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ABSTRACT

The growth of interest in all things knowledge management (KM) is exponential. Developments of products and ideas, fueled by a newly designated knowledge community, is happening at such speed that few seem to question the trends or the knowledge management systems finding favor in organizational life. A consideration of what is being presented as KM notes its remarkable similarity to the traditional features of information management (IM) redressed in appearance but perhaps not the ideal starting point to get us to the desired destination. This paper identifies these trends and develops prescriptions for the IM curricula. Most importantly it offers a critique of some of the issues that appear frequently absent in the teaching and learning of KM. Includes one table: KM curricula knowledge system (adapted from Endlar, 2000). (Contains 10 references.) (Author)

TOWARDS A KNOWLEDGE MANAGEMENT MODEL FOR THE INFORMATION MANAGEMENT CURRICULA

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ABSTRACT

The growth of interest in all things 'knowledge management' (KM) is exponential. Developments of products and ideas, fuelled by a newly designated knowledge community, is happening at such speed that few seem to question the trends or the knowledge management systems finding favour in organizational life. A consideration of what is being presented as KM notes its remarkable similarity to the traditional features of 'information management' (IM) re-dressed in appearance but perhaps not the ideal starting point to get us to the desired destination. This paper identified these trends and develops prescriptions for the IM curricula. Most importantly it offers a critique of some of the issues that appear frequently absent in the teaching and learning of KM.

INTRODUCTION

Conceptually, KM itself may not be so very different from IM for it certainly appears to have some roots in organisational learning and in the concept of learning organizations. The advent of the Learning Organization (Argyris 1982, Senge 1990, De Geus 1997) or the Learning Company (Pedlar et al 1991) appears more than merely another management theory fad that promises unattainable benefit. In a review of these literatures one of the many disciplinary perspectives is management science with its ontology of information creation, capture, storage and dissemination. A role for the IM discipline in this endeavour is self-evident as is the development of supporting organisational infrastructure based upon information technology (IT) platforms and solutions. This disciplinary interest can also be tracked through Information Systems (IS) strategy literature in which surveys have consistently identified organisational learning as a key and strategic goal for the IT function. This goal has a recurring prominence over the last two decades. More recently a significant development within these literatures is focused around the concept of KM (Ranchhod and Hackney, 2000). Whilst KM is not a new theme, with its roots traced to the ancient Greeks, the contemporary opportunities afforded through IT developments would seem to open many previously incomprehensible pedagogic opportunities. Consequently, growth in interest in KM theory and practice is illustrated through the increasing prominence of the theme in the IM curricula. The increase in conferences, products and services are also being offered in support of the KM endeavour illustrates the probability of this theme being substantial and gaining much more significance than even its current highly visible status. These increases seem to coincide with a reported decline in the publication output around organisational learning. Indeed, during the 90's that decline in journal publications corresponds with an incline in those

concerning KM. One interpretation of this might be that KM has become the current organisational learning theme. One has not replaced the other; rather they are part of the same genre. The currency of the KM theme though particularly strong and still strengthening might at some stage nonetheless be replaced by a yet more contemporary theme, though both still part of the organisational learning paradigm. Presently what we can observe is that the teaching and learning of KM is of such significance and interest that deeper pedagogic research is both warranted and worthwhile.

THE ROLE OF STUDENT INTRANETS

Intranet media designs offer support for traditional learning and, more critically, they augment the development of new ways of learning. This is to suggest that an Intranet provides the opportunity for different means of delivering information, different means of human-computer interaction and different means of creating appropriate environments for on-line learning. Clearly, there are a number of complex issues surrounding the achievement of these objectives which extend beyond a simplistic 'meet the needs of students' design. The available tools, including multimedia authoring software, Java integrated environments, common gateway interfaces, artificial intelligence, virtual reality modelling and language creation interaction techniques, all offer possible solutions. However, what is needed in this respect is a determination of the cognitive styles and preferences of the students in their interaction with an Intranet. Consequently, it may be possible to superimpose more general design principles onto the cognitive profiles of particular kinds of students. This should enable the better use of an on-line community for the realisation of an advanced learning experience (Hackney and Pagano, 2000).

