Knowledge Management and the colonization of knowledge

Jacky Swan**
Email: J.A.Swan@warwick.ac.uk
Tel: (+) 44 24 76 524271
Fax: (+) 44 24 76 524656

Maxine Robertson
Emails irobmr@wbs.warwick.ac.uk

Mike Bresnen
Email: irobmb@wbs.warwick.ac.uk

All at: Warwick Business School,
University of Warwick,
Coventry,
CV4 7AL,
UK

** Main Contact

Submitted to the Dissemination of Management Knowledge Stream
CMS Conference July 11-13th 2001
Knowledge Management and the Colonization of knowledge

Abstract
Interest in Knowledge Management (herein ‘KM’) has soared in the last few years. Despite what might be said about the feasibility or robustness of the idea, undoubtedly one of its astounding ‘successes’ is its heated diffusion among both academic and practitioner communities. This diffusion, together with its popularity among major consultancies suggest that it has the hallmarks of a management fashion, and is likely to disappear as quickly as it arrived. Indeed, the data we present in this paper indicate that this is likely to be the case. As such KM could be dismissed as not worthy of any serious investigation because its effects (if indeed there are any) will be short-lived. However, management fashions are arguably worthy of investigation in their own right. Fashions have symbolic or sign value - flagging up some organizational concerns as being more pressing or worthy of management attention at certain times than others. They also draw attention to, and legitimate the status and expertise of, those who are seen as being able to deal with those pressing problems. We argue therefore that the fashionization of ideas needs to be understood in relational terms. That is it comprises multiple professional networks (encompassing practitioners and suppliers) that seek to compete for and defend their claims to knowledge in relation to other professional groups in ways that relate to the activities and practices they are actually involved with in organizations. Ironically, a consequence of the colonization by professional groups is that ‘KM’, when applied in organizations, could become an example of the very problems that it seeks to address. Thus, adopting a broad perspective on knowledge as socially constructed ‘KM’ itself is found to be an interesting example of the social construction of knowledge with the result here being that knowledge relevant to ‘KM’ is both dispersed and disintegrated.

Introduction
Although knowledge per se has long been recognized as important within organizations, the focus on Knowledge Management (herein ‘KM’) is relatively recent. Interest in ‘KM’ has soared in the last few years with articles and references to the topic growing exponentially (Scarborough et al., 1999). Despite what might be said about the feasibility or robustness of the idea, undoubtedly one of its astounding successes is its heated diffusion among both academic and practitioner communities. This heightened diffusion, together with its popularity among major consultancies in North America and Europe (e.g. IBM’s ‘Institute of Knowledge Management’), suggest that ‘KM’ has the hallmarks of a management fad or fashion, likely to disappear as quickly as it arrived. Indeed, the data we present in this paper indicate that this is likely to be the case. As such, ‘KM’ could be dismissed as not worthy of any serious investigation because its effects on practice (if indeed there are any) will be short-lived. However, management fashions are arguably worthy of investigation in their own right, for example, as powerful rhetorics that shape management understandings and practices (Abrahamson, 1996). Fashions have symbolic or sign value - flagging up some organizational concerns as being more pressing or worthy of management attention at certain times than others. They also draw attention to, and legitimate the status and expertise of, those who are seen as being able to deal with these pressing problems. According to this logic, the ‘fashionization’ of ideas has
direct and important implications for organizational practice. Indeed the fashionization of ideas is a part of organizational practice, reflecting the various strategies enacted to legitimate certain kinds of organizational activity among occupational and professional groups (Hardy et al., 1998). This paper explores and explains this fashionization process and its implications for practice using the particular example of KM.

The literatures on innovation diffusion and, more recently, management fashion are an obvious place to start when attempting to explain the spread and impact of fashionable ideas and inform the research presented here. The diffusion literature, influenced heavily by communication perspectives, focuses on explaining rates of adoption of new ideas and the factors that influence the spread of ideas from suppliers to potential adopters via communication channels, or networks. In contrast, the literature on management fashion, informed by institutional theory, has focused on the roles and discursive strategies of fashion setters (e.g. consultants, gurus, business schools) in the development of persuasive management ideas or ‘rhetorics’ (Kieser, 1997; Abrahamson, 1996; Clark, 1995). These strategies are used to explain the cycling of management concepts. These literatures have in common an interest in explaining macro patterns of the diffusion of new ideas (or old ideas repackaged). They also have a common focus on the role of the supply side (consultants, diffusion agents, gurus, etc.) in creating and transmitting ideas through social and institutionally embedded diffusion networks.

Such approaches highlight the importance of the institutional context in which new ideas are communicated and diffused. In particular, they note the importance of understanding diffusion in terms of the legitimization of particular ideas as ‘best’ practice through institutionally embedded social networks and professional groups (King et al., 1994). However they often fall short of understanding the social, political (relational) processes that underpin and shape the knowledge and ideas diffused through such networks. Being essentially broadcaster-receiver models, these theories remain relatively silent, for example, on the role of ‘receivers’ (e.g. management groups) in the demand and (re)construction of ideas (Clark, 1987). In other words, whilst they acknowledge the social nature of the diffusion of ideas (through institutionally embedded social networks), they mostly fail to comment on the socially constructed nature of the ideas themselves among groups with interests in their application. This paper explores the journey of the idea(s) and discourse(s) of ‘KM’ focusing in particular, then, on the interplay among institutionally embedded networks of diffusion (and consumption), the shaping and appropriation of the idea itself, and its relation to organizational practice.

The argument is structured as follows. First we overview relevant literature on the diffusion of ideas, including in particular that on management fashion, and establish ‘KM’s credentials as a management fashion. Next we report research (ongoing) that is analyzing the evolution of ‘KM’, in order to explore further the links between networking relations and the journey of ideas. This analysis suggests that the ‘success’ of fashionization of ‘KM’ can be understood, at least in part, in terms of the

---

1 In this paper we use the term ‘professional’ inclusively to refer to those groups working within specialised knowledge domains who use institutionalised mechanisms (such as professional associations, qualifications, specialist texts, societies etc.) to promote and control knowledge within their given domain (Abbot, 1988; Freidson, 1986).
appropriation and colonization of the ‘KM’ discourse by particular professional communities – in this case those comprising Information Technology (IT) and Information Systems (IS) specialists. However, we also show how other professional groups (e.g. HR, Accounting, Artificial Intelligence) have attempted, partly as a reaction to the IT/IS colonization of the idea, to construct and recast ‘KM’ in discursive terms that better legitimate their own organizational roles and practices. From this we argue that the fashionization of ideas needs to be understood in relational terms. That is, it comprises multiple professional networks (encompassing consumers/users and suppliers) that seek to compete for and defend their claims to knowledge in relation to other professional groups in ways that relate to the activities and practices they are actually involved with in organizations.

