Are knowledge workers able to search and retrieve information from their EDRMS? The second and final article in this series reports the results of a study of the information-seeking behaviour of 40 EDRMS users in four different organisations using three different types of EDRMS which highlights barriers to information seeking and discusses how RMs can address these barriers.

BY PAULINE JOSEPH, ARMA

The first article in this series set out reasons why RMs need to be aware of the information seeking behaviour of their EDRMS users. What are the necessary actions needed to address the barriers identified next from the research findings? The report continues...

### BARRIERS TO INFORMATION SEEKING, OR, REASONS WHY SEARCHES WERE DIFFICULT

When the 40 users were asked to describe and demonstrate their last difficult search, only 27 (67.5%) reported their experiences with difficult searches. The remaining 13 (32.5%) had not encountered difficult searches or were not able to recall them.

The eight reasons why searches were difficult are summarised in Table 1, column 1, whilst column 2 states the percentage of users who cited this reason. Column 3 identified who or what caused the search difficulty; be it the user, the system, RMs or the organisational culture. Lastly, stated in column 4 are the possible solutions to overcome each of these eight search difficulties.

<table>
<thead>
<tr>
<th>Reason for Search Difficulty</th>
<th>Percentage of Users</th>
<th>Who or What Caused Difficulty</th>
<th>Possible Solutions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of meaningful titling</td>
<td>22%</td>
<td>Colleagues or the Records Section</td>
<td>Use clear and consistent titles.</td>
</tr>
<tr>
<td>Classification scheme</td>
<td>19%</td>
<td>Users</td>
<td>Train users on using classification scheme.</td>
</tr>
<tr>
<td>System issues</td>
<td>15%</td>
<td>System</td>
<td>Improve system functionality.</td>
</tr>
<tr>
<td>User-related issues</td>
<td>12%</td>
<td>Users</td>
<td>Provide user training and support.</td>
</tr>
<tr>
<td>System interface</td>
<td>10%</td>
<td>System</td>
<td>Design intuitive system interface.</td>
</tr>
<tr>
<td>Organisational culture</td>
<td>8%</td>
<td>Organisational culture</td>
<td>Foster a culture of information sharing.</td>
</tr>
<tr>
<td>Other reasons</td>
<td>14%</td>
<td>Other</td>
<td>Address other identified barriers.</td>
</tr>
</tbody>
</table>

The study set out to determine whether EDRMS users are seeking information as the systems’ designers intended.

59% of problems are attributed to the users, but care must be taken by RIMS and others when registering new information into an EDRMS.
### Table 1: Barriers to Information Seeking in the EDRMS

<table>
<thead>
<tr>
<th>WHY SEARCH WAS DIFFICULT?</th>
<th>% OF TOTAL USERS</th>
<th>CAUSED BY</th>
<th>SOLUTION BY RMS</th>
</tr>
</thead>
</table>
| 1. Lack of meaningful titling of documents and records         | 22               | User                        | 1. Develop document titling guidelines and promote them in training sessions.  
2. Encourage business units to develop their own standard document titling conventions for their core information.  
3. Influence EDRMS vendors to research and build smart technologies to meaningfully title information registered. |
| 2. Lack of understanding or familiarity using the classification schema for searching. | 19               | Classification Schema       | 1. Simplify schemes to make them user friendly  
2. Provide users with training on:  
   a. how classification scheme works.  
   b. the handful of keywords relevant to individual business units or users. |
| 3. Document searched for, not registered in EDRMS               | 19               | User                        | 1. Market the benefits of using the EDRMS as the single corporate repository instead of network drives.  
2. Change user behaviour to store information using the EDRMS  
3. Seek management support to restrict or turn off access to network drives and other conflicting information repositories. |
| 4. Lack security access to documents and records                | 15               | System                      | 1. Conduct periodic quality checks to update security status assigned to embargoed information |
| 5. Incomplete or inconsistent entry of metadata fields in EDRMS by Records Section | 7                | Records Section             | 1. Establish processes for accurate metadata capture using controlled authority pick lists.  
2. Provide training for RM support staff registering information, of the importance of accurate and consistent metadata capture for search and retrieval. |
| 6. Too many search results to browse through to find documents and records Sought | 7                | User                        | 1. Provide training on searching at subject levels using the classification scheme. |
| 7. Requestor for documents and records provided inaccurate background details to search assistants | 7                | User                        | 1. Awareness raising training for Record Focal Points to elicit more accurate information from the requestor, using librarian’s ‘reference interview techniques’ |
| 8. Not sure if documents and records was made ‘FINAL’ in EDRMS. | 4                | User                        | 1. Emphasise at training sessions that documents finalised, as records need to be declared as records. |
| 100                                                             |                  | Records Section             | 2. Perform periodic quality assurance checks. |

