Knowledge Management and Local Government: Some Emerging Trends

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Knowledge management continues to be a focus of attention with in recent years considerable public sector interest in developments which initially emerged within the private sector. This paper gives an overview of knowledge management and assesses emerging trends in knowledge management within local government drawing on research conducted in Australia and the United Kingdom. Indications to date are that much of the higher order policies on knowledge and its management are translating in practice to the delivery of specific services under the umbrella of e-government. The major difficulty facing government at both local and national level is likely to lie in finding a way to overcome those softer cultural and behavioural obstacles that lie in the way of successful implementation of knowledge management.

Keywords: Knowledge; Knowledge Management; Government; Local Government; Australia; United Kingdom

1. Introduction

Today knowledge is regarded as a key differentiator in business, the currency of competitiveness and organisational success. The problems associated with poor knowledge management manifest themselves in a loss of organisational knowledge, the expensive duplication of knowledge-creation and acquisition activities, rising costs and reduced competitiveness. Companies operating in the private sector have been forced to adjust to a changing relationship between tangible and intangible assets and to become expert in the generation, cultivation and application of knowledge, expertise, and ideas. More recently these approaches have emerged in a local government context where even with a focus on service outcomes rather than profits, the locus of value has shifted. This paper looks at aspects of these emerging developments within local government using a combination of primary and secondary sources.

2. What is knowledge?

Knowledge in very general terms is that combination of information

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and human context that enhances the capacity for action. It may be viewed at individual, group and organisational levels. It is common also to distinguish between explicit and tacit, that is structured and unstructured knowledge. *Explicit* knowledge is represented in documents, databases, products and processes. It can be codified and shared in formal systematic languages or objects. *Tacit* knowledge is more dependent on action, context and personal experience, which makes it difficult to formalise and communicate. It is often described as what is known but cannot be explained, for example how to negotiate a contract or build a cross-functional team [1].

Critically, however, knowledge is neither a given nor an absolute, but an individual social creation. Individuals justify the truthfulness of their beliefs based on observations of the world. When individuals create knowledge they make sense out of new situations by holding justified beliefs and committing to them [2]. Furthermore, being context-dependent, knowledge cannot be shared directly but rather is shared through conversations or discussions which are basis of knowledge creation in organizations. Hence, knowledge is understood as emerging from a process of knowing that is culturally situated, technologically-mediated and socially distributed [3].

3. What is Knowledge Management?

As a term, *knowledge management* continues to receive a mixed reception in the business community. Technically it is an *oxymoron* in that it is simply not possible to manage something as elusive and intangible as knowledge. Prominent figures in the knowledge management community continue to distance themselves from the term. Buckman insists that it was the trade and not his company that applied the term to activities at Bulabs Holdings. Nonaka argues that the term is too restrictive, having too much emphasis on measurement and control. Instead Nonaka prefers the concept of *knowledge enabling*, a set of organisational activities that positively impact upon knowledge creation. This includes facilitating relationships and conversations as well as sharing knowledge across organizations and beyond [2].

Nevertheless the term has caught on and it appears destined to survive. There are hundreds of definitions of knowledge management most of which run along the following lines: Knowledge management a capability to create, enhance and share intellectual capital across the organisation … a shorthand term covering all of the things that must be put in place, for example, processes, systems, culture and roles to build and enhance this capability [5].
4. The management implications of knowledge

Knowledge management seeks to align knowledge processes with organisational objectives. However, the management of knowledge is difficult both on account of its intangible nature and owing to a tendency to apply inappropriate industrial age management paradigms to the task. The old assumptions and methods designed for the physical resources of previous eras are no longer effective. Today more than ever, organisations can be seen as networks of intellectual and knowledge-based processes. The *visible* representations of organisations, such as structures, procedures, products and services, are in large part merely temporary materialisations of the underlying organisational knowledge. To maximise organisational effectiveness requires the facilitation and management of knowledge-related activities. This is difficult in practice and can present challenges such as:

- Repeated ad hoc problem solving – reinventing the wheel
- Internal competition and non-collaborative behaviour
- Inconsistent methods and approaches to similar tasks
- Disincentives to sharing knowledge

5. Knowledge management practice

Nevertheless, a body of knowledge management practice in response to such challenge, a phenomenon that for present purposes can be summarised in terms of infrastructures and strategies. Let us first look briefly at infrastructures for knowledge management.

