

# Knowledge Management: A Social Perspective

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Knowledge Management is interpreted through a social perspective, both in terms of the development of the concept, and in its major components. This perspective is demonstrated as an effective means of interpreting the confusion that surrounds the topic, and of exploring questions about its character, its genesis, the nature of its literature and its future development. There are also important social perspectives in the key issues of the subject itself, involving the concept of knowledge, the human and social dimensions, the role of technology, measurement, top management and the professions involved. Adaptation of the principles to other organisational and social contexts also needs consideration. Finally, the various social disciplines, in particular Information Sciences, have much to offer the field of Knowledge Management.

## **1 Introduction**

Knowledge Management is the latest wonder theory. In a few short years it has appeared, apparently from nowhere, and is now spawning masses of books, articles, conferences and Internet sites, gathering up any vaguely associated activity into a whirling mass of visions, ideals, ideas, practices, technologies, consultancies and case studies. Whether it is communications, data bases, artificial intelligence, HRM, organisational design, organisational culture, work groups, learning organisations, training, system engineering or information technology and services, they are all being caught up and carried along in the whirling dervish.

It is easy for the cynic to pass it off as a fad – we have had PPBS (Program Planning and Budgeting Systems), MBO (Management by Objectives), MBWA (Management by Walking around), Excellence, TQM (Total Quality Management), CQI (Continuous Quality Improvement), BPR (Business Process Re-engineering), Downsizing, Benchmarking, Outsourcing – and now Knowledge Management – what's next – What will they do with wisdom? The term Knowledge Management is being attached to so many different systems, practices and technologies that many are bewildered and confused by its meaning and significance. People are seeking definitions and explanations – what is Knowledge, what is Management, can you manage knowledge, what is a Knowledge Management system, how do you measure Knowledge, is Knowledge Management cost beneficial, will it last?

This paper addresses this confusion by looking at Knowledge Management as a social dynamic, rather than as a set of tools and techniques. It looks at the complex of attitudes, ideas, beliefs, cultures and political forces that mould and develop what is seen as Knowledge Management.

## **2 The Social Perspective**

### **2.1 Why a Social Perspective?**

The significance of the social perspective can be seen in the answer to the question: "What is Knowledge Management?" Because there is a specific term, there is a natural expectation that there is a corresponding concept which is subject to definition in some form or other. People also look for a set of tools to enable Knowledge Management to be achieved. The social perspective recognises that the term may be more a manifestation of a social process or discourse, rather than the definer of a specific concept. Because, the social process generating the term is complex, then the range of different concepts and processes to which the term is applied is also complex. However, because many people are looking for definitions and solutions, then there is a wide range of definitions and solutions generated, often with circular explanations that offer little clarity. Thus the confusion. Such confusion is not unusual, however, and similar situations are associated with other words

such as 'information', 'management' and 'society'. With such a complex process, meaning cannot be sought so much in the words themselves, but in the context in which they are used.

This social perspective then provides an explanation of the confusion. It also provides a means of addressing some of the critical questions about the way Knowledge Management is practiced, its emphasis and the way it might develop. This perspective also suggests a different set of questions that are more answerable, and more useful in dealing with the phenomenon of Knowledge Management.

Why, for instance, is Knowledge Management seen as a fad? What is it that evokes the sense of hollowness and temporality that people tend to associate with fads? Two aspects seem relevant. First, many people find the combination of the two terms “knowledge” and “management” quite anomalous. Knowledge is private, and thus not subject to the controls of management. The understanding of this sense of anomaly is important in appreciating how people might respond to the idea - perhaps terminology needs to be adapted. Then there is the frequent hype: naïve assertions, over-generalisations, simplistic solutions, internal contradictions, and lack of conceptual coherence, that have tended to characterise Knowledge Management in common with past 'fads'. There are many who are alienated by these characteristics, and become resistant to considering the concepts seriously.

We will now consider two other aspects of the social dynamic: the nature of the literature and the historical development.

