

LEARNING TO VALUE THE BARDIC TRADITION: CULTURE, COMMUNICATION AND ORGANISATIONAL KNOWLEDGE

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ABSTRACT

Recent work on organisational knowledge suggests that, in addition to cultivating the 'knowledge spiral', organisations need to focus on facilitating forms of 'knowing' which are deeply rooted in their own contexts and which reside in the communicative act itself. The implications are that organisations seeking to implement so-called 'knowledge management' systems should invest not so much in constructing knowledge repositories as in building networks of user-driven communicative exchange, using Information and Communications Technologies (ICTs) where appropriate. We use examples from a recent empirical study to illustrate the limits of 'structural' approaches to knowledge, and draw upon insights from the social anthropology literature to question the achievability of building 'knowledge communities' within organisations – a common objective of organisational 'knowledge management' strategies. Instead, we show how the accommodation of individual diversity within organisational cultures can be linked to success or failure of knowledge-related initiatives. We thus suggest several implications for any organisation seeking to maximise its ability to generate and disseminate shared knowledge.

1. THE NATURE OF KNOWLEDGE

1.1. 'Objective' and Inter-Subjective Organisational Knowledge

In *The Coming of Post-Industrial Society*, Bell proposed that knowledge could be considered as "a set of organized statements of facts or ideas, presenting a reasoned judgement or an experimental result, which is transmitted to others through some communication medium in some systematic form" (1973:175). Since then, organisations and researchers have paid considerable attention to deepening their understanding of the processes surrounding the generation and 'management' of organisational knowledge. One of the most influential among the latter has been Nonaka (1991,1994), whose 'knowledge spiral' explored the dynamics of the interrelationship between tacit and explicit knowledges between individuals and groups. Although Nonaka focused on the relationships of communication between such knowledge types (via processes of 'socialisation', 'externalisation', 'combination', and 'internalisation'), it is arguable that his view of all such knowledges as objects, able to pass between these different states, has contributed to a sense that the focus of knowledge management systems (KMS) should be to 'externalise' and 'combine' tacit forms of knowledge. Such an influence continues to be visible, for example, in Cohendet et al's recent attention to the

"codification of experience, know-how and localised tacit knowledge" (1999:239) via these processes of conversion; a similar dynamic underlies Crossan et al's (1999:523) "intuiting, interpreting, integrating, and institutionalizing".

There is increasing recognition, however, that such views place undue emphasis on the desirability of 'converting' tacit knowledge residing within individuals into explicit, codified forms that may be 'possessed' by an organisation. Whilst not underestimating the continued importance to organisations of forms of explicit, codified knowledge (such as best practice guides and templates), several recent papers have directed attention towards more emergent, processual forms of distributed organisational knowledge in seeking to explain the perceived failures of many technology-led, flagship 'knowledge management systems'. Although space constraints preclude an exhaustive survey, we provide several representative examples here.

Davenport and Prusak (2000) underline the limitations of attempts to codify knowledge, proposing that ICTs should rather point to knowledge, not contain it. Gherardi (2000:212) underlines the phenomenological concept of knowledge as *practice*, "residing neither in the head nor as a commodity". Her focus on praxis is echoed by Tsoukas and Vladimirou (2000:16), who return to Polanyi's original book (1967), credited by Nonaka for influencing his tacit/explicit spiral, and show that Polanyi's view was different in that he defined knowledge as "inevitably and irreducibly personal, since it involves personal participation (action) in its generation". Among the authors to further develop this approach of *knowing*, McDermott has provided powerful case examples of the emergent nature of knowledge, conceived as the "residue of thinking" (1999:105), which, he argues, should form the focus of KMS. In a study of the failed merger of a British and a Japanese engineering firm with radically different cultural approaches towards knowledge-as-practice, Lam (1997) underscores the socially embedded nature of knowledge and the detrimental effect this may have upon attempts at knowledge transfer. Similarly, Blackler proposes that "the appropriate unit for analysing knowledge is not an aggregate of beliefs or rules but a complex of routines, improvisations, setting conditions, and often (implicit) understandings" (1997:880). There is a sense, therefore, that those knowledge types conceived of as residing in inter-personal participation are also deeply implicated in social context. We seek to develop our understanding of this contextual nature of knowledge later in the paper.

Such distinctions between knowledge types have far-reaching implications for organisations seeking to improve their handling of knowledge, since there are major qualitative differences between the properties of knowledge conceived as object and those of knowledge conceived as residing in inter-subjective interaction. Our summary of these differences is given at Figure 1. over the page.

