



University of Zurich
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Requirements Elicitation Techniques

Requirements Engineering II - Assignment 3

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Agenda

- **Definition**
- **Elicitation Techniques**
- **How to select a Technique?**
- **Effectiveness**
- **Conclusion**

Definition

■ Requirements Elicitation

“Requirements Elicitation is the **means** by which analysts **determine** the **problems** and **needs of customers**, so that the system developer can construct a **system** that actually **resolves** those problems and **addresses** customer’s needs.”

A. Hickey, A. Davis (2005)

■ Variety of Situations and Ways

“It is the **relationship** between the detailed characteristics of such **situations** and elicitation **technique** selection.”

A. Hickey, A. Davis (2005)

Elicitation Techniques

■ Interview

- Types: explorative (open discussion), standardized (prepared questions)
- Critical factors: ability to communicate (interviewee), clearly defined Objectives

■ Workshops (collaborative Sessions)

- Techniques: Brainstorming, iterative Objective and Scenario definition, Storyboards, Discussion
- Critical factors: understanding and accepting Objectives, Motivation, “the right” Participants

■ Observation

- Description of the activities during an accomplishment (direct, ethnographic)
- Critical factors: cooperation of the Stakeholders

Elicitation Techniques (2)

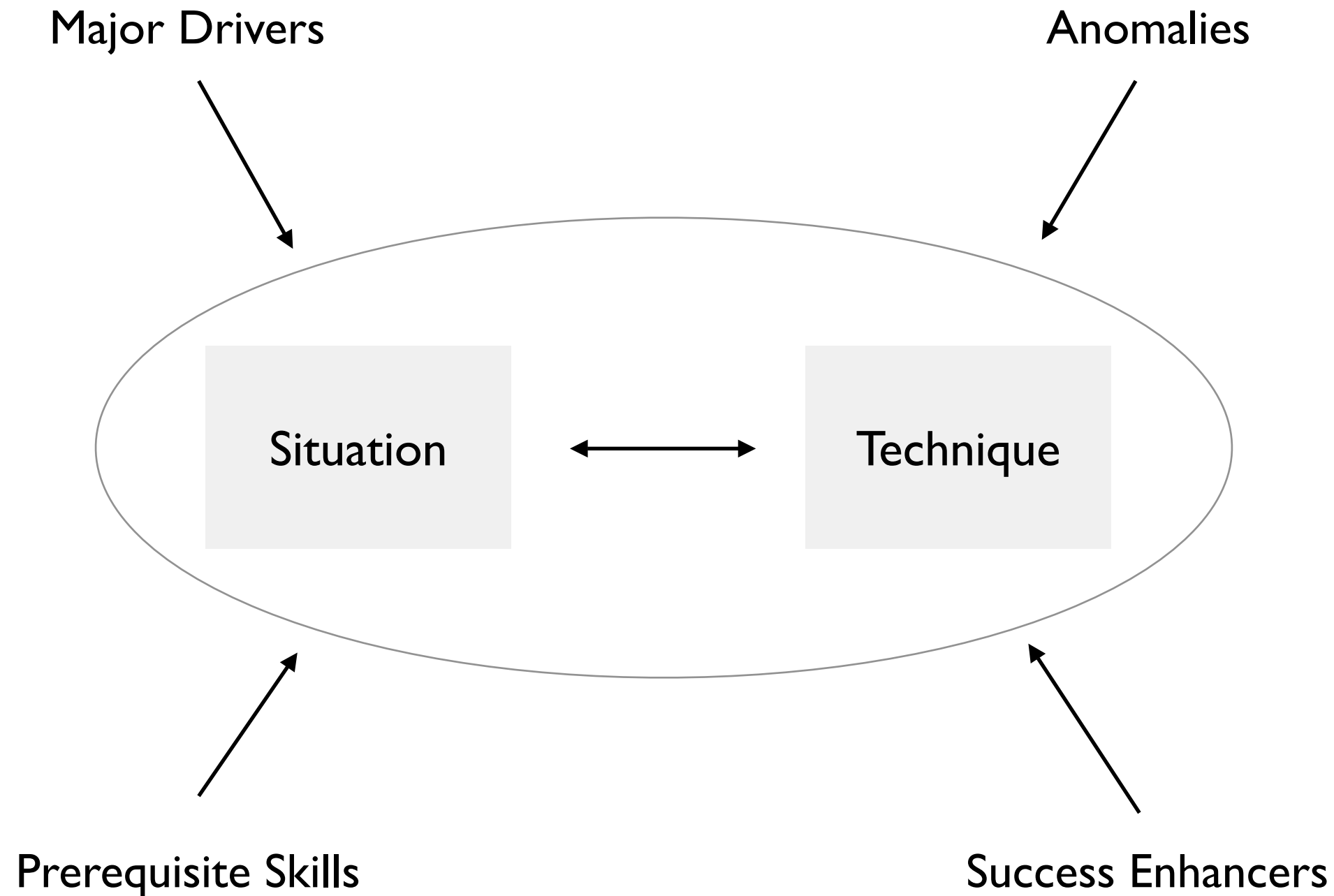
■ Questionnaires

- Stakeholders write down their Requirements (Reflexion on their Thoughts)
- Critical factors: motivated Stakeholders, clear Questions, carefully worded Answers

■ Introspection

- I-Perspective: What would I want if I would be doing the Job?
- Critical factors: Domain knowledge, work settings (conditions, “naive user”)

How to select a Technique?



How to select a Technique? (2)

■ Major Drivers

- Specific and unique set of predicates concerning situational characteristics
- Example: Multiple Stakeholder with disparate needs (consensus)

■ Anomalies

- Set of additional predicates (true)
- Example: Geographical distribution of Stakeholders

■ Prerequisite Skills

- Set of skills that must be present for the technique to be effective
- Example: Communication, leadership and meetings for Collaborative Sessions

■ Success Enhancers

- Set of additional skills (during technique's execution)
- Example: Conflict resolution and creativity skills for Collaborative Sessions

Effectiveness

■ Definition

- Dimension (Degree) of achievement of Objectives
- Quality of the Objectives (Requirements)
- Metrics: SRS (document grade, evolution, errors, original requirements supported)

■ Dependence

- Context (ex.: Distributed Requirements Engineering)
- Experience (Expertise)
- Knowledge how to use

■ Sense of Benefit

- Elicitation of existing and innovative Requirements
- Requirements Sources

Effectiveness (2)

	Effectiveness	Situation	Effort
Interview	middle - high	new projects in new Domains, isolate Conflicts (Stakeholders)	average
Workshop	high	always (diverse, autonomous set of Stakeholders)	very high
Observation	high	always (when Stakeholder available and system exists)	(very) high
Questionnaires	middle	Concrete Problems, Market Research Survey (understand Customer Needs)	low
Introspection	(middle)	always (careful consideration of limits)	low

Conclusion

- **Different Techniques**
- **Elicitation Technique depends on Situation**
- **Know how to use a Technique (Effectiveness)**

**Thank you for your
Attention**