6. Infrastructures

These range over the following areas:

**Technology**: where the role of technology is to facilitate and support, to enable internal and external communication, workflows and interactive access in a multitude of information formats. This includes a range of search, concept modelling and sensing technologies, increasingly embodying case-based reasoning and agent capabilities to improve and transform business processes and outcomes and facilitate the creation of knowledge-centric organisations.

**Operations**: The operational infrastructure embodies the nature and structure of the organisation, including its governance and processes, human resources operations and organisational design.
**Culture:** The cultural infrastructure supports the processes of knowledge creation and exchange within organisations. More than anything else, organisational culture holds the key to successful knowledge management. However, the creation or emulation of knowledge cultures is a difficult and lengthy business calling as it does for a climate of continuity and trust in which knowledge and learning are valued [6]. It is in such environments that effective strategies for knowledge management are most likely to emerge.

7. **Strategies**

A number of strategies both generic and specific have emerged in practice. Generic knowledge management strategies include:

- **Codification strategies:** capturing and storing knowledge for re-use; Best Practices
- **Personalisation strategies:** focus on knowledge transfer, often involving that kind of kind of knowledge that cannot be codified [7].

As for specific strategies one or all of the following can be tried:

- **Intellectual Asset Management Strategy:** Emphasis is on enterprise-level management of specific intellectual assets such as patents, technologies, operational and management practices, customer relations, organizational arrangements and other structural knowledge assets. Management may centre on renewing, organizing, valuating, safekeeping, as well as increasing the availability and marketing of these assets

- **Personal Knowledge Asset Responsibility Strategy:** Emphasis is on personal responsibility for knowledge-related investments, innovations and the competitive state, renewal, effective use and availability to others of the knowledge assets within each employee’s area of accountability to being able to apply the most competitive knowledge to the enterprise’s work

- **Knowledge Creation Strategy:** Emphasis is on organisational learning, basic and applied research and development and motivation of employees to innovate and capture lessons learned to obtain new and better knowledge that will lead to improved competitiveness

- **Knowledge Transfer Strategy:** Emphasis is on systematic approaches to transfer --- obtain, organize, restructure, warehouse or memorise,
repackage for deployment and distribute --- knowledge to points of action where it will be used to perform work. Includes knowledge sharing and adopting best practices.

8. Knowledge management and local government

To this point the paper has focused largely upon developments in private organisations, but nevertheless much of what has been said is applicable to the circumstances of local government. Among the reasons why this should be the case are:

- Cutbacks in public sector funding leading not just to staff cuts but to some flattening of organisational hierarchies;
- Introduction of IT in support of government work and processes and more broadly leveraging the collective experiences for more effective performance;
- Avoiding the duplication of effort while realising the benefits of new opportunities
- Better problem prevention and resolution;
- Trend away from traditional bureaucratic approach to one that is more responsive to public opinion;
- Growing demand for better, more accountable public services delivered more effectively;
- Difficulties in attracting and retaining staff with the specialist skills and knowledge required to operate in the changing business environment;
- Introduction of some aspects of the private sector model, for example competitive tendering for core services, to public sector operations, with local authorities in some cases exiting their provision altogether;

Unfortunately it has been a common experience of organisations and not just those within local government that whilst in theory they embrace high-level concepts of knowledge management, in practice they are still wedded to traditional command and control approaches. Sometimes this results in outright rejection of knowledge management but more often it leads to special initiatives of one kind or another. In these latter cases there has been a tendency for knowledge management initiatives to bounce off some aspect of the Information Technology operation. This is understandable, as it
might seem to offer some tangible outcome, for example a database or a logistic process that can be reported to shareholders and or Council. Unfortunately they often produce little else. Expectations of great transformations through a more efficient utilisation of knowledge all too often turn out to be ill-founded, leading to the conclusion that knowledge management does not work. A more likely explanation is that there is no fundamental strategic underpinning to these initiatives.

9. Background research

It was against this background that the author conducted two research projects, aimed respectively at identifying key aspects of knowledge management within Australian local government and at identifying knowledge-based competences and related activities for staff in both local government and the public sector. In 2000, a postal survey of senior local government officers sought to identify the state-of-the art of knowledge management in local government in Australia. The specific research objectives were to identify perceptions and trends in the implementation of knowledge management in Australian local government in the context of new corporate structures. It was expected that the increasing corporatization of local government as evidenced by such practices as Compulsory Competitive Tendering and outsourcing, benchmarking, performance management and service quality programs would be likely to impact on the uptake of knowledge management. Underlying the basic research design was an expectation that as in the private sector, local government would encounter a number of fundamental problems in its attempt to come to grips with knowledge management. These formed the basis for several research hypotheses as follows:

- With the onset of corporatisation, organisations would experience both knowledge loss and reinvention of the wheel (that is duplication of knowledge creation efforts)
- In a more commercial and competitive local government environment, individuals would be reluctant to share their knowledge with colleagues and in fact would engage in knowledge hoarding.
- In practice knowledge management would involve the capture and dissemination of explicit knowledge through the use of information technologies and systems.
- Those organisations that best understand the value and wider
implications of knowledge management would have cultures to facilitate knowledge creation, dissemination and sharing.