Experience from KM could be viewed as a critical success factor in this respect for students who must continually learn if they are to survive in contemporary business (DeGues, 1997). Within these strategies it is clear that Intranets have a leading role for they pervade many areas of organizations and beyond to other elements of the supply chain (Miller and Dunn 1998). In particular, Intranets are increasingly expected to provide the knowledge dissemination infrastructure inter and intra organizationally, so as to support learning activities. Any comprehensive survey of the learning organization literature and practice quickly reveals the significance of KM for it is through the capturing of information and sharing of knowledge that organizations can be seen to learn (IPD, 1999). The inference is clear that for a successful teaching and learning strategy KM necessitates close attention to the issue of creating organizational knowledge and of its shared management. KM can be said to be the policies and processes through which organizations seek to create, store and disseminate organizational knowledge, and Intranets are fundamental to this endeavour (Dick and Burns, 1999). In this way the virtual environment can be understood to be a comprehensive knowledge system, as shown in Table 1.

TABLE 1
KM CURRICULA KNOWLEDGE SYSTEM (ADAPTED FROM ENDLAR, 2000)

	Teams	Technology	Learning
Trust	The building of positive team processes	Open and accessible information	Implicit knowledge made explicit through sharing of information
Conflict	Building relationships and mixing team talents	Open and instant communications for working with conflict	For deep levels of discussion and dialogue
Dialogue	A "core competency" for developing effectiveness and facilitating interaction	Enables a "higher order" of communication	Open and powerful communi-cation for moving beyond single understandings
Meetings	Helps motivate individuals while building relationships and "shared vision"	Asynchronous and synchronous meetings	Synchronised action without specific action plan
Electronic Practice Fields	Practice is performed in similar to work situations	Establishes real work environments for practice	Learning occurs through team processes without the fear of consequences
Technology Teams	Greater performance levels attained with teams using technology	Technology enables teaming processes of learning	Captured team knowledge results in learning for new team members and the organisation

Table 1
(continued)

	Teams	Technology	Learning
Virtual Teaming	Real life skills and new team skills for enhanced learning	Teaming without face-to-face contact	Continuous learning possible without waiting for next meeting
Networks	Develop team members	Enables instant access to information	Implicit knowledge made explicit through sharing of information between team
Groupware	Necessity for building relation-ships and bonding team members	Enables instant communi-cation for dealing with conflict	Needed for reaching deep levels of discussion and dialogue
Collaboration	Team vision and focus for the team	User driven technological development enhanced	Learning opportunities from failure
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Team Learning	To align and develop teams to create results by challenging assumptions	Immediate and continuous dialogue and sharing work whilst apart	Collective intelligence that is greater than the some of individual intelligence's of the team members
Knowledge	Information transformed in knowledge	Tools for collaboration for capturing and storing knowledge	Greater learning leads to more knowledge in organisation
Implicit/ Explicit knowledge	To build learning teams implicit knowledge must become explicit knowledge	Sharing of knowledge increases transfer of implicit knowledge to explicit knowledge	Implicit knowledge made explicit and shared

Contemporary applications of KM systems therefore utilize Intranet as their principal tool. As one senior KM officer of a global top-six computer company recently asserted, "Our company wide Intranet is the window on the organizations knowledge". It is through this window that our students may learn about their increasingly virtual business world.

INFORMATION MANAGEMENT VS KNOWLEDGE MANAGEMENT TEACHING

There also appears considerable confusion, both in the literature and in organisational practice, between KM and IM. The two are often considered to be the same thing though it is clear that on more precise scrutiny they

are not. If knowledge were the same as information then we would not need a different name in language to define it. Information and the data from which it is derived can be captured, stored and disseminated with relative ease and through commonly accepted practice. In effect, information is organisational history, codified and managed through information technology infrastructures amongst others. Conversely knowledge focuses not on history but on future. Knowledge creation is an outcome of human cognition that is unique to the individual and therefore inevitably influenced by phenomenology. Knowledge provides the capacity for individuals to take action, it is the 'know how' to information's 'know what'. Knowledge therefore cannot be captured in the same way as information nor managed accordingly. Indeed, knowledge cannot be managed at all, which means the term KM is regrettably misleading. Like many accepted and established labels in language KM is commercially expedient rather than accurately indicative of the endeavour itself. Even within the IM literature, knowledge is frequently positioned to follow information without the recognition that the two are in different domains, one retrospective, and the other futuristic. Understanding organisational knowledge might mean to understand how to bridge the gap between these two domains. This 'continuum' between organizational information and organizational knowledge appears previously to have received little discernable attention.