## **2.2 Literature**

The explosion in literature is demonstrated by indexes of data-bases. For instance ABI-Inform lists 10 papers indexed to Knowledge Management in 1994, but 255 in the first seven months of 1999 and Amazon.com list a total of 334 books on the topic. Part of this proliferation is undoubtedly due to the popularity of the topic with the subsequent broadening of the range of disciplines that are associated with it. The literature comes from a wide range of sources, often using very different concepts of Knowledge Management. It is generally popular in style, and much of it is highly promotional. Evidence is largely anecdotal and case-based with little depth of critical analysis. For instance there is much rhetoric about tacit knowledge, culture, sharing and trust, but little recognition of the subtleties of the concepts used or of the dilemmas involved in working with them. Many quite basic conflicts between the various approaches remain unresolved, and the implications of concepts such as 'capital', 'assets' and 'knowledge capture' are poorly explored. The lessons promoted tend to be overgeneralised, with little indication of limitations or guidance on how they may be adapted to different settings. There are notable exceptions to these generalisations, including Fahey and Prusak (1998) who offer a critique of Knowledge Management practices, and Hansen, Norhia et. al. (1999) who identify contrasting practices in different types of consulting organisation. However, even in these cases the principles are generalised across industries. There are also important research contributions such as the work of Nonaka and Takeuchi (1995), and links to earlier literature (Butterworth-Heinemann). However, these are the exception.

Given the novelty and the complexity of the issues involved it is not surprising that the literature is like this. Such characteristics demonstrate a strength and an opportunity. The strength is in the close ties that the field has to industrial practice, and the opportunities in the scope for developing a more rigorous and coherent empirical and theoretical basis.

## **2.3 Knowledge Management as historical development.**

A social perspective enables us to follow the factors leading to the development of and popularising of the term. For instance Debra Amidon (1997) has illustrated the genesis of Knowledge Management, identifying the contribution of a combination of Asian, US and European forces, involving interests in artificial intelligence, learning organisation, innovation and technology. Other important factors are the dramatic success of knowledge-based initiatives by some major international corporations such as Shell, BP (Prokesh 1997), Hewlett-Packard (Sieloff 1999), 3M, Johnson & Johnson and a variety of other organisations (O'Dell and Grayson 1998:p8, Keeble 1999). The identification and popularisation of these cases have been principally by consultants, with a resulting growth in industry initiatives and consulting practices. There is, however, general agreement that the major underlying drive is the change in nature of the economy from being product based to being more knowledge based (Stewart 1997; Quinn 1992). The result has been a virtual avalanche of activity

over a wide range of organisations. Academics, in general, have been responding somewhat belatedly, despite their participation in many of the contributing disciplines. This situation reflects, perhaps, the fragmentation of much academic study.

However, while the increasing prominence of knowledge in the economy seems almost self evident, it can hardly be argued that the importance of knowledge is new - knowledge has always been a significant part of the economy and society in general. Many of the cited practices in the Knowledge Management literature go back many decades, and for some organisations, (e.g. Hewlett-Packard and Johnson & Johnson) the practices long predate any discussions of a shift to knowledge-based economies. Also, many longstanding institutions and services such as universities, professional practices, government, consultancies and even churches can be considered as essentially knowledge-based. Yet, many prominent current organisation books (Handy 1993, Clarke and Clegg 1998) fail to identify knowledge, or even information as core organisational elements. More surprisingly, many of the major management consultancies have only recently addressed the management of their own knowledge. Such anomalies require substantially deeper study and analysis to understand the role that Knowledge Management plays in the broader conceptualising of the organisation.

Analysis of the development of Knowledge Management and its relationship to other organisational thought provides a basis for anticipating the future of the field. One can address issues such as the way that the fundamental economic changes and business requirements will relate to the way that the field is perceived. Will "Knowledge Management" become passé and be replaced by other, possibly highly fragmented sets of concepts, or will the diverse set of disciplines and interests find sufficient common language to maintain the coherence required to give the term meaning? What can we learn from other management 'fads'?

It can be seen then that the social dimensions of the phenomenon of Knowledge Management are complex and significant and there are many questions to be answered. Further, social perspectives also contribute to a number of key issues related to the concepts involved in Knowledge Management.