'Objective' knowledge	'Inter-subjective' knowledge
objective representation of reality	inter-subjectively defined reality
external object	creational state/process; historical
transferable, can be possessed	not directly transferable
normative; universal	shaped by language, from which it derives local meaning
truth	discourse
resides within individual	networked within organisation

Figure 1: Differences in properties between 'objective' and 'inter-subjective' knowledge

1.2. Significance of Different Knowledges for Organisations

Reference to Figure 1 suggests that only those types of 'objective' knowledge represented in the left hand column are likely to be suitable for capture and dissemination via ICTs (for example, the explicit knowledge residing in expert systems). The danger for organisations therefore lies in confusing those types of

knowledge which are indeed directly transferable via technology with those which are not. It is thus arguable that approaches to knowledge management (KM) founded on such a misunderstanding can be at best a misguided capital investment and at worst disastrous for intra-organisational interaction, since they replace established, localised communication structures, cultural norms and understandings with, for example, an indiscriminately applied, database-driven intranet.

The above insights on different forms of knowledge are of considerable importance to any organisation seeking to improve the generation, communication and husbandry of organisational knowledge. A similar point is made by McDermott (1999), who argues that knowledge continues to be viewed by many organisations striving to develop and implement KMS as a source of value that may be possessed and, if only the right technology can be deployed, to be internalised. Such approaches are understandable as reactions of organisations accustomed to accounting for shareholder value as they seek to define, measure and appropriate these mounting 'intangibles' into their books, but they contain built-in contradictions which cannot be solved via technology. In a knowledge-driven economy, will employees really submit to 'management' of their knowledge by the organisation? Which types of knowledge lose currency and relevance the moment they are archived? When does knowledge become 'official', and is it universally true and useful in consequence? Such issues centre around the problem that all 'objective' knowledge will always remain the subjective product of its creator(s) and does not transfer easily to others in a form which may be operationalised to the benefit of the organisation.

So how should organisations best use ICTs to facilitate the generation and sharing of 'inter-subjective' forms of knowledge? We draw below from recent empirical experience and the literature within social anthropology, to suggest that a key aim should be the generation of an inter-subjectively meaningful context, using technology-facilitated communication where (but only where) appropriate.

2. RESEARCH METHODOLOGY

We used an interpretive methodology, grounded in the belief that 'man is an animal suspended in webs of significance he himself has spun' (Geertz, 1973:5) to collect the empirical illustrations for this paper from the UK subsidiary of A1 Software, a major software development and consulting organisation. Although subjectively defined, those issues considered by individual interviewees to be important to A1's knowledge management capability are therefore treated as valid empirical objects of study.

Data collection took the form of eight semi-structured interviews lasting between one and two hours, supplemented by additional material where possible (interactive tours of A1's KMS, web-based material, technical bulletins). Observations and responses were recorded in longhand, in detailed note form. In addition, we had a valuable opportunity to present our findings at a feedback and discussion session with participants following our research.

Data analysis followed an inductive 'semi-grounded' approach, using a process of analytic induction as described by Hammersley and Atkinson (1995:234-5), where hypotheses (second-order concepts) were reformulated until a fit with the empirical material (first-order concepts) was obtained. First-order concepts related to the identification of three types of KMS deployed within the organisation and the relative degrees of success with which these had been met, as described by interviewees. As analysis of these first-order concepts revealed the existence of a pattern between KMS type and measure of success, hypotheses explaining the identified phenomena were developed from the social anthropological literature. These second-order concepts, which we address in the penultimate section of this paper, included the importance of generating context, the ascription of meaning by individuals and hence interpretive diversity within organisations, and the limitations of technological KM solutions.

3. DIFFERENT KNOWLEDGES, DIFFERENT ICTs

3.1. 'New' Organisational Culture versus the Bardic Tradition

A1 Software (the names of the organisations are pseudonyms) is a leading US-based global software supplier and consultancy offering products and services in over 145 countries. An initial analysis of the empirical data showed that A1 makes use of knowledge in several readily identifiable areas, including technical 'knowhow', organisational best practice, new product awareness, and project management. Additionally, more 'tacit' forms of knowledge were also cited, such as customer information (considered the most important of all) and cultural self-awareness relating to its mission, identity and working approach. Importantly, there was little or no awareness by the senior personnel interviewed of the nature of the different types of knowledge represented here, nor of the most appropriate methods for their generation and transmission.

