INTRODUCTION

Organisations were always keen to capture and manage what they know. However, the cost and effort was often deemed overwhelming compared to anticipated benefits. In today’s environment, when organisational settings are more fluid and complex, formal mechanisms for identifying and utilising knowledge become an absolute imperative in order to support effective operation.

The field of knowledge management (KM) emerged in response to these organisational imperatives. Theories, tools and techniques from a range of reference disciplines, which traditionally focused on organisational issues, was called upon to deal with the cognitive, social and technical needs required to manage the knowledge life cycle. KM is therefore a truly multidisciplinary area of research that requires rigour and relevance to address the organisational imperatives.

An Historical Overview of Organisational Knowledge Management

One of the major drivers for KM is the risk associated with losing knowledge including not being able to capture it. The first wave of KM was an attempt to address this risk (Alavi & Leidner, 2001). It was associated with a codification effort when knowledge was treated very much as a commodity that the organisation can “own” once it is “removed” from people’s heads. Riding on this wave, a whole range of technology solutions were developed and some old technologies were relabeled. The claim made for these technologies was that all of the organisation’s knowledge could be codified and stored in a whole of organisation knowledge base (Probst, Raub, & Romhardt, 2000). At the same time Nonaka and Takeuchi (1995) argued for the externalisation and codification of individual tacit knowledge that emerge as a result of the social processes that underpin knowledge creation.

The first wave of KM highlighted the differences between knowledge and information and different requirements associated with their capture. It has also made the role of advanced technology prominent in organisational knowledge processes.

This approach has generated a great deal of confusion and debates (Wilson, 2002). The advocates of this approach led a number of KM projects to the point of frustration and failed expectations. In reflection, it was realised that despite ever increasing functionality in collaborative technologies and other systems, organisations frequently do not realise the anticipated benefits from these systems. This in-
ability to meet expectation can be largely attributed to the fact that organisations “… fail to give due attention to people and organisational processes—the elements of soft infrastructure” (Skyrme, 1999). Snowden (1998) remarked that “… too many technology-based knowledge management systems are attempting the cognitive equivalent of raising an iceberg above the surface of the ocean. It may be possible, but the energy expenditure is out of all proportions to benefits” (p. 8). To explain the reasons for the failure of purely technological solutions for KM, Snowden (2000) quotes three principles:

1. “Knowledge is only ever volunteered: it cannot be conscripted”;  
2. “We can always know more than we can tell, even after we have told it and we can always tell more than we can write”, and  
3. “Most valuable knowledge is only known when it is needed to be known” (p. 7).

The second wave of KM brought human factor back into the KM equation. Tools and techniques for managing knowledge were developed and were geared towards the creation and accumulation of human and intellectual capital. Driven by a managerial paradigm, there were a variety of approaches developed to quantitatively measure an organisation’s ability to create and use knowledge. One of the most prominent examples is the “intangible assets monitor” proposed by Sveiby (1997). This stage highlighted the structural and organisational principles required for KM practice.

Emphasis on the social and cultural aspects of KM can be seen in the rise of the “community of practice” (COP) and its variants. Such communities are proposed as a dominant means by which people organise to share and use knowledge and how work is organised. From a KM perspective, the emphasis on communities is based on their role in individual and organisational learning. Organisational learning is aligned with the focus on human capital and is seen as a more desirable KM outcome than dissemination and replication of past “best practice” (Senge, 1990).

The third wave of KM looks at KM as a strategic initiative. It takes a socio technical systems view that attempts to reconcile the technological and human aspects of managing knowledge. However, organisational strategy requires a broad range of issues to be addressed simultaneously. Hence, issues such as context, culture, organisational work design, governance and management of work, and identifying and supporting social networks emerge as legitimate concerns of KM. Paradoxically, the role of technology becomes even more crucial in enabling and defining the character of KM initiative in each specific situation.

