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## ANALYSIS AND PERSPECTIVE

### Data Maps: An IT Necessity for Efficient, Cost-Effective Information Management



By BRENDAN SULLIVAN

**F**or many organizations, staying afloat in today's complex legal and financial environment has become increasingly difficult. The amount of data that flows through companies has exploded while compliance measures have increased and deadlines for discovery have shortened. Current economic troubles can overburden IT and legal departments in several ways—not only are companies tightening their belts wherever possible, but increases in lawsuits, regulatory requests, and government investigations invariably accompany financial downturns.

In the current economic climate, organizations are more concerned than ever about the spiraling amount of electronic information generated. Many organizations have not properly developed retention policies, defined information architecture, or prepared method-

ologies for dealing with requests for specific information from larger data pools. The struggle to manage the exponential growth of electronic information is a major concern from a cost, management, and efficiency standpoint.

**Benefits of Planning.** With some planning and the development of common language between IT and legal departments, there are ways that electronically stored information (ESI) can be mapped, and ultimately controlled. Additionally, a little advanced planning goes a long way towards preparing an organization for the inevitable litigation, regulatory, and compliance issues that seem to be omnipresent in today's business world.

Better planning means less time spent identifying key information assets when troubles arise, which ultimately lowers the cost of responding to legal issues and

allows the organization to focus its personnel on the day-to-day business of generating revenue for the company.

Developing a data map for the entire organization is one important step that will help identify, organize, and chart the flow of communications within the organization.

**What's a Data Map?** Data mapping is the process of understanding how data is created, the paths it travels, and where that data ultimately resides within an organization. A data map is a visual reproduction of the ways ESI moves throughout a company, from the point it is created to its ultimate destruction as part of the organization's information retention program (which includes paper documents as well as electronic data). At its heart, a data map addresses how people communicate with each other and with others outside the organization.

#### Topics Encompassed by Data Mapping

Topics a data map must address include the people, processes, and technology around creation and storage of data:

- Physical and digital data
- Business use of the data
- Physical locations where the data is stored
- Litigation portfolio and high-risk issues
- Retention policies and data governance practices

Data mapping identifies the types of information that are generated by organizations, the technology used to generate it, the people who create it, the people and processes that are responsible for moving and monitoring it, and the technology used to store and retrieve it.

Accordingly, a comprehensive data map provides a guide to the employees, processes, technology, types of data, business areas, and physical and virtual location of data throughout a company. It includes information about data retention policies and enterprise content management programs. And it takes into account high-risk issues such as the type of litigation a company is facing or will likely face in the future.

**How Data Maps are Used.** A data map represents the intersection of the expertise of IT and Legal, and it should illustrate the limitations or boundaries of how information is moved and stored. It allows the IT department to identify where certain categories of information are housed internally, what historical information is maintained within the organization, and how various departments interact and communicate with each other. Additionally, data maps help the legal department see where data resides, not just for litigation purposes, but for regulatory and compliance issues as well as internal investigations.

A fully formed data map will contain several elements. It should offer insights into whether data is unidirectional and bidirectional. (Unidirectional data flows one way, from the source to the target. Bidirectional data flows two ways. Different types of information lend themselves to either being unidirectional or bidirectional, and it's important for in-house counsel issu-

ing litigation hold notices and conducting discovery to understand how both fit into an organization.)

**Isolating Data.** The data map should also offer a snapshot of employees and the technology that each one uses, including which servers and which types of servers each employee utilizes. By identifying which servers are used to maintain which types of information, IT can quickly isolate only relevant servers when requests to produce information (whether internal or external) are generated.

This saves the organization valuable time, given that a typical company will generate anywhere from 1,000 to 10,000 e-mails and documents each day. Knowing how to isolate financial data from human resources data, for example, allows IT to key in on the relevant information quickly and without engaging in a search for the proverbial needle in a haystack.

The locations, formats, and methods for storing data represent major issues in e-discovery, and these should be thoroughly recorded on a data map. Doing so includes detailing whether data is stored on-line, near-line, or off-line.

Legal matters in particular may require the retrieval of older information that is less likely to be stored on active servers. A map that shows exactly where the potentially responsive data is stored, and in what formats it exists, can help quickly direct IT and legal personnel to key information stores and avoid the bloated cost of massive restoration of legacy media.

**Implications for Data Retention Programs.** Beyond responding to legal matters, a data map can also help the legal department ensure that information is being backed up and stored properly in accordance with the organization's data retention procedures.

For example, if the company retention policy calls for all backup tapes to be discarded after three years, a data map should reflect that, enabling IT to respond confidently that information outside of the retention period has been properly destroyed (unless a legal hold has been implemented suspending normal retention procedures and requiring extraordinary preservation of data).

Internally, when an organization needs to issue a litigation hold notice, knowing which employees represent potential custodians can simplify the task of ensuring that potentially discoverable information is being exempted from the usual data destruction cycle.

**Locating ESI.** The goal of the data map is to connect people to the information they create. Achieving it requires input from many areas within the organization, including the IT and legal departments, in order to do a thorough job. The involvement of the human resources department might also be necessary, to provide updated organizational charts and insights into the activities of different employees.