Finally we turn to the implications of this fashionization process for the practice of ‘KM’. Ironically, a consequence of the colonization by professional groups is that ‘KM’, when applied in organizations, could become an example of the very problems that it seeks to address. These concern the difficulties of developing, sharing, integrating and re-cycling knowledge that is increasingly distributed across organizational, occupational and professional boundaries (Prusak, 1997; Tsoukas, 1996). Thus, adopting a broad perspective on knowledge as socially constructed (c.f. Spender, 1996; Blackler, 1995; Pan and Scarbrough, 1998), ‘KM’ itself is found to be an interesting example of the social construction of knowledge, with the result being that knowledge relevant to ‘KM’ is both dispersed and disintegrated. The scare quotes around the term used in this paper are significant, as a reminder that the idea itself has different interpretations and meanings among the different social groups involved in its diffusion and consumption. These difficulties in practicing the idea, arising from the selective appropriation and stylizing of ‘KM’ may help to explain its ultimate fall from grace as a management fashion.

Theoretical Background
In explaining the fashionization of ‘KM’, it is useful to turn initially to the now large body of literature on innovation diffusion. This literature clearly has important things to say about the journey of ideas, but is sometimes forgotten in the light of more recent (and more fashionable) research on management fashion. Diffusion theories and research attempts to explain why it is that some ‘new’ ideas (that is, ideas that are new to the adopter) diffuse extensively whereas others fail to diffuse at all (compare, for example, the diffusion of the Qwerty and Dvorak keyboards – Rogers, 1983). Studies of innovation diffusion (e.g. Rogers, 1962; 1983; 1995; Clark, 1987; Davies, 1979) note several important points. First, ideas are subject to ‘bandwagon’ effects whereby an increase in the number of adopters generates stronger pressures for further diffusion. Hence diffusion is often found to follow a typical ‘s-shaped’ diffusion curve. Second, explaining diffusion in terms of a rational-efficiency model, which assumes that those ideas that are beneficial to the user in terms of efficiency gains will diffuse more rapidly, is inadequate (Rogers, 1995). Some, apparently very efficient, innovations (for example, the vitamin C cure for scurvy in the 17th Century) fail to diffuse at all, at least when first introduced (Abrahamson and Rosenkopf, 1997). And, some innovations diffuse rapidly despite problems being ‘obvious’ early on (for example, the diffusion of new technologies such as MRP2 – Swan and Newell, 1999). Third, and following on from this, social networks that link individuals and organizations through which new ideas are channeled are crucial in influencing the
rate of adoption of new ideas within and across dispersed communities (Abrahamson and Rosenkopf, 1997; Aldrich and von Glinow, 1992). Fourth, boundaries within and across networks (for example, at regional, national, occupational or professional junctures) can limit diffusion (Rogers, 1983; Clark, 2000). Fifth, key individuals and groups (e.g., change agents and media) play an active role in influencing information flows within and across social networks. Finally, as innovations are diffused and applied in different social (e.g., institutional or national) contexts, the ideas themselves may change (hence Rogers’, notion of ‘reinvention’ and Clark’s ‘pivotal modifications’). This last point is important, albeit not greatly developed in diffusion research, because it acknowledges possibilities for the idea itself to be appropriated and reconstituted through its lifecycle. Thus studies on innovation diffusion highlight, importantly, the role of social structure (i.e., the structure of social communication networks) as well as social agency (i.e., the role of influential media, change agents or opinion leaders) in the diffusion of new ideas (or old ideas repackaged) such as ‘KM’.

That said, early models of diffusion tend also to focus on how information about the efficiency (perceived costs, benefits and profitability) of an idea influences the extent of its diffusion (Davies, 1979). For example, Rogers (1983) notes how information relating to the perceived benefits of the innovation itself (e.g., its relative advantage, its trialability, its observability) is important in explaining diffusion. The bandwagon effect, then, is an informational one. However, with many innovations estimates of benefits and profitability are uncertain and the nature of the idea itself is often ambiguous. This is especially true of new managerial and organizational innovations such as ‘TQM’, ‘BPR’, ‘ERP’ and, of course, ‘KM’. The benefits of these kinds of innovation are uncertain, subjective and ambiguous and the ideas themselves are fuzzily defined (Clark and Staunton, 1989). Indeed, it is precisely this ambiguity that gives such ideas the possibility of wide appeal and purchase as management fashions (Clark and Salaman, 1992). Diffusion theorists accommodate such examples by arguing that, where information about an innovation is ambiguous, potential adopters just need to learn more about it in order to assess its potential benefits more accurately. As more adopters adopt, more information is generated, and this learning can occur which, if in a positive direction, results in the classic diffusion curve and bandwagon effect. This explanation may be useful for explaining the diffusion of ideas where ambiguities about the innovation are resolved through use as the benefits become clear (such as Rogers’ classic accounts of the diffusion of disease resistant seeds). However, they fail to explain why it is that ideas that show themselves to be inefficient, or remain dubious in terms of benefits, or ideas that remain inherently ambiguous (such as ‘BPR’), also become popular (Abrahamson, 1996; Tinaikar et al, 1995).

To explain such diffusion, fashion-setting theories appear to offer more promise. These explain innovation diffusion in terms of a social rather than an informational bandwagon effect, whereby information about the adoption and adopters of the innovation, rather than information about innovation per se, creates social pressures leading to further adoption. So, for example, it is argued that firms adopt new managerial ideologies, practices and discourses in order to retain their legitimacy within their particular and evolving organizational field rather than for reasons tied to efficiency (Meyer and Rowan, 1977). Thus diffusion is assumed to occur through the kinds of pressures for isomorphism (in particular, mimetic and normative) outlined by Di Maggio and Powell (1990). New ideas are, it is claimed, selectively favoured by
social communities at certain points in time as legitimate forms of ‘best’ practice, the paradox for innovation being here that diffusion is more rapid but the range of ideas being diffused is at the same time narrowed. Diffusion patterns are represented by a bell-shaped curve explained in terms of rapid popularity encouraged by the discursive practices of fashion setters who are attuned to felt performance gaps in industry, followed by frustration with ideas during implementation that eventually leads to their demise (Abrahamson, 1996). More recently, fashion perspectives have attempted to explain the co-evolution of concepts, as new solutions follow (and are claimed to fill) the performance gaps left by previous solutions (Abrahamson and Rosenkopf, 1998).

