

Towards Knowledge Management: ECM/EMC after the first year

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Knowledge Management – All Sounds Sensible...

“...creating new knowledge is not simply a matter of processing objective information. Rather, it depends on tapping the tacit and often highly subjective insights, intuitions and hunches of employees, resulting in a spiral of knowledge at continuing higher levels.”

Nonaka, I, ‘The knowledge-creating company’, *Harvard Business Review*, 69, 1991

“A company's choice of knowledge management strategy is not arbitrary--it must be driven by the company's competitive strategy”

Morten T. Hansen, Nitin Nohria, Thomas Tierney, ‘What's Your Strategy for Managing Knowledge?’ *Harvard Business School Publishing*, January 2000

Knowledge Management – All Sounds Sensible...

- An environment where people can create, collaborate and enhance knowledge
- Shared, secure, digital documents and records
- Private vs Public
 - E.g. Pharmaceuticals – creation and sales of knowledge
 - The internet – particularly Web2.0
 - Many companies are combining both – with expert users providing help forums - enhancing user support

Knowledge Management – Starting Out

- Key documents on drives not accessible across the organisation (or on C: drives?).
- Important email in individuals' mailboxes
- Research data in 'Books' or personal systems. (The data less important than the publication.)
- Few users bother to save email or files in a directory structure
- Important paper contracts 'hidden' in cupboards etc

Knowledge Management – Starting Out

- As a minimum UCL wanted to be able to save important documents and emails into a repository
- Searchable across the organisation
- With enterprise security
- But... with a view to enhancing knowledge sharing and collaboration

ECM at UCL – How We Bought EMC

- Background
- Initial requirement for EDRM
- Procurement
- Implementation
- Future Directions

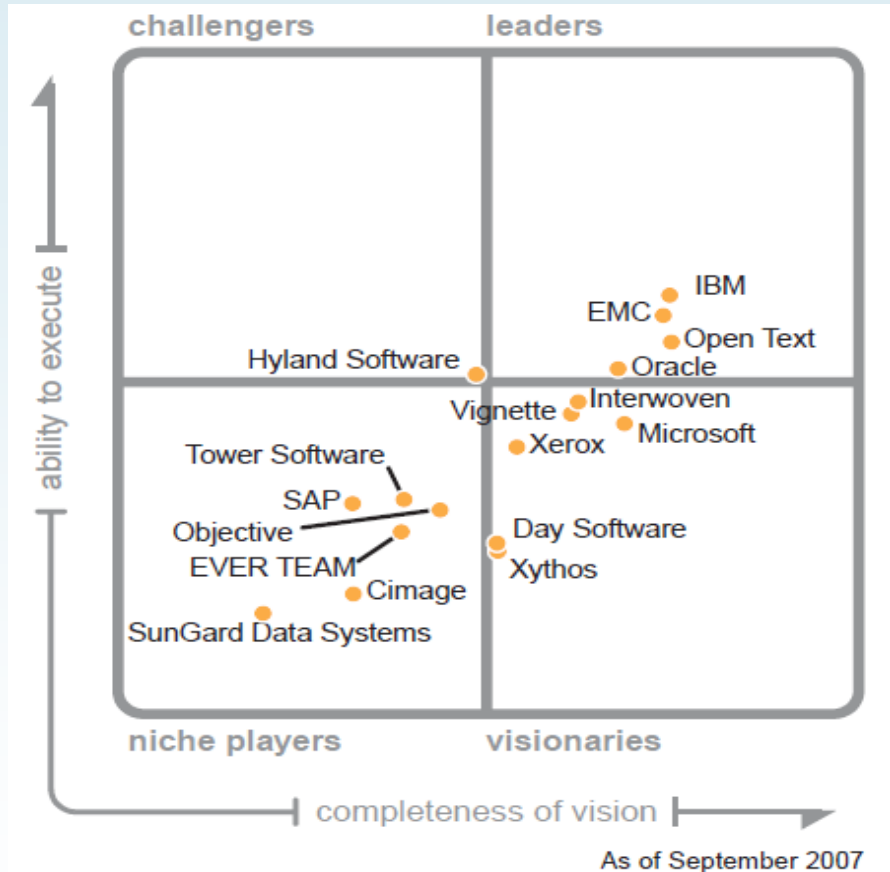
Background

- Bandwagon: E-Government framework had mandated EDRMS by Dec 2003
- Paper – London’s space premium
- Disaster Recovery – are paper documents ‘safe’?
- Data Protection/FoI – and searching
- Documents and Legacy systems

