Applying Enterprise Social Software for Knowledge Management

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ABSTRACT

This paper investigates the application of Enterprise Social Software for knowledge management in Australia. The Enterprise Social Software researched here assisted in collaborative knowledge sharing to support data-driven decision making. Enterprise Social Software was beneficial for complex tasks, especially those that involved a wide range of collaborators such as multi-disciplinary teams or geographically distant users. Australian knowledge workers found Enterprise Social Software to be extremely helpful in enhancing their externalisation and combination, but less proficient in socialisation and internalisation. In overall, there was agreement among respondents that Enterprise Social Software was facilitating them to meet work requirements which would be very hard or impossible to deliver without. The findings highlight Enterprise Social Software as a technological platform that diffuses the task complexity facing knowledge workers in Australia as a representation of the next generation Knowledge Management Systems.

KEYWORDS

Enterprise Information Systems, Enterprise Social Networks, Knowledge Management, Knowledge Workers, Organisational Knowledge Creation

1. INTRODUCTION

Globalisation of markets or products and advancements of technology are the major drivers for today’s knowledge economy (Dalkir, 2011; Jashapara, 2011), where knowledge is regarded as not only an organisational asset but also relation and capability of knowledge workers (Dang & Umemoto, 2009). Littlejohn et al. (2012) stressed task complexity faced by the knowledge workers, who more likely worked in interdisciplinary teams consisting of colleagues sometimes across the globe, utilised knowledge smartly from previous and existing projects, incorporated knowledge from structured sources (databases and reports) as well as unstructured formats (asynchronous discussions, wikis, blogs, knowledge sharing forums and video clips), and expanded their trusted networks as required.

Social media technology has been an enabler for knowledge management (KM) in organisations (Levy, 2013). Driven by their ease of use, social media techniques have become extensions of traditional software platforms in workplaces. In as early as 2006, McAfee (2006) envisioned that the popularity of social media would lead to the adoption of emergent social software platforms by organisations to pursue their goals. Nowadays, social media is a business model paving the road for successful enterprise KM (Levy, 2013). Enterprise Social Software (ESS), also known as Enterprise 2.0, is an emerging stream into Knowledge Management Systems (KMS) (McAfee, 2006; McAfee, 2011), and a feature of second generation of KMS, which focuses on sharing tacit knowledge between knowledge workers (Matayong & Mahmood, 2013), while the first generation focuses on explicit knowledge.
As a developed country in the globally competitive environment, Australia is shifting towards a knowledge-based economy (Clarke et al., 2011). However, many Australian organisations have very low levels of intellectual capital efficiency (Joshi et al., 2013). This research examines the application of KMS of the second generation, especially the ESS, in Australian organisations, identify implications for extended use or adoption of ESS, and improve organisational capability for KM in Australian organisations in both organisational and technological perspectives. This research also seeks to improve the currently embryonic research on worldwide application of ESS for KM, especially in developed countries.

2. BACKGROUND

In today’s knowledge economy, knowledge is a foundational cornerstone to achieving sustainable competitive advantage (Paroutis & Al Saleh, 2009; Davenport & Prusak, 1998; Drucker, 1999; Ipe, 2003; Xu & Quaddus, 2005a). Knowledge is deemed as an organisation’s most important asset and its foundation of success (Xu & Quaddus, 2005b, p.291). KM has become an emerging discipline (Jashapara, 2011) involving knowledge assets and knowledge-related processes (Dalkir, 2011). In this section KM is defined as a general concept, and the spiral model is described for knowledge creation. ESS is also discussed for its application in KM.

2.1. Knowledge Management

KM is a multi-disciplinary field, which originated from disciplines including philosophy, psychology, cognitive science, interpersonal communication, organisational dynamics and behaviour, information design, and computer science (Demarest, 1997; Jashapara, 2011). Researchers have developed KM models to describe concepts, underlying perspectives and issues of KM. For example, Girard (2005) developed the inukshuk KM model, which focused on knowledge creation, and stressed that technology and culture were the two ‘legs’ of the inukshuk to support KM activities.

Researchers have also developed KM cycles to describe KM process by identifying phases in the process, and activities in each phase. Based on previous KM cycles, Dalkir (2011) proposed an Integrated KM cycle, which classifies common KM activities into three primary phases:

- Knowledge creation/capture,
- Knowledge sharing/dissemination, and
- Knowledge acquisition/application.

In knowledge economy, economic success is the aim of KM, and technological advancements increasingly facilitate the application of KM. In this paper, KM is defined as creating, sharing and acquiring knowledge for organisational objectives by means of Web technology.

2.2. SECI for Knowledge Creation

Knowledge creation is crucial in knowledge economy, because new knowledge is believed to allow a company to leave the competitors behind by undertaking innovative actions (Schumpeter, 1934). Knowledge can be classified into explicit knowledge and tacit knowledge (Xu & Quaddus, 2005a; Nonaka & Takeuchi, 1995; von Krogh & Nonaka, 2009), where explicit knowledge is codified and easily communicated and shared (Nonaka, 1994, p.16), and tacit knowledge is ‘highly personal, hard to formalise, thus difficult to be communicated to others’ (Nonaka & Takeuchi, 1995, p.8). Jashapara (2011) characterised explicit knowledge with ‘know-what’ such as guidelines and business rules and tacit knowledge with ‘know-how’ such as experience and expertise.

Tacit knowledge and explicit knowledge were regarded as the two ends of the same continuum (Leonard & Sensiper, 1998; Augier et al., 1999). However, more recent research described tacit knowledge and explicit knowledge to be more closely intertwined (Nonaka, 1999; McAdam et al.,
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