As can be seen, fashion-setting perspectives may offer more promise than traditional diffusion perspectives for explaining the expeditious diffusion of managerial ideas and discourses such as ‘KM’ that are characteristically ambiguous. They are also useful in highlighting the role of meso-level institutional networks in innovation diffusion. In doing this, they emphasise the context-specificity of the diffusion process, observing that diffusion patterns may differ across national and institutional contexts (Abrahamson, 1996). In support, some of our earlier work, for example, noted the importance of professional institutions and networks in shaping the diffusion of new production control technologies to manufacturing firms in Europe and North America (Swan and Newell, 1999). However, a criticism is that diffusion (including fashion setting) theories tend to be limited in terms of their treatment of social network influences on diffusion (Abrahamson, and Rosenkopf, 1997). In short, they assume that all potential adopters within a broad institutional field (e.g. sector or nation) experience similar information and pressures (either informational or social) to adopt an idea. In other words, diffusion is assumed to occur in a relatively even or uniform way within an institutional domain. According to Abrahamson and Rosenkopf (1997) this under-emphasizes the patchiness or unevenness of the diffusion process and the agency of particular social actors and networks in promoting certain ideas. In explaining this, they argue, it is important to understand how particular networks play a role in actively channeling information so that different groups of adopters experience bandwagon pressures of differing strength.

This criticism about the disregard of social networks adds (albeit implicitly) a political dimension to diffusion - a closer recognition that management ideas or ‘best practice’ rhetorics are promoted selectively by those social groups who have vested interests in their adoption and who penetrate social networks. For example, in the diffusion of production control technologies, the MRP2 design template was promoted vigorously and selectively in the US and UK by consultants (Oliver Wight - Wilson et al, 1994) and IT suppliers (IBM). These agents used institutionalised social networks such as those provided by operations management associations as indirect routes for marketing solutions to practitioners in manufacturing industry. For example, they authored much of the material published in the associations’ journals and this material publicised the benefits of MRP2 technology. However, this did not occur to the same extent across different institutional contexts (Swan and Newell, 1999). This emphasises the importance of active fashion setters (consultants, gurus, IT suppliers, professional groups and so forth) in packaging and commodifying management ideas about ‘best practice’.

Other writers on management fashion make observations about the characteristics that an idea needs to incorporate (via the rhetorical strategies of suppliers) in order to
become a candidate for fashion. These argue that ambiguity coupled with apparent simplicity and a ‘must do’ imperative (or you will undoubtedly fail) are the perfect ingredients for the diffusion of a new idea (Clark and Salaman, 1996; Kieser, 1997; Guest, 1992). This is because they permit wide appeal - hence the notion of a universally applicable ‘technical fix’ - and at the same time provide a continued role for the fashion setter in resolving ambiguity (but not too much). It is easy to see, then, how management ideas and practices such as ‘BPR’ or ‘KM’ have these ‘best seller’ ingredients. Theories on management fashion appear, then, to offer a useful lens through which to explore and explain the journey of the idea of ‘KM’. However, focusing as they do on institutional structures, they are relatively limited in terms of their treatment of processes through which social network influences on the diffusion of ideas are played out.

A further limitation of diffusion and fashion perspectives is that they over-emphasize the stability of the idea being diffused. The ‘wave’ metaphor in studies of management fashion, or the s-shaped curve in classic diffusion studies, clearly suggests a single idea that rises, crescends and crashes to leave space for another (probably related) idea to take its place (Abrahamson and Fairchild, 1999). However, research from the social constructivist tradition notes that new ideas have ‘interpretative flexibility’ (Bijker et al, 1990). As such, they are appropriated and (re)configured selectively by different social groups with different interests in their use (Clark and Staunton, 1989). Indeed, it is this notion of interpretative flexibility that lies behind the advantages, in fashion terms, of ambiguity. Thus while fashion-setting and diffusion perspectives note the importance of (institutionally-embedded) social relations in explaining the journey of ideas, they fail to examine the socially constructed nature of the idea itself, treating the discursive practices around the idea itself as relatively homogenous.

One reason for this neglect of the idea is because of the focus in diffusion and fashion setting research on macro-diffusion patterns. For example, the evidence in diffusion research is in terms of rates of adoption, whilst the evidence for fashion perspectives is usually in terms of tracking hits or citations in published texts (Abrahamson and Rosenkopf, 1997). These macro, quantitative measures are insensitive to the quality and content of the idea being diffused. Another reason is because of the focus in diffusion and management fashion perspectives on the supply and suppliers of ideas (e.g. diffusion agents, fashion setters). Diffusion and management fashion perspectives are essentially broadcaster-receiver models - they tend to make a tight but artificial boundary between the production/supply of knowledge and its consumption/demand, focusing on the former. These approaches are mostly silent, then, on the ways in which the ideas are (re)constituted through the social groups that actually perpetrate, use and apply them for various purposes. Moreover, these approaches tend to be ‘entitative’ in their treatment of new ideas or management rhetorics and discourses. They treat ‘the fashion’ (Abrahamson, 1996) or ‘the thing’ being diffused (e.g. the innovation – Rogers, 1995) as a single, uniform, and relatively unchanging entity. As such, they tell us little about the ways in which new (or old) ideas are reinterpreted, transmuted, appropriated (and ultimately abandoned) by social groups and networks with interests in their production and consumption in order to reinforce, for example, their own knowledge claims and status.
A small amount of work, including some by the authors, has focused in particular on the journey of ‘KM’ (Scarbrough and Swan, 2001; Scarbrough et al, 1999; Raub et al, in press). Scarbrough et al, for example, provide an analysis of ‘KM’ as represented in articles (listed under Proquest Direct) between 1990 and 1998, while Raub et al provide a more detailed analysis of the representation of ‘KM’ in different kinds of professional journals (e.g. IT, HRM, Marketing). Both of these studies emphasise the dominance of the IT community in shaping the discourse of KM. Thus they find that ‘KM’ has been largely reinterpreted via this community as IT-based tools for knowledge capture and distribution. Further, both studies note that distinctive ‘speech communities’ have been involved in the ‘KM’ debate – communities constructed around IT/IS, HRM and general management. These communities collide and collude in the promotion of ‘KM’ as management fashion. However, these studies, focusing as they do on articles to 1998, capture only the ascendancy of ‘KM’ – they say little about its possible demise. They also say relatively little about the stances assumed by different professional networks in relation to one another with respect to particular discourses and knowledge domains, and the implications of this for the organizational practices with which they are engaged (Abbott, 1988).

The discussion that follows next extends this earlier work and draws from theoretical perspectives on diffusion – in particular the management fashion perspective – to explain the journey (rise and fall) of the idea of ‘KM’. This analyses the role of social networks in ‘KM’ diffusion - focusing in particular on those aligned with a range of professional communities - and reveals how the idea itself has been selectively appropriated and colonized via particular co-existing networks. It also explores the implications of this colonization for the practice of ideas. This suggests developments to fashion-setting explanations in terms of their treatment of the journey of ideas and in particular the demise of management fashions.

