Document Management

A brief guide to what it is and how to select and implement a solution.

November 2003
Document Management – What it is

Document management involves the migration of paper and electronic documents or reports onto an electronic storage medium and then the ability to easily retrieve the information according to agreed access rights. The diagram below shows the five basic components of a document management system:

1. Bringing In Documents
   a) Scanning Paper Files
      - Produces picture image on computer
      - Document feeder to scan many documents in 1 batch
      - Simplex or duplex mode (single sided vs double sided)
      - Scanning speed (10 – 200 pages per minute)
      - Optical Character Recognition (OCR) allows text to be "read" in and stored giving documents "active content"
   b) Computer Output to Laser Disk (COLD)
      - Brings in computer reports in electronic format on to imaging system
      - Reports are indexed to allow for fast retrieval of information

2. Storing Documents
   - Documents once brought into system must be stored
   - Must use non-proprietary and widely used storage standards
   - Common storage devices:
     - Hard drives
     - Magneto-Optical storage
     - Compact disks
     - DVDs
     - WORM

3. Indexing Documents
   - Paper documents are usually labelled, sorted, indexed, placed in folders and filed in a cabinet
   - Electronic documents are handled in a similar manner
   - Indexing must allow ease of use and be easily understood
   - Indexing will include:
     - Index fields
     - Full-text indexing
     - Folder/File structures

4. Retrieving Documents
   - Retrieval is where a powerful indexing system pays off
   - Some systems only allow searches by keywords (the person selecting keywords must have good knowledge of end user requirements as they are not the people who will be searching for the file)
   - Most effective imaging system uses full-text retrieval

5. Controlling Access
   - Need to provide different users with appropriate levels of access without compromising confidentiality or security
   - System administration controls user access and what actions to perform (edit, copy, delete)
   - Remote access by web browser
# Selection / Implementation

The steps below indicate some of the activities which will need to be undertaken to select and then implement a document management system, and what benefits the document management system would bring:

## 1. Needs Analysis

- Some key questions need answering to determine configuration and cost of solution:
- **Needs**
  - 1) How many documents to store? H/w config, storage size, h/w costs
  - 2) No of users? S/w costs
  - 3) Access (remote, local, networked)? S/w costs, security features
  - 4) Business problems to be resolved? Which modules to purchase
  - 5) Type of network? System configuration
  - 6) Who does the backlog scanning? Cost of take on

## 2. Selection

- Aim to provide a fast track selection process based on existing selection templates and reducing vendor shortlist to a maximum of 3 vendors.
- Can complete selection within 2 months

## 3. Pilot Implementation

- Start small (perhaps one or two departments and maybe a standalone solution). Allows procedures to be developed and tested.

## 4. Full Implementation

- Take on of historic reports
- Backlog scanning of all paper based records
- Training of systems administrators and end users
- Implement network version

## Benefits of Document Management Solution

1. Minimizes storage, retrieval and work flow management
2. Cost savings on data entry, filing and personnel management
3. Operational efficiencies (minimises errors, quick retrieval, and is not labour intensive)
4. Customer Service efficiencies
5. Reduction in volume of paper and need to photocopy
6. Sharing of information quickly and to several individuals at once
7. Secure documents electronically minimise loss due to damage or disaster
### Challenges

Below are a list of challenges to be addressed with regards to selecting and implementing a document management system:

<table>
<thead>
<tr>
<th>Business Case</th>
<th>Legal &amp; Compliance Issues</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ensure there is a solid business case and sponsorship right at the start</td>
<td>Can electronic records be used instead of paper records?</td>
</tr>
<tr>
<td><strong>Selection</strong></td>
<td><strong>What are FSA guidelines on this?</strong></td>
</tr>
<tr>
<td>Fast track the selection process</td>
<td>General guidelines for electronic record keeping are:</td>
</tr>
<tr>
<td>The process should be focused and requires significant involvement of business users. Can be completed in 2 months</td>
<td>- Records must be stored in unalterable format</td>
</tr>
<tr>
<td>Need to ensure what solutions have already been implemented within the Group and whether this can be supported in the UK</td>
<td>- System must have an audit trail to show any revisions</td>
</tr>
<tr>
<td><strong>Needs Analysis</strong></td>
<td>- Indexation system is available to allow easy access</td>
</tr>
<tr>
<td>Should be positioned as a strategic solution</td>
<td>- System must be able to print records</td>
</tr>
<tr>
<td>Will need to conduct workshop to determine what business problems need to be resolved now and in the future (e.g. need to capture requirements arising from future acquisitions)</td>
<td><strong>Other Issues</strong></td>
</tr>
<tr>
<td></td>
<td>Network vs standalone solution</td>
</tr>
<tr>
<td></td>
<td>Who does the scanning (inhouse vs outsourced)?</td>
</tr>
<tr>
<td></td>
<td>What to do with paper records?</td>
</tr>
<tr>
<td></td>
<td>What is the DR / BCP strategy?</td>
</tr>
<tr>
<td></td>
<td>What level of functionality is really required and who can be the decision maker on this?</td>
</tr>
</tbody>
</table>
Below is an indication of initial assumptions and estimates of the likely costs of a document management solution.