Table 1: Barriers to Information Seeking in the EDRMS

on using metadata fields for searching instead. In cases where users had insufficient metadata to conduct the search, they first turned to other information sources to obtain their metadata, and then returned to the EDRMS to conduct their search.

#### Classification & Registration Conflicts

These extra steps could be eliminated if these users had an understanding of the classification scheme and how information was classified using the scheme.

Searching was also reported to be difficult because of differences in thinking of where corporate information on the same subject should be filed using the classification schema. This led to users searching in folders where they would file corporate information into, but not where their colleagues or the Records Section filed into. These conflicts in the selection of folders to file corporate information made searching using the scheme difficult as well.

Another 19% reported their search was difficult because they eventually realised that the information they spent their time and effort searching for was never registered in the EDRMS in the first place.

The information was not registered in the EDRMS for a number of reasons: other information repositories like network drives were also used to store corporate information in the organisation; and not everyone in the organisation diligently registered corporate information into the EDRMS.
The Problem of Multiple Information Repositories

The existence of multiple information repositories for corporate information, or the lack of communication on how network drives and EDRMS are to be used was observed to affect users’ work productivity in three of the organisations.

Fifteen percent of users reported that the lack of access to the information they were searching for in the EDRMS made their search experience difficult. This is because users were not aware whilst searching that the reason for not finding the required information was owing to their lack of access and not because of their search capabilities.

Seven percent reported their searches were difficult because the metadata they used to conduct their search was either not registered or was inaccurately registered in the EDRMS. An example cited was the ‘Contact’ metadata field where the name of the organisation from whom the document/record was received was registered.

In the absence of registering this metadata, users’ searches were incomplete, thus requiring more time and effort to search for the information using alternative metadata or search methods.

How Many is ‘Too Many’ Search Results?

Another seven percent of respondents reported their search was difficult because they had to browse through too many search results to find the sought information. Having to plough through more than 15 search results was perceived by these users to be difficult to find what they were seeking.

A further seven percent reported their last searches were difficult because the requestor of the information provided inaccurate background details regarding the required information. These users assisted their colleagues to search for information from the EDRMS in their roles as record focal points. Examples of inaccurate background details were inaccurate authors for documents, records or file numbers.

Lastly, one participant (representing four percent of users) reported searching for the letter which was signed off by the Treasurer and scanned into the EDRMS. Because colleagues did not conscientiously declare the information as a record in the EDRMS, this user had difficulty searching for the final record of this letter for accountability reasons.

IMPLICATIONS OF THE FINDINGS TO OVERCOME INFORMATION-SEEKING BARRIERS

It is evident from the findings in Table 1 that 50% of the search difficulties were caused by the ‘user’. However, the provision of user training by records management professionals could rectify the majority of the barriers cited for search difficulties.

Additionally, the findings highlighted the need for greater effort from both users and records staff when new information is registered into the EDRMS. Both groups need to ensure relevant metadata are captured accurately and corporate information is registered so that retrieval is possible by others and not themselves in future.

Changing the Organisational Culture

The findings highlighted that directives from senior management are required to change the organisational culture on how network drives, EDRMS and other information repositories are to be used in organisations. If EDRMS are implemented, should network drives be made available for storing corporate information?

Lastly, the need for RMs to work with different stakeholders like EDRMS vendors, senior management and knowledge workers who are the EDRMS users is emphasised to overcome search difficulties experienced by users. Further strategies RMs can pursue were reported in the previously republished article in the August 2009 issue of iQ.

BIBLIOGRAPHY


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PAULINE JOSEPH, ARMA, graduated from Curtin University of Technology with an Honours degree in Information and Library Studies in 1991. She is currently an Associate Lecturer at Curtin University of Technology, lecturing in records and archives management. Pauline is a qualified librarian and records management professional. In her 17 years as an information management professional, she has worked in both the government and private sectors in Singapore and Western Australia.

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