



Editorial

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This issue marks a milestone in the history of *Knowledge Management Research & Practice (KMRP)*, as *KMRP* has now completed five volumes. Interest in knowledge management, intellectual capital and organisational learning in both business and academia continues unabated, with some definite evidence of progress, but also some signs of ‘reinventing the wheel’ and even of a few attempts to reinvent the wheel without realising a wheel works better if it is round. It is therefore an appropriate time to take stock of the past five years in knowledge management (KM), and to look forward to the next five years, and beyond. We do this with a set of eight position papers contributed by various experts in the field, which we hope will also lead to more opinions and correspondence from the *KMRP* readership during 2008. There are also three regular articles in this issue, all of which were selected as being of particular relevance to this theme. Last, but not least, Heiner Müller-Merbach offers another in his series on philosophers and KM.

The position papers are presented in alphabetical order of the first author’s family name, but it is perhaps fitting that this results in Daniel Andriessen’s contribution being first in the issue. Daniel’s paper ‘Stuff or love? How metaphors direct our efforts to manage knowledge in organisations’ is based on his keynote address at last year’s 8th *European Conference on Knowledge Management* in Barcelona, where it stirred up a great deal of interest and comment among conference delegates. Most *KMRP* readers will be familiar with some of the different metaphors that are used as a basis for views of knowledge and of KM in the existing literature, for example the distinction between ‘knowledge as object’ and ‘knowledge as process’. Andriessen explains how the use of metaphors – both explicitly and implicitly – extends very much further. Inspired by the work of Lakoff & Johnson (1999), he explains that his research has revealed no fewer than 22 different metaphors for knowledge in the KM literature, and goes on to look at some of the metaphors that are most visible in published KM work. This shows a clear difference between ‘Western’ metaphors (such as knowledge as resource, knowledge as assets, and knowledge as property) and ‘Eastern’ metaphors (e.g. knowledge as thoughts or feelings). We suspect that these metaphors will all be somewhat familiar to readers of *KMRP*. So what about using some very different metaphors? Andriessen presents what he terms two *challenging* metaphors: knowledge as water, and knowledge as love. He then goes on to describe what happened when he used those in a workshop setting. He (and I, as editor) would like to invite you to use these and other metaphors in thinking about the other papers in this issue, and about your own interest in KM. When you’ve done so, please let us know what insights it gave you.

Joseph (Joe) Firestone’s position paper ‘On doing knowledge management’ focuses on the lack of a common definition or framework in the KM field – which was one of the reasons behind the founding of *KMRP*. Joe identifies the difficulties that this gives in trying to evaluate, or even understand, the successes that KM has achieved so far, and raises the question of which of these phenomena is the cause and which the effect – or if they both proceed in parallel. Would KM have been more successful if there were a common agreed paradigm? Rather than spending too much time debating this point, what he advocates is that people working in KM need to make clear what their conceptual view of KM is and use it explicitly

in their work. Going on to practise what he preaches, he then presents his own conceptual framework for KM – at least in a shortened form. This includes the definition ‘Knowledge Management is the set of activities and/or processes that seeks to change the organization’s present pattern of knowledge processing to enhance both it and its knowledge outcomes’. Firestone then uses his framework to discuss two different approaches to ‘doing’ KM. These he labels the Decision Execution Cycle Interruption approach, and the Background Conditions, or Ecological Approach. The first of these improves knowledge processing (as Firestone calls it – you decide which metaphor for knowledge he might be using here) by interrupting the decision maker after a decision is contemplated but before it is implemented. The second relies on providing resources that an individual may use to help them perform a knowledge-related task better than they otherwise would do. Firestone points to the importance of internal marketing in this second case, since the individual may otherwise choose not to use the benefits of the approach.

