Document Management vs. Knowledge Management

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Most large organizations have been investing in various disconnected management technologies during the past few years.

Efforts to improve management have been especially noticeable over the last 18-24 months, as organizations try to tame the chaos behind their public internet and internal intranet sites. More recently, regulatory concerns have reawakened interest in records management, archiving and document management. In addition, organizations seeking to increase innovation and overall employee efficiency have initiated projects to improve collaborative capabilities.

With business models constantly changing and organizations moving to outsourced solutions, the drive towards improving business processes has never been greater. Organizations expect outsourcing to streamline business processes efficiently and effectively if they are to achieve rapid payback and return on investment (ROI).

This is where workflow, document management and knowledge management can support the in-house and outsourced business process improvements that help CEOs gain the business benefits they seek in order to remain competitive.

We will show how processes can be improved through workflow, document management and knowledge management.

Keywords: document management, knowledge management, designing process.

Nocument Management

Document management or EDMS – electronic document management systems – have long been pushed aside by many IT professionals.

Traditionally, systems designers like to hold all corporate data electronically and to capture that data at source. The internet allows customers to operate in self-service mode – and you can't get nearer to 'data capture at source' than that.

So why do we still need document management systems?

In the real world, many people are not sitting at workstations but are out and about where paper is still, and always will be, the most convenient way to hold information.

For many people who work for organizations like the utilities industry, digging holes in the ground, paper is the most sensible arrangement.

Research papers contain information held on one or more databases. Minutes of meetings hold information that may subsequently prove to be vitally important. Companies therefore recognize that while all data should be held electronically, useful information often sits in documents, which cannot.

The challenge is how to retrieve data to make best use of the information. And this explains why document management is at last being taken seriously, and why workflow solutions are providing the productivity improvements that many earlier automated systems failed to achieve.

Of course there are a number of caveats that must be considered if organizations are to succeed.

For example, a **workflow** solution should connect all the people in different functional areas who undertake the activities that make up a process. On the technical side, companies also need to ensure that electronic documents can be migrated to new environments when a technology infrastructure upgrade takes place.

Too many system architects focus on how to automate activities where data retrieval is easy – such as sales data captured online and held in a relational database.

By using workflow and document management packages, organizations can now streamline a whole process.

Every company still wants to get rid of labour-intensive activities such as photocopying and distributing paper documents. If paper has to be used, due to the physical nature of the business operation, then an electronic document should be sent and printed locally. Of course good system design remains important and for an EDMS, using templates

and/or document samples that others can easily access or make use of improves the system. Also, the more that people are involved in the detailed design, the more likely they are to use the new process/system.

"Involve people and they will understand" must be the most important focus for many companies - "Tell me and I'll forget. Show me and I may remember, but involve me and I will understand." said Lao Tzu.

Designing processes

Workflow and document management software packages enable organizations to reengineer business processes and achieve substantial returns on the investment in IT.

BPR (business process reengineering) has acquired a bad reputation as 'big people reduction', so it's not surprising that many staff is still suspicious when organizations talk about re-engineering a process.

However, when people come to appreciate that they can access information held in documents quickly and easily and share this information with others, the attitude tends to change.

When people see they will benefit from a change, they are willing to go along with it.

Productivity improvement is achieved by having everybody undertake the process activities in a consistent manner, and this is facilitated by the workflow package. This is quality management in action or 'getting it right first time, every time'.

One of the advantages of workflow and document management systems is that the system keeps track of events as they occur, so there is an audit trail as well as an easily understood and operated set of controls.

Both of these features are important for security, since people only see information when it is appropriate and are reminded to undertake the next activity in a process.

However, using a software package does not mean ignoring good documentation design principles, such as:

- version control, including document date

- retention times, so as to not clog up the system with out-of-date information

- categorization on a document – eg, meeting minutes or research papers

- author and other contact details

- audience, objective and/or key word summary, which will be of use to individuals seeking information.

Data can also be captured using a variety of hardware and software-based techniques such as:

- numbered forms

- barcodes pre-printed on forms

- mark sensing – ie, crosses in designated boxes on a form

- optical character readers (OCR).

