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Managing Knowledge by Intention: the role of standards, frameworks and models

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Managing Knowledge by Intention: the role of standards, frameworks and models

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Abstract

This paper reports an empirical study of how large Australian government agencies are using standards, guides, frameworks and models in their pursuit of managing knowledge. The study focuses its enquiry on the role of the Australian standard for knowledge management (KM) within the situated complexity of organisational reality. The research explores whether the Australian KM standard is in use and, if so, how it is applied within the organisation and whether it brings any benefit to the knowledge endeavours of the enterprise. The paper claims the value of documented standards, frameworks and guides but argues that they should be seen as part of a rich, complex environment in which knowledge workers respond to their environment and use whatever objects are available to benefit practice.

Keywords

Knowledge Management, Australian Government, Australian Standard

Introduction

Drucker (1993) claims that the current global shift to a knowledge society is one of the very significant changes or world transformations that have occurred in human society. To remain competitive, a modern organisation must attend to knowledge as a key competitive asset. Prusak (1999) notes that there is no sustainable advantage other than what a firm knows, how it can utilise what it knows, and how fast it can learn something new. Hence, KM has emerged as an important focus for organisations over the last two decades and an increasingly important management lens or framework.

KM itself has seen various phases of development and maturity and scholars present multiple perspectives of what constitutes knowledge and its management. When knowledge is reified and deemed reducible to artefacts that are captured and stored in information systems, conventional approaches to management that include best practice and standards development may be applicable. But when knowledge is considered as a human activity, a situated practice (Tsoukas 2005), a complex responsive process (Stacey 2007) or an interrelationship (Snowden 2002), pre-defined frameworks and processes may be less applicable.

Bodhanya (2008, p. 3) calls for the crafting of a 'deep and enduring organisational intervention' as he acknowledges that alternative paradigms are needed to manage a social-process perspective of knowledge. One intentional response or intervention from organisational and discipline leaders to further develop the maturing discipline of KM has been to frame and describe the practices of KM as standards, frameworks and models.

It is in this context that an Australian standard entitled: Knowledge Management: A Guide was developed and published by Standards Australia in 2005. Standards Australia is an independent company that prepares and publishes many Australian standards after a process of consultation and consensus that includes many of the varied stakeholders and experts in the field. On reading, the AS 5037-2005 standard for KM is quickly introduced as a ‘non-prescriptive guide’, and a ‘flexible framework’.

Designed for voluntary use, standards do not impose any regulations. It is when a law or regulation refers to particular standard that compliance becomes compulsory (British Standards Institution 2009). The British Standards Institute offers a definition of a standard and a justification for its existence:

A standard is an agreed, repeatable way of doing something. It is a published document that contains a technical specification or other precise criteria designed to be used consistently as a rule, guideline, or definition. Standards help to make life simpler and to increase the reliability and the effectiveness of many goods and services we use (para. 1).

This study explores the role of overarching standards, frameworks, guides and models in enabling the management of knowledge in large Australian government organisations. It focuses its inquiry on the role of the Australian Standard for KM within the situated complexity of organisational reality. It examines whether the Australian standard and other encompassing frameworks or policies are in use and, if so, how they are utilised within the organisation to support the knowledge endeavours of the enterprise. Within an organisation, it explores these intentions for KM and whether they meet the needs of knowledge workers.

The Literature

Koenig (2008) notes that knowledge management is but one management lens or framework that is used in steering a successful modern organisation. He also claims that other management perspectives, such as total quality management and business process reengineering have come into fashion but have not provided enduring management frameworks. KM, however, continues to flourish (Koenig 2008).

