

WEB 2.0 AND KNOWLEDGE MANAGEMENT FOR LOCAL GOVERNMENT IN ENGLAND – A MODEL FOR THE PUBLIC SECTOR?

ABSTRACT

PURPOSE

Delivering success in the public and private sector requires staff to have access to the best knowledge possible about how to do their jobs well so a major challenge for employers is how to ensure their staff are making decisions based on the latest knowledge of best practice.

21st century professionals and policy makers are increasingly being required to demonstrate that their practice and decision making is evidence based.

This paper examines a new public sector knowledge management initiative across local government in England and Wales which aims to improve knowledge sharing across local government.

In response to a number of drivers for improvement, the Improvement and development Agency for local government in England (IDeA) has harnessed web 2.0 tools to support knowledge creation and sharing, and just in time learning to create a professional networking online environment - a 'Facebook' type environment for local government. The result is an online Communities of Practice for local government initiative <www.communities.idea.gov.uk> .

DESIGN

This initiative was launched across local government in England and Wales in January 2008 and an arrangement with the local government improvement services in Scotland provides similar access to local government officers there. At the time of writing the initiative has over 30,000 members in over 700 online communities with new members joining every day.

The knowledge management strategy discussed in this paper was developed following a review of knowledge management literature and an analysis of the specific needs of the local government sector by the Improvement and Development Agency for local government in England. The data reported come from a number of sources including web statistics which are collected automatically and interviews carried out to identify ways in which the initiative is having impact.

RESEARCH LIMITATIONS/IMPLICATIONS

The impact of knowledge management initiatives can be hard to quantify but the paper outlines some proxy measures which give some indication of the value for money of this knowledge management strategy.

PRACTICAL IMPLICATIONS

The argument is made that online communities of practice can very quickly provide advantages and significant cost benefits to the public sector in spite of the limitations of the software and the fact that working practices will take many years to change.

It is argued that the approach set out in this article provides a model for other public sector organisations.

ORIGINALITY/VALUE

Knowledge transfer and research impact are areas in England of concern to both government and academics who in the REF 2013 will be judged on the impact of their research

This online communities of practice initiative is a new way of knowledge sharing and working across a whole public sector. It has the potential to revolutionise the ways professionals learn and carry on learning as well as the relationships between academics and potential users of research. However, the establishing and managing of such an initiative requires national leadership on behalf of a sector.

INTRODUCTION

One fundamental prerequisite to delivering success consistently in any organisation is that staff have access to the best knowledge possible about how to do their jobs well. This requires effective quality assurance and knowledge and information systems to be in place together with systems for continuing professional development (CPD) and 'rapid onboarding' of new staff.

Whilst all of these systems fall within the remit of an organisation's Knowledge Management strategy¹ (Collison and Parcell, 2006, Leask et al, 2008), there is a limit to what each public sector institution can achieve acting individually within its own resources as staff have a wide range of individual and particular knowledge needs. The initiative discussed in this paper provides a model for sharing and accessing the collective knowledge of the sector and has been funded by a national agency on behalf of the sector.

Knowledge management is an emerging discipline focused both on the effective use of the tacit and explicit knowledge existing in organisations as well as on the access to expert knowledge from outside the organisation (Howard Partners, 2005; Davenport and Prusak, 1998; Newman and Holzman, 1997).

In parallel with this thinking has been the emergence of the evidence informed policy and practice movement which is having an impact on the way professionals are held accountable (Oakley, 2003; Hu et al, 2000). Both are international in scope. But

practice is patchy. Effective knowledge management and evidence informed practice can only be built on a solid foundation of information management which harnesses the opportunities offered through technology for the storage, archiving and retrieval and cross-searching of electronic documents.

This paper introduces and reviews a national initiative in England and Wales designed to support knowledge management across local government through just in time CPD and rapid onboarding of local government staff. The work presented is built on theories and research evidence of how professionals learn, see for example Schon, 1987; Lave and Wenger, 1991; Wenger et al ,2002; Leask and White, 2003.)

The initiative is the Online Communities of Practice for local government (CoPs) which is found at <www.communitites.idea.gov.uk>.

This online CoP initiative was developed by the Improvement and Development Agency for local government (IDeA,< www.idea.gov.uk>). The Online CoPs use web 2.0 tools (read and write) such as blogs, wikis, forums as well as web 1 tools (read only) such as document libraries, events postings, personalised search to provide private or public online workspaces for just-in-time access to knowledge, knowledge sharing and creation across local government.