Knowledge management

I believe workflow and document management systems are now key components of a whole new way of working.

What sort of picture does the words 'knowledge management' conjure up in the mind?

To some, knowledge management is all about that fuzzy term 'networking', where people get together in virtual 'knowledge' groups and share experiences and information. The problem with this description is that there is too much reliance on individuals' personal knowledge.

On the other hand, software vendors believe that knowledge management is all about search engines and how best to structure and hold information. In this type of scenario, naming standards are a key feature; otherwise the ability to find useful information is impaired.

Actually, neither of these approaches addresses the way that people actually work which is the sequence of activities that people undertake in following a process. This is where workflow comes into its own.

Knowledge management guru Karl Sveiby say that: "Knowledge is the capacity to act,

not something stored in a database."

In our view, without workflow present to structure business activity, knowledge workers are operating in an environment where there is reduced productivity. Given that the whole point of using technology is to improve productivity, this is a huge wasted opportunity that is costing businesses money.

This can help company to improve their business processes, and occasionally this has involved changing the whole work environment.

Nowadays the type of software tools that are available can offer vastly more than just workflow and document management.

For reference, as we can see in fig. 1, explicit knowledge can be recorded and accessed by others; tacit knowledge is what an individual knows instinctively from experience and/or gut feel, plus the application of common sense. The diagram shows all the subject areas that come under the heading of knowledge management. For example:

- document management is important, as much of an organization's information actually sits in documents

- collaboration and project management is a facility that enables people working in teams to share information in dynamic (real-time) mode, and keep track of events within a project team; the original Lotus Notes software was an early version of this facility

- where there is a standard process for dealing with a situation, then an organization can build this into a workflow module so that a consistent approach is used

- this feature can be taken further – an organization can set up the software so that when a certain type of 'event' has occurred, an email will be generated and sent to an individual to alert them to the situation.

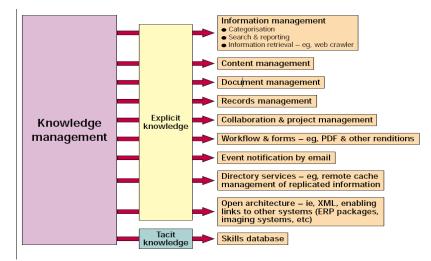


Fig.1. Knowledge management functionality

Maybe there is a toolset already out there that provides this functionality, but if not, it will not be long before one is introduced.

As can be seen from the list of headings, workflow and document management are integral components within a knowledge management solution.

"Different types of organization need to use their corporate knowledge in distinctive ways" said Nigel Oxbrow.

The knowledge economy has become a reality for many organizations and countries. As Tony Blair said "*The success of the economy* will be determined by knowledge, skills and education." In other words, the wealth of a nation no longer depends on its ability to convert raw materials into tangible goods, but rather on its ability to develop and harness the abilities and knowledge of its citizens.

Many organizations have realized significant benefits from developing a knowledge conscious style of management and from specific knowledge actions.

Companies fully exploiting their knowledge potential are characterized by: excellent cus-

tomer understanding; innovation and creativity; better informed decisions; continuous improvement to operational efficiency and effectiveness; clever risk management. All of which results in improved business performance and profitability.

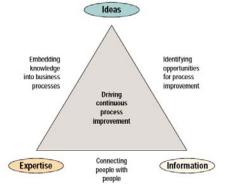


Fig.2. Key factors in process improvement

In summary, knowledge conscious management aligns an organization's expertise, information and ideas around the critical success factors of the organization. It also employs an appropriate mix of tools of intervention – people, processes and technology. The knowledge proposition outlined here suggests a knowledge framework that can help organizations map knowledge-focused activities against their key performance indicators.

Conclusion

So where does all of this take us?

Although IT impacts on all aspects of life, organizations have accepted that some information will always need to be held in documents or stay paper-based.

This means document management is going

to remain an important tool in the IT arsenal for some time to come.

Likewise all routine processes can now be better managed in a quality environment through the use of workflow software with measurable gains in productivity and a better approach in knowledge management.

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