KM itself has seen various phases of development and maturity over the decades. Snowden (2002) claims three ages of KM. The first is labelled ‘information for decision support’ and described as the appropriate structuring and flow of information to decision makers enabled by use of technology with an emphasis on the ‘computerisation of major business applications’ and ‘the perceived efficiencies of process reengineering’ (Snowden 2002, p.3). The second age of KM recognised human involvement in knowledge work and an exploration of the nature of knowledge, tacit and explicit, and its flow in organisations. The work of Nonaka and Takeuchi (1995) featured at this time. In its third age, Snowden (2002) sees KM as a complex adaptive system that is emergent, irreducible and in need of new paradigms of management. Knowledge is seen both an object or artefact, and continual flow and an active process of relating.

Increasingly, scholars are applying a lens of complexity to the situated practice of knowledge work and management (Stacey 2007; Kennedy 2006, McElroy 2000). Snowden and Stanbridge (2004) claim that KM was a pioneering management discipline in embracing complexity thinking. The uncertainty and ambiguous nature of ‘human acts of knowing lends itself to complexity based thinking’ (Snowden and Stanbridge 2004, p. 140).

Complex adaptive systems theory holds that coherent patterns emerge from the local interactions of agents that adapt in response to the action of other agents in close proximity (Cillier 1998). Complexity theory is at odds with the paradigm of external design and control using strategies such as planning, blueprints or programs (Stacey 2007, p. 237). Stable, linear, repeatable, cause and effect relationship do not play a role in complexity theory and without them, plans and blueprints for activity are of little use. It follows that emergence cannot be accommodated by standards, frameworks or guides.

A number of scholars (Stacey 2007; Snowden 2002, 2003) would debate an organisation's ability to manage organisational knowledge within a traditional management framework. As a complex adaptive system, an organisation has emergent properties and patterns and requires a management approach that seeks to strengthen or disrupt these patterns. The actions and intentions of management will gain a response from others within an organisation, but that response is one that cannot be predicted with certainty or controlled (Stacey 2007, p. 322).

Snowden (2005, p. 4) points out that standards, frameworks and best practices are always partial representations of what we know. Humans always know more than they can say and write down. Snowden (2002, 2005) argues against global, prescriptive and documented ways of practicing KM. Best practice, he states, is contrary to natural practice and 'an attempt to impose an idealistic structured process onto the natural activity of learning and knowledge transfer' (Snowden 2005, p2). He goes on to warn that best practice is often entrained past practice and will not serve innovation and creativity.

As if in a parallel universe, the dominant management paradigm is consistently and continually applied to KM in the form of 'organisation-wide intentions' of strategy, standards and best practice and standards (Stacey 2007, p. 231). Stacey goes on to acknowledge that orthodox and rational management theory predominates in organisations and complex thinking is only accommodated within a traditional management paradigm of control, hierarchy and organisational-wide intent. Snowden and Stanbridge (2004, p. 142) note that there is a strand of KM that endorses 'economics of knowledge packaging' and ongoing scientific management.

Internationally, the European KM Forum has the goal of creating common ground in KM terminology, application and implementation and stimulating 'the definition of open standards and common approaches for KM across Europe (Weber et al. 2002, para. 1). This goal has culminated in the European Committee for Standardization's 2004 Guide to Good Practice in KM, which is formally presented as a 'workshop agreement' rather than a standard. The British Standards Institution (BSI), the UK's national standards body, offers the Knowledge Management PAS 2001: A Guide to Good Practice' to demonstrate 'informed clarity' (Farmer 2002, p. 5) in the discipline. A PAS is a publicly available specification and falls short of a BSI full standard. However BSI considers a PAS as a 'methodology of standardisation' and considers itself 'formally involved in the process of KM standardization' (Farmer 2002, pp.7-8).

Exploring the role of standards in KM, Weber et al. (2002) suggest three tiers of standards. First level standards are designed to describe the overall concepts and approaches of KM. The second tier focus on elements of KM such as topic maps and ontologies and the third category of standards are not of KM, but are allied or supporting standards.