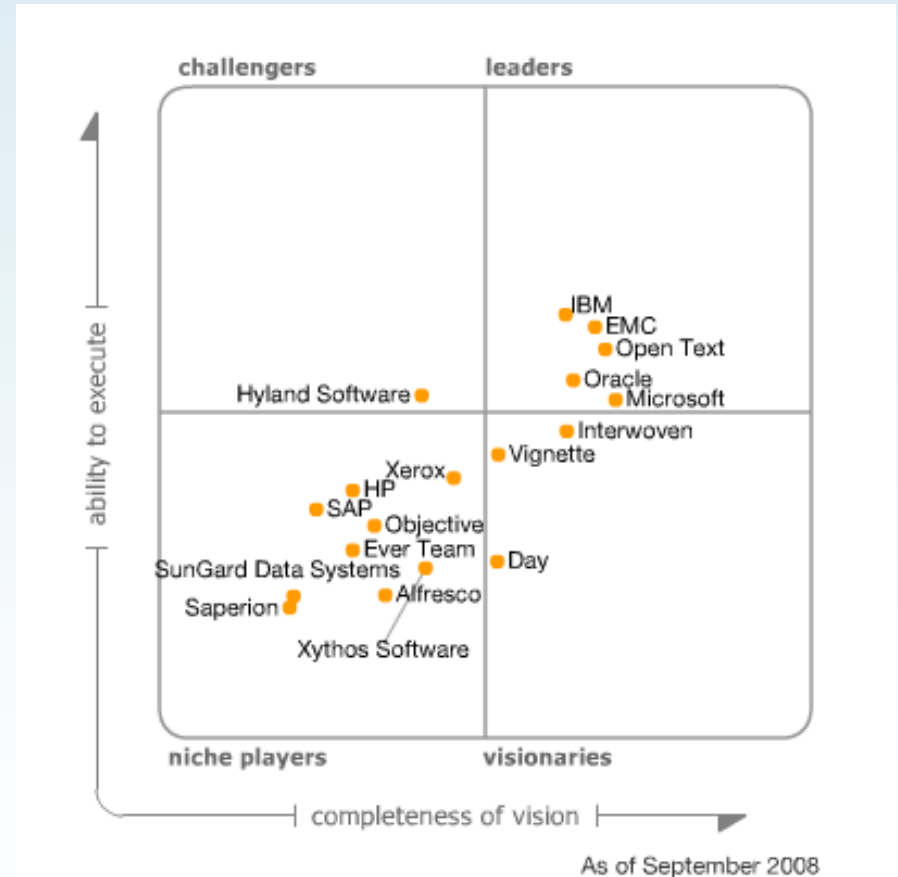
Background

- What companies are out there? Why won't they bid?
- Government and big business activity
- Who should we trust?
- ECM sector was consolidating
 - Vignette buys Tower, EMC buys Documentum, Oracle buys Stellent, IBM buys Filenet, OpenText buys Hummingbird...
 - In 2008, open source Alfresco enters Gartner Quadrant

Background – Gartner’s Magic Quadrant



Source: Gartner (September 2007)



Source: Gartner (September 2008)

Gartner’s Magic Quadrant for ECM – 2007 and 2008

Initial Requirement - Registry

- Registry Student Records
 - Existing implementation, but company no longer in existence
 - Running on old NT boxes, with no upgrade path
 - No access to source code
- Business benefits
 - Integration with SITS would improve processing of student information.
 - Lower risk to important organisational data

Initial Requirement – Research Grants

- Research Services – Funding Applications
 - Large paper holdings - filing cabinets and archiving
 - Potential for collaboration and workflow
- Business Benefits
 - Reduction in clerical filing & retrieval (between 0.2 - 0.25 FTE).
 - Decrease a business clerk's time to access records by 4 hours.
 - Remove need for 4-6 desks space of filing cabinets.
 - Collaborative environment

Initial Requirement

	Research Services	Student Records
Users	50	100
Initial Folders	3,000	86,000
Initial Files	390,000	420,000
Folders p.a.	3,000	15,000
Files p.a.	150,000	50,000
Pages p.a.	150,000	300,000

