

# Designing for Communities

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- Introduction: my experience
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# Introduction: my experience

# 1996-1999

- CIS - Cooperative Information Systems:  
Euro-Canadian Initiative sponsored by EC,  
involving also the following Universities:
  - Toronto and British Columbia in Canada;
  - Aachen, Hamburg and Namur in Europe.

# 1997

- The feasibility study of the functional architecture of the RUPA: the Italian Government Public Network
  - Internet as a middleware

# 1998-2004

- Two EC funded Knowledge Management projects: Klee&Co (1998-2000) and Milk (2001-2004)
  - Supporting Context Awareness,
  - Providing Knowledge On-Line
  - Multi-Disciplinary Design

# The evolution of Information Systems

# Important Facts about Information Systems

- Reusing old stuff
  - Migrating Legacy Systems
  - Integrating old and new Data-Bases
- Designing new Systems
  - ERP



# Architectural Issues

- Standards (Corba, ...)
- Middleware layers
- Data Warehouses

# On-Line Executive Information Systems

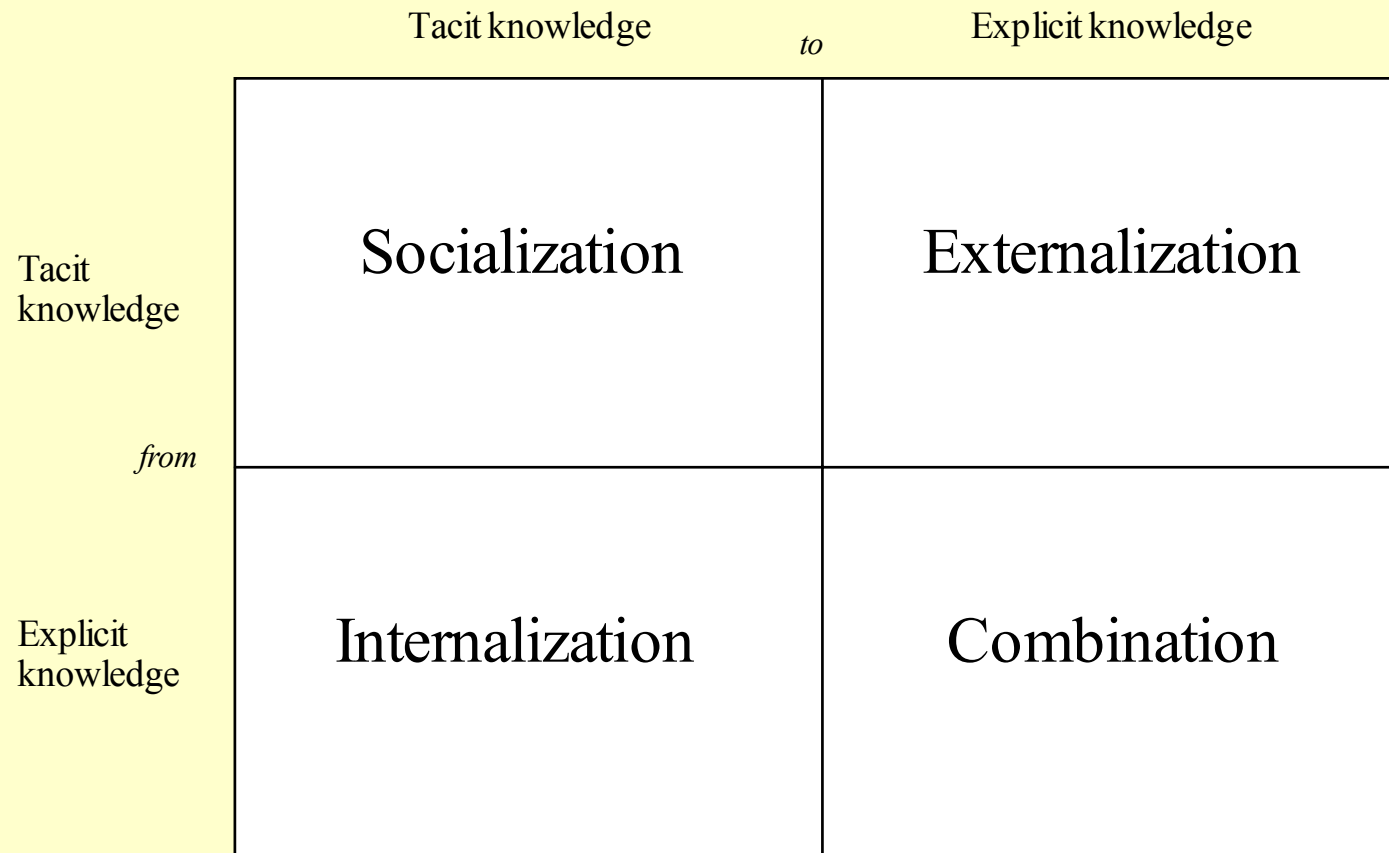
- Supporting the various aspects of management
- Providing on-line information
- Integrating knowledge from different sources