Five years ago, A1 bought Data1, a small UK-based software house, absorbing 200 Data1 employees into the workforce, with the specific intention of 'capturing' the specialised knowledge possessed by Data1 employees and making this available within the wider A1 organisation. Accordingly, in the intervening five years, several different types of 'knowledge management' initiative had been tried by A1 with varying degrees of success. Amongst these initiatives, a strong contrast was perceived by all interviewees (comprising both ex-Data1 employees and long-standing A1 employees) between new, 'global' knowledge projects, particularly large, high-budget knowledge exchange systems, and those that exploited what several ex-Data1 employees termed the 'Bardic Tradition'.

This latter term was used by some respondents to convey the role of knowledgeable individuals as repositories of experiential (historical) organisational knowledge, and the sense in which such individuals recreate organisational culture and identity through local communicative interaction. Whereas larger, more technology-driven approaches were often seen as more in keeping with A1's future development as a global organisation (and therefore more progressive), there was a tendency to view forms of interaction based on the Bardic Tradition as local and backward. A common question asked within the organisation was thus how A1 might best move away from the communication of knowledge within localised contexts to the *capture* of local knowledge and its dissemination within a global context.

By making such capture and dissemination the goal of its KM initiatives, we argue that A1 was committing the error identified earlier in this paper of confusing those types of knowledge which are directly transferable via technology with those that are not. This view is supported by the reactions of A1 interviewees to the various types of KM initiative which they had experienced to date. We seek to show in the next section that there was an identifiable relationship between the perceived success of a KM initiative and the appropriateness of the technology for the type of knowledge being conveyed.

3.2. Collecting Data, Codifying Information, Communicating Knowledge

We were able to group the KM initiatives within A1 into three categories relating to the type of knowledge being conveyed. The first category comprised those initiatives which sought *to collect and archive explicit knowledge in the form of historical data*, such as knowledge repositories, best practice, old presentation slides, reports, and documents. These initiatives tended to be 'flagship' projects with a high budget and high corporate visibility, but interestingly none was felt to have been very successful. One interviewee commented:

"A1 makes knowledge management too formal and inaccessible, with the usual cultural problems - templates produced in the US, etc. Instead of lots of processes, documentation, gateways, procedures, etc., (you need to) push responsibility down to the group of people with an interest in a particular subject. There's a need to build recognition at an individual level in an increasingly networked, global environment, and KM represents the link that's required between career development and culture to achieve this."

It is possible to discern a strong sense from the above comment that much of the 'knowledge' contained within such repositories was felt to be irrelevant to the personal circumstances of the knowledge user. Such circumstances impact both on the types of knowledge used and on individuals' motivations for sharing knowledge in the first place. This meant that not only was much existing data inappropriate, but that there was a serious lack of 'qualitative' information. For example, we were told that a customer relationship management application introduced the previous year had been scrapped because salespeople had not provided it with sufficient data; people had been reluctant to provide essentially qualitative, subjective information regarding client relationships (previous project successes/failures, etc) - information which they would have been happy enough to have provided through communicative interaction. Some respondents felt that the appropriate way to convey such information was heavily context-dependent, and that to attempt to codify it was "asking for trouble". This was due to its availability for subsequent access and use by others who might take it out of context and misinterpret its meaning.

The second category of KM initiative identified within A1 was those approaches which sought *to codify 'raw' data into more readily useable forms of information*. Examples included decision-making tools, profiles and templates intended for customisation by individuals, CASE tools, and 'technology-push' reports and news. Unlike the category identified earlier, such initiatives all involved the application of knowledge to data to generate meaning (thus making it useful to the user). Importantly, however, these were only felt to have been successful where the *context* of the user had successfully been anticipated. For example, in their ongoing struggle to keep up with ever shorter product release cycles, salespeople and consultants specialising in a particular technology area found 'technology-push' news bulletins to be an essential method for appraising themselves of new technical developments. It is worth mentioning that these were heavily tailored to the requirements of this limited user group, and would have been fairly indecipherable to users from another context, since an outsider would have lacked the shared vocabulary required to assign meaning to what he or she was reading.

Such initiatives were felt in general, however, to have been more successful than those which sought indiscriminately to collect and distribute data. As another example, specialist sites on the corporate intranet were perceived as successful by the members of their clearly defined interest groups:

"The Corporate Repository is little more than a subset of the intranet where 'everything gets dumped'. This has already become subsumed by specialist websites. For new products, the only official Knowledge Management is an email from the States saying 'there's a new product/release - look on this website'. But this works well."