### **3 Issues in Knowledge Management**

#### **3.1 A knowledge perspective of the organisation.**

Perhaps the single dominant contribution of Knowledge Management is a perspective of the organisation in which knowledge, in all its diverse forms, is the central organising concept. While there have been a number of approaches to analysing aspects of information and knowledge in organisations (e.g. data models to learning organisations), never before have there been such widespread attempts to bring together such a variety of perspectives on knowledge as key contributors to organisational success. Knowledge Management draws on a broad range of established disciplines, most of which have traditionally been quite philosophically removed from each other. Integrating these effectively is still a major challenge, and metaphors which are capable of encompassing this scope do not yet exist. Thus effective communication of the breadth of the topic is very difficult.

The ramifications of the Knowledge Management perspective are wide-ranging, having implications for management styles and structures and organising systems. What does it mean for accounting, for instance, which currently is the principal means of representing value in organisations. Knowledge does not conform to the arithmetical framework on which accounting is based. Can we make knowledge conform to this framework, or do we need a very different approach to handling such assets? Further, there is a dichotomy between the view of knowledge as an object, thus definable and manageable as conventional assets, and as a process and skill, and thus implicit in the competence and commitment of staff, requiring very different management approaches.

#### **3.2 Human and Social Dimensions**

Knowledge Management writing places great emphasis on social processes such as personal communication, construction of personal knowing and cultures of sharing and trust.(Martiny 1998; Ring 1999) Such issues have substantial implications for management styles and systems, and organisational structure in terms of networks, alliances and communities of practice (Wenger 1998). While some of these issues have been addressed in

organisational culture literature in the past (McGregor D. 1960, Walton R.E. 1885), seldom have they been so convincingly related to strategic issues of organisational effectiveness.

Central to the human focus is the recognition of tacit and unstructured knowledge as critical contributors to organisational effectiveness. While these factors have also been previously recognised (Gwynne 1998), their breadth and significance has not generally been emphasised. Some writers limit the concept of knowledge to the tacit (Miller 1999) but others prefer to limit knowledge to the explicit arena, considering tacit knowledge too “metaphysical” (Davis 1998).

The importance of these factors for Knowledge Management have clearly been demonstrated in the many case studies. However, analysis of their characteristics, their relationships with other organisational factors and the way that they are influenced have as yet been only very superficially dealt with. There are complex dilemmas relating to the impact of financial incentives on the culture of sharing, the approach to ‘capturing’ implicit knowledge resulting in “stripmining human brains” (Ring 1999), and instrumental personal strategies (Stewart 1997)p91 undermining trust.

### **3.3 Technology**

Alongside the emphasis on social perspectives is a parallel emphasis on technology, with some seeing technology as one of the primary drivers for Knowledge Management. Prominent technologies include various types of data bases, inter- or intra-nets, groupware and decision support systems. While a number of writers strongly emphasise the subservient role of technology (Fahey and Prusak 1998), its prominence has grown to dominate many of the conferences and publications. McElroy (McElroy M. 1999) of IBM Consulting recently highlighted this development, concluding that “by continuing to promote that kind of narrow, technology-centred brand of thinking, the nascent field of Knowledge Management places its own credibility at risk”. He predicted a 'second generation' of Knowledge Management which would correct these deficiencies. Ironically, these solutions emphasise the same understanding of knowledge and the human and social factors that characterise earlier writings.

While such an overemphasis on technology is unfortunate, it is not at all surprising when one considers the driving forces. There is a wide range of expertise in the management of technology, much of it already employed within organisations, and many aggressive companies providing technically oriented systems or services. Further, technology has a substantial element of tangibility and specificity which makes it relatively easy to identify some sort of return, however illusory, for expenditures. Against that is the rather limited array of expertise and technologies for the more subtle organisational and cultural changes which many recognise as being central to Knowledge Management effectiveness.

A comparison with experience in the management of information is instructive. It took over thirty years of widespread promises, hype and investment before there was effective recognition that much of the investment in information technology was wasted (Schrage M. 1997). Characteristic of this period was an extensive over-emphasis on technology and formal structures of information, with insufficient recognition of the social dynamics (Davenport 1994). With this record, it seems that a continuing over-emphasis on technology is likely to continue and yet continue to be counterproductive. One of the positive indications are that many of the developing Knowledge Management leadership, the Chief Knowledge Officers (Earl and Scott 1999), come more from a corporate rather than a IT background. This is a distinctive difference from their predecessors the Chief Information Officers. Whether this shift will be adequate to redress the imbalance remains to be seen.