Weber et al. (2002, para. 10) note that the first level of standards lies outside the technical realm and is one that concerns 'human centred KM thinking'. They consider a 'sensible degree of standardisation' (para. 11) for the holistic practice of KM. According to Weber et al. (2002), 'standardisation' instruments include best practice, common approaches, reference frameworks or 'real standards'. From their research in Europe, these authors conclude that the most relevant approach to KM 'standardisation' is in the form of common KM frameworks, terminologies and implementation approaches. They see the KM framework as the most urgent need and the most productive standardisation instrument for advancing KM.

Wong and Aspinwall (2004) claim that organisations struggle with KM and fail to reach their full potential because they lack a strong theoretical foundation in the form of a framework to support their knowledge endeavours. Noting also that the development of a KM framework may be a challenging task for individual knowledge managers, Wong and Aspinwall (2004) warn that a flawed framework will lead to sub-optimal guidance.

Describing a framework as 'a set of basic assumptions or fundamental principles of intellectual origin that forms the underlying basis for action', Wong and Aspinwall (2004, p. 94) posit that if KM is to be accomplished in organisations, a framework is needed to provide theoretical underpinnings for knowledge based activity. Maier and Remus (2003, p. 62) also see the need for commonly agreed frameworks, methods or procedures to avoid KM initiatives that 'seem to absorb all kinds of theoretical approaches as well as practical activities, measures and technologies without thorough consideration as to its strategic or business value'.

Disparate models and sets of guidelines have been developed and prove useful to practitioners. Nonaka and Takeuchi's (1995) model of knowledge conversion is typical of what Shankar and Gupta (2005, p. 260) consider 'knowledge category models'. 'Socially constructed models' (Shankar & Gupta 2005, p. 260) are process driven and include the knowledge life cycle models McElroy (1999) and Bukowitz and Williams (2003). These isolated theoretical contributions represent snapshots or particular aspects of knowledge activity in organisations and require greater integration and cohesion to guide a clear pathway to productive action by practitioners of KM (Wong & Aspinwall 2004).

This brief review of some of the seemingly opposing literature highlights the difficulties in approaching organisation-wide intervention and intention in KM. At one extreme, true to management orthodoxy, national standards bodies in Australia, UK and Europe are working to provide clear and precise frames for the practice of KM. At the other extreme, Snowden and Stanbridge (2004, p. 142) warn 'knowledge management is in danger of backfiring as a result of an approach to knowledge management that amounts to large corporate militancy'. This study sets out to explore the tension in an organisational context.

Research Design

Framed by a case study methodology, this research used large government organisations as cases or units of analysis. Yin (2003) defines the case study as an empirical inquiry that investigates a contemporary phenomenon within its real-life context and Hartley (2004, p. 323) claims that 'case studies can be useful for exploring new or emerging processes or behaviours' and understanding 'how behaviour and/or processes are influenced by, and influence context'. A case study approach to knowing more about how organisations are using intentional and normative documented frames for KM is applicable because contextual insights and patterns will be revealed only by examining the situated practice of KM. This

research was conducted in large government organisations, which are arguably more prone to a regulatory environment and use of standards than other organisations.

This research was designed as a particularistic (Merriam 1998, p. 29) multiple case study – that is, it examined a particular phenomenon. Each case was important for what it revealed about the conduct of knowledge work in organisations. It was purposely designed to generalise and find patterns rather than describe how KM is practiced in any particular organisation.

Focus groups and interviews with KM practitioners from organisations with knowledge-focused sub-units within the organisational structure were conducted. Participants were asked to broadly describe what organisational intentions, in the form of guides, frameworks or standards were available to support them in their work. They were also asked about the value of this form of support and what else was needed.

This research has taken an interpretive approach to the analysis of the data that was collected in each of the cases examined. It applied thematic analysis to the qualitative data that is collected. Thematic analysis is a means of identifying, analysing and reporting patterns within data. A theme captures something important about the data in relation to the research questions and represents some level of patterned meaning within the data (Braun and Clarke 2006). In an inductive approach to analysis, the data was coded and used to develop the themes, and as a result, the themes are closely linked to the data itself. Thematic analysis was useful in this research because it provides a theoretical freedom to approach a complex body of data and reveal patterns and insights without pre-existing expectations or existing coding frames.