The 2001 project sought to investigate the kinds of competences being demanded of staff engaged in the emerging field of electronic business and something about the uses to which these competences were put. The two central hypotheses were:

- Competences for electronic business would be knowledge-based
- Implementation of such competences would involve their application to a range of electronic business and transactional-type operations

A key link between the two projects resided in the fact that not only were local government employees strongly represented in the sample population for the second project but also much of the trend towards implementing knowledge management within local government as evidenced in the first project embodied a strong e-business dimension.

10. General findings: 2000 Project

The 2000 survey revealed that almost 60 per cent of Australian local authorities were engaged in the practice of knowledge management. However, of these less than 20 per cent had a knowledge management strategy. Some 52 per cent of responding authorities had negative perceptions of the quality of their knowledge management operations although 60 per cent rated their own organization’s ability to learn as excellent. In terms of the hypotheses posed the research indicated that:

- Knowledge loss and reinvention: As regards the first part of this hypothesis, the data strongly supported the assertion that knowledge would be lost. This was strongly supported in follow-up interviews, with a major driver of knowledge management being the desire to stem losses of knowledge. The picture was somewhat less clear in regard to the second part of the hypothesis, with almost 30 per cent of respondents being of the opinion that this did not happen within their own organisation. However in the follow-up interviews, a majority of respondents expressed concern about continuing difficulties in accessing information frequently leading to duplication of effort and reinventing of wheels. At this stage, therefore, it is perhaps advisable to suggest that the case for widespread reinvention of the wheel within Australian local government has only been partly proven.
• Knowledge hoarding: The data in this case both from the survey and the follow-up interviews strongly rebutted the assertion that staff would resort to hoarding knowledge. These data were further reinforced by the fact nearly 60 per cent of local authorities had in place mechanisms for making knowledge commonly available and 50 percent has mechanisms for enabling knowledge to be re-used.

• That knowledge management in practice would involve the capture and dissemination of explicit knowledge through the use of information technologies and systems. The survey and interview data bore this out with, apart from electronic mail, which was easily the most popular technology, commonly used technologies included Groupware (used by 40 per cent of respondent councils), Workflow (50 per cent) and Electronic Document Management Systems (50 per cent).

• Those organisations that best understand the value and wider implications of knowledge management would have cultures to facilitate knowledge creation, dissemination and sharing. The evidence from the surveys and especially from the follow-up interviews suggests that within local government there is growing awareness of the need to nourish a culture of knowledge sharing and openness. Specifically in excess of 60 per cent or responding local authorities had policies in place to improve access to knowledge. To improve the ways in which knowledge was represented in the system and to enhance levels of knowledge sharing in the organization.

11. General findings: 2001 project

In general the two hypotheses posed for this project were supported by the research data:

(a) Competences for electronic business would be knowledge-based:
    Provided with a list of four knowledge management competences that might be relevant to the conduct of electronic business:

• 92 per cent of respondents agreed the need for competences in managing knowledge resident in business processes;
• 93 per cent of respondents agreed the need for competences in managing customer knowledge;
• 80 per cent agreed the need for competences in managing product or service knowledge;
• 40 per cent agreed the need for competences in managing
knowledge relating to other stakeholders such as business partners or suppliers.

(b) Implementation of such competences would involve their application to a range of electronic business and transactional-type operations. Asked as to what purpose they would exploit their knowledge management competences:

- 90 per cent of respondents anticipated their application to decisions relating to demand and to inventory levels;
- 63 per cent anticipated their application to the management of B2C relationships;
- 30 per cent anticipated their application to the management of B2B relationships.

12. Implications of the projects for the take-up of knowledge management in local government

These two projects were relatively limited both in scale and in the fact that they were undertaken in Australia. However, they provide some degree of evidence for recognition of the value of knowledge within Australian local government and for potential links between knowledge management and e-business. Similar evidence although on a much larger scale in terms of the numbers of people served, is emerging from the United Kingdom. In that country an administration returned to power with an increased majority is striving to change the face of government, including local government across the nation. In 2002 the author conducted a series of interviews with senior staff within the Office of the E-Envoy and the National Health Service in London. The resulting data helped to shed further light on existing secondary material already available from official sources.