# Basic Elements on Knowledge Management

# Why is Knowledge relevant, today

- The Value of Knowledge
- Know-how and Know-why
- Tacit and Explicit Knowledge
- Other's Knowledge On-line in the processes
- A pact between Organization and People

# Knowledge Creation (Nonaka, Takeuchi)





**PHILIPS**

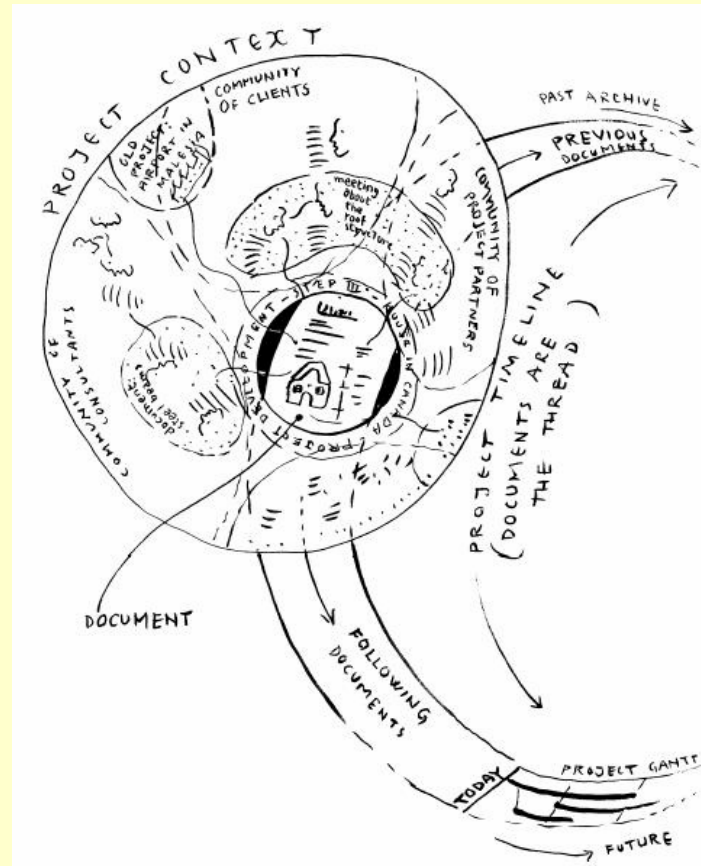
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# Situating users and objects



# The view with context

The screenshot shows a Microsoft Internet Explorer window titled "View with context - Microsoft Internet Explorer". The main content area displays a draft version of a document titled "Literate Programming" by Henrik Turbell, dated 10 March 1997. The author's affiliation is listed as the Image Processing Group, Department of Electrical Engineering, Linköping University. The page is bookmarked as "Cweb".

Surrounding the main content are several context menus:

- Related People:** Shows a profile for Ulrike Wingerath, currently offline.
- Related Documents by System:** Lists "Concurrence NEW!", "Perl", and "Solps".
- Related Documents by People:** Lists "Perl".
- Related keywords:** A horizontal scrollable list of terms including "Soft qualities design", "Web design", "CWEB", "word processor", "source code", "methodology", "documentation", "programmer", and "literate program".
- Related E-Mails:** This section is currently empty.
- Bookmarks:** Lists "Cygnus NEW!", "Keyword NEW!", "readme", and "Solps".

The Windows taskbar at the bottom shows the Start button, several open applications, and the system tray with the time 10:38.



# Coupling knowledge sharing and communication

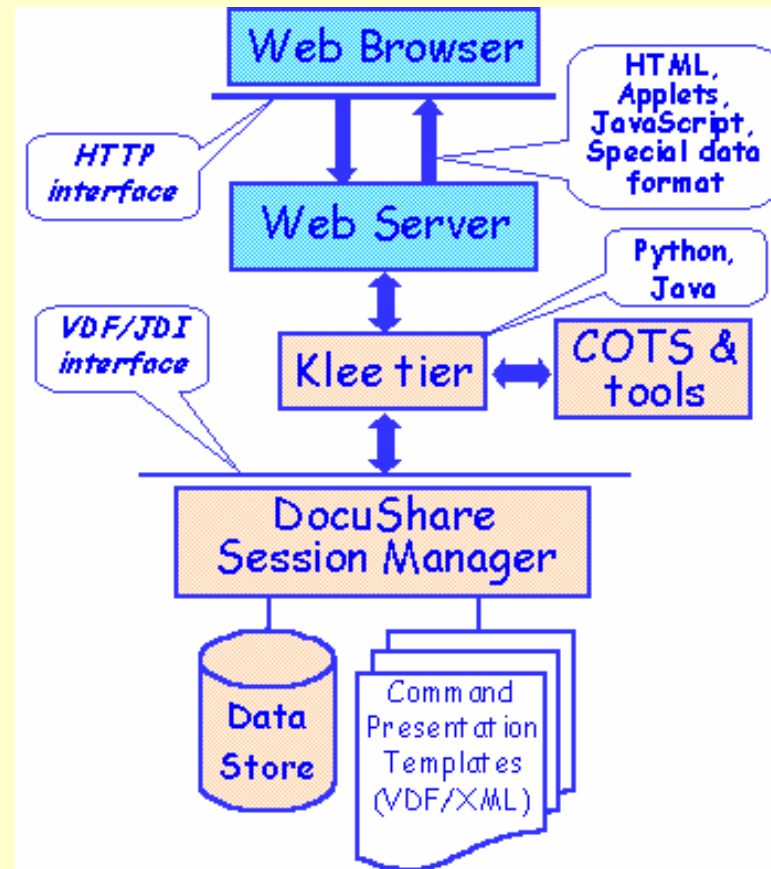
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# Klee&Co architecture