The third category of KM initiative identified comprised those KM initiatives which relied on *continual inter-subjective communication between individuals* - in other words, where groups of people were able continually to refine the context of their interaction and hence ensure the continued relevance of the knowledge being communicated. Such initiatives included 'mentor' relationships between new and experienced recruits, communities of practice indexes (corporate 'yellow pages'), special interest groups, email, and informal interactions of all kinds. All respondents considered these to be the most successful type of initiative. There was a strong feeling that such initiatives allowed people to communicate knowledge which was appropriate to the continually evolving context in which it was needed, eliminating the need to 'repair' old and inappropriate information to render it meaningful to the current environment:

"There's lots of information out there and it's useful; but it's often not quite what you need. It usually needs updating and making accurate....useful documents are posted to the departmental website, but these are just documents - the real knowledge lies in consultants' own 'toolkits' which they build themselves. People accumulate IPR on their laptops."

In addition, it is possible to discern a sense from this that what the organisation really 'knew' derived from the emergent interplay between knowledge and context involved in inter-subjective communication: much as a well-stocked bookshelf contains 'just books', useful documents at A1 are described above as "just documents". They are not 'knowledge' in the sense that they can be simply pasted into the context of a client project, since all contexts are different and require the generation of new knowledge through communicative interaction. The 'new' knowledge on consultants' laptops was meaningful and appropriate to the 'new'

environment, from which it continued to derive its meaning and relevance; in short, knowledge and context can be seen as two parts of a duality.

The implication of the findings in this section is that in building ambitious, database-driven 'knowledge management systems', A1 Software was decoupling 'knowledge' from the very context which rendered it meaningful, and from which it derived its current value. Ironically, a cheaper and more appropriate model had existed within the organisation all the time: the 'Bardic Tradition'. More than any of the KM initiatives discussed, the value of the strongly shared identity amongst ex-Data1 employees was stressed by every individual interviewed. For example:

"In learning about new products, I'm very well connected because of the of ex-Data1 network. I feel sorry for my newer colleagues who don't have access to this."

For many projects, members of this 'tradition' who had spread throughout the company remained the only gatekeepers to the most sought-after network of experiential, praxis-driven knowledge in the organisation. Such knowledge was so valuable because it was based on what had actually worked in a delimited context, was always current, and was readily meaningful to others who shared the same strongly defined set of cultural and communicative expectations.

This enduring and envied effectiveness of A1 Software's 'Bardic Tradition' is striking compared to their other, more recent KM initiatives. As discussed earlier, many A1 employees had shown their reluctance to provide certain types of information to a KM application where it might become divorced from its context and subsequently misinterpreted by others. Instead, those forms of knowledge initiative that were considered successful relied on human interactants, sometimes mediated by ICTs. In these cases knowledge and context were able to form the continually emergent duality upon which each depended for its significance and truth value. Knowledge remained firmly in the sphere of human interaction from which it was generated; the function of ICTs was to facilitate appropriate networks within which such interaction could occur.

Of course, the number of employees who were party to the 'Bardic Tradition' was limited and this particular network was non-replicable within the wider organisation: individuals were either ex-Data1 employees or they were not. The next section therefore seeks to address opportunities that may exist for those wishing to create similarly effective networks within their own organisations.

4. CULTIVATING CONTEXT: IMPLICATIONS FOR FUTURE KM INITIATIVES

In seeking to cultivate similar 'Bardic Traditions', we argue that organisations need to develop a greater understanding of the dynamics underlying such effective inter-subjective interaction. In this section we propose that such dynamics occur at the level of the individual, rather than the group, and that for this reason the concepts of culture and identity may be more appropriate methodological tools than the term 'communities of practice' (Lave and Wenger, 1991), which implies altruistic or communitarian principles experienced at group level. We draw below on some recent literature within social anthropology to develop this point.

As implied by the A1 example, if the types of inter-subjectively defined knowledge discussed in this paper are valuable because they are imbued with locally relevant meaning, and if such meaning is generated through its continual relationship to contextual referents, then the problematic of knowledge *exchange* is intimately connected with the production and sharing of the locally defined contexts through which such referents are generated. Significantly, however, the cultural symbols from which knowledge derives cannot be regarded as universal even *within* the same shared context: they are no more than a communal vocabulary to which members of a community ascribe their own significance and meanings (Rapport, 1999). For example, different members of the same consulting company are likely to share a broad contextual vocabulary, but their individual interpretations of the concept 'added value' are likely to differ, based on their own individual experiences.

Indeed, work within social anthropology suggests that cultures are symbolically constructed group identities which owe their continuing existence to just this ability to accommodate disparate individual interpretations

and objectives within a single communal, but *individually experienced*, vocabulary (Cohen, 1985). They are able to achieve this precisely because of the flexibility of their symbols; the 'meaning' of any one cultural symbol is a value ascribed to it by the individual community member. In fact, it has been argued (Cohen, *ibid.*) that the more locally one investigates, the more keenly the members of a culture perceive their differences as well as the strength of their boundaries of communal identity; such are the properties of 'the recursiveness and reflexivity of social life' (Arce and Long, 2000).

