Case Studies

- Research design—to ensure that the evidence obtained enables us to answer the initial question as unambiguously as possible.

- Research Method—the way the data is collected

- Case Studies are NOT:
  - Only Qualitative data
  - A Data Collection Method:
    - Ethnographies, Participant-observation…

David de Vaus, 2001, Research Design in Social Research
Case Studies

- Confusion:
  - types of evidence (e.g., qualitative data)
  - types of data collection methods (e.g., ethnography)
  - research strategies (e.g., case studies)

- Goal of Case studied: establish the parameters which can be applied to all research. Thus, even a single case could be considered acceptable.

Yin (2003), *Case Study Research: Design and Methods.*
## Different Research Strategies

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Form of Research Question</th>
<th>Requires Control of Behavioral Events?</th>
<th>Focuses on Contemporary Events?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experiment</td>
<td>How, Why</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Survey</td>
<td>Who, What, Where How Many/Much?</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Archival Analysis</td>
<td>Who, What, Where How Many/Much?</td>
<td>No</td>
<td>Yes/No</td>
</tr>
<tr>
<td>History</td>
<td>How, Why</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Case Study</td>
<td>How, Why</td>
<td>No</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Yin, 2003, *Case Study Research: Design and Methods*, Figure 1.1
Case Studies vs. Grounded Theory

- Case study research must have a theoretical dimension otherwise it will be of little value for wider generalization.

- 3 ways theory is used in case study design:
  - Theory testing case studies
  - Theory building case studies
  - Clinical case studies—case centered

Grounded Theory Method

Cheryl Chi
Grounded Theory Method

- Sociologists, Barney Glaser and Anselm Strauss

  - Glaser—induction, emergence, and the individual researcher's creativity within a clear frame of stages.
  - Strauss—validation criteria and a systematical approach.

http://en.wikipedia.org/wiki/Grounded_theory
Grounded Theory Method

- All is data
- Open coding (substantive coding)
- Selective coding
  - theoretical sampling—selectively sample new data with the core in mind.
- Memoring
- Sorting and Writing up
- No pre-research literature review, no taping and no talk

Building Theories from Case Study

- Start with no theory, no hypothesis.
- Just start with Research Questions
- Use Case Studies to build theory.
- 4-10 case studies ideal
- Series of cases is a series of experiments
  - Not a series of results from single experiment.
  - Don’t use statistics to compare results.

Eisenhardt, 1989
Building Theories from Case Study

- **Strengths**
  - Increased likelihood of novel theory
    - Juxtaposition of contradictory or paradoxical evidence
    - Less bias from previous research
  - Theory is testable with measurable constructs and hypotheses proven false.
    - Constructs measured during theory building
    - Hypothesis verifiable because created during theory building.
  - Empirically valid.
    - Theory building intimately tied with evidence

Eisenhardt, 1989
Building Theories from Case Study

- Weakness
  - Empirical evidence yields overly complex theory
    - Rich in detail, lacking simplicity of overall perspective
  - Narrow and idiosyncratic theory
    - Unable to raise generality of theory

Eisenhardt, 1989
<table>
<thead>
<tr>
<th>Step</th>
<th>Activity</th>
<th>Reason</th>
</tr>
</thead>
</table>
| Getting Started          | Definition of research question  
Possibly a priori constructs | Focuses efforts  
Provides better grounding of construct measures |
| Selecting Cases          | Neither theory nor hypotheses  
Specified population | Retains theoretical flexibility  
Constrains extraneous variation and sharpens external validity |
| Crafting Instruments and Protocols | Multiple data collection methods  
Qualitative and quantitative data combined  
Multiple investigators | Focuses efforts on theoretically useful cases—i.e., those that replicate or extend theory by filling conceptual categories  
Strengthens grounding of theory by triangulation of evidence  
Synergetic view of evidence  
Fosters divergent perspectives and strengthens grounding |
| Entering the Field       | Overlap data collection and analysis, including field notes  
Flexible and opportunistic data collection methods | Speeds analyses and reveals helpful adjustments to data collection  
Allows investigators to take advantage of emergent themes and unique case features |
| Analyzing Data           | Within-case analysis  
Cross-case pattern search using divergent techniques | Gains familiarity with data and preliminary theory generation  
Forces investigators to look beyond initial impressions and see evidence thru multiple lenses |
| Shaping Hypotheses       | Iterative tabulation of evidence for each construct  
Replication, not sampling, logic across cases  
Search evidence for “why” behind relationships | Sharpens construct definition, validity, and measurability  
Confirms, extends, and sharpens theory |
| Enfolding Literature     | Comparison with conflicting literature  
Comparison with similar literature | Builds internal validity |
| Reaching Closure         | Theoretical saturation when possible | Ends process when marginal improvement becomes small |