

Mixed

Methodology

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SOM

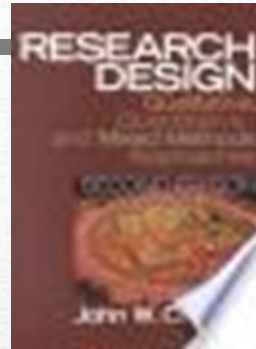
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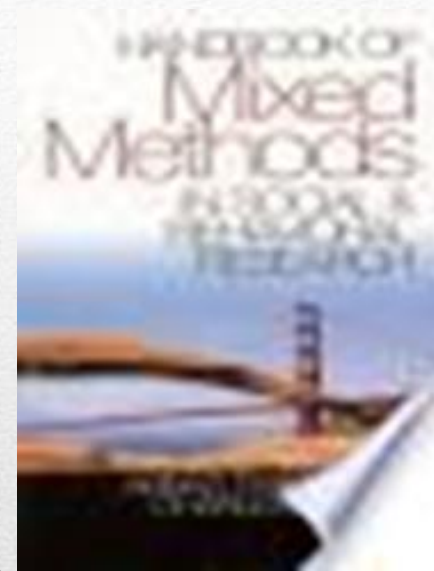
Content:

- 1959: Concept of mixing different methods by Campbell & Fiske. (Psychologists)
- 1973: Combined the Qualitative & Quantitative data by S.D. Sieber.
- 1979: Converging or triangulating different Qualitative & Quantitative data sources by Jick.
- 1998: Morgan, D. L. (1998). Practical Strategies for Combining Qualitative and Quantitative Methods: Application To Health Research. *Qualitative Health Research*, 8 (3), 362-376.
- 1989-2003: Expanded procedures for Mixed methods By Tashakkori & Teddli and then
- Creswell (2003) *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*

1. Brief History



Creswell, J. W. (2003). Research design. Sage publication.



Tashakkori, A., & Teddlie, C. (2003). Handbook of mixed methods in the social and behavioral sciences. Thousand Oaks, CA: Sage.

2. Reference

- Quantitative data can reveal generalizable information for a large group of people
- These data often fail to provide specific answers, reasons, explanations or examples
- Qualitative research provides data about meaning and context regarding the people and environments of study
- Findings are often not generalizable because of the small numbers & narrow range of participants
- Both methods have strengths and weaknesses
- When used together, these methods can be complimentary

3. Why Mixed Methods?

- Research design can easily be categorised in two main groups based on the amount of control the researcher has over the research exercise:
- Quantitative research
- Qualitative Research
- Mixed Research Methods

4. What is Mixed Method

| Method | Quantitative | Qualitative | Mixed-Method |
|---------------------|---------------------|-----------------------|--|
| Logic | Deductive | Inductive | Deductive + Inductive |
| Paradigm | Positivism | Constructivism | Pragmatism |
| Epistemology | Objectivism | Subjectivism | Objectivism+ Subjectivism |
| Ontology | Realism | Relativism | Accept external reality but choose the best explanation |

4. What is Mixed Methods?

| Quantitative research Methods | Qualitative research Methods | Mixed Methods Research Methods |
|--|---|--|
| <ul style="list-style-type: none"> • Experimental designs • Non-Experimental designs, such as survey | <ul style="list-style-type: none"> • Narratives • Phenomenologies • Ethnographies • Grounded theory • Case Studies | <ul style="list-style-type: none"> • Sequential • Concurrent • Transformative |

5. Type of Research Design

- The most striking differences between qualitative research and of quantitative is the fact that analysis of the data collected in the former is done with words, versus numbers in the latter.
- Bakken (1996) quoted Tom Semon, an independent research consultant in marketing, who suggested that qualitative research is often defined by what it is not: 'not good enough, not large enough, not comprehensive enough to serve as a benchmark or a basis for statistical projection.'

