Towards capturing Implicit Knowledge: 
A Practical Application of Intranet development

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Introduction

The use of Intranets as basic tools of communication is well established in the commercial world. Their usage in the NHS is still in its infancy, and its potential for misuse under scrutiny. The experience from the world of commerce suggests that Intranets are *sine qua non* for the capture of implicit knowledge. Yet it is not the technical infrastructure but the culture that influences the dissemination of knowledge, and furthermore any attempt to capture the implicit knowledge must be built on the existing culture rather than imposed as an organisational directive. There are many examples of Intranets designed with explicit knowledge in mind, indeed the NeLH includes a section on Knowledge Management, the title of which is Managing Explicit Knowledge. Rather than replicate existing Intranet approaches, the focus was placed on Implicit Knowledge Management. The aim being to develop an intranet structure that would build on existing cultural structures in order to generate the potential to capture organisational implicit knowledge. This presentation outlines the implementation process to date and relates the products produced to the existing cultural structures within the NHS and the principles of Knowledge Management. The presentation describes the organisational background, the developmental approach, the product development, the products themselves, the commercial comparisons, and the implementation to date. It highlights the strengths and weaknesses of the approach taken and the lessons learned.

Background

St Helens & Knowsley Health Community covers 320,000 patients cared for by two Primary Care Trusts (PCTs) and one Acute Trust. The Health Informatics Service was created in February 2001 by merging staff from primary care, community trust and secondary care into one organisation. The Intranet development falls under the auspices of the Clinical Knowledge Manager. The Intranet is a community wide initiative, having evolved from the Trust network.

Developmental approach

The web development department, (Webheads) undertook a process of scenario mapping, under the guidance of the Clinical Knowledge Manager. This scenario mapping involved considering the communication flows into and out of various components of the health community at multiple degrees of scale. Primary care was considered at the practice level, the Primary Care Group/Trust (PCG/T) level and to and from functionally adjacent structures, e.g., other PCGs. Secondary care was considered at the level of ward, department, directorate and functionally adjacent organisations, e.g., other hospitals. The output form this phase of the development was a categorisation of the knowledge artefacts/sources, the means by which knowledge is passed from one component of the health community to another.
Results and Development

The main themes emerging from the process centred around three kinds of artefacts/sources: “person” sources, individuals whose experience could be accessed directly to gain information, departmental sources, documents which were circulated within the unit containing explicit knowledge, and communal sources, which occurred in intra-departmental meetings, disease specific groups, or process specific meetings.

Product Development

These artefacts appeared to fit well with the principles of Knowledge Management outlined by Davenport and Prusak. They suggest three essential components in any attempt at managing implicit knowledge; Directory Services, Communities of Practice and Lessons Learned. The challenge has been to create a health community wide intranet that implements these principles in a way which builds on existing activity and looks for the synergistic effect of adding a KM focus to ongoing work.

Directory Services

The purpose of a directory service is not to be a phone book, but to act as a knowledge /skills /learning repository. With this in mind our directory has a minimum data set of demographic details, but in addition includes soft issues such as current projects, clinical and non clinical skills and even hobbies and interests. The user controls the content, creating and maintaining through a secure password. This password provides a single log on for all the intranet functions.

Lessons Learned Database

The lessons learned database collates documents and forms from all parts of the community, either as individual submissions or on behalf of a department. Submissions are linked to directory services to enable “grounding” of the document within the scope of the submitters’ experience.

Web Communities

The existing communities of practice cover a range of topics from managerial to disease specific. Web communities provides a framework for those groups to share their work, engage non members in discussion and contribute to the organisational knowledge base.

Implementation to Date

The current version of the Intranet was launched in February 2002. The roll out has been on a departmental basis; currently 10% of the health community with access to the intranet has registered in the directory service.

Lessons Learned and Conclusion

Departments that are geographically dispersed have showed the greatest interest in the web communities, other interested parties include groups that do not represent a distinct organisational entity. To date, the nature of the artefacts submitted tends not
to be personal work, but departmental or organisational in nature. This possibly suggests that the confidence to share our “own work” will take time to be established. It could be argued that explicit knowledge management must be in place for implicit KM to work, and that personal knowledge will be the hardest commodity to share.

References

   BMJ 1999;319(7220):1295-.
5. NELH Knowledge Management 2002
   http://www.nelh.nhs.uk/knowledge_management.asp NELH 22.02.02 2002

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