

# Chapter 18

## Understanding Knowledge Sharing in an Organization: A Perspective of Actor–Network Theory

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### ABSTRACT

*This paper set out to propose the actor-network theory (ANT) as a lens through which to understand and interpret the sociotechnical knowledge sharing challenges in organisations. The methodology for this study was developed within the context of ANT by adopting its ideals and principles. The findings demonstrate that using the concept of the Moments of Translation as a lens to study this phenomenon is indeed a novel way of investigating the reason why there is still difficulty with sharing and managing knowledge. This perspective is proposed to transform the way that knowledge sharing factors are perceived. By utilising a normative approach, this research looked at how knowledge sharing as an ideal can be achieved when taking into account the existing constraints within an organisation. A general framework is proposed to guide the formation of a network of aligned interest for knowledge sharing.*

### INTRODUCTION

This qualitative-based knowledge management study is an approach to research that facilitates the understanding of a social construct within the context of knowledge management using Actor Network Theory (ANT). As a social theory, ANT can be used as a lens through which to interpret the phenomenon of knowledge sharing challenges in organisations. Although knowledge management can be studied by a variety of lenses, this paper argues that it can well be understood through the single lens of the concept of Moments of Translation of ANT. Knowledge management was conceptualised in the 1980s, but still draws significant attention in research and industry today (Baskerville & Dulipovici, 2006). The effective

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management of knowledge seems to be a primary concern for organisations in various industries and in academia due to the value that an organisation can derive from knowledge (Malik, 2005; Lubega, Omona & Van der Weide, 2010; Sulisworo, 2012; Tan & Wong, 2015). Knowledge is considered to be a valuable asset as it can improve performance in terms of productivity, efficiency and effectiveness, thus enabling an organisation to be more competitive (Holsapple, 2001; Liao, 2003; Bush & Tiwana, 2005; Durcikova & Gray, 2005; Hewett & Watson, 2006; Lubega et al., 2010). However, such benefits are not derived from knowledge management unless organisations manage their knowledge efficiently (Meso & Smith, 2000). Knowledge is context-specific because it is derived from the accumulated individual experiences of employees within an organisation (Chen & Mohamed, 2010). Various methods, techniques and tools are employed to harness the knowledge of individuals through capturing, storing, sharing and using of knowledge (Lee, 2001; Liao, 2003). However, these techniques do not guarantee the flow of knowledge and social structures make it difficult to manage these processes (Lauring & Selmer, 2012). This is why knowledge management strategies are so widespread (Davenport & Prusak, 2000; Hislop, 2013).

The question, then, is why after all these years are organisations, including academia, still struggling to share and manage knowledge? Given the works of Chen & Mohamed (2010), Lee (2001); Liao (2003), Polanyi (1967), Hong, Kim & Suh, (2012) and Lauring & Selmer (2012), it is agreeable to consider individuals creating the accumulated knowledge as actors in a network of aligned interest. This paper argues that knowledge sharing is influenced by facilitating factors of technology, processes, and a knowledge sharing strategy (Twum-Darko & Harker, 2015) which form part of a network of aligned interests to share the accumulated knowledge. Given the contextual and sociotechnical nature of knowledge sharing, this paper employs the actor-network theory (ANT) as a methodology to understand and interpret the sociotechnical processes of knowledge sharing challenges in organisations. The paper draws on the findings of an interpretive case study conducted at a selected University of Technology in South Africa.

## **OVERVIEW OF LITERATURE REVIEWED**

Barriers and facilitators constitute the core themes within knowledge sharing literature (Schauer, Vasconcelos & Sen, 2015). This is due to the need to understand the factors that influence knowledge sharing for its stimulation and to manage knowledge sharing processes more effectively (Ma, Huang, Wu, Dong & Qi, 2014). Even though the literature highlights individual, organisational and technological factors as the most important enablers for knowledge sharing, the relationship between these factors need to be explored (Cavaliere, Lombardi & Giustiniano, 2015). Consequently, studies on knowledge sharing have spanned several decades (Alavi, Kayworth & Leidner, 2006; Bontis & Serenko, 2009; Ma & Yu, 2010). The review of current literature suggests that findings are divergent, but there is consensus that individual and organisational factors determine the success of knowledge sharing (Israilidis, Siachou, Cooke & Lock, 2015). This speaks to the very contextual nature of knowledge and the individuals that are central to knowledge sharing. While individual (or personal) factors are found to significantly affect knowledge sharing, organisational factors, such as management, structure and cultural influences, are found to be influential too (Israilidis et al., 2015). Whether barriers are considered in terms of individual factors, or environmental (organisational) factors, their applicability spans different countries, industries and organisation types and sizes (Martin, 2000; Chuang & Hung, 2009; Ma et al., 2014).

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