Findings

The Australian Standard for KM was not being used for its stated objectives in the organisations investigated in this study. The preliminary findings of this ongoing research project are outlined under the themes of *executive engagement*, *practice-led models* and *credibility, authority and the KM standard*. Those themes are discussed in this section.

Executive Engagement

There was strong call for leadership in KM in the research findings. Whilst research participants were able to expand and give substance to the notion of leadership, there was an emphasis, almost a catchcry, for leadership as this research participant indicates, ‘but leadership, leadership again, its leadership!’

Knowledge aware leadership was described as providing a vision and a broad direction within which, knowledge practitioners enjoyed the freedom to plan and enact the operational aspects of knowledge work.

We had some broad guidelines about what were the issues and what they would like to see at the end. But a lot of the operational side of getting this out there and how we would make it happen came out of the team.

Knowledge leadership is not always the work of an individual. Groups and steering committees provided leadership and points of reference to knowledge practitioners. One research participant conveyed enormous respect for a steering committee saying ‘We kept going back to the steering committee all the time’. That committee provided leadership,

communication and a confirmation that a team of knowledge workers was heading in the right direction.

Leadership was linked with obtaining resources especially when a significant amount of funding was required and obtaining those funds was political. A research participant speaking of a respected leader stated, 'and he knew there were really big issues and he went in lobbying for this money'.

A well-regarded executive leader in one organisation worked in synergy with his knowledge team in an intentional effort to shift practices to include stronger relationships with clients. He demonstrated his engagement and its value by working across the executive body to communicate and involve them in the initiative. The executive group 'endorsed' a business relationship model and this knowledge leader was described as a conduit of knowledge initiatives across the executive layer in the organisation.

He was already engaging with his peers across the organisation, so he regularly, every couple of months, meets with other ... the group managers on a one to one basis.

Research participants reported looking for governance and leadership that was more than 'lip service'. Lip-service to knowledge activity was very recognisable by the knowledge workers interviewed. They were looking for support, energy and participation rather than objective approvals.

And it was his vision and him there for supporting and sponsoring us that made a huge difference - as I said it was sponsorship that allowed us to do some of the most amazing work. It was vision and it was leadership. Without the leaders you just don't get there. I was being supported all the way to do this.

An absence of leadership was also noted by research participants in this study and it was recognised as limiting the effectiveness of their knowledge work. Ill-informed and damaging actions by those higher up in the hierarchy had been experienced. The response to absent or poor leadership was usually subversive strategy and behaviour. KM took place 'under the radar' when leadership was not conducive. KM was reported to have purposely taken place, in the guise of training.

When leadership was absent, knowledge workers are frequently left to get on with the job. With careful politics and attention to regulatory responsibilities and other areas of management, the knowledge workers continued to operate without connection to a more senior executive in the organisation. As a consequence, in times of weak or absent leadership, an organisation doesn't always know what is occurring within to improve its KM abilities.

Leadership is prescribed in the Australian KM standard as an 'enabler' of KM. Yet Stacey (2007, p. 352) would argue that leadership is constructed in the recognition of others and does not exist in 'autonomous individuals who formulate visions and values to be directly applied to an organisational or cultural system'. Complexity thinking questions the prescription of leadership within a standard or framework. This research suggests that leadership plays a greater role in intentional KM than that of enabler - it is a significant environmental ingredient in making KM successful in large organisations

Definitions of leadership abound but the authors of this paper were concerned to stay close to the collected data and hear what leadership meant to the research participants. In doing so, a

theme of executive engagement in KM emerged. The cry for leadership in KM is describing the need for engagement by more senior staff in the knowledge endeavours within their organisations. Engagement by executives provides leadership, resourcing, supportive relationships and wider connections within the organisation.