13. Some evidence from the United Kingdom

In 1999 the U.K. government published its Modernising Government White Paper, which had as one of its objectives:

Smarter knowledge management across government, which increasingly enables government to harness its data and experience more effectively and to work in new ways [8].

Although aimed at the national tier of government this document had direct implications for local government. Moreover, whether at national or local level the initial thrust has been very much in the direction of electronic
governance and includes:

- Operating a Government Gateway – a portal through which registered users can sign up for access to government online services;
- Operating another portal ukonline.gov.uk as a point of entry to all government information;
- Operating the Knowledge Network, a system which links departments electronically and is aimed to promote collaborative activity both within and between departments.

This is very similar to what is happening at State and local government level in Victoria and elsewhere in Australia. However, with due allowance for devolution in Scotland and Wales and for arrangements in Northern Ireland, the United Kingdom example is somewhat more coherent.

14. The Local Government Dimension

In the United Kingdom fundamental outcomes of this policy are that council services are expected to be joined up and customer centric. In more formal language this means that Councils are expected to offer 25 per cent of customer services by electronic means by 2005. That this includes such services as payments of rates and parking fines, applications for free school meals, student awards or adult education classes, information about swimming pool opening times and responses to consultation exercises and planning issues. This general approach fits in with another national initiative that for Best Value in local government services. Introduced as a replacement for the widely unpopular system of Compulsory Competitive Tendering (CCT), this programme administered by the United Kingdom Audit Commission requires local government services to demonstrate the provision of best value (as measured by performance levels previously obtained by the top 25 per cent of Councils) or risk losing the right to provide the service. The process will not have run its first cycle until 2005 [9].

There are certain similarities between the principles and practice of Best Value and of knowledge management. These can be illustrated by examination of the so-called four C’s of Best Value, namely challenge, consult, compare and compete in a knowledge management context:

- **Challenge**: councils are challenged to question their traditional approach and to ask whether they need certain services. Among the fundamental tenets of knowledge management are those mandating the need to question the status quo for example in relation to the
actual nature and mission of the organization and the knowledge it needs to operate and survive.

- **Consult**: Councils must show they have consulted local people and key stakeholders, including their own staff, and have monitored customer satisfaction. Without such consultation knowledge management will remain little more than an aspiration for most organizations.

- **Compare**: Councils must benchmark their services against other councils and also against private and non-profit service providers. It is only by comparing that any organization be it public or private sector, can know what it knows and what it needs to know.

- **Compete**: Councils must show that in-house services are the most cost effective. For any organization the knowledge management operation must link directly to cost and revenue outcomes.

There can be a problem in putting principles into practice however. All too often, as in the private sector, the term knowledge management has been embraced where in practice what is happening is data management or at best a more sophisticated level of information management, for example in the general rush by local councils to embrace Portal technology as an interface with their communities. Although according to the Audit Commission, 78 per cent of Councils in the United Kingdom will meet government deadlines for e-government services by the end of 2005, most of these e-projects are in their infancy. Moreover, one-third of projects are aimed at website development and the online provision of some forms of payment and service delivery [10]. The extent to which the emphasis continues to be on technology is reflected in a recent report from the United Kingdom Committee of Public Accounts (CPA) which is critical of the outcomes likely to be delivered for an expenditure of 10 billion pounds sterling on government online services. While unhappy with the scale of access to online transactions the report more significantly highlighted the need for strategies that looked beyond mere e-enablement of provision to the point at which the technology could be used in order to enhance and improve public services [11].

This is but the latest in a line of reports questioning the techno-centric nature of what purports to be e-government and within this knowledge management policies in the United Kingdom. A critical area for attention and one that is fundamental to the practice of knowledge management is the importance of linking all such initiatives technologically-driven or otherwise to the business objectives of the organisation, which in the case of local
government means good customer service. Other significant areas of weakness are those of inadequate skill levels, not just within local authorities but across communities and an inability to form meaningful partnerships with private sector bodies [12]. Critically, however, much of the criticism of existing efforts comes down to the issue of organisational culture, be this the so-called *Yes Minister* culture that pervades Whitehall departments or the need at local government level to focus away from the technology and delivery platforms and pay attention to the behavioural and people issues [13]. It would be unlikely if at least some of these factors did not apply with equal relevance to the circumstances of Australia.

