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## Qualitative Comparative Analysis for Conducting Multiple Case Study Research: Concept and Discussion

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### Abstract

We aim to make a contribution by deepening the understanding on how Qualitative Comparative Analysis methods can be applied for theory building in multiple-case studies when the relationship between Information Technology and organizations is investigated. In our presentation, we will outline a research design using qualitative comparative analysis, show one example of applying the method in the field of eHealth research, and discuss the pros and cons of our methodological choice.

**Keywords:** qualitative comparative analysis, set-theoretic method, multiple-case study

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Building theories from cases studies has been widely recognized as research strategy (Eisenhardt and Graebner 2007). The theory-building process occurs via recursive cycling among the case data, emerging theory, and extant literature. It involves using one or multiple cases to create theoretical constructs, propositions and/or midrange theory from case-based evidence (Eisenhardt, 1989). In multiple case studies, the analytical generalization logic is reinforced through theoretical replication logic (Yin 2009).

Researchers aiming at building theories from multiple-case studies face several challenges. They have to choose a suitable method for analyzing qualitative data collected from the different sources (e.g., interviews, archival data, etc.), and they need to present a relatively complete and unbroken narrative for each case. In the field of comparative sociology, *qualitative comparative analysis* (QCA) has been proposed as a case study method that has quantitative rigor, yet treating each case holistically and preserving its full causal complexity. Such method is based on a set-theoretic approach for studying cases as configurations. It differs from conventional, variable-based approaches in that it does not disaggregate cases into independent, analytically separate aspects but treats configurations as different types of cases (Ragin 1987, Ragin 2006).

Looking outside the political science field, in which QCA has been developed and widely adopted, this method has also been advocated as a suitable tool for case researcher's addressing issues such as organizational design (Grandori and Furnari 2008), Information Technology innovation (Fichman 2004) and other fields of management research (Fiss 2007). Nevertheless, the focus of these contributions is mainly to discuss the potential impact of QCA adoption by relying on conceptual analysis and rarely on empirical data.

Here, we aim to make a contribution by deepening the understanding on how QCA methods can be applied for theory building in multiple-case studies when the relationship between Information Technology and organizations is investigated.

In our presentation, we will outline a research design using *qualitative comparative analysis*, show one example of applying the method in the field of eHealth research, and discuss the pros and cons of our methodological choice.

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