Data Sources and Methods
In keeping with earlier studies of management fashion, this research included a macro, quantitative analysis that tracked the numbers of articles on KM published over an eleven-year period (1990 to 2000). This was used to provide evidence for ‘KM’ as a management fashion. The data-source used for this, mirroring previous work, was ABI Inform (Proquest Direct – Abrahamson and Fairchild, 1999). Identifying all articles on ABI Inform that focused on ‘KM’ was not a straightforward process, however. The term ‘KM’ only became a subject term on ABI Inform in 1999. It was therefore necessary to use the search term ‘KM’ in titles and abstracts and ‘Knowledge’ and ‘Management’ as separate search terms to adequately capture all articles relating to the subject. This was because articles back in the early 1990s were often found in Artificial Intelligence journals where the term ‘Knowledge Engineering’ was used but the thrust of the articles was in fact knowledge management. In addition, approximately a further 10% of articles were identified in the years 1999 and 2000 by searching on ‘KM’ in the title rather than just relying on using it as a subject term. These articles when viewed were clearly about ‘KM’ and yet had not been classified as such on ABI Inform. These problems associated with the identification of articles relating to ‘KM’ actually serve to highlight how ambiguous the concept is and how that ambiguity has in fact endured over time. ABI Inform holds articles from just over 1500 journals currently and this number has increased over time. In conducting this search, 207 journals were identified including academic journals (that include references such as ‘Long Range Planning’) and
popular press (no references cited, such as ‘Optimum’ - after Abrahamson and Fairchild, 1999). The search revealed a total of 1122 articles on ‘KM’ over the eleven-year period.

However, just tracking numbers of articles tells us little about the ways in which the ‘KM’ discourse has actually been taken up and appropriated by different social and professional networks. To investigate this issue a combination of quantitative and qualitative analysis was used. First numbers of articles on ‘KM’ were tracked over time with reference to the different professional domains in which they appeared. Thus journals that included any reference to ‘KM’ (both academic and popular) were coded by one of the researchers according to 8 professional domains listed in Table 1. Category codings were checked for inter-rater reliability by the other researchers. Inevitably there was a small degree of overlap across categories – where there was disagreement the majority coding was used.

**INSERT TABLE 1**

This procedure provided information on which professional networks appeared to dominate the ‘KM’ discourse. However, it did not provide any clues as to how the idea itself was actually being constructed or represented via different networks. Abrahamson and Fairchild (1999), for example, note this criticism in their recent study of macro diffusion patterns. In an attempt to resolve this problem, they used software to code articles (on Quality Circles) in terms of whether the discourse was ‘emotionally charged, enthusiastic and unreasoned’ or ‘reasoned, unemotional and more qualified’, finding that the former was associated with upswings and the latter with downswings in management fashion waves. Yet, while Abrahamson and Fairchild’s analysis is useful in indicating attitudes to particular ideas (e.g. in terms of whether they were enthusiastic or not), it still assumes that the content of the idea itself is constructed in similar ways across different social and professional networks (and across time). Yet, the notion of interpretative flexibility suggests that ideas and discourses are selectively reconstructed and appropriated according to the social groups involved and the context of their use (Bijker et al, 1990). This research, then, uses data from qualitative analysis of the content of the discourse as represented in the texts of professional journals (see also Scarbrough et al, 1999; Raub et al, in press) and other literature (e.g. association reports, conference materials and educational materials). This is combined with data from ongoing interviews with key players involved in different professional networks (e.g. organizers of professional events and associations in HRM and Artificial Intelligence). The purpose of this qualitative analysis is to develop an explanation of the history and evolution of ‘KM’ and an understanding of the agendas and interests of particular professional groups in relation to others who also embrace the idea.

**Findings and Discussion**

The findings presented next begin to unravel the socio-political processes involved in the journey of ideas. First, ‘KM’s credentials as a management fashion are established. This is followed by an explanation of the diffusion process in terms of the colonization of the idea of ‘KM’ through professional networks.
KM as management fashion.
The diffusion of ‘KM’, tracked in terms of numbers of articles using the idea, is shown in Figure 1. This shows that ‘KM’ does indeed follow the classic ‘bell-shaped’ curve (or wave) depicted in connection with the management fashion cycle (Abrahamson, 1996). This pattern was hinted in our earlier work (Scarbrough and Swan, 2001) and in the study by Raub et al, (in press) but was not demonstrated because these studies only tracked diffusion to 1998, when ‘KM’ was still in its ascendancy. ‘KM’ appears, then, to have all the essential ingredients of a management fashion as noted in the fashion-setting literature. Thus the discursive practices around ‘KM’ demonstrate:

- ambiguity of the concept (Clark and Salaman, 1995 – there are numerous definitions of ‘KM’, all more or less fuzzy);
- simplicity and a ‘must do’ imperative (Kieser, 1997 – ‘KM’ is heralded as the answer to performance improvement but with little indication of what this entails);
- a hyperactive supply-side comprising all the major large consultancies together with software suppliers of KM systems (e.g. IBM’s Institute of Knowledge Management);
- the classic bell-shaped diffusion pattern (shown in Figure 1).

INSERT FIGURE 1

Together these characteristics suggest that ‘KM’ has all the qualities of a management fashion. However, they tell us relatively little about the way the idea may have been appropriated via different networks. This is analyzed next.

The Colonization of ‘KM’
The extent to which ‘KM’ (however defined) has been used in the texts of journals grouped across different professional domains in shown in Figure 2. A problem with simply comparing numbers of ‘hits’ on ‘KM’ is that the ABI Inform database lists many more journals in some professional areas than others (e.g. there are 48 IT/IS journals listed but only 16 in HRM and 2 in AI). Therefore, Figure 2 shows the absolute numbers of article s in different professional domains, together with articles weighted by numbers of journals represented. This point was not addressed in earlier research on the diffusion of fashions but is important since, when weighted, there are clear differences in terms of the relative emphasis on the idea by different professions (at least as indicated by the selective number of journals on ABI Inform).

INSERT FIGURE 2

What is clear from this analysis is that, whatever figures are used, ‘KM’ has not diffused evenly through different professional networks. The IT/IS community has clearly been dominant in the diffusion of ‘KM’. For example, of all articles listed in the 11-year period, just over 41% were written for computer or IT/IS professionals. The IT/IS profession (encompassing IT managers, IT suppliers, consultants and academics) has been an important professional patron of ‘KM’. This confirms and updates earlier research demonstrating similar emphasis on ‘KM’ among IT/IS professionals (Scarbrough and Swan, 2001; Raub et al, in press). In analysing the content of the ‘KM’ discourse, it is also clear that within this IT/IS profession the dominant interpretation of the main tasks of ‘KM’ has been about knowledge capture using planned, IT-enabled change through the introduction of tightly prescribed
(packaged) methodologies, tools and techniques. ‘KM’ is discussed, then, in terms of capturing and codifying valuable (tacit) knowledge so that this can be made explicit and therefore available more widely (i.e. codification - Hansen, 1999). Our findings suggest, then, that the broad idea of ‘KM’ has been colonized by this community, reconstructed and appropriated as the development and promotion of ‘knowledge systems’ (e.g. datawarehouses, Intranets, data mining).

