

# E-government - the infrastructure

Kim Viborg Andersen  
Copenhagen Business School  
Department of Informatics

# Infrastructure challenges (I)

- Optimisation of physical, electronic, geographical presence in sustainable, environment-aware economies
- Intelligence of systems, user-aware interfacing and interaction, identity issues, make systems understand humans
- Virtual Products (customer-driven products, replication of products and services, substitution of physical products with digital counterparts, customer-driven value chains)

# Infrastructure challenges (II)

---

- Digital - analog
- Accounting - control
- Frequency and numbers
- Local - central
- Highly distributed/ scattered organizations
- Internet - mobile technologies
- Front-end & back office converging

# The VIDS

---

Volume

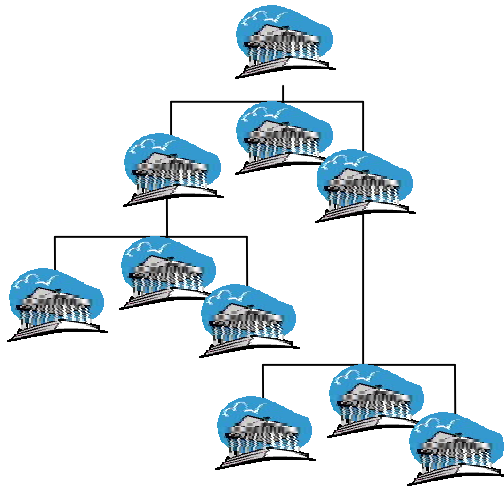
Integration

Diversity

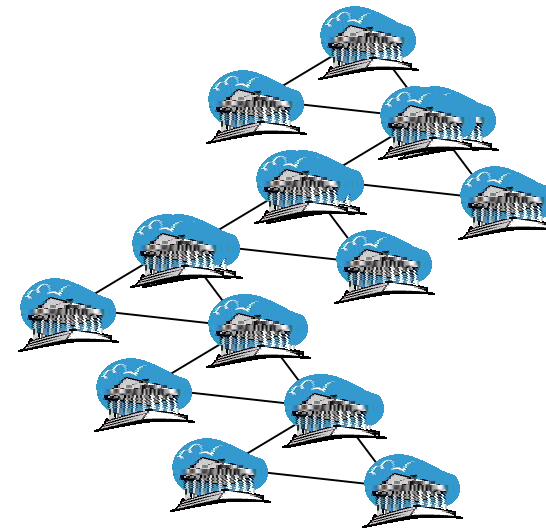
Span

# Configuration issues

---



Weberian hierarchy



Mobile and virtual organizing

# Virtual organizing

---

*the virtual organizing of work processes enabled by digital, managerial and policy technologies.*