The IDeA is the improvement arm of the Local Government Association (LGA) which is a subscription organisation in England representing the interests of its members who are all local authorities. This is an important point as an initiative such as the CoPs is most appropriately run and managed by the professional group it is intended to serve. It is not appropriate for a national government agency which has responsibility for inspection, or the allocation of funds for salaries for a professional group to provide this service – simply because those managing such an initiative – the administrators of the software environment - have software administration rights that allow them to view any discussions which are being undertaken. For the online CoP approach to work there must be trust between participants and those managing the service.

Through the IDeA CoPs, a private or public online workspace can be requested by anyone working in local government and a community takes only a matter of minutes to set up electronically. Sub communities can be created within the main community to support working of sub-groups within the overall community. The online environment provides workspaces with online tools such as an events calendar, wikis, specialist search across key websites, blogs, document library, RSS feeds, forums. Making an online CoP work effectively requires however a completely new approach to the daily work of staff who have responsibility for the CoP and this way of working is still embryonic in development. It is not to be fitted around other work in the way that email is.

The rest of this paper, provides insights into the problem and the opportunities which gave rise to the online CoPs.

THE CONTEXT – THE CHALLENGE OF KEEPING STAFF UP TO DATE

CPD in the traditional face to face form is expensive. It often has little long term impact and in many cases, is not up to date enough for public sector staff who need to create new knowledge in order to deal with new challenges or emerging crises in

local communities and the regular flow of new initiatives from central government. This new knowledge has to be created at the time of need by public sector workers drawing on the best knowledge available to them.

Many professional groups are now able to draw on materials in knowledge banks created specifically for them. In education in England, a good example is the Teacher Training Resource Bank (www.ttrb.ac.uk) which provides access to a quality assured evidence base for educational practice². For the education sector more widely, the Education Evidence Portal (www.eep.ac.uk) provides an education Google type facility to enable the rapid retrieval of documents from key organisations. In local government, the Improvement and Development Agency's (IDeA) website (www.idea.gov.uk) provides access to a resource bank of best practice in local government. For social care, the Social Care Institute for Excellence (<http://www.scie.org.uk/>) provides a similar function.

All of these initiatives are welcome developments supporting the improving of the knowledge base of professional groups. But they don't support the creation of new knowledge at the time of need.

Figure 1 illustrates the changing modes for access to knowledge and the changing modes of the creating and dissemination of knowledge now possible with online networking and online knowledge banks. It illustrates the rapid change in how we manage and create knowledge from the 19th century model (bottom quadrant on the left) where book production was slow and costly to the 21st century model (top quadrant on the right) where experts around the world can write collaboratively online and publish at the touch of a button with anyone, anywhere at anytime accessing their material.

Insert figure 1 from 19th Century practice to 21st Century practice

The online CoP initiative is a new form of working and draws on affordances indicated in Figure 1 in the top right hand quadrant. It has been called the 'Facebook for local government' after the popular social networking site of the same name. Developed and implemented across local government in England during the period 2006 the Online Communities of Practice (CoPs) for local government initiative (www.communities.idea.gov.uk) has over 30,000 members in 700 communities with numbers increasing daily

THE CONTEXT – 700 SERVICE AREAS, 1.25M EMPLOYEES

Local government in England has over one and a quarter million employees in 700 service areas plus another million employees in the education sector.

Whilst the resources in existing knowledge banks provide access to already published and explicit knowledge in the public domain, local government including the education sector is under constant pressure to respond to new government initiatives and challenges in local communities.

These challenges frequently require new ways of working and different forms of engagement with different groups in the community.

Consequently there is usually a limited published (explicit) knowledge base to draw on. Individuals faced with these challenges, have the choice of drawing on their own knowledge alone or working collectively with others facing similar problems and experts. Much of the knowledge required in the new situation will be newly created from the tacit knowledge, held in the heads of experts and the published explicit knowledge. Without online collaborative working, such knowledge sharing and development has to be done face to face which is expensive in terms of staff time and travel, and requires someone to take a lead to invest resources in to it. So often it simply doesn't happen.