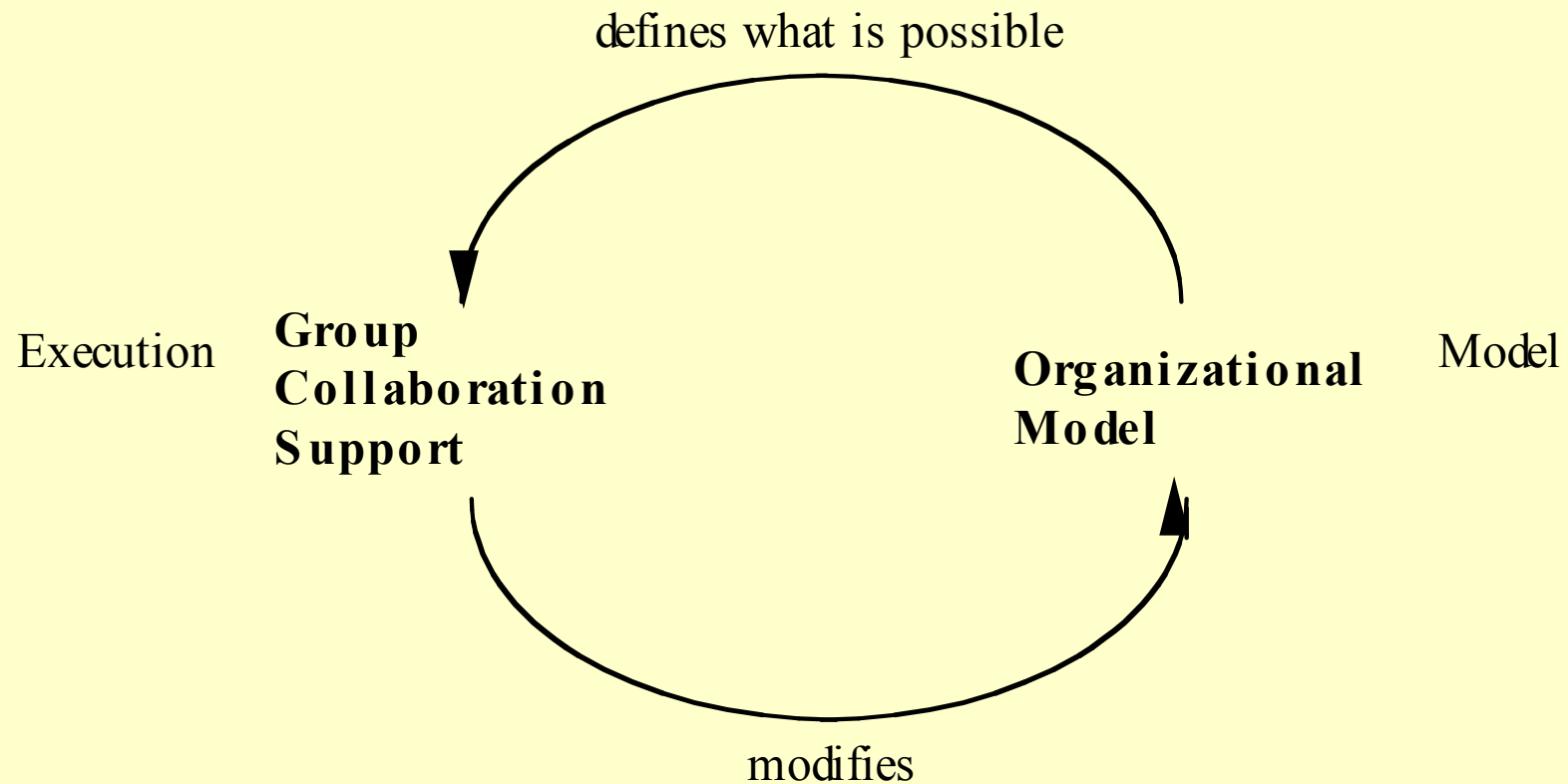


# Cooperative Information Systems

# The three Facets of an Information System



# The Dynamics at the Interaction Level



# Conclusion

# Open Issues

- From Interaction to Functions
- Creating a Technical Infrastructure
- An Evolutionary Approach
- Multi-disciplinary Design