

A decorative graphic on the left side of the slide consisting of two overlapping parallelograms. The front one is blue and the back one is a light green color. They are positioned diagonally, with the blue one in front of the green one.

Distributed Requirements Elicitation

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Connection to requirements elicitation

- People work globally
 - Collaboration with people from different countries
 - Different time zones prevent synchronous work
- Systems are getting more distributed
 - Requirements have to be elicited for a global population, not restricted to small area/company
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Summary of Paper 1

- Effectiveness of Elicitation Techniques in Distributed Requirements Engineering (Lloyd 2002)
 - Eliciting in distributed groups
 - Empirical study with 6 groups of students
 - Eliciting the requirements of a personal planner/scheduling system
 - Customers and requirements engineers never met face-to-face
 - 4 times 90 minutes virtual meetings (only audio)
 - Three goals
 - Determine the factors that lead to high quality SRS documents
 - Measure the effectiveness of the used collaboration software
 - Perceived (by the group) effectiveness of elicitation techniques when used distributedly
 - Possible techniques
 - Question & Answer Sessions / Customer Interviews / Brainstorming
 - Storyboards / Prototyping / Questionnaires / Use Cases / Requirements Management



Elicitation techniques in a distributed group

- Suitable:
 - Asynchronous techniques can easily be applied (e.g. Questionnaires/e-mail)
- Successful:
 - QA-Sessions for immediate feedback/follow-up
 - Use cases
 - It is assumed that high performing groups had prepared their virtual meetings better and could benefit more from the limited time of synchronous work
- Not suitable:
 - Prototyping (Hard/expensive to build prototype a mature enough prototype)
 - Paper-prototyping with Post-its is not possible, as people are physically separated
- Not successful:
 - Asynchronous (e-mail)
- Challenges:
 - Time-differences
 - Motivation (if not mandatory/postponable)
 - Face-to-face not feasible



Summary of Paper 2

- A Three-Stage Model of Requirements Elicitation (Yang)
 - Eliciting for web-based information systems (intranets, extranets, **web presence**, and **e-commerce**)
 - Traditional observation often not possible
 - Focus on correctly identifying, categorizing, and querying users
 - 3-Stage Model
 - Initial (system) analysis
 - Primarily synchronous methods with stakeholders and developers
 - Building a prototype
 - Key user requirements elicitation
 - For web presence and e-commerce: employ questionnaires and social network analysis (SNA: mapping user influence) to identify key users and include these in elicitation
 - Primarily asynchronous, but meetings still possible
 - Regular user responses
 - Asynchronous
 - In this stage include input from even more users of the system



Elicitation techniques for a distributed system

- Suitable:
 - Asynchronous techniques can easily be applied, depends on stage
 - First stage, only key stakeholders/developers are known, allows synchronous (Interview/QA)
 - If large group of participants (later stage): asynchronous methods (Questionnaires, emails)
 - Intended user base size and system type influences suitable techniques
- Successful:
 - Successful if addressing the correct stakeholders in the first stage
 - Depends on selecting key (influential) users/representative subset of users
 - Value of user identification and classification (ex. SNA) grows as the user pool increases in size, or when the users are initially unknown
- Challenges:
 - Volatility of requirements and user group
 - Diverse users and unknown stakeholders
 - Difficult key user management



Discussion

- How could distributed requirements elicitation work with the *requirements engineers* being distributed?
- Which techniques for distributed requirements elicitation changed/emerged in the last 15 years?
 - Skype
 - Shared documents (e.g. Google drive)
- In what ways has modern social network data changed requirements elicitation for web-based systems?
 - Ex. Facebook sharing Friends, Apps, Current Location