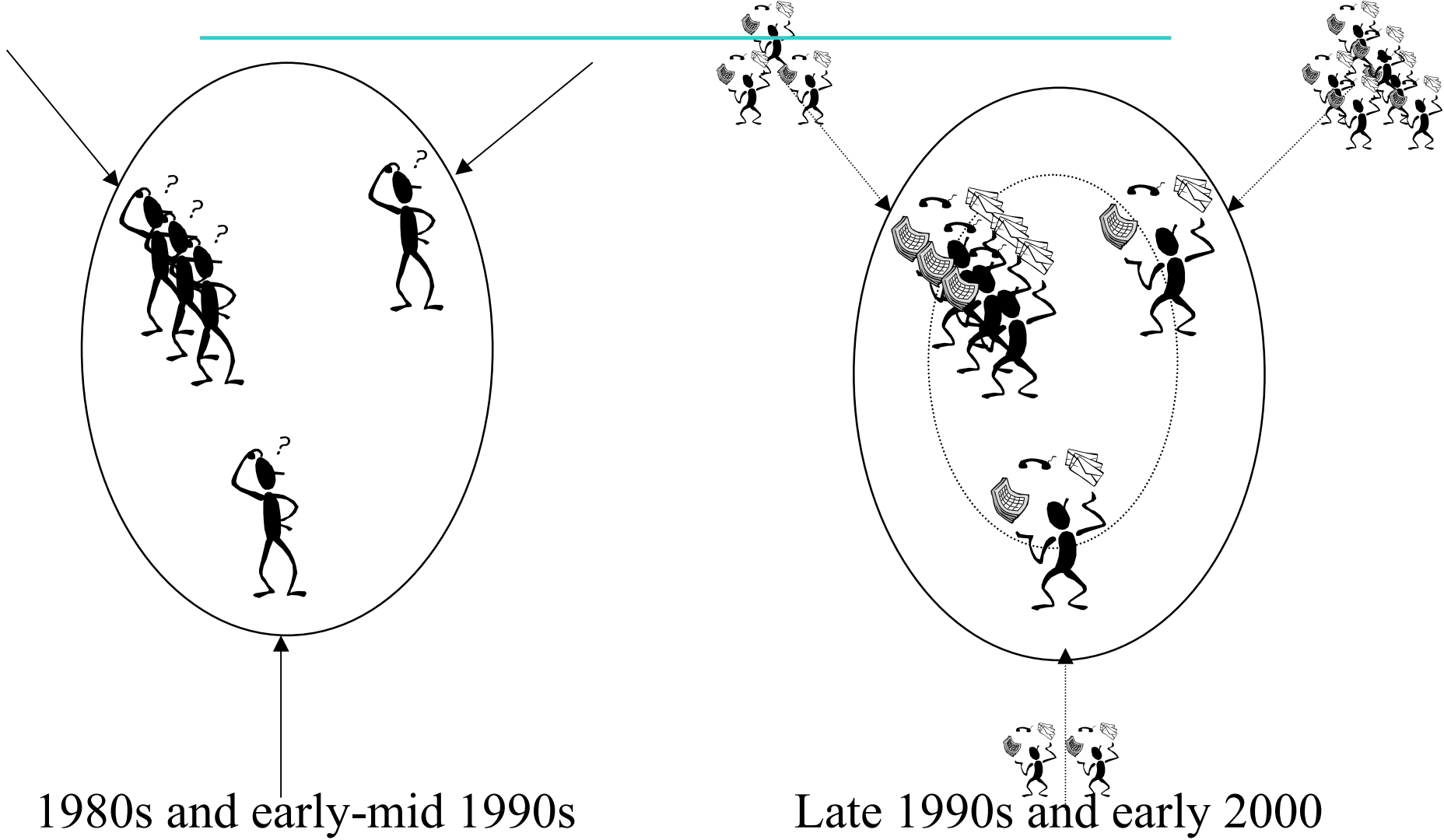
*the mobility at the level of the workers, the stock of data and files, the interaction with the front-end partners and the inter- and intraorganizational levels.”*

# Virtual organizing

---

*The mobile organization is a leader, not a follower, in the ongoing digital transformation in their organizing of the operational and strategic operations*

# IT managers interaction modes





# Domain changes

---

- *policy domain*
  - traditional mechanisms of governance are challenged to not operate by a business-as-usual imperative
- *managerial domain*
  - managers challenged by the impacts and how to respond to the anticipated future changes.
  - aid the transformation, the speed and the success criteria
- *technological domain*

# Adaptation and exploitation strategies

---

- supply rationality
- rarely demand oriented rationality

# Technology and application strategy

---

- technology driven
- not addressing the scope and overall purpose using the Internet

# Management of the digitalization

- in the hand of IT-related departments
- separated from the areas where the bulk of the expenditures are accumulated.

# Classical government concern

- Managable
- Budget restriction
- Accessibility
- Accountability
- Transparency

# areas of applications

- Case workers/  
teaching sector
  - service delivery
  - interaction
  - decision-making
  - procurement
- open mail lists/ doc.  
e-learning  
virtual face/ space/  
push-services  
collaboration  
distribute knowledge, management  
XML, exchanges, malls etc.

# Internet benefits

- Connectivity
- Reduced communication costs
- Lower transaction costs
- Reduced agency costs
- Interactivity, flexibility, and customerization
- Accelerated distribution of knowledge

# Awareness towards

- services available,
- index,
- commercial profile,
- legal issues,
- financial issues,
- users interface (window dressing, animation, chat rooms),
- job opportunities, language etc



# Infrastructure strategies

- *Horizontal and vertical* integration
- *Involvement* of general managers, middle managers, workers, *citizens, customers* and *companies* players and partners
- Content capability
- Digital divide

# Infrastructure strategies

- Technologies primary enablers
- Structures, actors, and tasks more rigid
- WAP, PDAs and Web are frontrunners
- PC, realtime integration, intranet the solid base
- Innovation/ maintenance/ transfer

# The current infrastructure challenges

- develop platforms that support productive and efficient collaboration and enable self-development, experimentation and innovative behavior
- counterbalance the need for managerial control and action with the privacy rights for the individual workers related to transactions and storage of their files
- outline strategies for having workers at home, satellite office, or the headquarter
- support knowledge creation, replication, adaptation, and utilization.