and Ruhleder, 1996; Edwards <i>et al.</i> , 2007)
Control	Centralized	Centralized	Distributed and dynamically negotiated (Weill and Broadbent, 1998) Can involve only basisorganizing principles (standards) and rely on installed base inertia (Star and Ruhleder, 1996; Edwards <i>et al.</i> , 2007).

# Et rammeverket av begreper

- Vi anvender i dette kurset begrepene:
  - Komplexitet
  - Delt
  - Åpen
  - Heterogen
  - Evolverende
  - Installert base
- Forstå dem, bruk dem og gjør dem til deres egne

## Hva rammeverket er (og ikke er)

- *Begreper* for å gjenkjenne, beskrive og forstå store og komplekse informasjonssystemer
- Ikke for å klassifisere hva som er en informasjoninfrastruktur og hva som ikke er
- Ikke absolutte/binære begreper, men en grad av