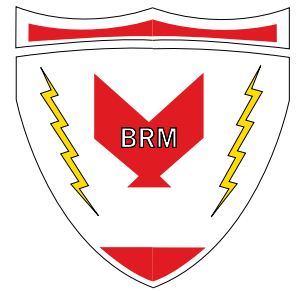




The
BUSINESS RECORDS MANAGEMENT
BULLETIN



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TAPE LIBRARIES : INFORMATION MANAGEMENT FOR COMPLIANCE

Tape, the longstanding and faithful favorite for back-up, remains a useful method for storing large amounts of data at moderate cost and in a portable format that can be transported offsite for storage of vital records. Tape libraries, sometimes called jukeboxes, have a tape drive, slots for cartridges, an automated means of loading tapes, and a barcode reader to identify tapes.

Tape libraries are capable of storing from 20 terabytes to several petabytes of data, exceeding the capacity of a hard drive by ten thousand times over. Tape storage can save as much as 60 percent over the cost of hard drives, but the drawback is slower access time and limited random access.

Tape rotation is the practice of overwriting older tapes on a scheduled basis such as 30 or 60 or 90 days, unless a tape must be permanently kept for archival or compliance reasons. Vital records or critical data for business recovery are frequently stored on tapes that are taken to offsite storage for protection, ready for retrieval as part of a disaster recovery plan.

There are some newer technologies that are giving tape some competition. A Virtual Tape Library or VTL is technology frequently used for archival storage, with a storage component, usually hard disk, that virtualizes the storage as tape hardware. VTLs can be integrated with standing policies for archiving and backup. Many current VTL systems use ATA (Advanced Technology Attachment) or SATA (Serial ATA) disk arrays with the benefit of low cost and increased storage capacity. When data is backed up to disks instead of tape, both backup and recovery may improve. Depending on the data and circumstances, data on a VTL disk may be exported to tapes for disaster recovery purposes.



MORE DATA, MORE COMPLIANCE

“Data is growing at 125 percent a year yet up to 80 percent of this data remains inactive in production systems where it cripples performance,” says Charlie Garry, Senior Program Director at the Meta Group. “To compound this problem, many enterprises are in the midst of compliance initiatives that require the retention of more data for longer periods of time, as well as consolidation projects that result in significant data growth.”

A white paper by Paul P. Tallon, professor at the Carroll School of Management, Boston College, presents the idea that dealing with compliance can be turned into an opportunity for a company, and that IT personnel—as well as business executives—must be involved in policy decisions for compliance procedures. “The challenge for IT management and for storage in particular, is to take what is typically seen as an expense and transform it into an investment opportunity that can add value to the corporation,” states Tallon. Although federal regulations may mandate the retention of specific data or records for a defined time period, the answer is not to save everything. The issue with compliance is that the data can be retrieved in timely fashion if an investigation or need for discovery arises. Managers who are using ILM, Information Lifecycle Management, to classify their data may feel that once data has been archived, they are in compliance. Not so, unless they have procedures and controls for archived data as well.

With more companies appointing compliance officers, there will be more compliance auditing by internal auditors, and data storage will come under more scrutiny. Tallon presents four key processes that build toward compliance.

- Inventory of data used in key applications. Beyond backing up files, their content and role are also important.
- Compliance readiness. Data should be grouped to meet specific compliance requirements. This means looking at how long files should be archived and how quickly they can be recovered, and the access controls for particular files.
- Data protection policies which translate business requirements into policies that protect the information assets of the company while meeting compliance benchmarks.
- Ongoing data management that supports compliance.

The opportunity, as Tallon sees it, is this. "If compliance has any purpose, it is to force companies to recognize that corporate data has value and that they have an obligation to their stockholders to secure that data from theft, corruption and loss." (Read this white paper at www.glasshouse.com.)

LOOKING AT THE COST OF TAPE VERSUS DISK

An interesting analysis of the benefits and costs of tape versus disk is given in an article by Dianne McAdam of The Clipper Group (www.clipper.com) called "The Evolving Role of Tape in the Data Center." Starting with the fact that more data has to be stored and held for longer periods of time, Adams points out that disks give fast access and are used for applications that have to be available 24 hours a day, and that disks are being used where backup windows are short for these 24/7 applications.

However, tape continues to be the practical backup choice for applications that do not have limited backup windows or stringent Recovery Time Objectives (RTO). Doing backups disk to disk, then migrating older backups to tape brings the economy of tape into the picture.

