An Enterprise Content Management Primer

ECM is increasingly important in helping organizations manage and control content according to their business goals and legal needs

Barclay T. Blair

Business has long sought technologies designed to make operations run better, faster, and cheaper. As business has entered the Information Age, these technologies have increasingly focused on better ways to manage information. Nearly 60 years ago, Dr. Vannevar Bush, one of the fathers of modern computing, proposed the "memex" device as a solution to what was then considered the "massive task of making more accessible our bewildering store of knowledge." Today, industry estimates say the volume of business e-mail is growing at a rate of 300 percent each year, and 800 megabytes (MB) of new information is created for every man, woman, and child on the face of the earth. The "massive task" of 1945 has not gotten any easier.

From the largest customer relationship management installation at global corporations with thousands of employees, to the tiny mobile device used by a one-person contractor, proliferating software applications and hardware devices output information that must be managed. New technologies emerge to facilitate managing such output: the e-mail, instant messages, electronic forms, spreadsheets, digital images, compressed log files, and more.

But growing volume is really only a symptom of the core issue. Namely, organizations need to take control of their digital information assets. This need today is driven by two fundamentals. First, organizations need to comply with laws, regulations, and other directives regarding the care and handling of information, particularly in the post-Sarbanes-Oxley world where information mismanagement is under heightened scrutiny from the courts, regulators, customers, and the public at large. Second, organizations need to make digital information assets accessible and useable to the business in a way that improves efficiency and contributes strategically. Dozens – if not hundreds – of software and hardware products and services have been developed over the years to assist organizations with the problem of managing the output of dozens – if not hundreds – of systems that create digital content. Until recently, there was no clear way to characterize the diverse products – everything from high-output scanners to e-mail management systems – as a group of technologies with the same purpose: the enterprise-wide management of information in an efficient, consistent, and compliant manner.

> **At the Core**
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> This article
>
> - defines enterprise content management (ECM)
> - discusses uses of ECM within the business world
> - examines how ECM relates to information management and IT

Defining ECM

Enterprise content management (ECM), a term introduced in 2001 by AIIM International, has been widely adopted by vendors, analysts, and end users in the marketplace. ECM is "the technologies, tools, and methods used to capture, manage, store, preserve, and deliver content across an enterprise."

Clearly, this is a broad definition that covers a wide range of technology categories such as electronic document management (EDM) and business process management (BPM). Gathering diverse technologies into an all-encompassing term is a necessary part of trying to grasp the complex and fast-changing world of IT, where the demise of one technology invariably spawns a dozen new variants.

ECM is more than simply technology; it is an also an activity that involves people and processes. Organizations cannot simply buy a solution for their ECM problems. Such a solution does not come in a box and is not found in any one piece of technology. Rather, solving the ECM problem requires a concerted investment in risk assessments, policy development, training, change management, and other activities, as well as technology.

ECM activities and technologies generally can be classified according to the major ways in which information systems and users interact with content. Four commonly identified categories include the following:

- *Capture:* collecting, identifying, and classifying business content into the systems that will house and manage it. Items may be digital such as Web pages, those items that exist in other media and are converted to digital form (scanned paper documents, for example), or other objects managed via an IT system.

- *Manage:* focuses on handling content with specific goals. Document management goals such as improved customer service and records management goals of compliance with retention requirements are examples.

- *Retain and Store:* the technologies and techniques that enable the efficient, accurate retention and storage of content in a manner that supports business and legal goals. In some cases, content – particularly business records – may need to be preserved for long periods of time in a trustworthy and accurate manner, in which case organizations must make decisions about the most cost-effective and reliable medium and mechanism to use.

- *Deliver:* providing timely, secure access to business content to the systems and people who need it.

At its core, ECM acknowledges that not all information is created equal. Some of it has business, operational, legal, and/or regulatory value and, as a result, must be identified and treated in a different way. The people, processes, and technology of ECM enable this to happen.

ECM Is About "Unstructured Content"

ECM focuses on unstructured information, that is, the free-form content that exists outside the confines of databases or systems with fixed routines and pathways, such as enterprise resource planning systems and workflow applications. Unstructured information, including e-mail, word processing documents, digital images, and PDF files, represents the vast majority of information in most organizations, with industry estimates placing it at 80 percent of all information created.

The proportion of unstructured information reflects the fact that business IT has become more democratic and decentralized over time. According to *Storage Network World*, businesses worldwide today use more than 300 million desktop computers that together have the capacity to store 150,000 terabytes of information. As a result, much unstructured information exists in a manner that makes it difficult to manage or to benefit the organization. ECM, then, is increasingly important in helping organizations manage and control content according to business goals and legal needs.

ECM is also concerned with information that would not normally be classified, retained, and managed as a record. For example, digital collaboration tools such as Web conferencing applications are generally considered to be part of the ECM family but do not necessarily generate content that must be managed as a business record.

Maturing Technology

Many technologies in the ECM category have only recently begun to mature into the enterprise-grade, robust, and reliable applications needed to tackle the tough tasks that they must handle. Even mature applications, such as those in the

E-Mail Retention Technologies in Use
(as a percentage of respondents)

Archiving system dedicated to e-mail retention
35%

Document management software
34%

Records management software
23%

Source: Managing E-Mail in the New Business Reality
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records management market, have had to undertake major retooling to address the widespread business adoption of the Web, e-mail, and other technologies.

Many organizations are in the early stages of selecting and implementing tools to help them manage content. For example, a 2003 survey by Kahn Consulting Inc. and AIIM International found that few organizations have invested in the technologies designed to help them manage and retain e-mail (See "E-mail Retention Technologies in Use"). However, as the impact of new laws and regulations, increased scrutiny in information management practices, and the ongoing maturation of ECM applications is fully felt in the marketplace, it is expected that rates of adoption will increase. In fact, the survey revealed that 80 percent of organizations were planning to make changes to the ways that information is managed internally, with a majority planning to make a tech-

nology purchase as part of this change.

Although Bush's "memex" was never built, his vision for it came to pass in ways he could never have imagined. Today, thanks to the proliferation of information in digital form, the hyperlinked universe of the World Wide Web, and ever faster and cheaper computing technology, the machines on our desktops do enable us to consult our "books, records, and communications," with "exceeding speed and flexibility." However, the very developments that

have benefited our businesses also threaten them. Left unmanaged, the ever-increasing volume of digital content in our enterprises becomes a liability instead of an asset, an efficiency drain instead of a knowledge boost, and a mountain of data instead of a storehouse of crown jewels. The people, processes, and technology of ECM are the keys to understanding these challenges and addressing them in strategic ways that promote and protect both our business and legal interests. ⏩Ⅱ

Barclay T. Blair, *director of the technology practice at Kahn Consulting Inc., is a recognized authority on the business, policy, and management issues of information technology. He is also co-author of* Information Nation: Seven Keys to Information Management Compliance. *He may be contacted at* bblair@kahnconsultinginc.com.

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