Ironically, the above argument suggests that A1's 'Bardic Tradition' is a *symbolic community*, which owes its existence to the ability of communally held symbolic vocabularies to accommodate individually-experienced realities, not to any inherently communitarian properties of ex-Data1 employees as a group. Consequently, we argue that it is more accurate to speak of the historical development of culture and tradition (terms which accurately describe shared symbolic vocabularies) than 'communities of practice'. Such an approach refocuses the goal of KM initiatives on the more pragmatic aim of cultivating rich context, rather than attempting to engender 'organisationally correct' communitarian behaviour at odds with individually experienced goals and identities.

The aim of cultivating rich context has implications for the ways in which organisations should deploy ICTs, since *context is latent in (and defined by the circumstances of) any shared communication*. There can of course be no universal 'meaning' of any particular knowledge item or symbol within a given group, since individuals assign context-dependent meaning to symbols as they are experienced. This implies that organisations which are able to accommodate individuality in their organisational structures (and KMSs) are likely to be more successful in cultivating user-driven KM than more prescriptive organizational regimes which seek to capture and archive universal, definitive organisational knowledge. Since context derives from communication, we argue that the energies of any KM initiative should be directed instead towards facilitating effective inter-subjective communication between members of a particular interest group such that a strong shared symbolic vocabulary is developed over time. Furthermore, ICTs may sometimes not be the most effective medium to achieve this; at A1 Software, the most powerful and popular KM media proved to be mentor relationships, special interest groups, training sessions, and informal interactions, as well as simple, user-driven technologies such as email and corporate indexes (which direct the user towards direct interaction with the knowledge source). We submit that through such non-prescriptive means, Data1 were able to develop the 'Bardic Tradition' which has proved so enduringly successful.

Such an approach demands that organisations abandon attempts to 'design' KM frameworks from scratch using information management principles, and instead begin to take stock of their own existing interactive cultures before seeking to understand how these may (or may not) be enhanced through the application of ICTs. How might it be possible to produce locally relevant context, however, within increasingly networked organisations whose interest groups are increasingly distanced through both time and space? Can a 'Bardic Tradition' be developed under such disembedded conditions? The answer is, again, that if context is the product of any shared communication, then it may be developed across time and space if the mode of communication permits this; an interesting example of this has been provided by Castells regarding the use of technology by the *Zapatistas* movement in Mexico in their development of group identity (Castells, 1997II:72-83).

In the words of Appadurai:

"I view locality as primarily relational and contextual rather than as scalar or spatial. I see it as a complex phenomenological quality, constituted by a series of links between the sense of social immediacy, the technologies of interactivity and the relativity of contexts" (1995:204).

5. CONCLUSION

While certain 'explicit' knowledge forms for which there is a guaranteed demand and little historical specificity (in A1's case, details of new releases within high turnaround product cycles) may demand a technology-push approach, the failures associated with many KM initiatives suggest that many valuable forms of organisational knowledge take the form of a highly distributed discourse which depends upon

current communicative acts within shared cultural systems for its continued existence and evolution. Knowledge can never have only one 'organisational' meaning; successful KM initiatives are likely therefore to be those which acknowledge and build upon inevitable diversity of interpretation by remaining simple, localized and user-driven. In this way, individuals have a greater chance of developing the shared codes which, given time, they may succeed in developing into their own 'Bardic Tradition'.

The implications are that organisations seeking to improve the way in which knowledge is generated and communicated need to develop a greater awareness of the different types of knowledge which are routinely required by their employees before investing in technology-driven KM initiatives which too often fail to achieve their aims. In cases where knowledge consists of emergent, inter-subjective communication, we suggest that attention should be directed to cultivating the interactive environments in which cultural identities are able to flourish, so that knowledge is never divorced from the context which imbues it with meaning and value.

Such an approach does not sit well with the predominant accounting-based view of knowledge as an asset which must be appropriated and quantified as a measure of shareholder value. A further implication is therefore that organisations need to move away from such outdated, prescriptive organisational models (Grant, 1996) before they will be truly incentivised to devise more appropriate ways of measuring the value that derives from knowledge. Meanwhile, whilst the current view of knowledge-as-object remains, organisations are likely to continue to seek to 'capture' their more elusive forms of knowledge, and hence to fund inappropriately-directed KMS that miss their mark.

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