**Global Engineering**  
*Dr.-Ing. Stefan Werner*

Chapter 2: Introduction to CSCW and Groupware

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Computer Supported Cooperative Working (CSCW)

"looks at how groups work and seeks to discover how technology (especially computers) can help them work." [Eli91]
- CSCW is an inter disciplinary research area !

Groupware

"is a generic term for specialized computer aids that are designed for the use of collaborative work groups. Typically, these groups are small project-oriented teams that have important tasks and tight deadlines. Groupware can involve software, hardware, services and/or group process support." [Joh88]
2. Introduction to CSCW and Groupware

History of CSCW

60s: Dough Engelbart’s vision of a conference room for twenty people, sharing a screen display and mouse cursor control (1968)

70s: office-automation – group support in the office area-

80s: - vision of a worldwide computer network
 - increasing interest in computer supported cooperation
 - intensive research in several disciplines

1986: first CSCW conference in Austin Texas


1991: Ellis, Gibbs & Rein: Groupware some Issues and Experiences
### 2. Introduction to CSCW and Groupware
#### 2.1 The time-space taxonomy

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<th>Time</th>
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Institute of Computer Engineering  
Prof. Dr.-Ing. Axel Hunger  
Global Engineering  
Wintersemester 2016/17  
Lecturer: Dr. Ing. Stefan Werner  
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2. Introduction to CSCW and Groupware

2.2 Application Level Classification

i. Message systems
ii. Group editors
iii. Electronic meeting rooms
iv. Conferencing systems
v. Shared information spaces
vi. Intelligent agents
vii. Coordination systems
(Originally by Ellis et al. (1991))
2. Introduction to CSCW and Groupware

2.2 Application Level Classification

Application Level Classification
- Message systems
- Group editors
- **Electronic meeting rooms**
  - Conferencing systems
  - Shared information spaces
  - Intelligent agents
  - Coordination systems

Computer support for face to face meetings/sessions

Electronic Meeting Room at UDE in BC 203
used in Global Engineering Lab
2. Introduction to CSCW and Groupware
2.2 Application Level Classification

Application Level Classification
- Message systems
- Group editors
- Electronic meeting rooms
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Support of distributed sessions (Computer Conferencing)

2. Introduction to CSCW and Groupware
2.2 Application Level Classification

Application Level Classification
- Message systems
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- Coordination systems

Desktop Conferencing
2. Introduction to CSCW and Groupware

2.2 Application Level Classification

Application Level Classification
- Message systems
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- Electronic meeting rooms
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  - Intelligent agents
  - Coordination systems

PASSENGER (Desktop Conferencing)
developed at University of Duisburg-Essen Institute of Computer Engineering —
used in Global Engineering Lab

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Global Engineering
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2. Introduction to CSCW and Groupware
2.2 Application Level Classification

Application Level Classification
- Message systems
- Group editors
- Electronic meeting rooms
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- Intelligent agents
- Coordination systems

Agents in CSCW
- computing services that humans, or even other agents, can request in order to accomplish their tasks.

Workflow Management
2. Introduction to CSCW and Groupware
2.2 Application Level Classification

**Application Level Classification**

- Message systems
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Common Scheduler

Common scheduling and resource planning
2. Introduction to CSCW and Groupware
2.3 The 3C Model

Communications-support

Conferencing-systems

Message-groups

Shared information spaces

Intelligent agents

Group-editors

Coordination-systems

Electronic meeting rooms

Coordination-support

Cooperations-support

Teufel 1995