Carl Frappaolo has contributed a position paper entitled ‘Implicit knowledge’. This considers the familiar distinction between tacit and explicit knowledge, and examines the usefulness of an intermediate category, labelled implicit knowledge. This represents the currently tacit knowledge that could be made explicit with appropriate effort, resources and techniques, as opposed to genuinely tacit knowledge that could never be made explicit. He identifies that a particular challenge for organisations is to learn how to work with implicit knowledge rather than the ‘easier to handle’ explicit knowledge, and explains how this is likely to rely on extensive use of interviews. Frappaolo mentions one technique for this, knowledge harvesting.

Helen Hasan’s contribution immediately raises a slightly different metaphor, that of the ‘sensible organisation’. This immediately appealed to your editor, as I (like, I suspect, most consumers) have in the past been a customer of few distinctly non-sensible organisations! Its full title is ‘Back to the future for KM: the case for sensible organisation’. Sensible in this instance refers to the use of commonsense in a world where technological advances offer all kinds of new possibilities. In addition, for your editor at least, the term carries echoes of a more ‘organic’ organisation: one that has senses, rather than functioning in a purely mechanistic manner. Helen raises some of the contradictions of the 21st century world: between innovation and predictability; between the ambiguity of the world and the precision of computer systems; and between the individual and the large organisation. She goes on to identify 14 statements that characterise her concept of the sensible organisation, and draws on this and her own experience to speculate on the future agenda for KM.

Clyde Holsapple and Jiming Wu are interested in one of the big questions for KM: does it make any difference to the organisation’s bottom line? In their title ‘In search of

a missing link’, the link is between KM and firm performance, rather than another challenging metaphor for knowledge (an exercise for the reader: consider knowledge as the yeti/Abominable Snowman). Their paper first charts the expansion and growth in the field of KM itself, reaching the encouraging conclusion for *KMRP*’s editor and publisher that KM as a field of study and practice is here to stay. Holsapple and Wu then draw on the resource-based theory of the firm to examine the theoretical links between KM and firm performance, and develop three hypotheses based on this framework. They then discuss in detail the issues involved with testing these hypotheses, including that of identifying and dealing with any time lag between the implementation of a KM initiative and its bottom line effect.

Jonathan Klein, in his position paper ‘Some directions for research in knowledge sharing’ shares with Carl Frappaolo the view that the distinction between tacit and explicit knowledge is an inadequate one, and arrives at the same conclusion regarding the importance of implicit knowledge, albeit by a somewhat different route. In the process, he draws our attention to an example cited by Collins (2007) which might disturb the thinking of many about tacit knowledge: it is apparently possible to make the knowledge of how to ride a bicycle sufficiently explicit to build a machine which can do it. (‘There goes my standard teaching example!’ – *Ed*) But – and this is crucial – the rules used in constructing this machine are no help to humans who wish to learn how to ride a bicycle. The body of the paper concentrates on storytelling as a means of knowledge sharing, and in the process (no doubt to Joe Firestone’s approval) distinguishes what Klein means by knowledge sharing and knowledge transfer – another of those definitional issues that are still afflicting the KM field. This leads to a proposed research direction. Klein’s final conclusion is that carrying out the research he identifies will not be easy. We leave it to the academics among you to decide whether that is a good or a bad thing!

Jay Liebowitz starts his contribution from the position that the KM literature commonly recognises the influence of culture on knowledge management, whether that is national culture, organisational culture, or even organisational sub-cultures. The widespread growth in recognition of this point is perhaps one of the most noticeable changes in the KM landscape over the past five years. With the title ‘“Think of others” in knowledge management: Making culture work for you’, Jay stands this relationship on its head, and considers in addition how KM might affect culture. This means thinking carefully about the reasons why an organisation might wish to embark on a KM initiative – which for Liebowitz is all about improving knowledge sharing in some sense – and what direct and indirect results might be achieved from a KM programme. This brings the range of potential knowledge management applications into consideration, and also generational issues such as the ageing workforce

in many Western economies. Liebowitz closes by calling for more action research and longitudinal studies into the effects of KM on culture.