It is here that the real potential contribution of knowledge management to the delivery of better and more relevant public services must be restated. Targets for Best Value or for online service provision must be located within a much wider process of knowledge-based change. A critical feature of e-government, and its associated involvement in e-business is a growing reliance on knowledge. In both contexts, knowledge can be both input and output and on occasions the determining characteristic of the operating environment. In both cases knowledge has three dimensions: knowledge as content, knowledge as context and knowledge as process.

- **Knowledge as content:** In Business-to-Business (B2B) and Business-to-Consumer (B2C) e-commerce and their manifestation in both public and private sectors there are markets for creation, packaging, re-use, sharing, delivery and customisation of information and knowledge. The linking of various diverse knowledge sources for multiple uses has the potential to empower customers and other stakeholders [3].

- **Knowledge as context:** However, as in traditional forms of business much of the real intelligence and information value within electronic markets resides in the context that is wrapped around the information. The poses a need to automate the management and delivery of context, using such technologies as document management systems, content management systems, enterprise portals and collaborative environments. Prominent among these advances is XML (eXtensible Markup Language), which allows companies not only to deliver content to anyone but also to collect valuable information about the context of their business dealings.

- **Knowledge as process:** knowledge also resides in quality processes within organizations. One illustration would be of the use of workflow software to capture Best Practice in certain processes.
Another illustration would lie in the workings of the organisational value chain, along which can be identified not only value transactions but also accretions of information and knowledge.

15. U.K. knowledge management policy framework

None of this has been lost on policy makers and indeed in the United Kingdom there is a knowledge management policy framework directed at all levels of government in the country. This framework in many respects is the epitome of good knowledge management principle and practice, embodying as it does the following key areas of activity:

- Knowledge capture: policies and processes to identify and capture both explicit and tacit knowledge.
- Knowledge transfer: among a variety of sources and in various forms.
- Knowledge retention: retention of corporate knowledge particularly in times of personnel or organisational change.
- Content management: efficient management and maintenance of the corporate knowledge base.
- Knowledge capital: Policies and processes for measuring and developing the government’s human and social capital foundations.
- Enabling communities: identifying, promoting and supporting knowledge-based community working across and between departments.
- Knowledge culture: developing and embedding the necessary cultural change and business environment to embed knowledge management activity and ethos.
- Knowledge partnerships: identifying, promoting and supporting knowledge partnerships between central government and key partners, including local government and the regions, the NHS and Agencies and the voluntary and community sector.
- Key business activities: supporting key activities within government including project management, the legislative process, delivery monitoring and committee support.
- Knowledge benchmarking: Benchmarking current knowledge capacity and practice against domestic and international best
practice [14].

This is an impressive list which suggests that in the United Kingdom, government has a clear and comprehensive understanding of what needs to be done in order for the country to reap some of the benefits of knowledge management. Hence whereas issues such as the capture, transfer and retention of knowledge might be regarded simply as more recent manifestations of previous information management practices, the remaining elements in the framework are more characteristic of a growing focus on knowledge management. For example, recognition of the potential value of intangible assets and of the importance of a culture of knowledge sharing and collaboration represent key breakthroughs in organisational perspective, in this case breakthroughs in the government sector. However, significant challenges are likely to arise as government seeks to implement these strategic aspirations, not least owing to their essential soft and intangible nature.

16. Conclusion

Problems to do with the cultural and behavioural dimension to knowledge management are generic and apply irrespective of the kind of organisations involved. Moreover, whether operating in the public or private sector, organisations will seek to gain quick wins in the guise of technological or systems-based solutions aimed at the capture and reuse of knowledge. As a consequence, achievements in the knowledge management field have tended to be moderate and often at relatively low levels within organisations. This assessment has prompted a third research project which will set out to test three basic hypotheses relating to knowledge management in government:

- Knowledge management will operate in a context of service modernization;
- In practice knowledge management will be subsumed within electronic government;
- Despite the issuing of high-level mission statements, electronic government seems most likely to eventuate as the delivery of and access to public services.

This latest project might seem to be based on an unduly conservative assessment of the nature and pace of change within government both local and national. After all, the indications from the two earlier projects are that despite a certain amount of confusion over core concepts, the breakthrough to recognition of the potential of knowledge and knowledge management may
have occurred. Nevertheless experience in the private sector shows that it is in achieving success in the softer aspects that the major challenges reside. It remains to be seen if the gap between high and lower levels of knowledge management practice can be closed in the complex environment of the public service. This is necessary not only make a reality of knowledge management in the public sector but also to contribute significantly to its reform and to a general improvement in levels of public services.

References