Initial Requirement – Strategy

- Initially, no enterprise-wide Knowledge Management vision/strategy
 - Though the intention was to expand usage to other Administration areas
- Perhaps strange in an organisation which is focussed on the creation, storage, sharing and exploitation of knowledge...!
- But difficult to align user requirements – sponsorship needs to come from near the top

Procurement

- A false start with one company, followed by retender
- Re-financing – budget in the region of £800k, (inclusive of hardware and VAT)
- Shortlist between Tribal (with Vignette), and Dell (with EMC)
- Either would have been an acceptable solution

Procurement – Lessons Learned

- First tender:
 - our contract saved us from a non-performant supplier
 - Allowed supplier fixed time frame to correct problems
 - When they didn't – we terminated the contract

Saved by our contract!

Procurement – Lessons Learned

- Second tender:
 - Few of the big players would accept risk at tender stage
 - Difficult contract negotiation – four months
 - Prime Contractor took most of the risk
 - Issue of ‘Revenue Recognition’ used to negotiate risk and level of acceptance tests
 - Unit and Load Testing Schedule is critical

As far as possible make sure the supplier accepts the risks of implementation

Procurement - Software

- EMC software offers:
 - *Knowledge Worker* (i.e. storage, classifying and retrieving information/documents)
 - *Transactional processes* (the scanning in of documents, automation of processes, forms, and document data recognition)
 - *Interaction* (eRooms, collaboration functionality)
 - *Compliance and Archiving* (change control, authenticity, retention schedules, records policy, managing an archive)

Procurement – : What We Bought

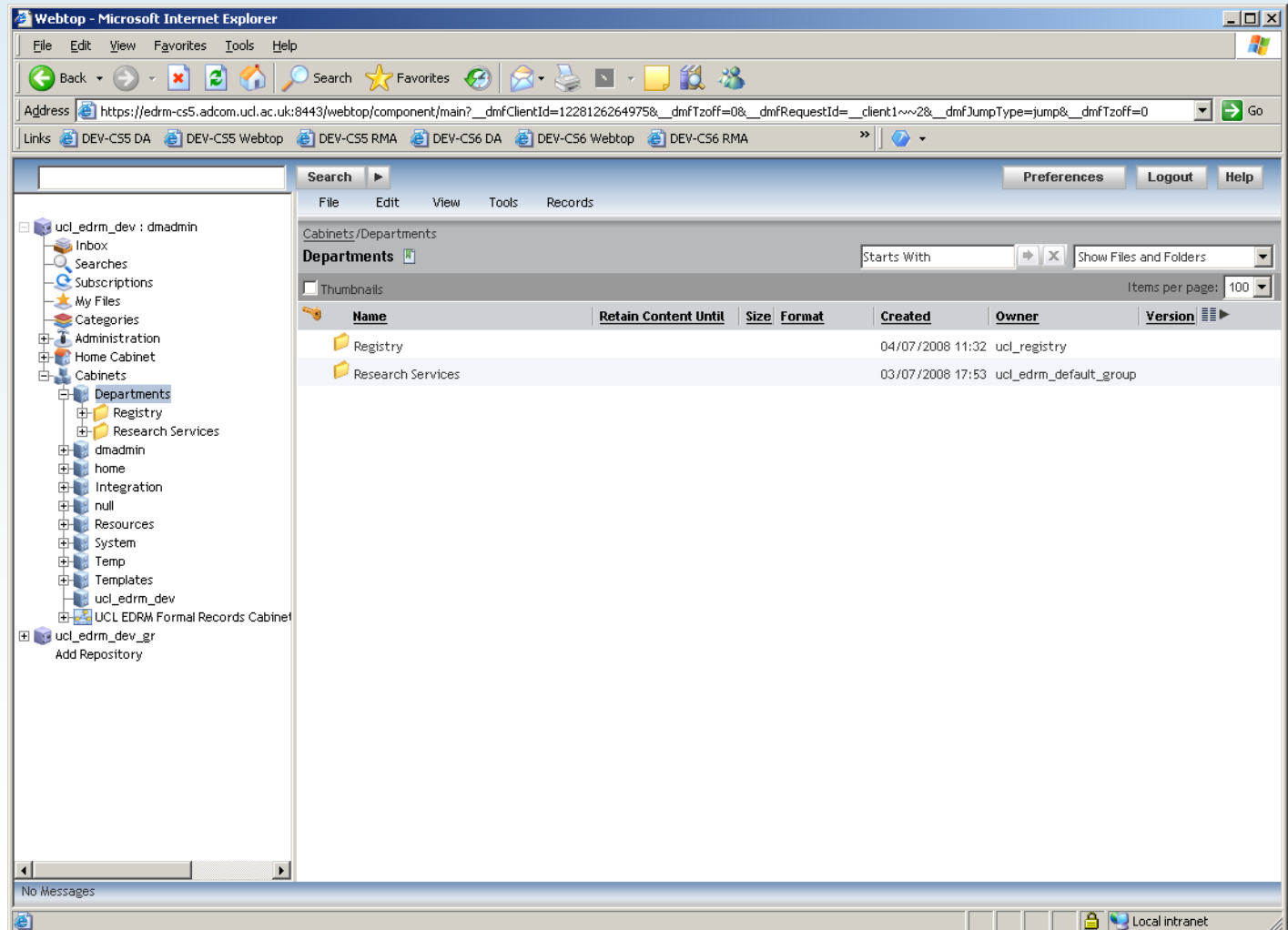
- *Webtop and Documentum* – the fundamental document and records management facility
- *eRooms* – providing Sharepoint-type functionality that integrates with document management
- *Transactional functionality* covering almost the full range of business processes (BPM design, eForms design, workflow, BAM)
- *Scanning* software and integration software
- *Search* engine called Discovery
- *Records, retention and archiving* capabilities
- An Outlook Connector that allows emails to be declared records and documents