6. Qualitative vs Quantitative Research

- Qualitative data consist of 'detailed descriptions of events, situations and interactions between people and things providing depth and detail ' (Patton, 1980).
- Patton elaborates that such data are symbolic in nature, and in need of a meaningful interpretation and response
- Van Maanen (1983) emphasises its potential for theory development through rigorous coding and interpretative procedures

6. Qualitative vs Quantitative Research

- **What is implementation sequence of the quantitative and qualitative data collection in the proposed study?**
- **What priority will be given to the quantitative and qualitative data collection and analysis?**
- **At what stage in the research project will the quantitative and qualitative data and finding be integrated?**
- **Will an overall theoretical perspective (e.g., gender, race/ ethnicity, lifestyle, class) be used in the study?**

7. Criteria for Choosing a Strategies

| Implementation | Priority | Integration | Theoretical Perspective |
|----------------------------------|--------------|--|-------------------------|
| No Sequence Concurrent | Equal | At data collection | Explicit |
| Sequential- Qualitative first | Qualitative | At data analysis At data interpretation | |
| Sequential- Qualitative first | Quantitative | With some combination | Implicit |

Four decisions in selecting a mixed methods strategy

- In mixed method, prioritizing and sequencing of qualitative and quantitative methods are crucial to conduct a successful research (Morgan, 1998; Tashakkori & Teddlie, 2008).
- Priority: which method is a principal method and which is a complementary one
- Sequence: whether the complementary method precedes/follows the main method

8. Sequential Mixed-method

| Philosophical Assumptions | Strategies | Logic | Research Methods | Motivations for Selection |
|-----------------------------------|-------------------|--------------------------------|--------------------------------|--|
| Pragmatic knowledge claims | Sequential | Inductive and deductive | Multiple Source of Data | Developing detailed Explanation |