**Initial Assumptions**
- Document Management System data will be sourced both from scanned documents and comma delimited flat files (e.g. reports from current back office systems)
- Networked solution (access via browser)
- 50 users
- Jukebox access (rather than tower)
- Backlog scanning to be outsourced
- Selection timescale: 2 months
- Implementation timescale: 1 – 4 months

**Indicative costs**
- Software licence: £20 - £60K
- Hardware costs: £15K - £35K
- Backlog scanning (sample costs from one supplier):
  - Scanning Documents up to A3 - £25 per 1000
  - Scanning Documents Larger than A3 - £0.65 each
  - Preparation of documents pre-scanning (unfolding, destapling etc) £9.50 per hour
  - Indexing - £3.50 per 1000 keystrokes
  - Saved to master CD - £15 each.
  
  (the cost will depend on the quality of the documents: what is the readability of the documents, are they folded or stapled, how much manual intervention will be needed?)

Please note that these are initial estimate only. The actual costs may be higher / lower and will depend on:

- Functionality
- Scale of data to be stored
- Level of access (e.g. remote users)
- Range of documents and reports to be archived
- Number of user licenses
- Complexity of solution
- Implementation timescales
Document Management Suppliers

Below is a preliminary list of Document Management solution providers based in the UK.

Agfa-Gevaert
Canon UK
Dicom
DocuWare
Easy Software UK
EDOX Solutions
FilePlus
Formscan
Hitec Laboratories
Imaging and Archiving Co
Iron Mountain
Merlin Document Management
OIT UK
Tokairo
Xera

All these suppliers sell a document management product and / or can provide a documents management outsourced service.

The choice of which suppliers to progress with any selection process would be based on current and future business and technical requirements.
Background to Square Mile Consulting

- Main business areas
  - Consultancy
    - Investment banking
    - Retail banking
    - Insurance
    - Exchanges
  - Training
    - Project management
    - Programme management
    - User acceptance testing

- Square Mile currently employs 4 staff and associates

- Located in the City of London
Services and Products

- Aimed primarily at Financial Services, IT and Operations

- Consultancy
  - Project and programme management
  - System and service selection and implementation
  - Business and IT strategy
  - Business Process review and re-engineering
  - Disaster Recovery

- Training
  - High value management training
  - Based on project management
Project Management

- Our approach is based on PRINCE
- Concentrates on the deliverables of a project
- Our success is based on a set of proven abilities enabling us to:
  - Accurately define scope and manage change
  - Meet business objectives and realise measurable benefits
  - Manage risks and issues
  - Identify key deliverables and milestones
  - Manage all project participants including business, IT and suppliers
  - Manage communication of progress at steering group and project team levels
  - Coach and mentor client operational and support staff
The Square Mile “fast track” methodology adopts the following approach:

- Use predefined templates (ITTs, evaluations, workshops).
- Use of model business requirements which enables us to “hit the ground” running.
- Create a dedicated and committed selection team
  - Business and IT personnel
- Run many of the activities in parallel
- Work closely with short listed vendors

Experience of running many system selection projects in a wide range of financial services scenarios
If you require any further information please contact:

David Thomas / John Krol
Square Mile Consulting Limited

Square Mile Consulting
3rd Floor London fruit and Wool Exchange
Brushfield Street
London
E1 6EP

www.squaremc.com

Telephone: 020 7193 4455

Email: dthomas@squaremc.com
     jkrol@squaremc.com