This emphasis on (tools-driven) knowledge capture is particularly evident in earlier ‘KM’ articles in IT/IS journals and is also reflected in the content of many of the ‘General Management’ publications. However, our analysis also suggested a distinctive shift in the discourse from late 1998 onwards, with a backlash of criticism against ‘KM’ s emphasis on technology. Social and behavioural concerns, especially in relation to overcoming the problems of using ‘KM’ system applications, were being raised - including amongst IT/IS professionals (e.g. Alavi and Leidner, 1999).

That said, only on very rare occasions were the fundamental logic of IT as an ‘enabler’ of ‘KM’, or the underlying functionality of the systems themselves, questioned. The idea that knowledge is fundamentally a good thing and that ICTs enable ‘KM’ (if properly used by people) was pervasive.

Given the obvious strategic appeal of ‘knowledge’ over ‘information’ in the context of the ‘Knowledge Era’ (e.g. Earl, 1996), this colonization of ‘KM’ offered distinct possibilities for improving the status and strategic importance of IT/IS managers. This is reflected in written texts and conference themes: To secure a place at tomorrow’s corporate table IS managers should focus on managing and supporting 3 interrelated areas – knowledge, information and learning (Gopal, C. and Gagnon, J., 1995). The role of the Information Officer could be transformed into the Chief Knowledge Officer – a role that signaled greater strategic importance of IT/IS (Sceier, 1997). The IT/IS professional who actually understood the way people interact with technology, was clearly going to be central to ‘KM’. ‘IS plays a key leadership or support role (in KM). IS’s systematic thinking, technology know-how, and experience of working with many departments can be the perfect background for KM…the current corporate interest in KM is no passing fad (Maglitta, 1995). Hence, the demand and consumption of ‘KM’ by IS/IT practitioners, whose concerns and organizational roles it promotes, has helped to drive and construct the discourse itself. The fashionization of ‘KM’, and its transmutation into ‘KM systems’, has arguably occurred as much through the reactionary tactics of consumers as through the proactive discursive practices of fashion setters. This point is not picked up in the fashion setting literature, which separates fashion followers from fashion setters, depicting the former as mostly passive in the generation and promotion of rhetorics about management practice.

The emphasis among IT/IS professionals on the functionality of knowledge has chimed well with the concerns of general management and strategists. As Figure 2 shows (especially weighted numbers), discussions of ‘KM’ have also appeared to be pushed through these (very broadly based) professional networks. Here, discussions have been strongly grounded in the notion of ‘knowledge as a key resource’ (cf. Grant, 1996) and “knowledge as the strategic asset” in the face of competition in the next decade. Thus quotes such as “The capability to gather, leverage and use knowledge effectively will become a major source of competitive advantage in many businesses over the next few years… Success depends on a clear strategic logic” (Trussler, S, 1998) are typical. These articles encompass numerous discussions and
debates about the epistemology and ontology of knowledge (e.g. the difference between knowledge, information and data – Earl, 1996, or the individual or collective basis of knowledge - Spender, 1996; Nonaka, 1994). Again the functionality of knowledge (variously defined) as a critical resource has rarely been questioned - hence numerous (mostly anecdotal) success stories about the advantages of a strategy for managing knowledge (e.g. Davenport, 1995; Quintas et al, 1997; Hansen et al, 1999).

These findings are in keeping with earlier work that shows that IT/IS professionals and those involved more broadly with management and strategy have colluded in promoting, broadly, ‘KM’ as a legitimate management practice, specifically the development of ‘KM’ tools and methodologies (Scarbrough et al, 1999; Raub et al, in press). In an era where knowledge work and associated autonomy of workers are claimed to be critical, the idea of ‘KM’ may help to alleviate uncertainties about management’s role (Fuller, 2001). However ‘KM’ is not exclusively the domain of these groups. The analysis demonstrates that the idea has also been the subject of attention among other professional groups, including artificial intelligence experts, HRM specialists, organizational theorists, and accountancy professionals. Whilst the colonization of ‘KM’ by IT/IS and strategic management has succeeded in ensuring its popularity it has also marginalised these other professional groups from core debates (Abbot, 1988). These groups are, in turn, likely to react by attempting to reinterpret ‘KM’ in their own terms.

**Heterogeneous Discourses**

Our qualitative analysis of the content of the discourse supports the argument that heterogeneous professionals tend to reconstruct ‘KM’ in terms that resonate with their own organizational roles and concerns. These differences are caricatured in Table 2. For example, (and with exceptions of course) IT/IS professionals talk about knowledge and information capture when they discuss ‘KM’ - the main aim here is exploitation (Levinthal and March, 1993). Among this group, metaphors of digging, mining, extracting and exploiting underpin many discussions (Scarbrough et al, 1999, Fuller, 2001). In contrast, those in the domains of HRM and organization theory are much more likely to espouse the virtues of developing and building people, organizational processes and social communities rather than to advocate the use of IT – IT is peripheral rather than central to their concerns. Thus “while recent advances in technology have vastly increased information, they have not advanced understanding – perhaps the opposite (MacLachlin, 1998)… people and culture are at the heart of creating a successful knowledge-based organization” (People Management Magazine, 1998). The main aim of ‘KM’ here is to develop a context where knowledge can be created and shared freely among social groups. Key issues are to do with social processes – trust, commitment, and shared values – and the dominant metaphors are more reminiscent of those associated with the learning organization and organizational culture – i.e. of building, creating and developing cultures and communities.

In contrast (again) the discourse of ‘KM’ among AI professionals is tightly tied to knowledge representation and elicitation techniques (termed ‘Knowledge Engineering’). The AI profession views their main task, Knowledge Engineering (i.e. methods for eliciting and representing knowledge), as a methodology for developing knowledge-based systems that can then be used for ‘KM’ (i.e. exploiting knowledge
at business level - Schreiber et al, 2000). The aim, then, is to develop computer systems that simulate expertise – an advantage because experts (by definition) are in short supply. The metaphor here, then is the cyborg – the machine-come-brain with all the qualities of human judgement.

