Velkommen til Gruppetime 8

IN2150

Hovedtemaer for i dag

- Snakke kort om oblig 2, og presentasjoner

- Arkitektur
- Tensions
- Governance



Kahoot

Framover

- Innlevering 2 har mer overordnet system fokus *“minst en person (30-45 minutter) som er involvert i å planlegge, designe, utvikle eller vedlikeholde informasjonssystemet (typisk i en IT-funksjon), eller noen i en lederposisjon”*

- Vi skal se mer på arkitekturen nå fram mot oblig 2

Arkitektur

- “The conceptual structure and logical organization of a computer or computer-based system.”

  Oxford english dictionary

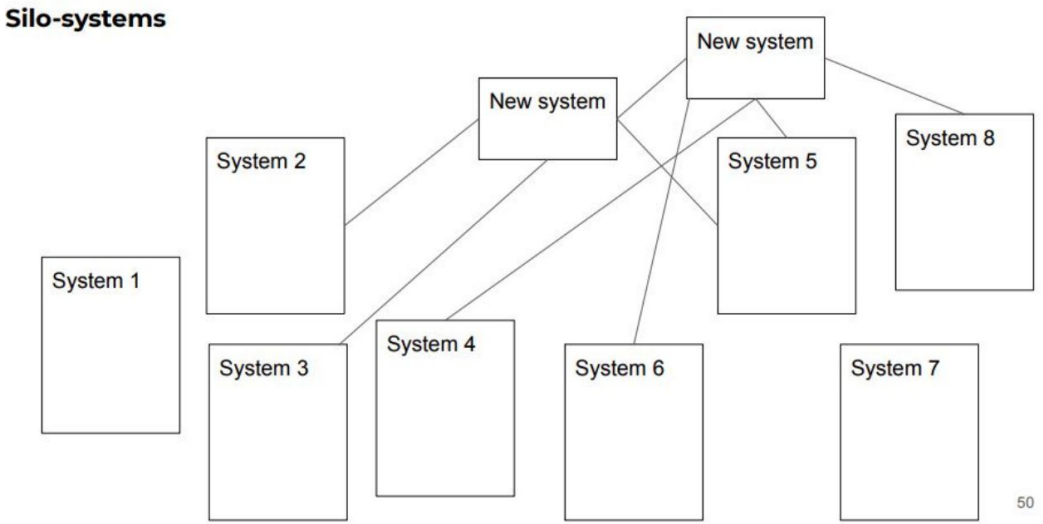
- Plantegningene av ulike elementer og relasjoner i et system/infrastruktur

- Teknisk og/eller sosio-teknisk fenomen



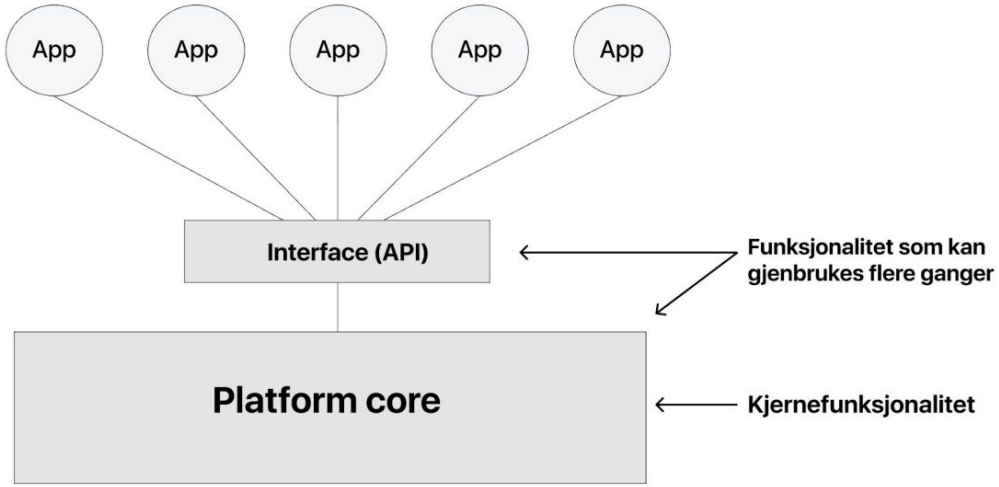
Eksempel på “tett kobling”

- “Tett kobling” = Ressurser/funksjonalitet er splittet i forskjellige systemer. De er tett integrert og snakker sammen. Dermed er de avhengig av hverandre



Eksempel på “løs kobling”

“Løs kobling” = Uavhengige og gjenbrukbare komponenter.



Hanseth, O., & Modol, J. R. (2021). The dynamics of architecture-governance configurations: an assemblage theory approach. Journal of the Association for Information Systems, 22(1), 5.

Artikkelen i dag snakker om architecture-governance configurations (A-G)

- Gir veldig mye bra hvis dere skal snakke om tensions
- Tar for seg 2 forskjellige arkitekturer
- Spansk sykehus og apotek industrien.

Vær ops på at det er mye man kan hoppe over her

Artikkelen.