Thus such technological dominance is likely to persist, at least in some section in Western industry. In Japan, in contrast, there appears to be a rather different organisational ethos with a much stronger organisational and human awareness (Nonaka et al. 1998).

### **3.4 Measurement**

Measurement is also a highly controversial topic. Some writers place measurement central to effective management (Sullivan 1998) and much work has been carried out to establish measurement systems (Sveiby 1997:p198, Edvinsson and Malone 1997:p179). Other writers (Fahey and Prusak 1998) believe that attempting to manage knowledge is counterproductive, and programs need to focus on business outcome measures instead.

Measurement is a complex area with a variety of uses having very different requirements. To date measures appear to be highly complex and problematic, though undoubtedly can be improved. However, whether the effort required by developers and implementors will lead to effective management structures, or divert attention from more productive pursuits, remains in dispute. At a broader level the discussion on explicit measures used to tout the effectiveness of Knowledge Management practices need to be more clearly elaborated.

### **3.5 Top Management**

Many writers in Knowledge Management emphasise the central role of top management, not only in their commitment to programs, but also in their understanding and participation in the processes involved. The rationale arises from the close connection between Knowledge Management and corporate strategy (Hansen et al. 1999) and experience in the classic case studies. However, the experience of practitioners suggest that the behaviour of the majority of managers is more problematic. A major task faced by many proposers of programs is that of convincing top management of their value. In addressing this, however, a basic dilemmas can arise. Knowledge Management may require substantial changes in management principles and styles, for instance, shifting from emphasis on control to support (Mintzberg 1998; Amabile 1998). An effective appeal needs to be work within management's current operating framework, thus re-enforcing that framework. Thus, an appeal addressed to a control orientated management may conflict with the essence of Knowledge Management. For instance, terms such a "capital" and "asset" represent instrumental and managerial mindsets, which may conflict with the sophistication and sensitivity required of a Knowledge Management culture. A rather different problems is presented by the manager responding with naive enthusiasm, ignoring the complex of cultural and organisational issues involved.

This issue of managerial competence needs to be put on the agenda in establishing the framework for effective Knowledge Management, a lesson confirmed by experience in information technology (Davenport 1997:p181) and TQM programs (Grant and Krishnan 1994).

### **3.6 Impact on Professions**

Knowledge Management is having a significant impact on a number of professions, most notably the generation of a new position - the Chief Knowledge Officer (CKO) and other knowledge positions (Earl and Scott 1999). While the permanency of such a position is in question, it seems to be a major component of many Knowledge Management initiatives. Another impact is on the various information professionals, most particularly in library and record management. These groups have often had little status, but they are some of the few people who have an overview of much of the unstructured, qualitative information in the organisation. Significant opportunities exist to exploit those skills more effectively in the interests of effective Knowledge Management (Broadbent 1997; Marshall 1997), requiring significant expansion of their perspectives. There are also substantial implications for the technology-based information professionals (systems analysts, data-base managers, network manager, information resource managers) and the more specialised information professionals (accountants, business and market analysts etc) in terms of their relationships with each other, and their contribution to Knowledge Management processes (Davenport 1997:p108). Knowledge Management opens up substantial opportunities for all of these professions to expand into the new areas, but also risks destructive competition. Such developments will provide major challenges both for individual professionals and their professional societies.

### **3.6 Organisational context of Knowledge Management.**

To date, Knowledge Management has grown out of and been applied principally to organisations that are large, often multi-national organisations operating in highly competitive environments. In transferring these lessons to other types of organisation, one needs to consider the difference in social context. Perhaps the most significant would be the transfer to Small and Medium Enterprises (SMEs), a sector which accounts for well over half of the economy but which receives very little attention in management analysis. Currently the changes driven by technologies such as electronic commerce are presenting SMEs with great challenges, for which their understanding of their knowledge resources would be critical. However, they have a culture of individualistic pragmatism in which theory is foreign and even the word 'innovation' can be alienating (Stroeken and Coumans

1998). Also the difference in organisational structure would require very different knowledge processes. For instance, some of the more substantial gains may be achieved through cooperation between organisations in competition with each other.

