



Chapter IV

Research Method

In chapter 3, we reviewed the current literature from theories in multi-disciplines leading to the development of the conceptual model of inter-organizational trust in e-commerce participation. In this chapter, we first discuss different research methods in information systems followed by analysis of quantitative and qualitative research approaches. Then we provide the reasons for selecting a case study research method followed by a description of the research process, design, and instrumentation of the conceptual model, leading to a semi-structured questionnaire, data collection, and data analysis procedures that take into consideration the validity of data.

RESEARCH METHODS IN INFORMATION SYSTEMS

Several researchers emphasize the importance of identifying the epistemological and philosophical foundation of research (Galliers, 1992; Klein and Myers, 1999; Neuman, 1994). Galliers (1992) makes a distinction between research method and research approach. He suggests that a research approach

is the way of going about one's research, and may utilize different research methods and techniques. He classifies research approaches into two categories: a "positivist" and an "interpretivist" research approach, as shown in Table 14. Each technique makes an underlying philosophical assumption about the purpose of science and the nature of social reality.

Positivist research philosophy presupposes that reality exists independently of the researcher and suggests that it can be objectively and rigorously measured.

Interpretivist philosophy asserts that reality is a construct that people apply, and that social phenomenon cannot be examined independently of the individuals contributing to that reality. It also suggests that researchers themselves cannot be totally objective. It is from the researcher's conceptual orientation that the research questions, interpretations, and explanations flow (Galliers, 1992). Consequently, interpretative research emphasizes the context of this research and specifies the need for critical reflections on social and historical background of the research setting.

Based on these two types of philosophies, choosing the right research method becomes even more important. A wide variety of Information Systems

Table 14: Common research approaches used in information systems research

Positivist	Interpretivist
Surveys	Subjective/Argumentative Reviews
Case Studies	Case Studies
Laboratory Experiments	Action Research (descriptive/interpretive)
Field Experiments	Future research
Theorem Proof	Role/game playing
Forecasting	
Simulation	

Table 15: Research questions and types of research strategies

Strategy	Form of research question?	Requires control over behavior and events?	Focuses on contemporary events?
Experiment	How? Why?	Yes	Yes
Survey	Who? What? Where? How many? How much?	No	Yes
Archival analysis	Who? What? Where? How many? How much?	No	Yes/No
History	How? Why?	No	No
Case Study	How? Why?	No	Yes

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