The wave metaphor is used deliberately to indicate that each stage build on what has came before rather than displacing the previous stage. Thus KM is cumulative in its development so, for example, codification of knowledge is not excluded in the third wave but it is merely one of the many interventions that the strategy will include.

This reflection on the evolution of KM points to the complexity inherent in its practice. KM cannot be reduced to a single element but must be seen as multi layered and multi dimensional and needs to draw on a broad range of reference disciplines to express its interdisciplinary character.

There is a debate on whether KM is a discipline at all. Jennex and Croasdell (2005) in their inaugural editorial to the first issue for this journal argued that KM has all the features of a discipline and a potential to grow as a distinct discipline. They base their argument on a thorough analysis of the state of the academic research and its relevance to the KM practice. However, the problem with KM as a relatively young discipline is an abundance of so called organisational case studies. Such studies present success stories that often lack a critical analysis of underpinning assumptions that is needed to generalise what has been learnt to other situations. In this issue of the journal, we have solicited original analytical reports of em-
Empirical studies that reflect on the organisational influence on the design and implementation of the KM initiatives. Such studies will contribute to the development of the KM body of knowledge reinforcing the view of KM as an emerging discipline.

Origins of this Issue and the Papers

This issue is based on a set of papers specifically selected from the contributions made to the Australian Conference for Knowledge Management and Intelligent Decision Support in 2004. The papers in this issue have been significantly revised from the conference submissions which appear in the book Organizational issues in knowledge management published by Australian Scholarly Publishers. Seven authors were invited to update, re-write and resubmit their research for consideration for this special issue. The journal submissions were reviewed by two, sometimes three, reviewers and five were selected for this volume.

The papers were selected with the aim of presenting research performed by Australian researchers in an Australian context that would be of interest to anyone engaged in knowledge management practice, research, and education. The papers address theoretical as well as pragmatic issues on the topic and cover the broad range of problems and challenges organisations face when exploiting knowledge resources to support organisational performance.

The contribution of communities of practice (CoP) to knowledge management strategies is explored in Gerlinde Koegleiter, Ross Smith, and Luba Torlina’s paper. They report on initial findings from a long-term action research study to investigate the characteristics of informal networks. Their work explores how such networks emerge as CoPs and how communities influence the work practices. They demonstrate how CoPs enable a bottom up implementation of knowledge management and how this compliments a top down implementation.

Sharman Lichtenstein and Alexia Hunter address the effectiveness of knowledge sharing by examining the needs and behaviour of the person receiving knowledge. They propose that an understanding of these behaviours can help people make decisions about what knowledge, and how that knowledge, is made available for sharing. Their receiver based theory goes some way toward understanding and overcoming the real problems of knowledge sharing in organisations.

Jill Owen’s paper takes projects as its focus and develops a theoretical framework to explain how knowledge is utilised to meet organisational objectives. The framework is a two-level recursive structure that represents project management. Programme management is considered a meta-level representation of projects. The framework reveals both the formal communication within each level and the informal knowledge intensive communications. The significance of the framework lies in its focus on knowledge transfer and reuse in the task of managing organisational work.

Keith Sawyer and John Gammack present a case where they apply a proprietary strategy development method to integrate a knowledge strategy with other organisational strategies. Their work focuses on core competencies to identify what knowledge is known, what gaps in knowledge exist, what knowledge is needed strategically and is not required strategically. This knowledge audit maps competencies to organisational goals and demonstrates how organisations can effectively exploit knowledge.

Heuristic problem solving is the focus of the paper by Debbie Richards and Megan Vazey. They propose a method based on observation, diagnosis and action to classify and generalise a solution to facilitate its reuse. Their method also includes the flexibility that enables users to specialise generalised solutions to meet the demands of their particular situations. This flexibility is based on an algorithm that allows users refine and evolve stored solutions and represents a collaborative process of knowledge acquisition. They illustrate their method in a corporate call centre dealing with customer problems.
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REFERENCES


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