WHY ONLINE COMMUNITIES OF PRACTICE FOR LOCAL GOVERNMENT? THE PROBLEM AND THE OPPORTUNITIES

There were a number of drivers behind the initiative:

- Knowledge management¹: Improving knowledge management across local government had been the focus of considerable investment over a number of years by Communities and Local Government, the ministry responsible for local government. This had created an environment where opportunities for improved knowledge management were likely to be received with interest.
- Recruitment: The LGA and the IDeA saw the need to create a working environment across local government that would attract the best graduates to become local government employees. Creating a professional networking type environment to match the social networking environment young people were operating in their leisure time was seen to be an opportunity to be seized.
- Value for money: Local government was facing pressure from government to improve value for money so initiatives designed to share knowledge cost effectively and rapidly across local government were seen as worthy of support by the IDeA.
- Accountability: Best value, efficiencies, value for money, benchmarking, inspection, value added are all words that shape the context for work in the public sector in England. The introduction of performance indicators to the public sector in 1988 started a trend for accountability and measurement which has accelerated with the opportunities new technologies offer for low cost online collection and transfer of data now available to central government from a networked public sector. Delivering and measuring success in this high accountability environment is a key concern for all senior managers. Through the online CoPs, local government employees have been able to share the practice that underpins their achievement of particular benchmarks. For example, some communities have been sharing data about the time it takes to deal with particular enquiries from clients and finding that there is considerable variation between local authorities. The online CoP provides a private space for exploration and sharing of different practices which lead to efficiencies or which create inefficiencies.

So for a range of reasons, the IDeA decided to experiment with web 2.0 tools and to set up a professional networking solution based on existing successful social networking solutions. Using IBM websphere IT tools the IDeA communities of practice for local government online environment was created and made available for testing in October 2006

There are of course many free online networking solutions but a key reason for adopting a bespoke solution was to ensure that the functions met the needs of users including the need to be able to find people in a specialist area. All who are registered as a member can click a button and find people like them or search on a national people finder for people with similar responsibilities. This interlinking between otherwise private community online workspaces was not found to be available on other systems.

HOW ARE ONLINE COPS WORKING IN PRACTICE?

In this section an overview of findings of research undertaken with users is given together with web statistics for the site.

The IDeA Communities of Practice initiative is the subject of ongoing monitoring and evaluation. There are many different types of communities and these communities have different purposes. Communities may be set up for long term purposes or short term purposes such as time limited consultation. Among the hundreds of communities there are roughly three main types: those set up by central government agencies to support more effective communication with partners across local government; those initiated by local government officers to communicate with each other and those set up by regional organisations to facilitate knowledge sharing across the region.

The data used to underpin the discussion and the claims in this article are drawn from four sources:

- 1) a survey of 6,000 early adopters of the communities of practice platform. In January 2008, following a year of development and refinement of the software and the training materials, the initiative was publicised to local government. Just prior to this launch a survey was sent electronically to all current registered users - 6000. The questions asked yielded quantitative and qualitative data.
- 2) telephone interviews with members in 10 communities were carried out by an independent evaluator during the period January to March 2008. Participants were chosen to provide a sample of communities created to meet national priority needs for the IDeA and communities created at the request of local government officers. The evaluation report anonymised outcomes.
- 3) Web analytic software showing numbers of page impressions, document downloads, number of users, percentage of contributors
- 4) Close monitoring of the CoPs set up by IDeA staff. IDeA teams run CoPs as part of their communication strategy and ways of working with local government. They are held accountable through a number of success criteria to help them measure success such as:
 - Quality of interaction on IDeA CoPs meets individual CoP success criteria
 - 100% relevant LAs signed up to priority CoPs
 - 99.5% reliability of service..

The Knowledge Team which is the internal IDeA team with responsibility for the initiative, monitors usage using web stats, independent evaluation and surveys which are reported regularly to an internal steering group. The usage trends speak for themselves, membership, usage, active engagement figures all show a steady increase.

It is very difficult to measure financial benefits of the system except by proxies. Two proxies which are used are the cost of ordering an article from the British Library and the cost of producing policy documents as both of these items are available on the site. Rough calculations show a value in terms of time saved on the production of policy documents and the cost of ordering articles from the British Library of around £800,000 per month. The costs of running the system are a tiny fraction of this and neither of these proxies places a value on the impact of improved access to knowledge. Table 1 provides a summary of core data.

Insert table 1 here

WHAT ARE THE IMPLICATIONS OF THIS INITIATIVE FOR OTHER SECTIONS OF THE PUBLIC SECTOR?

There are few parts of the public sector as large as local government but health, the police, crime and justice, defence and education sectors are similar in many respects. Might such a service be of benefit to those sectors?

The adoption of a knowledge management culture within an organisation requires the establishing of a culture where sharing, creating, managing, building on and publishing knowledge become core values and where hiding, hoarding and hogging knowledge are discouraged. But there is an inherent contradiction in the expectation that employees will willingly adopt an open knowledge management culture. In many organisations knowledge is power. An individual's knowledge is what keeps them in their job and sharing knowledge could lead to an individual becoming expendable.

CONCLUSIONS

How is this initiative helping to deliver success?

