

# Challenges in Collecting Qualitative Data for Information Systems Studies

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## INTRODUCTION

In research, problem is not necessarily something that is broken, but phenomenon which require further or an in-depth investigation for a fresh perspective. Thus, every research necessitates a problem statement, goal and objectives, which determines the data collection methods. The data type can be either quantitative or qualitative. According to Seidman (2012), depending on the objectives of the study, either the qualitative or quantitative research methods are selected for data collection. However, both methods can be selected, which is referred to as a mixed method (Barbour 2013; Silverman 2013).

The choice of research methods is critical in that they influences the way in which data is collected and analysed. According to Myers and Avison (2002,p70), qualitative research methods were developed in the social sciences to enable researchers to study social and cultural phenomena. The primary purpose of qualitative research is to understand a phenomenon as it is seen by respondents within a period and space. This is achieved by studying the respondents in their natural environments. Yin (2010) takes the argument further and states that the events and ideas emerging from qualitative research can represent the meanings given to real life events by the people who live them, not the values, perceptions or meanings held by researchers. However, the meaning which individuals and groups give or associate to events of Information systems

and technologies (IS/IT) has never been easy for researchers to understand.

## BACKGROUND

IS/IT are used to support and enable organisations' operations including strategic intents. IS/IT does not operate in vacuum, but in socially constructed environments. According to Iyamu, Sekgweleo and Mkhmazi (2014), IS is not only made up of technology by its self, it also includes human and non-human actors, making it more complex than often seen from afar. The multifaceted nature of information systems does not make studies in the field easier. Also, there is a great diversity in the research methods and approaches that are employed in IS studies (Myers & Avison, 2002). However, it is believed that qualitative research methods are being used increasingly in evaluation of IS/IT studies (Kaplan & Maxwell, 2005). Qualitative methods are often employed to study the socio-technical aspects of IS, and to help researchers including postgraduate students to draw conclusions on why things happen in the way that they do (Iyamu, 2010).

Theoretically, many postgraduate students in the field of IS are knowledgeable about data collection methods, techniques and approaches. However, in practice, there are numerous challenges in how their knowledge is applied (Hen-nink, Hutter & Ajay, 2011). This has led to many students not able to complete their studies, or take

longer to do so. This is the primary motivation of this study. This chapter discusses hands-on experience, reveals pitfalls and challenges in collecting qualitative data, using semi-structured technique, towards achieving research objectives. The remainder of this article is divided into six main parts. The first and second covers literature review. The third discusses the processes that are involved in data collection. The fourth presents the major challenges that are encountered when the semi-structured method is employed in data collection. Future research is stated in the sixth part. Finally, a conclusion is drawn.

## RESEARCH QUALITATIVE DATA

The qualitative research methods are considered to be most appropriate for studying the social world. Hence the type of data is critical, from the perspectives of actors' intentional and unintentional acts. Erickson (2012) emphasises that the essential purposes of qualitative research methods are to document in detail, the conduct of everyday events, and to identify the meanings according to those who participate and witness them. According to Kaplan and Maxwell (2005), qualitative methods are primarily inductive. In the beginning the focus is on a specific phenomena and based on that, the findings can be generalised. Thus, qualitative methods does not allow definition of variables before the research process begins (Carla, 2013), but rather researchers studies phenomena without predictions and assumptions of outcome, making data collection critical.

The qualitative data enables researchers to examine and understand the relationship and interactions between human and non-human factors, which do not necessarily depend on quantity. Stahl (2013) states that understanding of socio-technical phenomena aims to lead to better or better usage of systems. In the same context, Erickson (2012) explains that the qualitative data helps to find and examine: (1) detailed information about implementation, actors and processes; (2) identify the nuances of subjective understanding that motivate

various participants in a setting; and (3) identify and understand change over time.

Qualitative data is connected to research methods, such as case study, ethnography and action research. Myers and Avison (2002) discusses the case study, ethnography, action research and grounded theory as qualitative research methods that can be used in IS. The options broaden, and instill depth in IS studies in the use of qualitative research methods. According to Yin (2009), a case study is an empirical inquiry that investigates a contemporary phenomenon within its real-life context. Madnick, Wang, Lee and Zhu (2009) supports the use of case study method, stating that it enable an in-depth inquiry of a single instance or event that can lead to deeper understanding of why and how that event happened. The ethnography research method is similar to the case study approach. It allows the researcher to participate overtly or covertly in people's daily lives for an extended time. Ethnography, according to Ritchie, Lewis, Nicholls and Ormston (2013), involves understanding of the social world of particular objects or subjects typically via immersion in their communities. In IS studies, the ethnographer join and become part of the IS environments and observe actors' behaviours and their interactions with the systems, which they are part of. A different perspective from the case study and ethnographic, is the action research. The action research requires experiments in which participants collaborate with the researcher to identify and solve problem of social practice, in real life situations. Järvinen (2007) upholds that action research includes the researcher as an active participant rather than a passive observer.

## QUALITATIVE RESEARCH METHODS: DATA SOURCE

The data collection method involves the gathering of data relating to the subject (research) from sources, such as interview (Yin, 2009). According to Babbie and Mouton (2001), data source includes data collected by the researcher, such as transcripts



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