Overall questions:
- What does governance mean?
- What does it mean 'centralised or decentralised' when talking about governance?
- What is the IT architecture of an infrastructure?
- What does it mean 'loose or tight' coupling when talking about architecture?
- Why are governance and IT architecture related?
- How are architecture-governance configurations related to stability and change in infrastructures?



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RESEARCH ARTICLE

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The Dynamics of Architecture-Governance Configurations: An Assemblage Theory Approach

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Abstract

Research on digital infrastructures and platforms studies large-scale systems that are characterized by constant evolution, loosely defined boundaries, and growing complexity. This research demonstrates that evolution is driven by tensions (between stability and change), which are in turn determined by the systems' architecture and governance structures. This paper argues that architecture and governance are intrinsically related and conceptualizes them as a unified entity that we call an architecture-governance (A-G) configuration. We focus on the dynamics of A-G configurations—i.e., how architecture and governance interact and, in combination, shape the evolution of digital infrastructures, while, at the same time, change as emergent outcomes of the evolution of infrastructures. Toward this end, this paper applies assemblage theory as a lens for conducting a longitudinal study on an electronic prescription infrastructure. We identify three overall A-G configurations corresponding to different phases of the evolution of the infrastructure. This paper makes three contributions. First, we theorize the A-G configuration as an intertwined intermediate-scale entity that represents the form of the infrastructure and simultaneously constitutes an assemblage in its own right. Second, we demonstrate how an A-G configuration and its infrastructure coevolved through a series of interacting stabilization and destabilization processes operating within and across levels. Finally, we argue that tensions driving the evolution of infrastructures are also dynamic and that, accordingly, the focus of study should be on the processes of stabilization and destabilization rather than on stability and change themselves.

Keywords: Digital Platform, Digital Infrastructure, Architecture, Governance, Assemblage Theory, Evolutionary Dynamics, Healthcare

Matthew Jones was the accepting senior editor. This research article was submitted on March 5, 2018 and underwent five rounds of revisions.

1 Introduction

The increasing strategic importance of IT systems for enabling new forms of social and economic organizing poses new challenges to practitioners and researchers alike. These contemporary large-scale systems exhibit high degrees of complexity, are characterized by a growing number of interconnections and interdependencies among sociotechnical components, and tend to evolve over long periods of time through loosely coordinated actions of many autonomous actors, usually in ways that go far beyond the specifications of the original designers. Examples studied in the field of information systems (IS) include smartphone ecosystems (Sørensen, Reuver, & Basole, 2015; Eaton et al. 2015), web browser ecosystems (Tiwana, 2015), mobile payment platforms (Kazan et al., 2018), eHealth infrastructures (Hanseth & Bygstad, 2015), enterprise software ecosystems (Wareham, Fox, &

Tensions i arkitektur

Hva ønsker man å oppnå?

	Stability	Change
Architecture	Integration (efficiency) Uniformity, standardization Centralized	Modularization (flexibility) Variation Decentralized

- Kan være nødvendig med tight integration

3 phases:

- Centralized Configuration
- Dual Configuration
- Platform Configuration

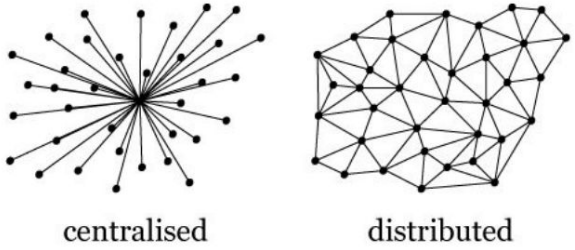
For instance, digital infrastructures tend to grow in complexity as more information, technological features and components, and users and user organizations are integrated. Such growth in complexity often leads to unintended changes within the architecture by making the modules more tightly coupled and making the infrastructure more difficult to govern by, for example, bringing the infrastructure into a locked-in state (Arthur, 1994), thus making it less manageable (Ciborra et al., 2000; Hanseth and

IT-Styring Governance

«The leadership and organizational structures and processes that ensure that the organization's IT sustains and extends the organization's strategies and objectives»

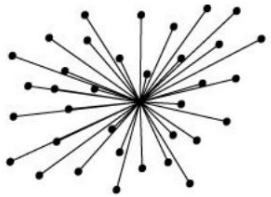
Governance omhandler måten/strategien man styrer en organisasjon på.

Hvem er er det som tar de strategiske valgene?

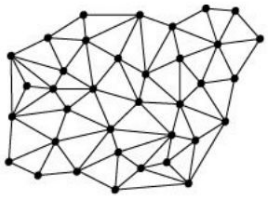


Sentralisert vs distribuert styring

Fordelene med en delt vs sentralisert styring av en organisasjon?



centralised



distributed

Tensions



	Stability	Change
Architecture	Integration (efficiency) Uniformity, standardization Centralized	Modularization (flexibility) Variation Decentralized
Governance (strategy, organizing)	Consolidation Long term focus Planned change Centralized control	Local optimization, innovation Short-term focus Emergent change Distributed control

Spørsmål?

Takk for i dag god helg!

Send evt andre spørsmål på mail:

Pederfs@uio.no

Kahoot link

https://create.kahoot.it/share/in2150-kahoot/2fc6256e-e533-4c58-8ff4-10859388ec76