Tape has always been favored for its portability to off-site secure storage. But it also offers the economy of being able to absorb large data streams that are now part of life such as images from surveillance cameras, broadcast news events, and digitized medical images (one digitized X-ray may be 10 to 20 megabytes in size). Hospitals are required to keep such images for decades, with more such images piling on in years to come. Most of these images will likely not be accessed again, and thus tape is the logical and economical way to archive them.

Adams presents cost comparisons for buying a disk system versus a similarly sized tape system. She works with projected data growth rates and the storage that will be needed over a five-year period, going from 100 terabytes of storage in the first year to 207TBs needed in the fifth year. Knowing that 100% utilization is not realistic, she uses rates of 70% for disks and 85% for tapes. She uses prices from Quantum for its PX720/ DLT-S4 tape library, drives and cartridges with a total of \$147,750. She has priced an IBM DS4100 disk system with controllers, expansion units, expansion unit attachment features, and racks totalling \$757,175. Thus, the cost for the disk system is five times larger than that of tape.

Beyond buying the system, Adams also looks at the cost of powering and cooling each type of system. Cost per kilowatt hour varies greatly, with the coasts paying higher rates than the Midwest. Factors considered were power and cooling requirement for each unit times the number of units with the result multiplied by 8760 hours in a year times the cost per kilowatt hour. The electrical cost for the tape system was \$4,248 while the disk system would cost \$49,386.

Why is electrical cost important? Because it is likely that rates will continue to rise year after year. With an increase of 10% each year over the five year period, the power and cooling cost for the disk system will be \$301,507 while the tape system will cost \$25,935. Storage hardware costs are coming down each year, and a buyer has many choices, but few customers have a choice of power suppliers.

Other long range costs to consider are the cost to replace disk or tape after several years, the cost of maintenance when the warranty expires, and the cost to backup or replicate data for disaster recovery.

Talk to your storage contractor to get more information on using tape for the particular needs of your organization.

Lack of Information Management Training Puts Organizations – and Their Customers – at Risk

A recent survey of information managers and human resources professionals conducted by ARMA International reveals that nearly half of the organizations are not training their employees on how to properly manage their records and information. Specifically, 45% do not provide formal training on managing corporate records and information. Almost half of those (46%) don't have plans to implement such training in the near future.

Good information management is critical to business continuity, regulatory compliance, and litigation readiness. As demonstrated in recent court cases and news reports, ineffective or mismanaged information – especially electronic information – can have devastating ramifications. It can cost an organization millions or even billions of dollars in penalties, as well as its reputation and, ultimately, its business.

“The fact that so many organizations do not formally train all their employees on managing records and information – including the handling of sensitive data – indicates that too many top executives don't fully-comprehend the risk,” says ARMA International Executive Director Marilyn Bier. “Information is a critical corporate asset. It's also a major risk area. That realization must start at the top.”

Respondents to the survey stated their information management training programs have been influenced most by recent news stories (49%), Sarbanes-Oxley Act and other regulations (48%), recent court decisions (46%), and the new changes to the U.S. Federal Rules of Civil Procedure (43%). In short, the Federal Rules state that organizations need to know what information they have, where it is stored, how to retrieve it. They also stress that employees must be trained on how to appropriately manage electronically stored information so that the company can meet its responsibilities.

Most of the organizations that provide formal information management training include e-mail (79%) and legal holds (75%) in that training. But only one-third cover voicemail as an information management risk area and even fewer (29%) address instant messages. Especially disturbing is the finding that 31% of organizations do not train their employees specifically about data security or protection of sensitive data. As for frequency of the training, 26% conduct the training annually, while 33% conduct it only upon request.

“The failure to institutionalize information management training – to take it to every desktop – leaves an organization vulnerable,” concludes Bier. “Policies alone are not enough. Each employee needs to understand why information management is important to the organization's continued operation, what their role is, and the risks if it's not done well.”

U.S. District Court Judge Shira A. Scheindlin, a key contributor to the new Federal Rules and the presiding judge in the often-cited case of *Zubulake v. UBS Warburg*, offered the following insight on the subject:

“It is well known that employees don't read handbooks and manuals even when there is information there that is to their benefit. It is also necessary to require training of all new employees, and refresher training for all other employees....An initial training session by department of all new employees, and then a semi-annual training course might be good ideas....A program that does not include a means of checking on employee compliance is no policy at all. Management must develop a system to ensure that employees are actually following the designated protocols. This can only be accomplished with a compliance monitoring program, which I think is an essential component of a records management policy.”

ARMA International encourages organizations to conduct general information management training enterprise-wide to all its employees on a regular basis. Resources such as the Keeping Good Company training program, produced by Kahn Consulting Inc. and ARMA International, can help organizations with that effort. (See www.arma.org/learningcenter/goodcompany.)