Finally, the discourse associated with ‘KM’ among accountancy professionals (where used) has been more tightly focused on the problems of measuring human and intellectual capital. Here, there has been a concern that the central and strategic importance of the accountancy profession was being threatened by the growth in the number of ‘knowledge intensive’ firms which appeared to defy normal accountancy practice. These firms were commanding large market prices (e.g. ‘dot coms’) on the basis of apparently intangible assets to do with human capital that simply could not be measured using traditional accounting techniques. “Cultivating and measuring the ‘great intangible’ of human capital is the next major challenge for both company boards and their accountants... Measuring intangibles like human capital may seem like a break with the accounting profession’s traditions but it is essential to building Britain’s sustainable economic success” (quote from the President of the ICAEW, 2000). Accountants were seeing their main area of expertise in valuing firms as being undermined and encroached by other sources of information – “as corporate valuations become the product of many information sources, accountants may find themselves competing with others to provide reliable and relevant information to help investors value a company” (Leadbetter, 2000). Here, then, ‘KM’ has been recast and, via metrics and measures for intellectual capital (if these could be developed), accountancy may reestablish its grip and relevance in the knowledge era.

INSERT TABLE 2

Professional Collaboration and Conflict
There are of course areas of overlap among these professionals in terms of their treatment of ‘KM’ – our analysis only represents the dominant position. For example, the academic journals in IS cite a growing number of articles that attempt to broaden ‘KM’ concerns with IT to encompass people and organization (e.g. Alavi and Leidner, 1997, 1999; Leonard, 1998). However, although different professional groups have often claimed to value an integrated approach to ‘KM’ - one that encompassed contributions from different specialists - only rarely have theorists and practitioners in one professional domain really gone on to engage with the central debates and concerns in others. One example of inter-professional collaboration that has had the aim of developing a more integrated approach to ‘KM’ was a limited alliance in the UK between the CIPD (HRM) and the ICAEW (Accounting) via common membership on a ‘Foresight 2000 Committee’. These professional associations, who saw their members’ interests as marginalised from the dominant discourse of ‘KM’ as technology, also saw a value in adopting the ‘KM’ constructed around notions of human and intellectual capital – but for different reasons. In the case of the CIPD, ‘KM’ has been a way of reinforcing the notion that human capital (and therefore HRM) is a firm’s main asset and of rescuing the earlier discourse of the learning organization by tying this more firmly to hard-edged strategic and business issues. In the case of ICAEW, ‘KM’ has been a way of reinforcing the importance of developing measurements of intangible assets (human capital) in order to fend off threats from other groups that were providing information relating to company pricing.
and investments. This alliance resembled the kind of temporary uniting of social
groups with different ‘logics of action’ noted by Cyert and March (1963).

That said, there have been few examples of this kind of collaborative alliance - inter-
professional conflict and territorial behaviours have been more common patterns in
shaping the discourse of ‘KM’. For example, AI professionals tended to be dismissive
of the kinds of generic software packages (one interviewee referred to these as
‘mickey-mouse’ systems) developed by those working in IT/IS. These, they would
argue are ‘merely’ about generating information and have little to do with knowledge.

“Most of these tools have been developed as part of an unstructured technological
thrust: they are more concerned with new ways of storing and communicating
information than with the actual ways in which people create, acquire and use
knowledge” (Shadbolt and Milton, 1999). Defensive behaviours have also been
apparent among HRM professionals. For example, at the 1998 European Human
Resources Conference – the year that ‘KM’ first really hit the HRM agenda - it was
noted that there was far too much emphasis on the notion that ‘KM’ had something to
do with IT. “How much of a company’s knowledge is buried inside its computer
systems – none would be a good place to start” (Johnson, 1998 – quoting guest
speaker Liam Fahey). Instead, it was argued, it was up to HR professionals to become
the “guardians of knowledge management… if HR doesn’t take up the challenge,
others will” (ibid). Thus the HRM interest in ‘KM’ appeared to be, in part, because
they saw themselves as potentially ‘losing out’ to other professions that were
advancing the ‘KM’ bandwagon.

While diffusion and fashion-setting theorists note the importance of understanding
social networks in the journey of ideas, our analysis suggests in addition that the roles
of social networks need to be understood in relational terms. The diffusion of ‘KM’,
then, needs to be understood in terms of the actions of different professional groups
that enter the ‘KM’ arena at different times and attempt to establish their priorities in
the development of the discourse in relation to the actions and priorities of other
professional groups. For example, the IS/IT community were quick to realize the
advantages of ‘KM’ in securing their strategic position. The battle-cry for ‘KM’ was
heard early among this group. The information industry is at a crossroads. It can
either seize the opportunity to leverage what it has and what it knows into a far wider
marketplace, or it can sit on its Hands and risk being sidelined by a growing army of
newer, faster moving players… (Poydner, 1996). Hence ‘KM’ has been a core theme
among IT/IS professionals (e.g. as a subject at major conferences) for around the last
6 years. Yet, it did not attract any real attention from the HRM community until
significantly later. For example, the Chartered Institute of Personnel and
Development (CIPD) - with their associated publication ‘People Management’ - did
not really show an interest in ‘KM’ as a relevant issue for their members until 1998. It
was only then that ‘KM’ appeared as a critical theme at the European HRM
conference and the CIPD commissioned research into the subject (including some of
our own). This was followed in early 1999 by the establishment of a ‘KM Steering
Committee’. Interestingly, and perhaps indicative of the faddishness of the idea, this
committee was abandoned in 2000. Similarly, it was only very recently (in 2000) that
‘KM’ became an item at the main conference for the Institute of Chartered
Accountants in England and Wales (ICAEW).
Interestingly, the idea of ‘KM’ is apparently not new to AI professionals who claim to have been working actively with core processes of managing knowledge since the early 1980s. For example, the Applied Knowledge Research Institute (AKRI) was set up at Blackburn College in 1988 to develop research in knowledge elicitation and management techniques. This group has essentially been dealing with ‘KM’ since its onset though perhaps not using the label. Also key members of the AI community in Europe have developed a methodology – CommonKads that, they claim, “covers the complete route from corporate knowledge management to knowledge analysis and engineering, all the way to knowledge-intensive design and implementation, in an integrated fashion” (Schreiber et al, 2000). This methodology is the product of a whole series of international research and application projects on knowledge engineering dating as far back as 1983. For example, the first version of this CommonKADS methodology was used as early as 1986 by the Dutch Company, Bolesian Systems (now part of Cap Gemini). It has also been applied in the US-based Carnegie Group and the Unilever Company as a standard for both knowledge-intensive systems development and ‘KM’. These projects have been supported by a host of institutional networks such as European university-industry consortia and European research funding bodies (e.g. ESPRIT). CommonKADS has also served as a baseline for systems development and research projects over many years including the European IT Programme and other national government projects. This interest in ‘KM’ has continued to preoccupy the AI community to date. This is demonstrated by a recent, widely read publication with the title ‘Knowledge Engineering and Management’ (Schreiber et al, 2000 - referred to by researchers as ‘the Bible’ on ‘KM’) and a recent influx of EPSRC funding to the tune of £7 million. Yet despite all this activity and research in the area, there was also a perception that AI had been marginalised from ‘KM’, being overshadowed in particular by those involved in IT/IS whom, it was suggested, were actually not dealing seriously with knowledge at all.

