# Chapter 1 Qualitative Case Study Research Approach: Empirically Unveiling the Pitfalls

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#### **EXECUTIVE SUMMARY**

Data collection is a critical aspect of any research. To this point, it is very important that a researcher has a good understanding of why, where and how to collect data. Broadly speaking, there are two main research and data collection approaches; namely, quantitative and qualitative methodologies. These two approaches are used both in academia and professional domains. This study focuses on philosophical assumptions underpinning Information Systems (IS) research. The philosophical assumptions underlying interpretive, case study research tradition and approach implies a subjective epistemology and the ontological belief that reality is socially constructed. The study investigated the challenges of interpretive, case study research strategy and empirical techniques applied in the information systems discipline. This paper focuses on the realistic challenges that researchers face while conducting a qualitative, interpretive, case study, particularly during data collection.

# INTRODUCTION

The paper is organised into four main sections. The first section is concerned with the interpretive approach as applied within information systems (IS) research. The second section discusses the case study approach, including data collection and analysis, as applied in many IS studies. The third section presents case study as an IS research

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design. Finally, the paper addresses the empirical findings (challenges of qualitative, case study research approach) of the study.

Qualitative research focuses on human behaviour and the social communities inhabited by human beings. The focus is on increasing the understanding of why things are the way they are socially and why humans behave the way they do. Qualitative research is popular in the social sciences such as psychology, sociology and anthropology. On the other hand quantitative research approach is primarily concerned with investigating aspects which could be observed and measured in a defined pattern (Blaikie, 2003; Creswell, 1994). The observations and measurements can be made objectively and repeated by other researchers. This type of research has been applied more in the natural sciences fields. This paper focuses on qualitative, interpretive case study. It explores the challenges of case study in IS discipline. Information Systems discipline has benefited from the richness of qualitative research in the recent years – it has been applied in many works such as Galliers (1991); Hirschheim & Klein (1989); Monteiro & Hanseth (1996); Myers & Avison (2002); and Walsham (2006).

Even though a brief comparison is provided above, the aim of this paper is not to compare both approaches. The paper focuses on qualitative interpretive case study: to gain a better understanding of the challenges faced by academic IS researchers and IT practitioners such as IT Architect conducting Research & Development (R & D). Understanding of these challenges provides practitioners contemplating or undertaking interpretive case study research for the first time with guidance on the collection of data.

Qualitative research has proved to be concerned with the perceptions, opinions, experiences and feelings of individuals and groups producing subjective data. Qualitative research is argued and described as a very useful method for complex situations and theories (Boucaut, 2001). Most IS research employs a qualitative methodology mainly because it is interrogative, and allows clarification on questions such who, what, how, when, where and why. Qualitative research describes real-life experience, social phenomena as they seem to occur naturally. An attempt to manipulate the situation under study is difficult because of its natural settings. This seems to be the case with experimental quantitative research as well. Understanding of a situation is gained through a holistic perspective. We take cognisance of the difficulty of attempting to understand the situation and therefore have no intention to trivialise it. Quantitative research depends on the ability to identify a set of variables in specific context.

## **BACKGROUND**

# **Interpretive Research Approach**

The interpretive research approach is investigative within any social environment, including IS. In such a context, an interpretive research approach (Walsham, 1995 and 2006) is appropriate in order to understand influences on the social context of an organisation or institution. Qualitative research was more suitable for this study as it allows for clarification from respondents. Through close interaction with interviewees, research can develop a deeper understanding including that of complex situations.

In relation to research in IS, Orlikowski & Baroudi (1991) identify three philosophical perspectives: positivist, critical and interpretive research. A research method can accordingly be either positivist, interpretive or critical (Walsham, 1995). The next three paragraphs briefly discuss these research approaches:

Positivist research in information systems is based upon the assumption that reality is objectively given and that it can be described by reference to measurable properties that are independent of the researcher (Myers, 1997). The positivist approach has been criticised within the IS field, specifically in respect of its treatment of organisational reality. Also, the positivist approach has been criticised for being too deeply rooted in functionalism and too concerned with causal analysis at the expense of getting close to the phenomenon being studied (Galliers, 1991).

The critical research approach in IS research sees its main task as one of social critique, whereby the restrictive and alienating conditions of the *status quo* are shown and challenged (Klein & Myers, 1999). In critical research, the investiga-

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