About the Survey

ARMA International conducted the Information Management Training Survey in April 2007. Respondents included 502 records and information management professionals and 59 human resources information management professionals. The survey was conducted in cooperation with the International Association of Human Resources Information Management (www.ihrim.org), an association of human resources and IT practitioners, vendors, consultants, students, and faculty.

About ARMA International

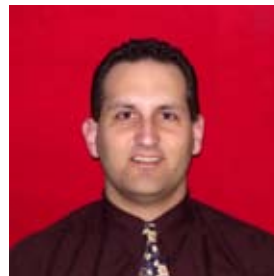
ARMA International (www.arma.org) is a not-for-profit professional association and authority on managing records and information. It is known worldwide for its development of standards and guidelines in this area as well as for providing unequalled education, publications, and information on the efficient maintenance, retrieval, and preservation of vital information created in public and private organizations in all sectors of the economy.

Formed in 1955, ARMA International is the oldest and largest association serving the records and information management profession. Its 10,000-plus members include records managers, archivists, corporate counsels and other legal professionals, IT managers, consultants, and educators. Further, its members work in a wide variety of industries – including government, legal, health care, financial services, and petroleum – in the U.S., Canada, and numerous other countries. ARMA International also has more than 125 chapters that help to provide education networking on the local and regional levels. ment will provide greater support to improving the funding of managing document-based information.

Employee Profiles



Daphne Lopez-Hendon has been a member of the BRM team since February 1998. She started at BRM as the Receptionist, but now serves as a Customer Support Specialist. Her duties include training and managing accounts, and building relationships with her clients – all with her great personality and friendly demeanor. Daphne and her husband Chris have three sons: Kortez, 16; Trei, 12; and Tyler, 10 – along with their dog “Payback”. When not hard at work, Daphne enjoys listening to R&B and Hip Hop music, spending time with her family, and vacationing in Cancun.



David Phillips joined BRM in April 2007. He is the new Marketing Supervisor in Pittsburgh. David is responsible for overseeing the marketing, advertising, communications and public relations efforts of BRM. He considers his greatest accomplishment to date to be receiving his Masters degree in Journalism from Point Park University. David enjoys landscaping, home improvement, sports, movies, kayaking, and spending time with his girlfriend Melissa.

Congratulations eNewsletter 1st Quarter Winners

Congratulations to Tracy Smith of the Pittsburgh Sewer & Water Authority and Donald Cowie of AXA Advisors! They have both won a pair of tickets to an upcoming Pittsburgh CLO show at the Benedum Center. Congratulations, and enjoy the show!

BRM Partners with Sherpa Software

Business Records Management, the leader in records and information management in Pennsylvania, has entered into a partnership with Pittsburgh-based Sherpa Software, a global provider of corporate information management technology.

Through the partnership, BRM will provide email archiving services to their clients with Sherpa's Attender Utilities for Microsoft Exchange and IBM Lotus Notes environments. These applications can locate information in existing databases and mailboxes, and automatically transfer and store it on secure, external devices.



Regulatory restrictions, audits and increasing limits on email storage space have forced companies to manage their email systems. On December 1, 2006, the electronic discovery-related amendments to the Federal Rules of Civil Procedure went into effect, which require organizations to preserve potential electronic evidence in the event of legal action. Coupled with other regulations like Sarbanes-Oxley and HIPAA, organizations face a difficult task in deciding how, what, when and where their information should be archived.

Sherpa's archiving, discovery, deletion and reporting software allows companies to take a proactive approach to controlling their electronically stored data and email. They address issues such as legal liability, security and storage, and will allow BRM's clients to be more efficient and increase the performance of their servers.

"Email management and storage is how BRM is adapting to today's changing business," said BRM president Steven Wright. "Documents aren't just paper anymore, and organizations that need to be able to address litigation or regulatory issues posed by electronic information. Our partnership with Sherpa will enable our clients to preserve their electronic data."

In addition to searching email, Sherpa's products can also search attachments and any other type of electronic file on a company's system. They identify content, generate statistical reports and trend analysis, and enforce the retention of data so that information is automatically purged after its useful life.

Sherpa Software is a privately-held company, founded in 2000, and has been named one of "Pittsburgh's Fastest-Growing Private Companies." Sherpa provides scalable archiving, e-discovery, retention and management solutions for companies of all sizes, and currently boasts over 900 customers worldwide. Their mission is 100% customer commitment - No project is too big, and no customer is too small.



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