by Dan Power

Editor, DSSResources.com

Document-driven DSS is a relatively new category of computerized decision support. These systems assist in analysis, retrieval and management of unstructured documents that are used in decision making processes. Documents is a broad term that includes written, oral and video materials. Fedorowicz (1996) defined document as a "chunk" of information. Examples of written documents are reports, meeting minutes, catalogs, letters from customers, memos, and e-mail; oral documents are conversations and recordings of meetings that are often transcribed; video may be news video clips, internal video or television commercials. Benefits of document-driven DSS are many and are often quickly realized. A good system can improve a targeted decision process without significantly changing or disrupting the process. What are the benefits?

Using a document-driven DSS has a number of intangible benefits like improved decision making, preserving organizational knowledge, improving the flow of information, and gaining a competitive advantage. These benefits are however difficult to measure and anticipate prior to project completion. One finds however significant tangible benefits that can be measured and anticipated for document-driven DSS projects. Let's examine the tangible benefits:

Tangible benefits include:

### Controlled and improved document distribution

Documents needed in decision processes can be created, shared and distributed faster. The users of documents can be identified and tracked. Multiple copies of a document do not need to be created.

### **Disaster recovery**

Digital documents are generally easy to backup at an offsite location or in the "cloud" of computer storage.

#### Flexible document indexing

Digital documents can be indexed efficiently using multiple indexes without making copies of the document. Software can also assist in indexing. The indexes point to the document.

#### Flexible document retrieval

Actually retrieving a physical document from storage can be difficult and time consuming. The storage location must be identified and then the document must be found. A digitized document is relatively is to retrieve.

#### Improved document security

Sensitive documents can be restricted to authorized users and physical copies are usally not created that can be misplaced, lost or stolen.

### Improved, faster and more flexible search

Document management systems (DMS) and document-driven DSS can retrieve documents using any word or phrase in the document - known as full text search. Keywords can also be stored with documents for searching and indexing. These search capabilities are not available for physical documents and make documents easy to find.

#### **Reduced document storage costs**

Physical documents are very costly to store compared to digitized documents. Physical documents are bulky and may need special climate controlled facilities for storage. Digital documents are inexpensive to store and all types of digital storage continue to decline in cost per megabyte.

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#### Remote document access

The World Wide web provides secure access to documents anywhere the network can be accessed. Distributed decision makers can quickly share documents and collaborate about their meaning.

According to Wikipedia, "the primary benefits that the first stand-alone electronic document management system (EDMS) technologies brought to organizations revolved around saving time or improving information access. Specifically:

reduction of paper handling; reduction of paper storage; reduction of lost documents; faster access to information; online access to information that was formerly available only on paper, microfilm, or microfiche; improved control over documents and document-oriented processes; streamlining of time-consuming business processes;

document security; document audit trail; and metrics to help measure productivity, and identify efficiency."

Jane Fedorowicz (1996) estimated only 5 to 10 percent of documents are available to managers for use in decision making. Why? Physical documents are not in a standardized, uniform pattern or structure which hinders storage in a database. Also, digitizing documents can be time consuming and costly. Today IT/IS staff can more cost effectively transform documents into usable formats that can be compared and processed to support decision making.

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