The potential of Knowledge Management concepts contributing to other types of organisations could be explored, including non profit organisations, cultural institutions such as libraries and museums, public services, health services, political organisations, universities and the community in general. There are many ways in which local intellectual capabilities could be used more effectively, for instance, in addressing local problems, and ensuring the communications revolution does serve the community.

#### **4 The Contribution of Social Sciences**

Despite the identification of a wide range of contributions to the field of Knowledge Management, there are other disciplines in the social sciences which have the potential of further enriching it and expanding the range of capabilities. Such areas include:

- Information Sciences: analysing of the role of information and knowledge at the level of the individual, the society and the organisation,
- Cultural Studies: enriching our understanding of culture and how it is developed,
- Philosophy: demonstrating the wealth of ways that people think and come to terms with their worlds and
- Communication: understanding the communication of knowledge.

While some of these disciplines have been drawn upon (e.g. Polanyi (Hendriks and Vriens 1999; Sveiby 1997:p29), there is much more territory to be explored. We illustrate the potential by expanding on information science.

##### **4.1 Information Sciences**

Information sciences have long been concerned with the developing role of information in society, involving the concept of the "information society". This analysis is typified by Brookes (1980:p131) Heilprin (1989), Wersig (1990) and Keene (in Macrae 1998), exploring the proliferation of information with the problems associated. This is supported by information literature going back to the 70s. These authors developed conceptualisation from information as an object, to information as process and information as knowledge. They discussed the "the age of the mind", placing emphasis on the role of "thinking", "knowing", "intellectual capital", "cognition" and "understanding". Brookes, in particular, focussed on a person's internal knowledge structure and saw the process of using information as one of information interacting with and modifying the existing structure. He thus presents human knowledge as a dynamic, ever changing entity, highlighting the value of human thinking.

Underpinning this notion is a rich and diverse literature that focuses on people as information consumers and users. This information user behaviour research can underpin Knowledge Management as a field of practice in a variety of ways: understanding of information needs, approaches to needs analysis, approaches to knowledge and information identification, information seeking behaviours, patterns of information utilisation, as well as an understanding of the contextual factors that predict information seeking and utilisation. The need for a better understanding of these areas are now being recognised (Sieloff 1999).

The three concepts of information collectively present a holistic view of the professional role of information workers:

- Information-as-thing: the acquisition, organisation, control and retrieval of information sources; the provision of information services: information management.
- Information-as-process: the facilitation of the intellectual processing of information: connecting with, interacting with, and utilising information: the sharing and educative role, centring on developing information and critical literacies.

- Information-as-knowledge: human knowledge production: the explication of the human knowledge network in an organisation, valuing it, accessing it and utilising it within the organisation: i.e. Knowledge Management. (Machlup 1980)

The broader arena of knowledge representation also provides a strong theoretical foundation for considerations of the knowledge dimension of Knowledge Management. Conceptual issues include: what is knowledge, how is knowledge structured in the mind, how is knowledge represented, how can knowledge be elicited, acquired and presented? A considerable amount has been written in many disciplines to address these questions.

## 5 Conclusion

It seems clear that the processes of working through the implications Knowledge Management will be long and complex, with much uncertainty in the way that the multitude of disciplines, professions and commercial interests will evolve and interact, and drive the application and understanding of the area. It is a large and complex area, but the following points stand out:

- The perspective of Knowledge Management as a social dynamic is vital for understanding its overall development.
- There is considerable scope for enhancing the research and literature base in Knowledge Management.
- We need to recognise and analyse the many dilemmas in Knowledge Management program styles and social implications.
- We need to understand the impact on professionals and guide their development.
- The value of Social Science disciplines.
- The role of Information Science as a foundation discipline.

Thus, in conjunction with the technical, managerial and organisational disciplines contributing to Knowledge Management, Social Sciences, and Information Science in particular, have major roles to play.

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