Chapter 14
Triple Helix Organisations, Communities of Practice and Time

Kathryn J. Hayes
University of Western Sydney, Australia

ABSTRACT

Commercialisation activities require knowledge sharing between groups such as researchers and commercial managers. The existence of research based Knowledge-stewarding Communities of Practice (CoPs) within industry/research/government innovation collaborations has important implications for innovation management practice. The context of the study is four Australian Cooperative Research Centres (CRCs) composed of academic, government and industry personnel. Semi-structured interviews with a total of twenty scientists, engineers and managers explored collectively shared and dissimilar perceptions of time in commercialisation activities. Knowledge-stewarding CoP members and commercial participants in triple helix organisations working to commercialise inventions report differing temporal perceptions. Commercial and research groups described distinctively different views of pace and flexibility, contributing to tension, distrust and negatively influencing knowledge sharing, communication and commercialisation outcomes. Management techniques in use in the four CRCs and an agenda for future research conclude the chapter. This chapter contributes to the literature on collaborative innovation management and inter-organisational CoPs.

INTRODUCTION

This chapter reports research identifying inter-organisational Communities of Practice (CoP) within triple helix organisations engaged in collaborative innovation. The chapter is intended for an audience that is familiar with Knowledge Management concepts and is interested in their application to collaborative innovation management.

From the 1980s, governments of industrialised economies have looked to innovations involving the generation of, and reconfiguration of knowledge as a means of maintaining their competitive advantage (Gibbons et al., 1994; Lehrer & Asakawa, 2004; Nowotny, Scott, & Gibbons, 2001; Premus, 2002). From a business perspective, the attractions of entering a collaborative research organisation include access to complementary physical and intellectual assets, reduced time and costs for product development, and increased organisational and financial flexibility (Senker & Sharpe, 1997). The creation of hybrid organisations that use resources and/or governance structures from more than one existing organisation (Borys & Jemison, 1989), has been a feature of the organisational response to government and business pressures. These triple helix organisations draw their members from three discrete sectors: government, academia and industry.

This chapter recognises an organisational feature and management challenge not previously addressed in the collaborative innovation literature; the potential for organisation-spanning, Knowledge-stewarding CoP (Wenger, McDermott, & Snyder, 2002) to form within, or be imported into triple helix organisations. Knowledge-stewarding CoPs act primarily to connect people with a shared knowledge domain and then collect, organise and share that information and knowledge (Vestal, 2003). Managers identified challenges in guiding the Knowledge-stewarding CoP that existed in each CRC towards producing commercial outcomes, but they also recognised the vital role the CoP played in their organisation's innovation efforts. Recommendations based upon theory and reported practices are provided to assist managers to succeed in the extreme conditions of triple helix and other industry-research collaborations.

The chapter commences with a review of the role of triple helix organisations (Etkowitz & Leydesdorff, 2000) within National Systems of Innovation. Research evidence is presented that identifies a Knowledge-stewarding CoP within each of four Australian triple helix organisations. Commercial managers and the researchers who comprised the Knowledge-stewarding CoP in each CRC held disparate perceptions of time and timed events. These differences are examined in detail. Implications for management in triple helix organisations are next explored, including advice regarding the management of boundaries between organisational and occupational groups. The chapter focuses on management techniques, based on those in practice in four Australian hybrid industry-research organisations and recommendations from recent research (Davis, 2008; Garavan, Carbery, & Murphy, 2007; Hayes & Fitzgerald, 2007). The chapter concludes with an agenda for future research into the role of Knowledge-stewarding CoPs in triple helix innovation collaborations.

Triple Helix Organisations and National Systems of Innovation

Governments have recently looked to innovation as a means of developing or maintaining competitive advantage. The rapid spread of triple helix organisations, in which private firms and publicly funded research groups collaborate, has been traced across Europe, the USA, Latin America and Asia (Etkowitz & Leydesdorff, 2000). In these organisations, the initial stages of knowledge management, including the identification, capture and evaluation of innovations, are increasingly conducted across occupational and organisational boundaries. In Australia alone, a total of A$925.9 million is being provided for administered grants between 2006–07 and 2010–11 (Department of

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