The final position paper, by José Maria Viedma Martí and Mihaela Enache, considers KM in a different context to the one that is the main emphasis of the other contributions: personal KM rather than organisational KM. 'Managing personal human capital for professional excellence: An attempt to design a practical methodology' takes some of the ideas of the field of intellectual capital, that have so far been applied in the analysis of organisations, regions and cities, and uses them to address an individual's career, especially what José and Mihaela call the 'boundaryless career' of the 21st century. This new term aims to capture a situation which treats as an opportunity rather than a threat the fact that most employers can no longer make the lifetime employment promise that was common in the 20th century. Another fascinating metaphor mentioned in this work is that of a person's career as a sculpture. The concept of personal human capital is at the centre of the theoretical development in the paper, and leads to the Personal Human Capital Navigator (PHCN) methodology. This methodology has been provisionally validated in the form of self-application by 50 individuals, but further more rigorous longitudinal research is called for.

Moving on to the regular articles, the first is by John Mingers, 'Management knowledge and knowledge management: realism and forms of truth'. Its subject matter fits very well in this issue, as it addresses a topic that Mingers cogently argues is insufficiently covered in the existing literature. This is the dimension of truth in people's conceptualisations of knowledge. Mingers addresses this from a viewpoint of critical realism, and necessarily gives much consideration in his paper to the issue of what it means to say 'I know', including examples of 13 different senses of that verb. He reviews many existing definitions of knowledge and related concepts, and also points to the lack of definitions in some – he would say far too much, agreeing with Joe Firestone – KM work. Mingers derives four types or forms of knowledge: propositional, experiential, performative and epistemological. He characterises these on several dimensions, including the existing literature on different notions of truth.

The second regular article is 'A review of the main approaches to knowledge management' by M. Begoña Lloria. It is very appropriate to include a review paper in our discussions in this issue, and Begoña Lloria starts by considering 10 different definitions of KM (we still have some way to go in unifying the field, do we not?). She then reviews what she found to be the seven most widely cited classifications or typologies of KM approaches in the specialised literature on KM. She proposes her own synthesis of these, leaning most heavily on the work of Takeuchi (2001). Among other things, this extends the Western–Eastern distinction already seen in places in the KM literature (and noted by Andriessen) by distinguishing 'European' and 'US' models, and also by adding

a further dimension which distances the descriptive approaches from the normative ones.

The final regular article by Meliha Handzic, Amila Lagumdžija and Amer Celjo is 'Auditing Knowledge Management Practices: Model and Application'. They propose a model for conducting an audit of the state of KM in an organization, which again fits in suitably with this issue's overall 'audit' of the state of the KM field. Their model is structured around six KM components: contingencies, drivers, enablers, processes, stocks and outcomes. Handzic *et al.* go on to apply the model to a case study of the city government of Sarajevo, the capital of Bosnia and Herzegovina. Although it is inevitably difficult to generalise from a single case, the case demonstrates that the proposed model can support a contingent approach to KM.

Finally, Heiner Müller-Merbach's latest article on philosophers and knowledge management looks at Kant's views on the reciprocity of sensations and concepts, which again brings into focus issues such as what it means to say 'I know' and also the relationship between tacit and explicit knowledge. Heiner concludes with the pertinent observation that knowledge management software needs to be bi-directional: in Kant's terms, to help in finding corresponding sensations for concepts as well as concepts for sensations.

Taking all of these contributions together, several themes emerge. The first is the need to define your terms, especially for academics. It may be appropriate in some empirical studies to let the interviewees or questionnaire respondents decide for themselves what knowledge means, or what knowledge management means. Review papers may similarly wish to draw attention to the diversity of meanings attributed to these terms (and others). But in most cases the current fragmented state of the field means that definition of such key terms is essential. Realistically, it is unlikely that any single agreed set of definitions will be achieved, and so contingent approaches may well be more useful (and thus longer-lived?) than those with narrower assumptions. A challenge for workers in the KM field is that of coping with dimensions of knowledge or of KM that one may literally not have thought of before, such as the notion of truth, as pointed out by Mingers.