This cry for leadership, interpreted as a cry for sustained organisational engagement in KM, is a plea for knowledge work to be acknowledged, integrated and valued within the organisations. It is a plea for KM to be a participatory activity especially with the organisation's elders. This research suggests that leadership and engagement should not be relegated to 'enabler', 'factor' or 'criteria' in a KM framework. It suggests that, more than organisational frameworks or standards, executive engagement is the effective driver of the knowledge endeavours of an organisation. It may indeed be more of an overarching driver of KM than the framework that lists it as an 'enabler'.

Practice-led models

Disparate models of KM theory and practice were used in the organisations studied to underpin knowledge work. They were drawn from what other practitioners and organisations were doing and from the literature, with an attitude of 'what's out there that we can use?' and 'where can we take advantage of other people's work'. Models were discovered, considered and adapted by practitioners to provide a theoretical frame of reference for their practice and their contexts. Practitioners were continually checking for the availability of KM models and evaluating their practical and contextual relevance. The models in the literature were mapped back to the reality of organisational practice until a resonance was found and a practitioner could claim 'this is what we're about'.

We say, 'well okay, how much of that is applicable to [this organisation], how can we reframe that into our world?' so its definitely an approach that's focused on looking for the better practice and learning lessons from other organisations, applying what seems to be the most appropriate elements of that, and setting that within a context of [this organisation].

A strong claim was made to a 'sort of, philosophical' approach to knowledge work and models and philosophies were at times used interchangeably. Philosophies were said to have driven the work of KM. Philosophies or positions of professional service, collaboration, building sustainable relationships and empowering clients were reported by the research participants. Embodied in these descriptions of KM as a philosophy, is a deep personalisation of adopted theoretical underpinnings and models. This paper suggests that 'philosophy' was used to impart passion and integral personal owning of the models of practice that were discovered and utilised. One research participant reports a discovery of a theoretical model:

Yes, and I had it in my head and it was only when I found the xxxxx stuff that it was like, 'Oh affirmation. That's what I've been thinking all along'. And I'd been putting it into place but I finally had someone in the outside world who'd put a framework around it. I sort of knew intuitively what I was doing but...

Significant in this theme, is the tight coupling and integration of explicit model and situated practice. The theory was known, 'I had it in my head', before it was located in the external world. It was only when theoretical models made sense and were relevant to practitioners that they were adopted for use. Theoretical models could be affirming and supportive if they resonated with practice. Once models had earned their way into the work environment, a mutual, two-way relationship existed. The models informed and communicated the work of

KM whilst the issues that beset the practice informed the evolving theoretical models that were changed by knowledge workers to keep them relevant.

Credibility, Communication and the KM standard

Some research participants were aware of the KM standard and reported several ways in which it was used in their work. The KM standard was quoted and cited in the production of reports and other documented communications. The glossary of KM terminology proved useful to one knowledge worker in its own right and especially because an Australian standard could be referenced. The quality of the local report was seen to be enhanced by reference to the standard.

It was suggested that KM remains a discipline little understood by many executives in large organisations; and that the depths and complexities of KM may never be fully understood by some people. The KM standard was a way of revealing and communicating KM to those not able to understand, especially those whose concepts were grounded in information management. Comments by research participants include:

I just don't know that a lot of the senior execs across the public sector get it. They are few and far between. I had one brilliant ... now, he was absolutely superb, he got it. He really got it. But, the others would sort of give it lip service but didn't get it and it didn't seem to matter how many times you went in to explain how things fitted together and the rest of it.

I think it is productive for teaching people what we're talking about. And in fact, for those who are really process oriented, to think there's a guide, it's like, 'Oh there's somebody telling us what to do'. So it has the benefit of being able to show it to the process oriented people, the left-brainers basically.

More than just explain, the KM standard imparts credibility and authority to knowledge workers and their practice in organisations. It is consciously used to do just that. KM in some organisations is still shrouded by mystery and mistrust. One research participant described how a team of dedicated knowledge workers was scorned for 'just collecting stories'. The existence of the KM Standard is, to some extent, saying that KM has stature, has import, and the Standards Australia organisation is engaging with it.