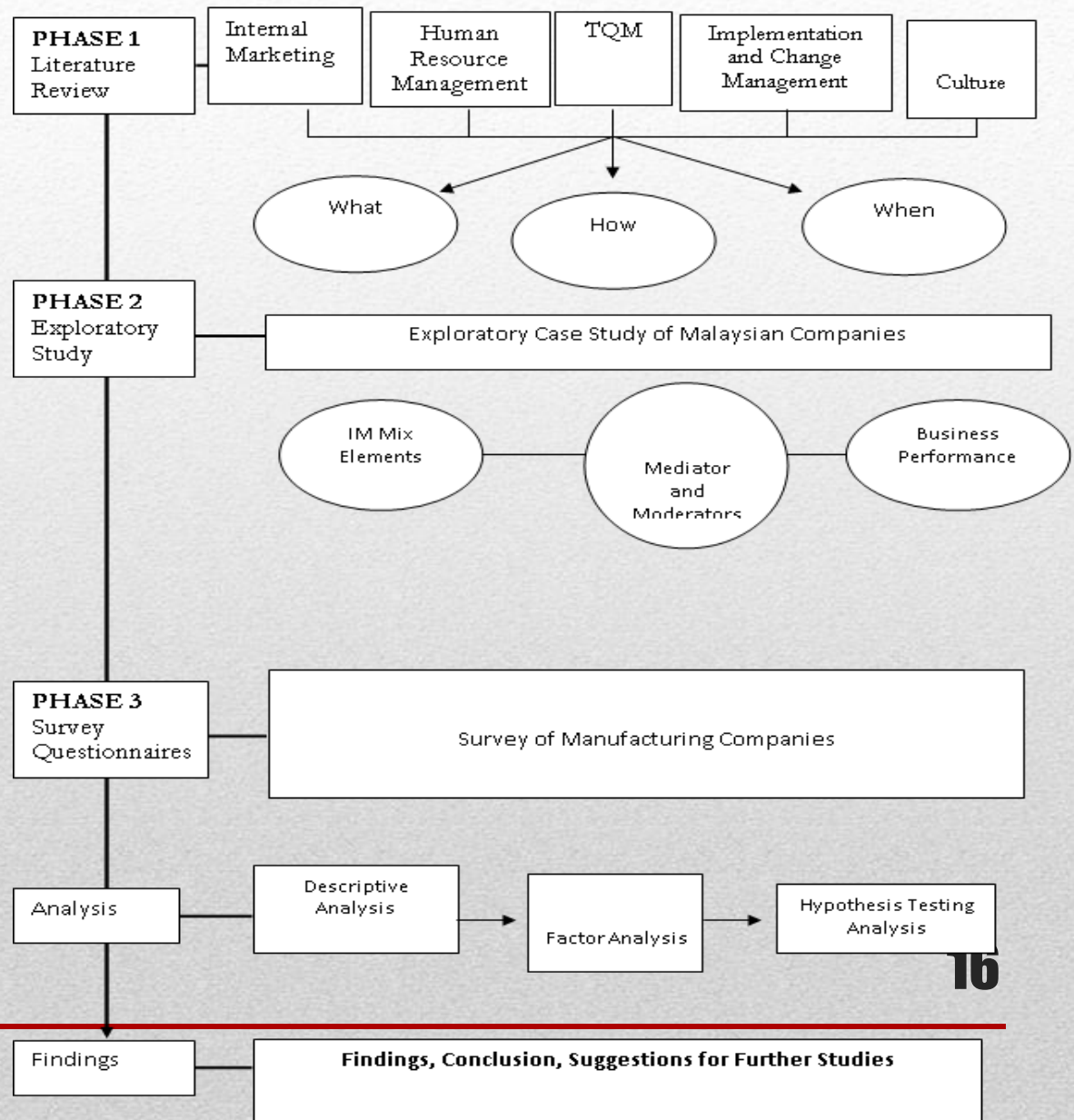
8. Sequential Mixed-method

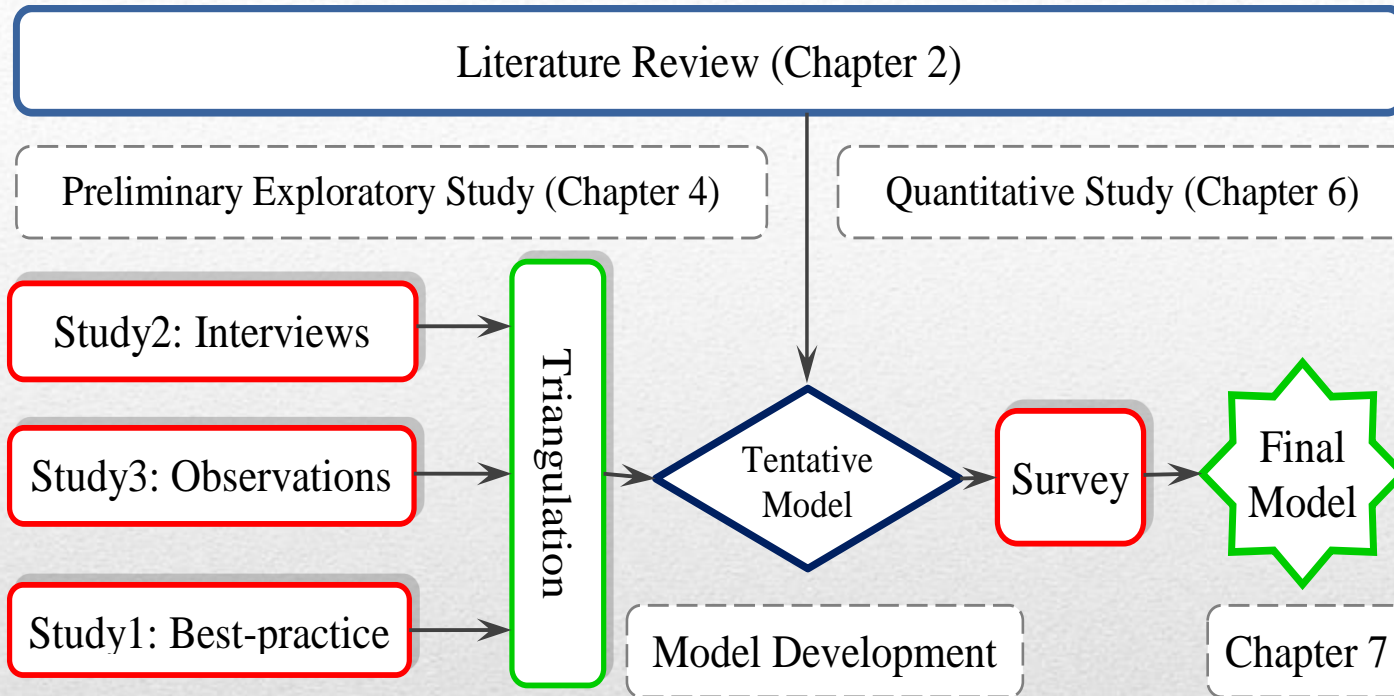
Selltiz et al. (1976) advocate the use of exploratory research for the following purposes:

- 1) formulating a problem for more precise investigation or for developing hypotheses;
- 2) establishing priorities for further research;
- 3) gathering information about the practical problems of carrying out research on particular conjecture statements;
- 4) increasing the analyst's familiarity with the problem;
- 5) clarifying concepts.

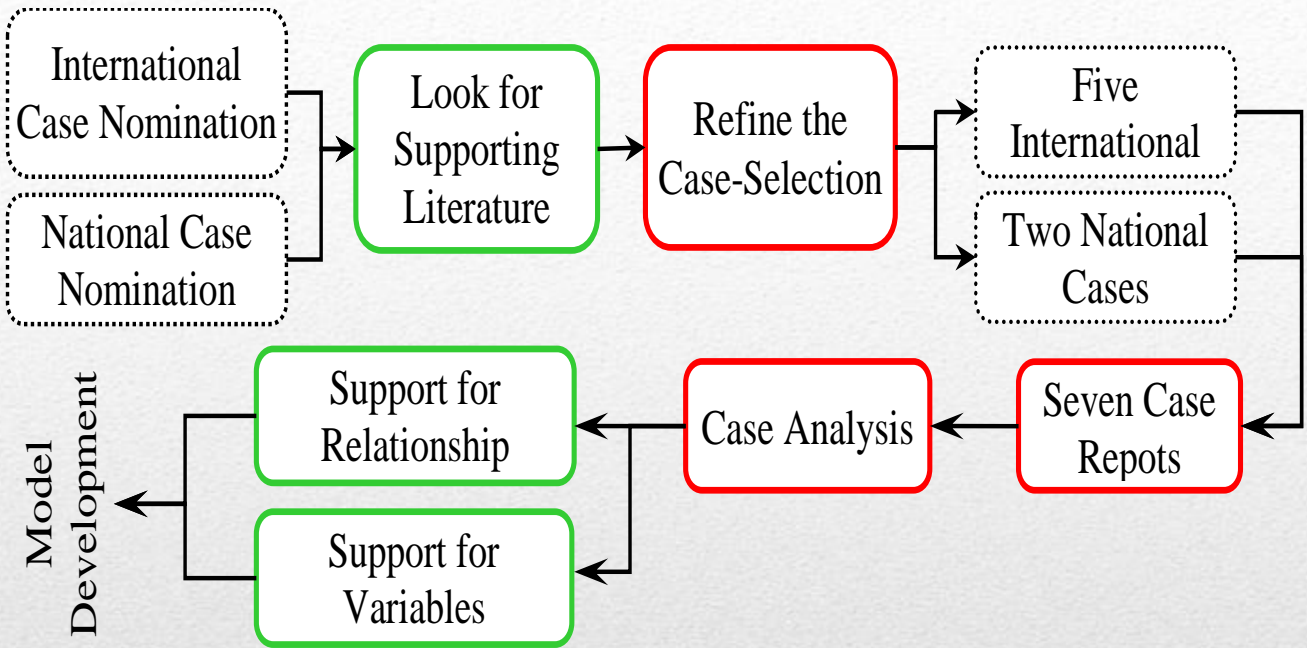
9. Preliminary (Exploratory) Study

E.g. 1

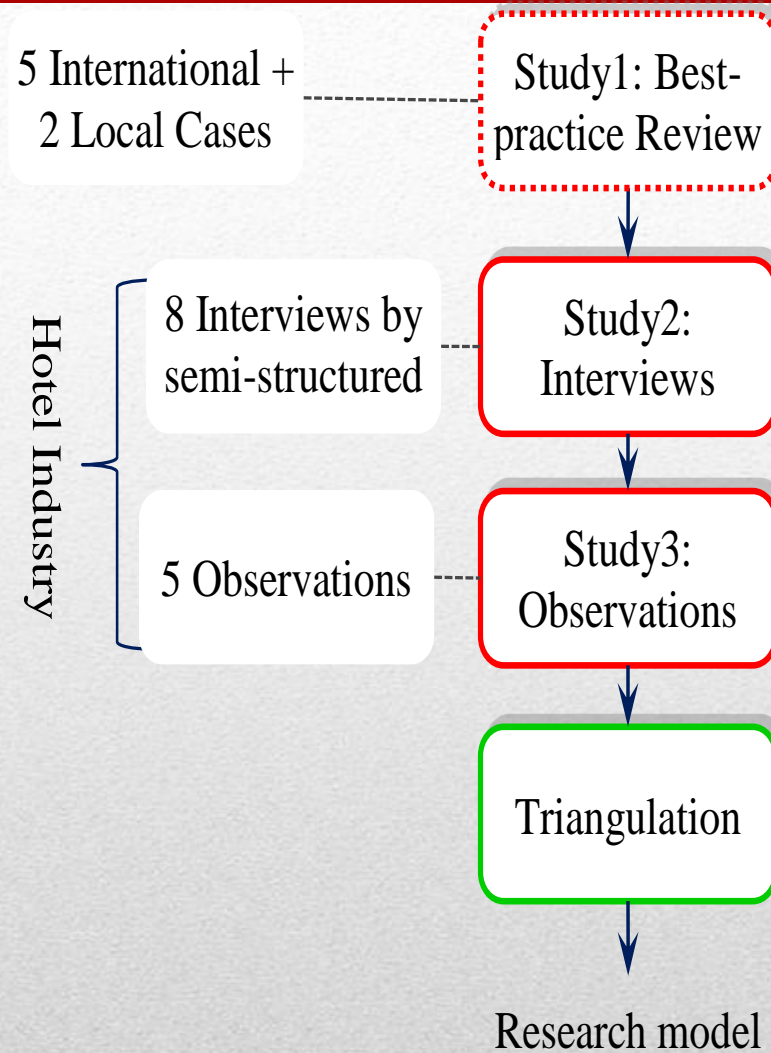




E.g. 2



Best-practice Study



E.g. 3

- It is necessary the validation of both qualitative and quantitative phases of study.
- Each of methods has the specific ways, for the qualitative data, the strategies that will be used to check the accuracy of the findings need to be mentioned.

10. Data Analysis and Validation Procedures

- For a sequential study, mixed method researcher typically organize the report of procedures into quantitative data collection and qualitative data analysis followed by qualitative data and collection and analysis. Then, in the conclusions or interpretation phase of the study, the researcher comments on how the qualitative findings helped to elaborate on or extend the quantitative results.
- Alternatively, the qualitative data collection and analysis could come first followed by the quantitative data collection and analysis. In either structure, the writer typically will present the project as two distinct phases, with separate headings of each

11. Report Presentation Structure

- In concurrent study. The quantitative and qualitative data collection may be presented in separate section, but the analysis and interpretation combines the two forms of data to seek convergence among the results.
- The structure of this type of mixed methods study does not as clearly make a distinction between the quantitative and qualitative phases.

11. Report Presentation Structure