

EXPLORING BARRIERS AND FACILITATORS TO KNOWLEDGE MANAGEMENT

PROCESSES AT PORTUGUESE UNIVERSITY RESEARCH CENTRES

Knowledge is a valuable intangible resource that should be correctly managed by any organization aiming at sustaining a competitive advantage difficult to imitate by competitors (Carneiro, A., 2000; Birkinshaw & Sheehan, 2002; Claver-Cortés et al., 2007, p. 45; Zyngier, 2006). Knowledge management (KM) is, thus, a crucial challenge of our time to any organization. KM involves a clear strategy for getting the right knowledge to the right people at the right time, and for helping people to share and put information into action in ways that contribute to improve organizational performance (O' Dell & Grayson, 1998).

Identifying barriers and facilitators to KM is recognized as an important step in KM (Maryan & Leiner, 2000; Nonaka et al., 2000), with barriers being considered as individual, socio-organizational, or technological obstacles that can hinder knowledge acquisition, creation, sharing and transfer inside and between organizations. Facilitators, on the other end, are individual, socio-organizational, or technological aspects that improve, stimulate, or promote the flow of knowledge, to help in knowledge acquisition and creation, knowledge sharing and transfer inside and between organizations. Both barriers and facilitators can be considered critical factors for enhancing knowledge production (Earl, 2001) since they may be used to

understand how the energy of a knowledge production system is used (Rubenstein-Montano et al., 2001).

This research aimed at exploring barriers and facilitators to four KM processes (acquisition; creation; sharing; transfer) in university research centres, as perceived by their leaders and researchers. Studying barriers and facilitators to KM in university research centres is a valuable endeavour because KM in such context has been even scarcely studied (Hasan et al., 2006; Tian et al., 2006; Wang et al., 2006). In addition, universities “face important challenges such as expansion of systems, necessity of responding to diverse social demands, increase of educational spending, and the need to adapt to the new age of information and knowledge” (Calvo-Mora et al., 2006, p. 99) and improving KM in their research centres may contribute toward meeting such challenges and accomplishing their quality and excellence purposes (Chourides et al., 2003; EFQM, 2005; Hsu & Shen, 2005; Quintanilla, 1999). The goals and features of such organizations are different from those of private companies. Focusing mainly on fundamental research, one main goal of academic research organizations is the advancement of knowledge and the publication of results (Agrawal & Henderson, 2002; Wang et al., 2006) to a broad and “anonymous” audience. On the other end, company-owned research centres usually have the focus on applied research and development, exploiting and creating knowledge for innovating and adding economic value.

Through semi-structured interviews, four leaders and seven researchers of four universities research centres operating in Portugal were invited to describe the main barriers and facilitators to the referred four KM processes. The main findings show that both main barriers and facilitators are related to soft (i.e. individual, relational and social) factors and not to hard ones (i.e., technology). Issues like trust, care, experience, collaboration, competition, motivation, rewards and incentives systems, and leadership are referred as critical to the four KM processes. Barriers and facilitators were also analyzed at the micro, meso and macro levels. At the micro/individual level, the main barriers are lack of time, working alone behaviour, and non-researcher activities. The main facilitators are learning with others and positive experiences on working in projects. At the meso level, the main barriers pointed to organizational cultures that do not foster trust, cooperation and sharing, where there is lack of discussion and debate routines. The main facilitators are related to clear incentives and rewards systems, structures and services to support communication, coordination processes and engaged leaderships. At the macro level, the main barriers are associated with tensions between public knowledge and private knowledge. The main facilitators are related to industry-university collaboration, open access to scientific knowledge and working in international projects. The study also explores the implications of the findings for the implementation of strategies and mechanisms that can increase knowledge production and sharing in university research centres.

Keywords: knowledge governance, knowledge production, knowledge management processes; barriers; facilitators.