And that actually helps me that it's come from Australian Standards. 'Oh, look at this'. And they will actually take notice of that.

Yeah, so you have an authoritative organisation putting out a guide and they go, 'Oh, yes in that case it's got credibility'. And that's really what I would be using it for...

One research participant was explicit and unashamed in his use of the KM Standard. He stated that he definitely did not use it for its intended purpose:

But it gives you something to say, 'hey, look, Standards Australia have done this'. And they go, the nodding, 'Oh yes, yes'. So, there's an authority and it really is about giving authority to what you're doing.

The KM standard was also useful to mitigate risk in the practice of KM. One research participant described the public service environment as one in which risk is continually calculated.

And it really is about the risk because the public servants, senior public servant just live with, 'is it a risk to me? Will the Minister be embarrassed? Will I make a mistake?'

Acknowledging that knowledge work is 'risky work', she stated that the KM Standard helped to alleviate that insecurity. Having an Australian Standard to point to as direction setting, 'makes them feel very secure' in implementing new KM programs. It was a tool to mitigate risk to the organisation and the individual.

The existence of an Australian Standard for KM goes a long way toward communicating and legitimising the knowledge practices in Government organisations. It is frequently used for that purpose.

Discussion and Conclusions

When one research participant was asked about how he had used the knowledge management standard in his work, he replied: 'I was aware of it'. The KM Standard was regarded as artefact, as object. It did not feature in a close and integral association with the reality of knowledge work. A remoteness was revealed between the KM standard and the practice of KM in Australian government organisations.

Yet the KM Standard was held in reasonable regard by research participants that knew of it and proved useful in the social space of knowledge activities. Its existence aided the legitimisation of KM in organisations where it could be referenced in reports, used to co-opt support, engender communication and provide authority and credibility for KM.

The Australian Standard for KM is not a 'real standard' (Weber et al. 2002). It is a de-contextualised reference framework with no mandatory requirements for use. Its existence as an Australian Standard brings benefits and some confusion. Located, under the auspices of Standards Australia, it has an authority that can be called upon by practitioners to provide credibility and legitimacy to KM practices but presents a Standard that is more a guide or framework and differs from previous published Australian Standards.

The research findings reveal that knowledge workers see a need for a whole of organisation intention for KM. The call for leadership, vision, support and governance by research participants is a call for stronger engagement and participation in KM by executive level staff. It is a call for involvement and a clear commitment to KM and its practices in large organisations and a desire of those engaged in KM practices to relate to people at higher levels of the organisation. In organisations with intention for KM and executive participation, it is deeply valued. Where leadership and engagement is absent, it is sought.

There are lessons to be learned in the local-level adoption of resonant theoretical models by knowledge workers. These models are adopted only when they are in accord with practice. They are living frames of practice, locally owned and modified without consultation or reference to the norm. They model knowledge work in a deeply contextual manner.

The social nature of KM dictates the need for a fluid approach to any documentation of common approaches to KM. There is value in a community of KM expertise exploring common ground and terminology for KM implementation and practice in the form of a framework that can be adapted to specific contexts. Collaboration, shared knowledge and abilities will culminate in a KM framework that is of higher quality and more representative of the discipline than any one organisation could produce.

In practice, KM frameworks are value added when owned and promulgated by a standards body such as Standards Australia. It is then that KM frameworks achieve an authority and a credibility that is a useful communication and influencing tool as KM practitioners reach-out for engagement and participation within their organisations.

Complexity thinkers must acquiesce that the management paradigm that produces documented standards, frameworks and guides is still dominant in organisations and consider this reality. Yet the existence of a KM Standard does not prescribe the way in which it will be used. KM Standards and frameworks can be considered as part of the rich complex environments in which knowledge work takes place. Emergence will see knowledge workers responding to their environment and creatively using whatever objects are available to the benefit of their practice.

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