Implementation

- EMC SAN and VMware solution – Dell & EMC hardware...
 - Should have been part of an institutional filestore, but wasn't...
 - Hardware compatibility issues – mainly backup - set back another four months
- Simple software solution – no workflow or e-rooms
- But, at UCL the modules duplicate Google Search, other workflow engines, other BAM solutions, ePrints, ImageStore, Silva CMS, Sharepoint...

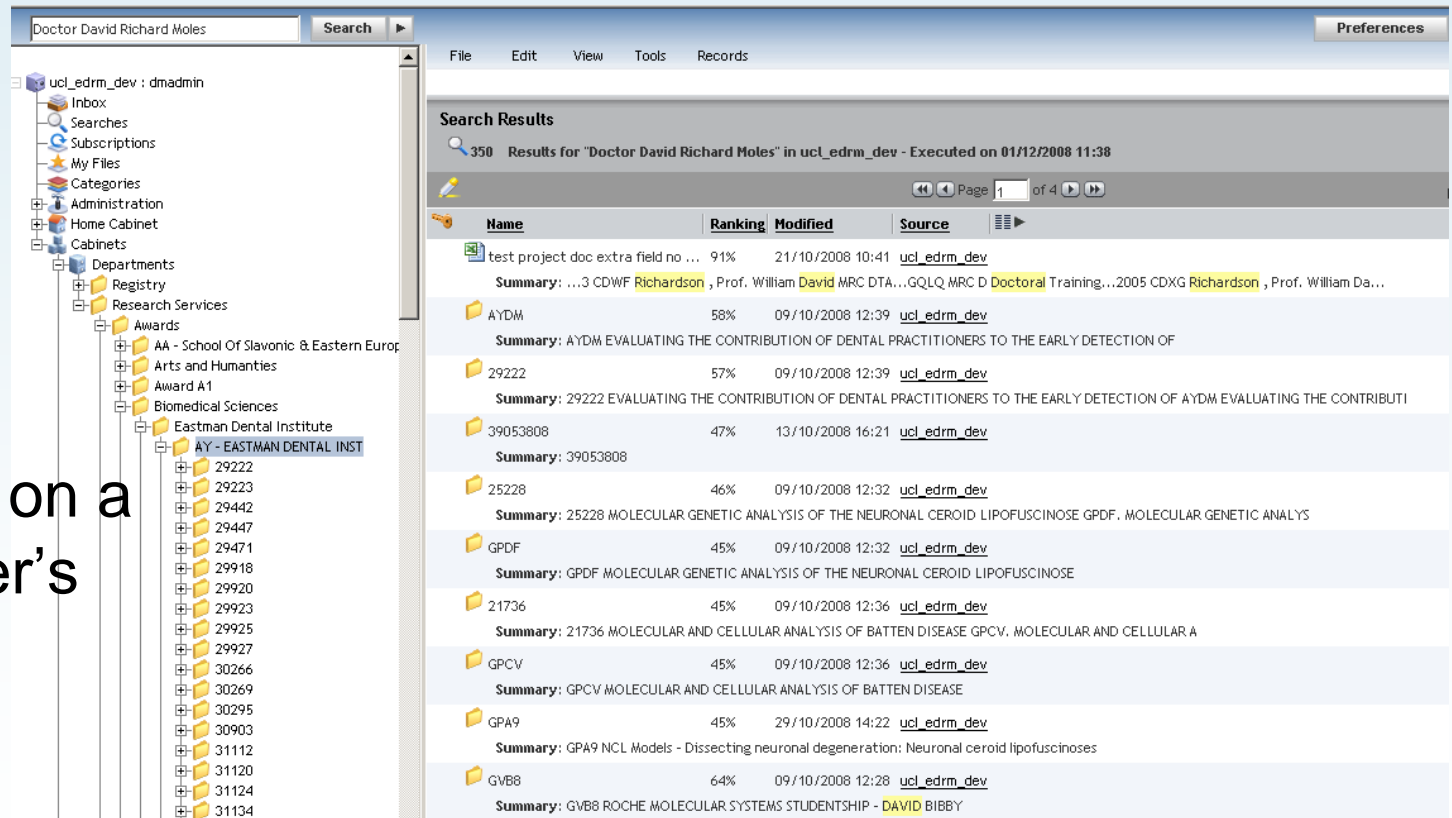
Implementation – Research Services

User
logged
into EMC
'web top'



Implementation – Research Services

Searching on a
Researcher's
name



Doctor David Richard Moles

Search

File Edit View Tools Records

Preferences

Search Results

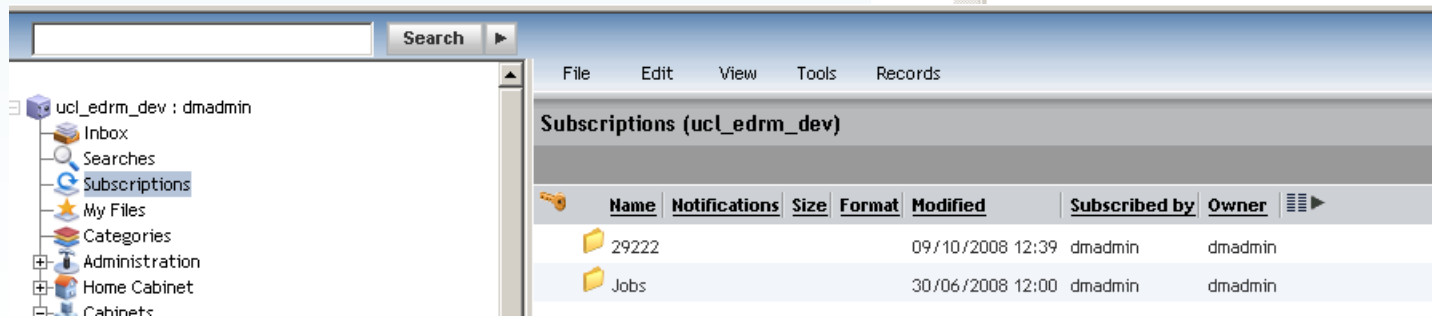
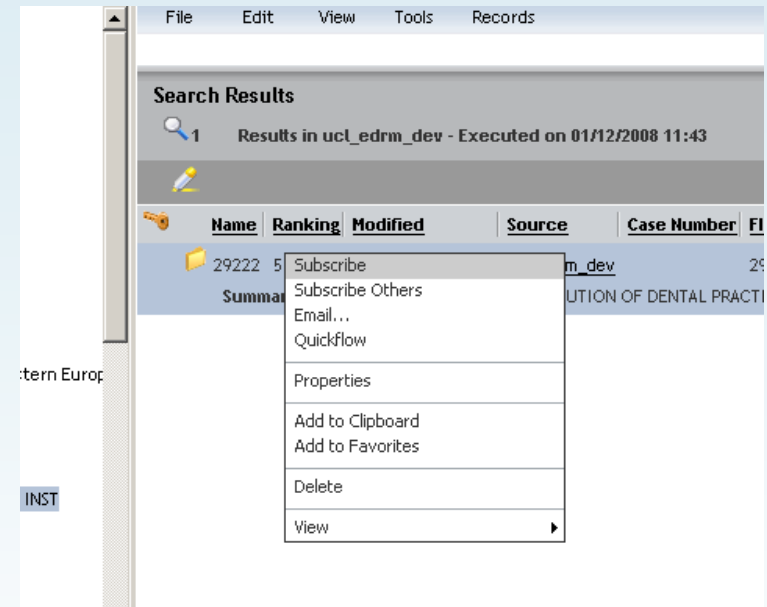
350 Results for "Doctor David Richard Moles" in ucl_edrm_dev - Executed on 01/12/2008 11:38

