Chapter 10
A Model for Operationalising Influencing Factors in IT Strategy Deployment

Tiko Iyamu
Tshwane University of Technology, South Africa

ABSTRACT

The reliance on information technology (IT) keeps increasing and rapidly as technology advances. Information technology has become so significant that it is critical to the success or failure of many organisations. Hence the organisations emphasises on strategy for IT, to enable and support their processes and activities, periodically. The IT strategy is influenced by many factors at both development and implementation levels. These factors enable and at the same time constraint during the development and implementation of the IT strategy in the organisation. The research examines the types of factors which exist during the development and implementation of IT strategy. This includes the roles of the factors and how they manifest to influence IT strategy. In achieving this object of the research, a case study method was employed and Structuration Theory was applied to examine the factors which emerge and how they impact the development and implementation of IT strategy in the organisation.

1. INTRODUCTION

Over the years, the need for IT has become increasingly important in the organisations it supports (Scarborough, 1998; Lederer & Sethi, 1988). Hence it is important to align the IT strategy to the business strategy (Weiss & Anderson, 2002). According to Sohal and Ng (1998), IT strategy has a great impact on the business strategy and some organisations rely completely on their IT strategy to succeed. It has also become a significant resource in enabling business goals and objectives. The roles and expectations of IT and the changing business needs have made it necessary to have a strategy for IT development, execution and use (Walsham & Waema, 1994; Wolff & Sydor, 1999). For example, the growth of web technology has expanded and changed the scope of the applications of IT. Two decades ago the focus of applications was more on internal
use. It was largely automation of processes to improve organisational operations. But, during the last decade, not only are people within an organisation increasingly ‘connected’ but so too are people outside the organisation connected with the organisation through the application of IT.

Understanding the development and implementation of IT strategy within the organisation implies making sense of it in their human and technological contexts. According to Iyamu and Roode (2010), there are various agents, some involved in the development of IT strategy while others are not. The study focused on the structures that existed, as created by humans and within which they operated, which influence the technology and organisation, groups of individuals and their organisational activities and tasks, their philosophical viewpoints on work as well as the organisation and IT strategy.

Regardless of the degree to which an employee may commit him or herself to the objectives of the organisation, personal interests are likely to be different from those of the employer. Employees seek to satisfy not only the organisational interests, but also their own wants and needs which are driven by self-interest (Markus, 1983). Mintzberg (2000) points out that people apply strategy in several different ways. Also, it is the management of the powerful resources (such as technology and people) and the environment they create that allow a difference to be made. According to Iyamu and Adelakun (2008), People’s willingness to accept or reject the IT strategy will therefore be highly influential in the outcome of the IT strategy.

The research examined how the interplay between structures and humans derail IT strategy in the organisation. The focus was on technical and non-technical factors in the development and implementation of IT strategy in the organisation. Based on the data analysis and findings, a model for operationalising the influencing factors in IT strategy deployment was developed. The study adopted qualitative interpretive case study for the research approach including, for the data collection.

2. RESEARCH METHODOLOGY

Qualitative, interpretive case study approaches were adopted in the study. This was due to the nature of the study, which sought to understand the impact of the interplay between the existing structures and humans in the development and implementation of IT strategy. Rowlands (2005) argued that the interpretive research method acknowledges the intimate relationship between the researcher, what is being explored, and the factors which shapes process. The study was unpinned by the Structuration Theory (ST), a theory by Anthony Giddens (1984). The analysis was carried out using the duality of structure from ST.

It was believed that the case study approach was the appropriate research strategy. This was primarily because of the advantages and opportunities it presented to create novel and profound insights and to examine the rich contextual influences (Myers, 1997; Yin, 2009). Other approaches could have been adopted. However, this would not have revealed in detail the unique experiences of individuals in the organisations and the factors influencing their IT strategy. According to Noor (2008), the case study approach is best used in probing particular area of interest.

The organisation used for the case study is an insurance company in South Africa, founded over hundred years ago. It has twelve thousand employees, of which four hundred and twenty are in the computing environment. The data collection was from primary and secondary sources, interviews and documentation, respectively. The primary data collection sources were structured and semi-structured interviews which were tape recorded. Roode’s (1993) description of a process-based research framework for information systems research was used to generate the most appropriate questions for this research. A total of 23 interviewees were carried out in the organisation: 14 white and 9 non-white; 11 senior and 12 junior; 12 female and 11 male employees were interviewed. A set of balanced respondent demographics was formulated and adhered to, as