Use of Multi-Context Systems for Crossing Boundaries

Hilda Tellioglu
Vienna University of Technology, Austria, hilda.tellioglu@tuwien.ac.at

Problems
- Boundaries between collaborating partners
- Complexity of allocating, scheduling, aligning, coordinating, monitoring individual and team work across organizational and social boundaries
- Mechanisms for linking, accessing, and publishing common information

Objectives
- Support boundary crossing between teams
- Provide implicit shared background
- Provide meta data and content data
- Investigate the role of multi-context artifacts in crossing boundaries

Challenges
- Need to manage individual work
- Need to be coordinated without being monitored

Research Approach
- Using common artifacts as boundary objects in collaborations
- Ethnographic studies, prototyping, and iterative user evaluations of prototypes

Results
- Multi-Context Systems (MCS) as a new framework to define, capture, and analyze meta and content data in use
- MCS are protectable by its owner
- MCS allow to share certain parts of an artifact with others
- MCS contain history tracking, awareness, dependency, and indexing data
- MCS implement linking and publishing

Impact of MCS
- Overcome boundary crossings between cooperative groups
- Provide shared access to project members
- Make transparency possible, tailorable, and harmless
- Easy knowledge sharing and implicit communication in real work environments with daily used artifacts
- Support for work and group awareness in collaborative projects
- Support for project management