A second theme is that some theoretical foundations are gaining in popularity and influence in the KM field. Two are worth drawing particularly to your attention:

- The knowledge-based view of the firm, developed from the resource-based view of the firm in the literature on strategic management and economics. This is stressed in the Clyde Holsapple and JimingWu position paper. There is a very important consequence to the use of this theory. One of the few areas within KM where there is a reasonable measure of agreement is that of KM strategy, where a large majority of the published work stems from the concepts of personalisation and codification as described by Hansen *et al.* (1999). However, their work draws upon a different school

of strategic management – the market-driven view exemplified by the work of Michael Porter. Trying to use both of these competing paradigms in the same piece of work may lead to some contradictory assumptions. Indeed, the very fact that different paradigms of strategic management exist may be a new dimension for some workers in KM.

- Complexity theory, as mentioned by both Jay Liebowitz and Helen Hasan in their position papers, may prove to be a better description of the situation facing those trying to implement a knowledge management project than existing decision-making theories. The recent paper by Snowden & Boone (2007) demonstrates that this idea may be moving into the mainstream of management thought.

Thirdly, and echoing Helen Hasan's 'back to the future', there may also be scope to make more use of partly forgotten or overlooked theoretical frameworks. The contributions of both Joe Firestone and Carl Frappaolo make some references to the 30 years or more of work on expert or knowledge-based systems, often carried out under the banner of artificial intelligence. Frappaolo makes an interesting and highly relevant point about the negative perceptions of artificial intelligence or expert systems which still exist. Even though there are far more systems of that type now in use than in their apparent heyday around the beginning of the 1990s, they are often not called by any of those 'threatening' names. Frappaolo comments that 'The goal of implicit knowledge management is to transfer knowledge so that it can be employed to enhance intelligence, not automate, emulate or replace thinking'. This is what many would have said always was the main goal of knowledge-based systems at the time – Jay Liebowitz, who was very active in that field, would no doubt be one of them. Your editor once produced (Edwards, 1991) a classification of six different styles in which a knowledge-based system could work with its users: as assistant, critic, second opinion, expert consultant, tutor, or automaton. Only systems in the last of these categories, and perhaps a few in the 'expert consultant' category, really fell into Frappaolo's trap of trying to automate, emulate or replace thinking, yet

clearly many of their potential users did not perceive them in that way. The extensive research on how to elicit knowledge from experts would certainly still be of value to those trying to help people share implicit knowledge, but equally it is vital to realise that people's perceptions of a system may be more important than the designers' intentions for it, as Firestone points out. Is there an issue of whose stories are being told here?

Fourthly, a growing problem in KM is likely to be that of generational issues. Not only is there an unbalanced age profile in the workforce of many Western economies, there is increasing evidence (at least anecdotally) of differences in ways of thinking between different generations (probably it has always been so, but only now in our data-rich world do we actually have the evidence). This is especially true when it comes to the use of social networking technologies, and we have probably only scratched the surface of the possibilities they offer so far. This again raises the question of the relationship between formal and informal KM systems, and the extent to which it is possible to 'manage' the informal ones. For example, the KM literature contains several articles which state that it is not possible to create communities of practice (CoPs) deliberately, only to let them emerge, and also other articles by people who claim to have been creating CoPs in organisations for years.

Last, but perhaps most importantly, remember your metaphors. Follow Daniel Andriessen's advice and think about the metaphors for knowledge used in the article you are reading – or even writing! (I'm still trying out the knowledge as yeti/Abominable Snowman one – I like the idea that knowledge is supposed to be out there, but no-one has yet proved its existence directly.) Try a 'challenging' metaphor to unlock your thinking about KM.

To sum up the prospects for KM in one word then, that word surely is 'challenge'. Yet the opportunity in this challenge is that the future of knowledge management is for *KMRP* readers and others to create. If some of these articles have stimulated your thinking, we challenge you, please, to share that thinking with us all – in the form of a regular article, or a position paper, or a letter to the editor. We look forward to hearing your own ideas and your comments on those of others.

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