

G- FAKULTÄT FÜR MATHEMATIK, INFORMATIK UND STATISTIK ILIANS- INSTITUT FÜR INFORMATIK ISITÄT ARBEITSGRUPPEN MEDIENINFORMATIK UND IEN MENSCH-MASCHINE-INTERAKTION

Case Study Research

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Definition

A case study is an empirical inquiry that investigates a contemporary phenomenon within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident. (Yin, 2003b)

Definition

Case studies can clear the how and why.

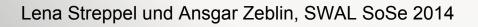
Characteristics of case studies

- A focus on depth rather than breadth
- Natural setting
- Holistic study
- Multiple sources and methods

Definition

Approach of time

- Historical study
- Short-term study or contemporary study
- Longitudinal study

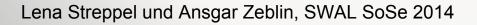


Targets

- rich, detailed insight into one case and its relationships and processes
- describe and explain one phenomenon
- build a new theory
- test an existing theory
- evaluate alternative theories

Types of case studies strategies

- exploratory study
- descriptive study
- explanatory study



Selection of cases

- Typical
- Extreme
- Test-bed for theory
- Convenience
- Unique opportunity



Five components of a case study

- research question
- propositions
- unit(s) of analysis
- determination of how the data are linked to the propositions
- criteria to interpret the findings

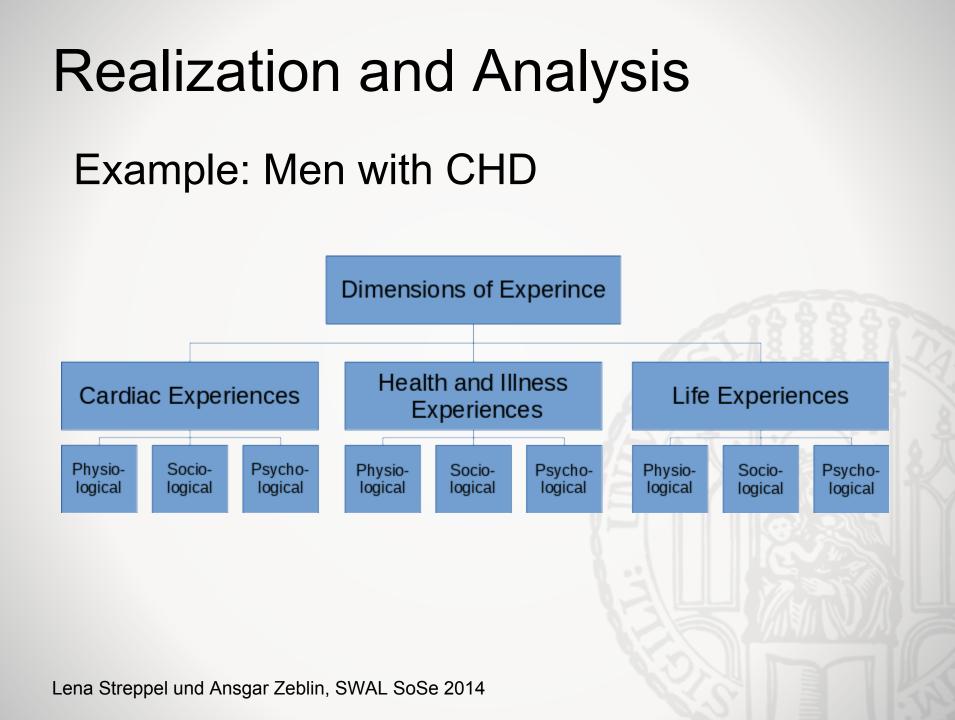
List possible data sources

- interviews
- records
- observations
- log files

Realization and Analysis

Iterative process

- collect data
- analyze data
- modify methods
- collect data



Reporting

Describe the case and the conclusion in detail

- Why this case?
- Who was interviewed or observed?
- What documents?
- How recorded and analyzed?
- Alternative explanations?

Generalization

Is generalization possible?

Four main types of generalization

- Concepts
- Theory
- Implications
- Rich insight
- Combinations

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Evaluation Guide

- Have the criteria for choosing the particular case been described and justified?
- 2. What kind of case study strategy is used?
- 3. What data generation methods were used?
- 4. How long did the researcher spent in the field?

Evaluation Guide

- 5. Does the researcher look at relationships and processes and provide a holistic perspective?
- 6. What kind of generalizations are reported, if any?
- 7. How does the researcher link the theory to the case study?
- 8. What limitations in the case study research does the researcher recognize?

Evaluation Guide

- 9. Can you identify other flaws or omissions in the researcher's reporting of the case study?
- 10. Overall, how effectively do you think the case study strategy has been reported and used?

Advantages

- deal with complex situations
- appropriate for situations where researcher has little control over events
- suitable for theory building and testing
- show complexities and explore alternative meanings and explanations
- data close to people's experience, not much numeric studies

Disadvantages

- imprecise and leading to generalizations with poor credibility
- getting access is difficult and timeconsuming
- influence of the presence of the researcher
- no rules
- reporting can be too much for papers

Examples

Internet case studies

- User resistance to the implementation of a management information system (1983)
- Development of a CSCW (1996)
- Improvements or not with CASE tools (1993)
- Small software development company during the dot.com boom and bust era (2004)

Take-Away Message

Case Study Research

- How and why
- Focus on every detail
- Real-life context
- Create or test theories
- Multiple sources and methods
- Deal with complex situations



Are case studies scientific relevant?