Staff in the public sector have access to a lot of measurements of their work but there is no point having access to benchmarking data unless you have access to the knowledge of how those more successful than you work. This online initiative is intended to provide a cost-effective means of networking professionals so that they can share and challenge practice thereby improving the quality of what they do.

The outcomes of the evaluations and the trend data from the web statistics indicate that users are finding this way of working useful with some communities clearly using the approach for benchmarking both to measure success and then through discussions within the community, to find out what actions others are taking to achieve success.

An analysis of the cost benefits indicates investment is providing a good return and this initiative is still at the very early stages of adoption and integration into the daily work of local government employees.

References

- Collison, C. and Parcell, G., (2006) Learning to Fly, London, Wiley.
- Davenport, T. and Prusak, L., (1998) Working knowledge, Boston, Mass, Harvard Business School Press.
- Howard Partners (2005) The emerging business of Knowledge transfer: Creating value from intellectual produces and services, Canberra, Commonwealth of Australia, Department of Education, Science and Training.
- Hu, T.O., Davies, S.M. and Smith, P.C. (2000) What Works? Evidence-based policy and practice in public services, Bristol, The Policy Press.
- Lave, J. and Wenger, E. (1991) Situated Learning: legitimate peripheral participation, Cambridge, Cambridge University Press.
- Leask, M., Lee, C., Milner, T., Norton, N. and Rathod, D. (March 2008) Knowledge Management tools and techniques: helping you access the right knowledge at the right time, London: Improvement and Development Agency for local government. Also available online at www.idea.gov.uk
- Leask, M. and White, C. (2003) Initial Teacher Training (ITT) Professional Resource Networks (IPRNs) – rationale and development, Paper presented at the British Educational Research Association conference, Edinburgh, September 2003.
- Newman, F. and Holzman, L., (1997) The End of Knowing, London, Routledge.
- Oakley, A., (2003) 'Research Evidence, Knowledge Management and Educational Practice: early lessons from a systematic approach', London Review of Education, Vol.1, No.1, pp 21-34.
- Schon, D., (1987) How Professionals think in Action, New York, Basic Books.
- Wenger, E., McDermott, R. and Snyder, W. (2002) Cultivating communities of practice: a guide to managing knowledge. Cambridge, Mass: Harvard Business School Press.

Autobiographical note

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Marilyn Leask is professor of education at Brunel University, West London following a career in national agencies and the education and health sectors.

She has worked in the area of public sector knowledge management for the last twenty years focusing particularly on harnessing the power of ICT to support knowledge creation, peer review and challenge in various public sector organisations. She is an experienced researcher and evaluator.

Her specialist areas are improvement and development across large systems particularly through online networking and knowledge sharing, the development of approaches supporting evidence-informed policy and practice, and the use of ICT in for professional development.

She has worked in the health and education sectors including in local authorities, universities and two national agencies. She held knowledge management roles at The Training and Development Agency for schools where she established the Teacher Training Resource Bank (<http://www.ttrb.ac.uk/>) and the Improvement and Development Agency for local government where she set up online communities using web 2.0 technology for local government (<http://www.communities.idea.gov.uk/>) She has written texts on management and improvement in national systems.

She has led research projects in a number of countries as well as within the UK.

At Brunel, she leads the Pedagogy, Professional Development and Policy Research Group.

Table 1 Summary figures: IDeA Communities of Practice September 2008

- 30000+ members signed-up since November 2006.
 - 700+ communities of practice have been established
 - 100% English and Welsh local authorities have registered with one of more communities. The Improvement Service in Scotland manages engagement with local authorities in Scotland.
 - Membership is increasing but the percentage of members who actively contribute is increasing at a faster rate. This is interpreted as indicating a growing confidence in the way of working.
 - There is a steady increase in registrations to over 1000 per month – with dips around Easter and Christmas.
 - There is a steady increase in page impressions per month
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ⁱ Knowledge management covers a wide range of practices which are not covered here. The HR department need to review job descriptions, induction processes, the knowledge base of the trainers used for in-house training, appraisal training and appraisal processes including objective setting to include knowledge management objectives. This article focuses on reporting but one type of knowledge management practice used in the local government sector. Individual organisations within a sector face challenges in adopting new working practices. As a minimum, there needs to be the vision at the top of the organisation and the understanding that adopting new ways of working as described in this article will be a requirement of many departments. An advice booklet is available from the IDeA Knowledge Management Team. See Leask, Leask, M., Lee, C., Milner, T., Norton, N. and Rathod, D. (March 2008) *Knowledge Management tools and techniques: helping you access the right knowledge at the right time*, London: Improvement and Development Agency for local government.