

Regulated Recordkeeping:

An Accurate Solution From SpreadBoss® and DocuVista®

As regulators in Washington, DC remind record custodians to “preserve and verify data,” SpreadBoss® and DocuVista® can keep your records accessible, accurate, compliant, secure, traceable, and verifiable.

Part Two in the Two-Part Series: Hyper-Intuitive Searches From SpreadBoss® and DocuVista®

The Power of a Real-Time Data Collection System

A major challenge for any industry, now and certainly in the future, is processing the exponential increase in types and volume of information essential to operating a business and maintaining regulatory compliance. Industry groundbreakers in this area find creative and innovative methods of capturing, categorizing and managing data to release the power of the accumulated information. One of the fundamental tools necessary to accomplish this is a flexible, scalable first-rate technology which includes features to integrate data management, regulatory compliance and the human factor in a real-time mode.

As noted in part one of this series, full and accurate recordkeeping correctly and completely captures the activity it documents. For a business to be reasonably certain it is in regulatory compliance, it must employ a high-quality records management program which includes features to achieve regulatory compliance. Optimizing the data retrieval process, a time-consuming activity, is vital to maximizing the performance of the system. Linking hyper information of objects is crucial to the optimization.

The right technology automatically organizes the data, using easily customizable parameters provided by the user, as it captures new information. Then, the data collection system drives the task of data capture. It takes the load from the user by providing a template for data acquisition. Template-driven records entry enhances data accuracy, consistency, and validity. This approach reduces the time and effort required to optimize the data retrieval process and, it makes data retrieval more intuitive.

Businesses expect the data collection system to be adaptable and intuitive, and to provide the company with real-time operational visibility across the spectrum of users. The best approach for meeting these expectations is designing the system to get the right information quickly and easily. If the data is captured and indexed appropriately, then access to the information through the search engine becomes intuitive. An intuitive search program designed to integrate with user needs, a “hyper-intuitive” system, has distinct advantages over less flexible technology. With all this in mind, let’s look at the basic elements required to achieve this result.

Capture Strategies for Intuitive Data Retrieval

A strong capture program includes a comprehensive inventory of capture utilities presenting the entire range of the functionality needed. A suitable capture strategy integrates the full power of the capture program with the needs of business using the program. There may be several acceptable strategies, especially if the business has many unique departments.

Finding the most effective tools to use for the capture strategy requires understanding:

- The scanner operator
 - Brings data into the system so future retrieval is intuitive.
 - Is the operator dedicated or part-time?
 - How much experience do they have with the tools and program?
- What is the rationale for collecting the data?
 - Decentralized real-time access?
 - How will the search engine be used?
 - Single database or multiple databases?
 - Third-party applications?
 - Do records need to be indexed to each other and the host?
- Where is the scanning location?
 - Scan from a central location?
 - Scan from remote/field locations?

Paper Documents

Scanning easily and quickly converts paper documents to images for storage in an electronic database. A powerful data collection program's scanning interface offers various options for handling documents. It makes finding and reading scanned records an uncomplicated, intuitive task. And, the result is more useful than the original document. An effective scanning routine is the basis for creating a functional, efficient database and a fast and accurate scanning process.

There are several fundamentals to consider when developing a scanning routine:

- Determine the capture method for the records and the scanning engine to use.
- Build procedural steps for the components of the process specific to the scanning program.
 - Incorporate linking metadata to documents and categories.
 - Correct images to tweak style, legibility, and Optical Character Recognition (OCR) accuracy
 - Send the documents to the database.

Digital Camera

A superior capture program can process digital photos of records and convert the images to behave like scanned OCR images. Capture data and text from large or fragile documents using this method. The program uses image enhancements that optimize the accuracy of text generated from documents captured with a digital camera. Index and store the data in the same manner as electronic documents (below) or paper documents.

Electronic Documents

Capture programs with enhanced capabilities can view documents of other formats (Microsoft Office, Adobe Acrobat, etc.) in either the native format or in a capture program format. Both formats allow the capture program to generate images, text or metadata. Index and store the data in the same manner as paper documents or digital camera images.

Web-based

Scan documents to the database from anywhere using the internet. Scanning across the internet executes in the identical manner as scanning from a dedicated local scanner. All of the capture process, OCR, indexing, etc., occurs and remains on the device at the off-site location until the device saves the record to the database.

Capture Strategy Impact

An intuitive search system emerges from a sound capture strategy. As records enter the database, field and record names along with file folder conventions populate the fields and templates based on the user-assigned name options. The intuitive search system benefits from consistency in naming data throughout every level of the file structure. The greater the effort applied to design the capture strategy, the more intuitive the behavior of the data searches and the fewer chances for data-entry errors.

A Pursuit of the Right Information

Locating the appropriate information in an ever-growing database of unrelated information is a central problem for businesses. The passage above shares an innovative technique for indexing and linking data from a record to a repository and retrieving the right data, a “hyper-intuitive” search. This type of search is superior to a typical “text” search. A record contains text – static data, and link information – dynamic data content. A hyper-intuitive search increases the accuracy and quality of search results by concentrating independently on the text and link components.

The Hyper Difference

An obstacle with a typical search engine is they weigh text more than the relationship between data objects. Conversely, a strong capture program and search engine link data captured from one scan or input to data captured by another scan or input based on the parameters set by the client. One measure of the importance of a record is the number of other records with a link to it. As a result, the search engine provides higher status to records with more links at the first level. But, the number of links associated with the record does not address the informative content of the record.

What is missing is the relationship the linked record (A→B) has to other records (B →C, B→D, etc.) at the second level and beyond. This is “hyper” information and it helps the search engine determine the overall weight of original dynamic data. The user limits the depth of the search engine query into the link association by selecting the appropriate parameters in the design of the customized system. Clearly, a query to a substantial number of levels would not be productive. Finally, powerful algorithms calculate

the “weight” of the parameters set by the user to determine the number and order of records returned by the search.

The user can be quite certain the results of the search are relevant to the search text, listed in order of importance, and returned quickly. They can find the data needed with fewer clicks, using multiple methods of search, chart and graph links, and informational roll-overs. Every department in an organization with a large repository will profit from a system designed to be hyper intuitive. The SpreadBoss® and DocuVista® solution have the capability to do this through accurate data capture, secure storage and real-time, on-demand access.

Next in the Series:

Monitor and Control Inventory Using Barcodes, SpreadBoss® and DocuVista®

More SpreadBoss® and DocuVista® White Papers:

**Part One of a Two-Part Series: Convert Paper Documents to Digital
Monitor and Control Inventory With Radio Frequency Identification, SpreadBoss® and DocuVista®
Track Assets Through GPS, SpreadBoss® and DocuVista®**