It is useful, therefore, to identify two critical curriculum issues for students of KM;

1. KM issues remain largely ambiguous or misunderstood with different organisational responses in evidence. Practice is as varied as organizations definitions. One of the few common responses, particularly amongst large organisations, appears substantial commitment in resource terms to the issue. KM products are flourishing; KM people are being appointed, sometimes at very senior levels (CKO's). Spending on KM appears to be taking an increasing proportion of IS organisational budgets. From all of these investments in time, people and systems, expected and anticipated paybacks will be substantial. Vendors offering KM solutions are likely to gain considerably in the next decade, perhaps more profitably than their clients in whose organizations their solutions will be deployed. IS strategy responses to KM appear largely to be around creating knowledge repositories (databases) and groupware applications, typically Lotus Notes and Intranets.

2. Discussion around knowledge capture, codification and dissemination too often simply mirrors the process of information management. The issue that in fact knowledge might not be capturable at all seems to be largely overlooked or ignored by many organisations. Further, that knowledge is not manageable like other organizational assets appears outside the realisation mindset of many. Distinct from the IM field, the human resource management (HRM) response to KM appears largely to be concerned with employee retention as a means of retaining knowledge. In an area of declining employment longevity and in which careers are now largely a series of consecutive steps between organisations, rather than within the same organisation, such strategy has limited and perhaps unrealistic value. Neither the IM nor the HRM functions seem to have yet developed an adequate strategic response to KM. The IPD have recently expressed this in terms of wishing KM to be perceived as an HRM issue for organisations whilst recognising the IT function is largely responsible for developing it and thus far maintaining the high ground. It appears time for new thinking around these issues, for neither IM nor HRM are likely to adequately respond to KM from their relative positions of isolation.

CONTEMPORARY CURRICULUM ISSUES

Contemporary KM feels intuitively almost a new issue; such is the interest and enthusiasm surrounding its apparent potential. KM promises opportunity not previously so well developed in organisational life. The facilitator of this opportunity is undoubtedly IT and within that, developments in communications technologies and software applications. However, the value added is predominantly to its people who learn, and use that learning to operate more effectively both as individuals and in their capacity to assist others within the organization. Consequently, within these issues, most notably organisational culture seems to make the significant difference between success and failure in KM endeavour. We can work with knowledge but not manage it, though we can to some extent manage the environment, manage the people and manage other organisational factors. In doing so we stay consistent with an aspiration to build a quality learning environment.

From teaching practice, four generic strategies can be discerned from reported KM endeavours (adapted from Prusak, 2000).

1. **Knowledge replication** i.e. banks, fast food chains, retailers e.g. Toys 'r' Us, MacDonald's, INTEL etc, all provide examples of conducting operations in precisely the same way wherever they are located world wide.

2. **Knowledge diffusion/leveragability** is about "knowing what we know, and using it". This seems to be the key strategy in most KM endeavours.

3. **Knowledge innovation,** which is concerned with knowing what comes next e.g. new products, new services, new ideas that might keep an organisation competitive.

4. **Knowledge commercialisation,** which is concerned with what does the organisation know that it can sell, i.e.. Consultancy, products and services, e.g. British Gas plc have developed KM systems initially for their own organisational needs but which they now seek to promote externally.

Of these generic strategies, knowledge diffusion appears the most prolific. However, organisations probably pursue more than one, perhaps sometimes all of these strategies simultaneously. By way of illustration a pharmaceutical company might be interested in strategies 1, 2 and 3 whilst a consulting group might focus on strategies 2 and 4. By segmenting the KM issue against differing strategic intention our curricular might develop a clearer perspective on the real contribution of KM. Strategically, we could be optimistic and feel that KM might afford our students the opportunity of acquiring competence towards competitive advantage. Realistically, we can predict with greater certainty that an inadequate teaching of KM will almost certainly leave individuals with a competitive disadvantage.

CONCLUSION

KM presents a different set of organisational challenges and appears to push the IM paradigm boundary sufficiently to require a different epistemological perspective. Participation in student group activities and events supports the articulation and use of tacit knowledge can never be captured or codified even if organisations had unlimited resources in which to make the attempt. Communities of people, networks and groups can share practice, knowledge and experience, which then become embedded in organisational routines and ultimately enculture the organisation. KM therefore may very well present new forms of organisational opportunity in the future. Taking the time to debate the more difficult aspects of KM might slow down the adoption of a KM façade. Whilst this might have short term unpopularity amongst vendors selling KM 'solutions' the long term benefits associated with breaking new ground, delivering the promise and potential of leveraging organizational knowledge, might be significantly rewarding for our students.

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