

Distributed Requirements Elicitation

Group 2

Presented by

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Agenda

- Introduction
 - Requirement elicitation
 - Distributed requirement elicitation, techniques and challenges
- Requirement elicitation for Web-based Information systems by Yang
- Effectiveness of Elicitation Techniques in Distributed Requirements Engineering by Lloyd
- Conclusion

What is Requirement Elicitation?

- Seeking, capturing and consolidating the requirements
- A complex process



Distributed Requirement Elicitation

- Virtual organizations that distribute their projects on multi-sites
- Coordination over distance
- Why?
 - Local availability of quality technical staff
 - Reduce costs
- Challenges
 - Communication and coordination

Elicitation Techniques

- Interview
- Brainstorming
- Card Sorting
- ~~Observation~~
- Questionnaires
- Use Cases
- Domain Analysis
- Task Analysis
- Storyboards & Prototyping

Applicable (successful) in
distributed environment?

Distributed elicitation challenges

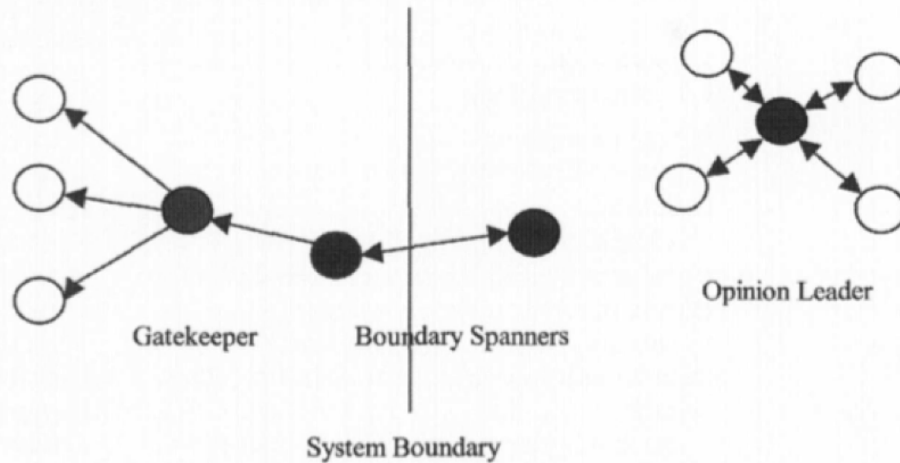
- Finding the source of data and stakeholders
- Communication issues
 - Not a common language
 - Misunderstanding
 - Less engagement by stakeholders
- Organizational issues
 - Time zone difference

Web-based Information Systems

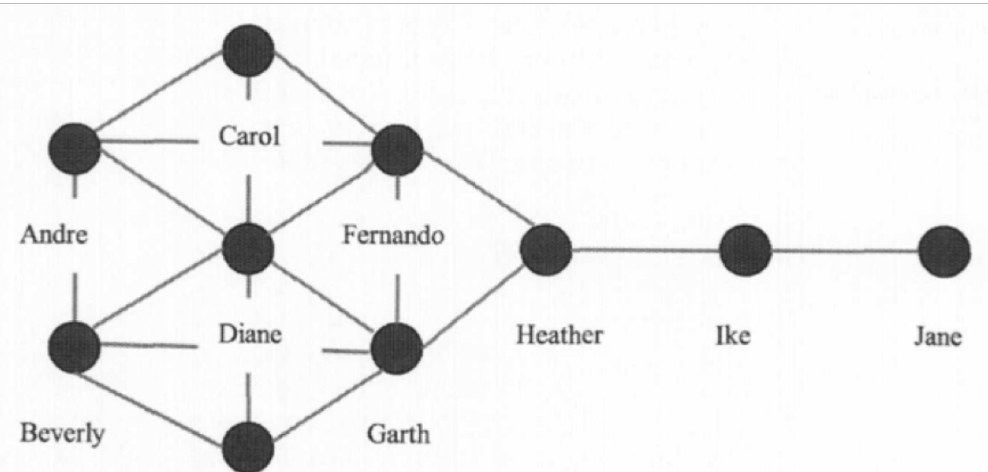
- Diverse and unknown users
- Users are expected to grow in numbers → user needs keep changing
- Problem?
 - Where are they?
 - Who are the more influential?
 - How to elicit requirements from them?
- Three stage model
 - Initial analysis
 - Key user requirement elicitation
 - Regular user responses

Social Network Analysis

Common network roles



Source: Adapted from Loughman *et al.* (2000)



Source: Krackhardt (1990)

Which techniques are more successful in distributed requirements elicitation?

- Research
 - 2 groups (46 participants): customers and requirements(engineers) engineers.
 - groupware tools (audio conferencing, file-sharing)
- Success factor → SRS analysis
- Metrics
 - SRS Document Grade
 - Measurement of Requirements Evolution
 - Requirement Errors
 - Original Requirements Supported

Successful Techniques for Distributed Systems

Synchronous > Asynchronous

- Interviews
- Use Cases
- Brainstorming
- Laddering
- Prototyping and storyboards
- Analytical
 - Documentation and existing systems

?