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Name	Ranking	Modified	Source
test project doc extra field no ...	91%	21/10/2008 10:41	ucl_edrm_dev
Summary: ...3 CDWF Richardson, Prof. William David MRC DTA...GQLQ MRC D Doctoral Training...2005 CDXG Richardson, Prof. William Da...			
AYDM	58%	09/10/2008 12:39	ucl_edrm_dev
Summary: AYDM EVALUATING THE CONTRIBUTION OF DENTAL PRACTITIONERS TO THE EARLY DETECTION OF			
29222	57%	09/10/2008 12:39	ucl_edrm_dev
Summary: 29222 EVALUATING THE CONTRIBUTION OF DENTAL PRACTITIONERS TO THE EARLY DETECTION OF AYDM EVALUATING THE CONTRIBUTI			
39053808	47%	13/10/2008 16:21	ucl_edrm_dev
Summary: 39053808			
25228	46%	09/10/2008 12:32	ucl_edrm_dev
Summary: 25228 MOLECULAR GENETIC ANALYSIS OF THE NEURONAL CEROID LIPOFUSCINOSE GPDF. MOLECULAR GENETIC ANALYS			
GPDF	45%	09/10/2008 12:32	ucl_edrm_dev
Summary: GPDF MOLECULAR GENETIC ANALYSIS OF THE NEURONAL CEROID LIPOFUSCINOSE			
21736	45%	09/10/2008 12:36	ucl_edrm_dev
Summary: 21736 MOLECULAR AND CELLULAR ANALYSIS OF BATTEN DISEASE GPCV. MOLECULAR AND CELLULAR A			
GPCV	45%	09/10/2008 12:36	ucl_edrm_dev
Summary: GPCV MOLECULAR AND CELLULAR ANALYSIS OF BATTEN DISEASE			
GPA9	45%	29/10/2008 14:22	ucl_edrm_dev
Summary: GPA9 NCL Models - Dissecting neuronal degeneration: Neuronal ceroid lipofuscinoses			
GVBB	64%	09/10/2008 12:28	ucl_edrm_dev
Summary: GVBB ROCHE MOLECULAR SYSTEMS STUDENTSHIP - DAVID BIBBY			

Implementation – Research Services

Subscribing to particular files and folders



Implementation – Legacy System Integration

- Integrated with Oracle Financials and SITS (UCL work)
- Documents attached to Oracle or SITS, but stored in Documentum file structure
- Java-based web services integration
- Scanning is EMC's Captiva product, rival to Kofax, and imports directly into SITS/Documentum

Future Direction

- Choice between:
 - High-value point-to-point solutions (e.g. forms and workflow), and
 - Broad-based, simple implementations (e.g. knowledge worker fileplan)
- Point-to-point solutions have a stronger business case, but can leave you with islands of customisation
- Simple implementations have a low immediate return, but improve organisational knowledge

Future Directions – UCL

- Advice from old ECM hands is:
 - get the basic knowledge worker/fileplan functionality in place as widely as possible
 - No customisations for individual areas – otherwise too hard to upgrade/support
 - One file plan
 - Select initial customers based on ‘maturity’ i.e. willingness to adopt the philosophy
 - Users hate taxonomy, so assign metadata to folders rather than documents

Future Directions – UCL

- UCL aiming for governance, rather than an explicit competitive strategy
- Positioning ourselves to be strategic about knowledge
- We have a list of basic implementations with ‘mature’ recipients – some researchers have also shown interest
- Will allow point-to-point solutions if the business case merits – e.g. PBIS document storage
- Will provide eRooms and CenterStage facilities to further knowledge collaboration

Questions?