It seems, then, that ‘KM’ is no passing fad among AI professionals. Rather, these professionals see ‘KM’ as a core part of their work on knowledge engineering; although recognising that this needs to be positioned within a broader portfolio of practices to encourage experts to use the ‘KM’ systems they develop. It could be argued that, unlike other professionals, those in AI see their expertise as being defined partly in terms of ‘KM’. Indeed, without the possibility of ‘KM’, this community would lose its raison d’être – knowledge engineering would have no purpose. Thus what appears to be a passing fad among some professional groups (e.g. IT/IS) may be a more enduring concept among others who define their identity and expertise around the idea. Similarly, for example, the idea of ‘cognitive mapping’ was briefly popular among management scholars in the early 1990s yet in psychology interest in this area has endured since Tolman first coined the term in 1948. Our findings suggest, then, what counts as a fashion depends upon the particular professional networks that use the idea. That this point has not been noted in the literature on management fashions is perhaps simply an artefact of the methodologies used. The continued interest in ‘KM’ among the AI community was found through our interviews – it was not detected in quantitative measures since specialist AI journals are not well covered in Proquest (originally ABI Inform – a business information database).

**Discussion – Developing the Fashion Perspective**

This study points to three important features of ‘KM’ diffusion. First, the diffusion of ‘KM’ is patchy. The idea has been differentially embraced, discussed and interpreted
at different times by heterogeneous professional groups with different practical and political interests and agendas, partly in response to the actions of other groups. Second, particular ideas are promoted by particular professional and occupational groups because they privilege their own knowledge and interests while at the same time dispossess, or under-emphasize the knowledge and interests of others (Abbot, 1988). Third, it is clear that ‘KM’ is ambiguous. Yet ambiguity can be used in communication as an effective technique for avoiding debate, gaining acceptance and marginalising resistance (Alvesson, 1996). Thus as the idea of ‘KM’ diffuses among professional networks (of consumers), the idea itself is being transmuted and stylized. For example, the appropriation by IT/IS professionals of KM as ‘KM software’, and the relative exclusion of HR practitioners from KM practice, has led to the attempted reinterpretation of KM by the HR community as an idea more akin to the earlier Learning Organization concept. The HR community’s re-construction of KM arguably reflects its relatively marginal position within the higher echelons of management (cf. Storey, 1992). This is something that would lead them to pursue new avenues for involvement in strategy-making, hence their view of ‘KM’ as more of an opportunity than a threat.

Although the fashion-setting perspective is useful in identifying the critical role of the institutional context (professional, national) and social networks in diffusion, the limits of the fashion perspective are implied by the colonization and reinterpretation of the discourse of ‘KM’ seen here. This study demonstrates the importance for management fashions of high interpretative flexibility around new ideas such as ‘KM’ coupled with a degree of ‘rhetorical closure’ as they diffuse through social networks (Bijker et al, 1990). This point is not adequately captured in fashions perspectives which tend to assume that the idea itself is in itself unchanging (e.g. Abrahamson 1996; Abrahamson, and Rosenkopf, 1997). However, it is consistent with an analysis that depicts the diffusion process (in this case of ‘KM’) as best explained, not so much by the spread of information about the idea or its adopters in a unilateral way, but by the political actions of individuals and social groups seeking to use the idea to establish, maintain, or defend their claims to power (Drazin, 1990; Friedson, 1986). This story of ‘KM’ can be interpreted, then, as an interesting example of the social construction of knowledge via networks of producers and consumers – a point that fashion setting perspectives tend to neglect.

The colonization of knowledge relating to ‘KM’ needs to be understood in the context of broader institutional arrangements such as those surrounding professional power and career development (Lam, 1998). This is predicted by fashion setting perspectives. Despite hints that we may be shifting towards more transdisciplinary modes of knowledge production (Gibbons et al 1994), institutional structures and arrangements continue to support demarcation across professional boundaries and inter-professional competition, at least in Anglo-American societies (Abbott, 1988). For example, as the backdrop to ‘KM’ suggests, personnel professionals, organizational analysts, IT professionals and accountants each have something to contribute to ‘KM’. However, despite observations that “KM is an issue that transcends internal functions” (Mayo, 1998), these communities rarely intersect. Indeed, they more usually see themselves as in competition. In this sense, ‘KM’ forms an important part of the terrain that is contested by diverse professional groups (Abbott, 1988). Indeed, it is not inconceivable that it could be harnessed to form the
basis for a collective mobility project that leads to attempts to monopolise professional practice by one particular group or coalition of interests (Larson, 1977).

The colonization of KM demonstrated in our study therefore has important implications and paradoxical effects. On the one hand, in terms of ‘KM’ diffusion, it is highly likely that part of KM’s success has been its colonization by IT/IS professionals and its affiliation to tangible aspects of technology. This has perhaps been accelerated by proliferation of new technologies coupled with the rapid cycle time of publications and magazines in IT/IS, as well as those that more generally focus on these technologies. However, it is also the case that KM has been selectively appropriated by this community to reflect, as would be reasonably expected, their primary interests – notably concerning investment in IT and IT development. On the other hand, in terms of ‘KM’ practice, it is also likely that a narrow emphasis on IT has ultimately contributed to ‘KM’s demise. Definitions of ‘KM’ and epistemological understandings of organizational knowledge have few things in common, other than to agree that organizational knowledge is multifaceted (Spender, 1996). A corollary of this multifaceted nature of knowledge is that ‘KM’ implies a variety of management practices, including the application of IT, but also the development and reconstruction of organizational practices, languages and routines. The paradox is that, whilst the diffusion of ‘KM’ occurs within bounded professional networks (i.e. is arguably mediated by a ‘Mode 1’ logic in Gibbons’ terms), the practice of ‘KM’ suggests a need to dissolve functional and professional boundaries (i.e. to work according to a ‘Mode 2’ logic). The narrow focus on IT with the neglect of these other concerns ultimately disappoint those who have great expectations about the advantages of ‘KM’ – as was noted with earlier fads such as BPR (Davenport, 1996).

