Chapter 2

Combining ERP Systems with Enterprise 2.0

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ABSTRACT

The chapter discusses both the complementary factors and contradictions of adoption ERP-based systems with Enterprise 2.0. ERP is well known as IT’s efficient business process management. Enterprise 2.0 supports flexible business process management, informal, and less structured interactions. Traditional studies indicate efficiency and flexibility may seem incompatible because they are different business objectives and may exist in different organizational environments. However, the chapter breaks traditional norms that combine ERP and Enterprise 2.0 in a single enterprise to improve both efficient and flexible operations simultaneously. Based on multiple case studies, the chapter analyzes the benefits and risks of the combination of ERP with Enterprise 2.0 from process, organization, and people paradigms.

INTRODUCTION

An Enterprise Resource Planning (ERP) system is an enterprise system which aims to improve operational efficiency by reducing process cycle time, producing documentation quickly, and eliminating errors and duplicated process design (Moon, 2005; Magal and Word, 2009; Tsai et al., 2011). However, there is an increase awareness of shortcomings of traditional ERP systems, because of high failure rates. These failures have occurred particularly in SMEs and firms of developing countries (Muscatello et al., 2003). Many ERP vendors have developed innovative software and applications to reduce the costs for these firms to implement ERP, such as Saas, SOA, and cloud computing (Tene, 2011). However, the most important barrier for these corporations to adopt ERP is less structured business process and informal documentation, rather than software costs (Laukkanen et al., 2007; Huang et al., 2001). Mullins (2007) calls these firms ‘informal organizations’
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that highlight flexible operations and have working procedures based on social and psychological needs without a formally defined structure. ERP facilitates a formal, structured, planned, transaction-based process management, while the informal organization focuses on different business norms that are informal, less structured, more spontaneous, knowledge-based operations (McAfee, 2009). Thus, ERP and informality seem to have some natural contradictions.

So how do the informal enterprises use of ERP systems? Traditionally in order to support a successful ERP implementation it is considered that informal communications and systems should be eliminated (Umble et al., 2003; Boersma & Kingma, 2005). In this view, ERP systems are supports for planned and routine process management (Al-Mashari, 2003; Monk and Wagner, 2008). This leads to a view that ERP systems may be incompatible with less structured and spontaneous based informal systems. McAfee (2008) introduces enterprise 2.0 as a way to incorporate the social interactions. Knowledge workers could share and discuss their knowledge through an online communication platform, which makes knowledge and output more visible. Based on enterprise 2.0 theory, ES vendors are already in the progress to develop relevant software. The combination of social software and enterprise system has already been used in SAP to integrate Google Wave and BPMN based business process modelling in order to achieve real-time collaboration (Bruno et al., 2010). Knowledge management 2.0 tools have been development to add connectivity to ERP, CRM, such as Koral, Illumio and iUpolad (Levy, 2009).

Multiple case studies will be used to interpret what different firms’ perspectives on using the fusion system are, and how enterprise systems benefit or risk for business development. For instance, from an operational perspective, can this combination really improve both efficiency and flexibility performance objectives? From an organizational perspective, informality is based on a trust based social network. Could this genuine trust be gathered from technical networks? Therefore, the following research of how to combine ERP and informality reviews these elements both from an organizational as well as a technical perspective.

BACKGROUND

Key Feature of Enterprise 2.0

To support informal communications and enhance social connections, enterprise 2.0 software becomes a popular communication channel at work, such as Twitter or LinkedIn (Zhao & Rosson, 2009; Riemer & Richter, 2010). McAfee (2009) termed Enterprise 2.0 as part of Web 2.0 to bring and build Internet-based software platforms to facilitate informal, less structured, more spontaneous knowledge-based works in a company. Technically, enterprise 2.0 developed from Web 2.0 to enhance the communication by transforming static HTML web page to be dynamic and two way interactions. (McAfee, 2006) Beyond a technology tools, enterprise 2.0 benefit organization to establish freedom, network-oriented, less hierarchical structure, and collaborative, trustful and transparent culture. The organizations adopted with enterprise 2.0 tend to be flatter that transfer from bottom-up to top-down structure (Cook, 2008). In summary of recent researches, the software is build according to four features. The following will explain the key features of enterprise 2.0 software in related to organizational informality.

Week Structure

The strong tied relationships work in hierarchy or team structure with formal and well-defined business processes (Granovetter, 1985). However, the week ties aim to motivate spontaneously interactions between social actors and to create new perspectives on solving problems. Thus, enterprise