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# A Smart Approach to Document Management

*By Bala Natraj*

Born out of the need to manage growing amounts of organizational information, document management is one of the oldest of the content management disciplines. Traditionally the term Document Management Systems (DMS) has referred to the computer system and software used to store, manage and track electronic documents and images of paper-based information. However, if one looks at all the possible ways to extract and manage information from electronic documents and images, this definition becomes too limiting. DMS today range in size and scope from small, standalone systems to large scale enterprise-wide configurations serving a global audience. A large number of DMS provide a means to incorporate standard physical document filing practices electronically.

There has always been a physical limit to the amount of hardcopy information that can be stored and retrieved. Applications like the word processor released users from the physical limitations of paper but created an exponential increase in information. Eventually, the concept of a 'paperless office' evolved. The paperless office started in the 1980s, expanded in the 1990s and was expected to become a reality by the end of the millennium. However, the same period experienced an onslaught of cheaper high-quality laser printers and scanners, which kept alive the problem of managing large amounts of paper.

One of the biggest challenges an organization faces is finding an effective and efficient way to integrate the way people work together with information and technology. This is a fairly complex task because business processes are dynamic and very often not consistent across various groups or departments. So in order to manage information across functional areas, an organization's processes have to be refined and tweaked as the needs of the business change. It also requires the tight integration of technology and processes.

The benefits of this integrated DMS approach can be broadly divided into the following:

- Tangible benefits like reduction of storage needs, quicker access to information, elimination of lost files, enhanced distribution of information, regulatory compliance, etc.
- Intangible benefits like improved operations, refined customer service and satisfaction, advanced knowledge management, competitive edge, etc.

Advances in capture technology enable organizations to capture data and document images at branch locations spread across the globe instead of shipping documents to one or more processing centers. This has benefitted organizations by: (1) eliminating courier and shipping activities while reducing the risk of loss, (2) reducing the time to process, and (3) creating the first step towards an efficient and effective DMS solution.

Following capture, the next challenge is to identify and extract useful and meaningful content from the variety of electronic documents and images. Today's Intelligent Document Recognition (IDR) technologies make it possible to identify and categorize a variety of forms and extract data with a high level of accuracy. Today's tools include a plethora of sophisticated routines and techniques to extract information from the captured images. The extraction of information off documents can substantially reduce the amount of data entry that would otherwise be paid for by the organization. This provides an opportunity for organizations to increase their efficiency, reduce costs and deploy resources to tasks requiring higher skills.

The IDR and data recognition step also adds an element of 'smartness' to DMS. These tools provide the ability to extract data from structured, semi structured or unstructured documents. Large amounts of critical information that would have otherwise been categorized as unstructured (simply because they exist as words) can now be extracted and brought over to a structured category. So, by employing IDR technology, the DMS can search and index larger amounts of important information for faster retrieval and utilization.

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