The IT department should provide information about the different hardware, software, server configurations, and backup formats that the company utilizes. The experts in IT should know, among other things, who has a personal digital assistant and the server on which the e-mails sent from those PDAs reside.

With the overview that a data map offers, it may be possible to simplify server and data storage systems as well. By tying organizational charts to information flow, the legal department can save a great deal of time and

effort during discovery. If the entire finance department's data resides on a single server, it becomes much easier to hone in on relevant information during discovery and avoid wasting time and money accessing data on servers unlikely to contain responsive data.

**Information Management and E-Discovery Preparedness.** IT and legal departments put boundaries on documents created by groups but stored outside of content management or traditional document management and workflow products. How an organization identifies and locates different types of information or information created by particular users/departments/functional areas within an organization will impact the organization's ability to respond to a range of internal and external events, including investigations, litigation, regulatory and compliance matters.

Additionally, from a corporate governance perspective, it is critical that every organization can locate data to determine if it is being stored and/or discarded properly in accordance with the organization's retention policy or media vaulting/lifetime policies.

A data map should be one part of a company's records management policy and legal strategy. From an internal standpoint, data maps help an organization more readily identify where information assets are likely to reside, so when internal investigations are conducted the IT department and investigation team can quickly isolate relevant information and drive resolution of these matters in short order.

#### **How Organizations Can Track and Locate Data**

- Tie in organizational charts to data flows
- Separate servers by department or organizational functional areas—(i.e. HR, Finance, Operations)
- Develop retention policies, enforce them uniformly, review them at least annually and update as needed
- Understand the flow of information from the point of creation to the actual storage destination, whether on-site, near line, offsite, or archived by third party software

Discovery is costly and time consuming. The faster and more efficiently an organization can identify, locate, and collect potentially relevant information, the fewer resources are needed in the process, the quicker the discovery process gets underway, thus lessening disruption to the ongoing daily business of the organization

**A Speedy Response.** Looking at outside legal risks, a typical litigation matter will involve the legal department along with outside attorneys, consultants and other service providers working from organizational charts to identify key potential custodians for a given legal matter. With a data map, the IT department can quickly provide sources of potentially relevant, discoverable data based on the communication patterns and flow of information from key personnel in a functional area of the organization. An org chart won't tell you that a potential custodian has a company-issued BlackBerry, a laptop, and a desktop computer and that she

regularly sends e-mail from all three—but a data map will.

The pressure on organizations to manage discovery quickly and efficiently has taken on new importance during the current financial downturn, but these pressures have been steadily increasing ever since the rules that govern federal litigation were amended back in 2006. The rule changes compressed the timeline for identifying and sharing information between litigating parties, so it has become even more important to quickly isolate and examine the potentially relevant data to shape the course of litigation. In the most basic terms, the quicker that IT can help locate and restore potentially relevant information, the more time the legal team has to review it before having to share it with the other side.

A data map can also be extremely helpful in defending the company's discovery processes and procedures before the court and opposing counsel. With a data map readily available, it becomes easier to show how a company has complied with the terms of discovery.

## **Practical Advice for Creating and Maintaining Data Maps**

Creating a data map that fits the needs of IT as well as the legal department can be a challenge, but when it is done properly, a data map will save time, money and frustration amidst the stress of issuing legal hold notices and responding to discovery requests for a range of matters. To ensure that your data map is ready and contains all the information you need when you need it:

**1) Involve Other Departments and Managers Early.** IT and HR are valuable partners in the creation of data maps, and so are business managers. Managers know the people, the systems, and the technology in their departments and divisions. By getting their buy-in early on, in-house counsel can save a great deal of time and aggravation while ensuring the data map is accurate and timely.

**2) Develop Logical and Comprehensive Practices For Managing Data.** Identifying data sources is a key step in creating a company-wide document retention policy. And as new technologies arise, it is important to regularly educate employees about the organization's data management policies so they understand, for example, that the instant messages they send at work don't just disappear into the ether but may someday come back as part of a lawsuit.

**3) Create Clear Pathways of Communication.** At many organizations, one division often doesn't know what the other division is doing. Unbeknownst to the legal department, IT may be testing a new backup system for part of the company's data. Employees may be adopting many different types of cell phones they use to create text messages that relate to their jobs or their coworkers. When it comes to data, it's important that different groups within the organization communicate regularly to avoid building silos of information that can hamper e-discovery.

**4) Don't Just Create, Update.** Data maps must be updated regularly in order to stay relevant. Employees come and go, terminologies change and technology is

constantly evolving. The data map should be reviewed on a regular basis to ensure information is still relevant.

**Parting Thoughts.** Survival of any organization is dependent on the ability to quickly identify, isolate, and examine key information assets related to these risk events, minimizing the resources and personnel to be deployed to deal with these events, enabling the remainder of the organization to remain focused on the day-to-day business of generating revenue, and ensuring the continued ability of the organization to thrive in a suppressed economy. Data maps are simply a necessity in today's business environment, helping achieve proactive information management goals as well as optimizing preparedness for the range of risk events that every business now faces as a matter of course.

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