Following the logic of the fashion cycle, this disappointment and frustration has a critical role to play in the generation of yet more fashionable management techniques and practices in an attempt to correct the inevitable problems left by ‘KM’s under-emphasis of organizational and human resource issues. It is probably no co-incidence, for example, that ‘KM’ itself emerged following the problems associated with loss of expertise in organizations that were restructuring along the lines of earlier fads such as BPR. Similarly, the growing popularity of ideas around ‘communities of practice’ and ‘social capital’ (e.g. Brown and Duguid, 1998; Nahapiet and Goshal, 1998), though perhaps not as ‘catchy’ terms, can be interpreted as a backlash to some of the obvious weaknesses entailed by ‘KM’’s focus on IT. While fashion setting explanations focus on why ideas become popular, they fail to adequately explain their demise. This is because there is little attention to studying how the idea itself is (re)constructed by those may stand to benefit from its practice. In contrast, our study suggests that the selective appropriation and stylization of ideas, in this case via professional networks, may help to explain simultaneously their success in terms of diffusion and their ultimate failure in terms of practice.

**Conclusions**

This study to date suggests considerably more flexibility in the ways in which ideas are taken up than fashion-setting or diffusion perspectives would acknowledge (Clark, 2000). The pattern of differential appropriation and colonization suggests that the diffusion of ‘KM’ needs to be understood not as a single wave but in terms of multiple, but loosely coupled, social bandwagons. In short, the diffusion of KM is advanced through a range of professional groups contesting for the idea. The latter
both contest the content and control of ideas as they are implemented in firms, and react to the domination tactics of other groups. The result of their competitive interaction, however, is a signal increase in the levels of interest in KM, and at the same time an increasing stylization of the concept which renders it more acceptable to professional norms and interests. Perhaps more appropriate than the ‘wave’ metaphor is a meteorological one whereby ideas are formed, develop and break up (or transmute) amidst the fluid and dynamic interplay of zones of high and low ‘pressure’, which incorporate successive, patterned waves in the forms of active ‘fronts’ (hot, cold and occluded). Whatever the appropriate metaphor, to understand the journey of ideas through diffusion and practice it is important, to consider the heterogeneity of institutionally-embedded social networks as well as their positioning and interests in relation to one another. This suggests that it may also be important in terms of future work to consider the ways in which the playing out of ideas in practice change network relations. It is feasible, then, that new ideas may open up new spaces for networking - spaces that can be colonized by existing networks to strengthen their strategic position or create opportunities for the emergence of new alliances that then shape the journey of ideas in a continuous feedback loop.

The colonization and appropriation of ideas has important implications. First, it highlights a need in explaining the fashionization of ideas to consider the relative power and interests of different professional and occupational groups as these are played out within firms. Second (and more tentatively) it implies that as ambiguous ideas become more tightly stylized (such as KM into KM systems), they ultimately lose their broader appeal and/or become unworkable. Thus, as seen with other fashionable ideas - for instance BPR - the success of a management fashion depends on engaging with and being contested by a range of professional groups. Success depends, then, on appropriation and diffusion within professional networks. However, it follows that the conditions of fashion success may be intimately linked to the causes of failure, since the professional stylization of management fashion creates intractable conflicts of design and interpretation with other groups at the level of practice. This linkage is particularly acute in the implementation of KM, since a major part of KM’s ostensible appeal lies in the pursuit of knowledge as an organizational resource, and not as a power source for professional groups. By linking the causes of a fashion’s demise to the roots of its success, this analysis of the role of professional networks may play an important part in helping to explain the fashion cycle.

References


Cyert, RM. and March, J.G. (1963), A behavioral theory of the firm, Englewood


Johnson, M, (1988). HR looks in the mirror. HR Focus, 75(7), 304


Table 1: Journal Categories by Profession

<table>
<thead>
<tr>
<th>Professional Domain</th>
<th>Number of Journals</th>
<th>Example (Popular)</th>
<th>Example (Academic)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information Technology (IT - including Computing and Information Systems)</td>
<td>48</td>
<td>Information Week</td>
<td>Information Management Journal</td>
</tr>
<tr>
<td>Management (General but aimed specifically at Management)</td>
<td>47</td>
<td>Management Today</td>
<td>California Management Review</td>
</tr>
<tr>
<td>Human Resources Management (HRM including Personnel)</td>
<td>16</td>
<td>People Management</td>
<td>Employee Relations</td>
</tr>
<tr>
<td>Accounting</td>
<td>15</td>
<td>The Practical Accountant</td>
<td>CMA Management</td>
</tr>
<tr>
<td>Strategy</td>
<td>7</td>
<td>Strategy and Leadership</td>
<td>Strategic Management Journal</td>
</tr>
<tr>
<td>Artificial Intelligence</td>
<td>2</td>
<td>N/A</td>
<td>Decision Support Systems</td>
</tr>
<tr>
<td>Organization Theory/Organizational Behaviour (OT/OB)</td>
<td>14</td>
<td>Optimum</td>
<td>Journal of Organizational Behaviour</td>
</tr>
<tr>
<td>Other (anomalous professions not specifically management)</td>
<td>58</td>
<td>Health Forum Journal</td>
<td>Economic Development Review</td>
</tr>
</tbody>
</table>

Table 2: Dominant Discourse of 'KM' across professions

<table>
<thead>
<tr>
<th>Profession</th>
<th>Discourse of KM</th>
<th>Implications</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>IS/IT</td>
<td>Knowledge capture, codification</td>
<td>Implement IT/IS tools, methods, communication platforms</td>
<td>Computer networking technologies are providing the tools for the creation of knowledge bases, knowledge webs and knowledge systems (Bank, 1996).</td>
</tr>
<tr>
<td>Strategy/ general Mgmt</td>
<td>Developing knowledge resources</td>
<td>Implement strategy for managing knowledge</td>
<td>The most important factor in managing knowledge is the way a company organizes its units and people (Cliffe, 1988)</td>
</tr>
<tr>
<td>HRM</td>
<td>Developing human and intellectual capital</td>
<td>Develop learning organization through culture and people</td>
<td>‘KM’ is about the creation of a culture of continuous learning (Armstrong, 2000)</td>
</tr>
<tr>
<td>AI</td>
<td>Knowledge representation &amp; engineering</td>
<td>Apply knowledge technology (intelligent systems) to business problems</td>
<td>“knowledge management can be seamlessly linked to knowledge engineering” (Schreiber et al., 2000).</td>
</tr>
<tr>
<td>Accounting</td>
<td>Measuring intellectual capital</td>
<td>Develop metrics for intangible assets</td>
<td>Cultivating and measuring the ‘great intangible’ of human capital is the next major challenge for accountants (Ward, 2000)</td>
</tr>
</tbody>
</table>
Figure 1: Number of Articles on ‘Knowledge Management’ 1990-2000 (ABI Inform/Proquest)

Figure 2: Total Number of Articles by Profession (1990-2000)