Strategic info Management:
Continuing Need, Continuing Opportunities

Bruce Dearstyne

Strategic information management (SIM) fits into a category of new, emerging, and embryonic ideas, including records and information management (RIM) and knowledge management (KM), that have themselves emerged recently as information professionals and the institutions where they work come to grips with the vast, unsettling implications of digital information technology. The technology makes it easy to create, transmit, store, access, and use information that is becoming the basis for business operations, customer service, and government's relationship with citizens. The technology is powerful, increasingly available at low or modest cost, widely deployed and, therefore, as Nicholas Carr argues in the *Harvard Business Review* article "IT Doesn't Matter," so ubiquitous that by itself it no longer provides a distinguishing competitive advantage in business.

Many SIM proponents reach a similar conclusion from a different perspective; they recognize that what really counts is *people's creative use of information rather than*

At the Core

This article

➤ defines the concept of SIM

➤ discusses five opportunities to apply SIM methods

➤ examines traits of an information-proficient organization
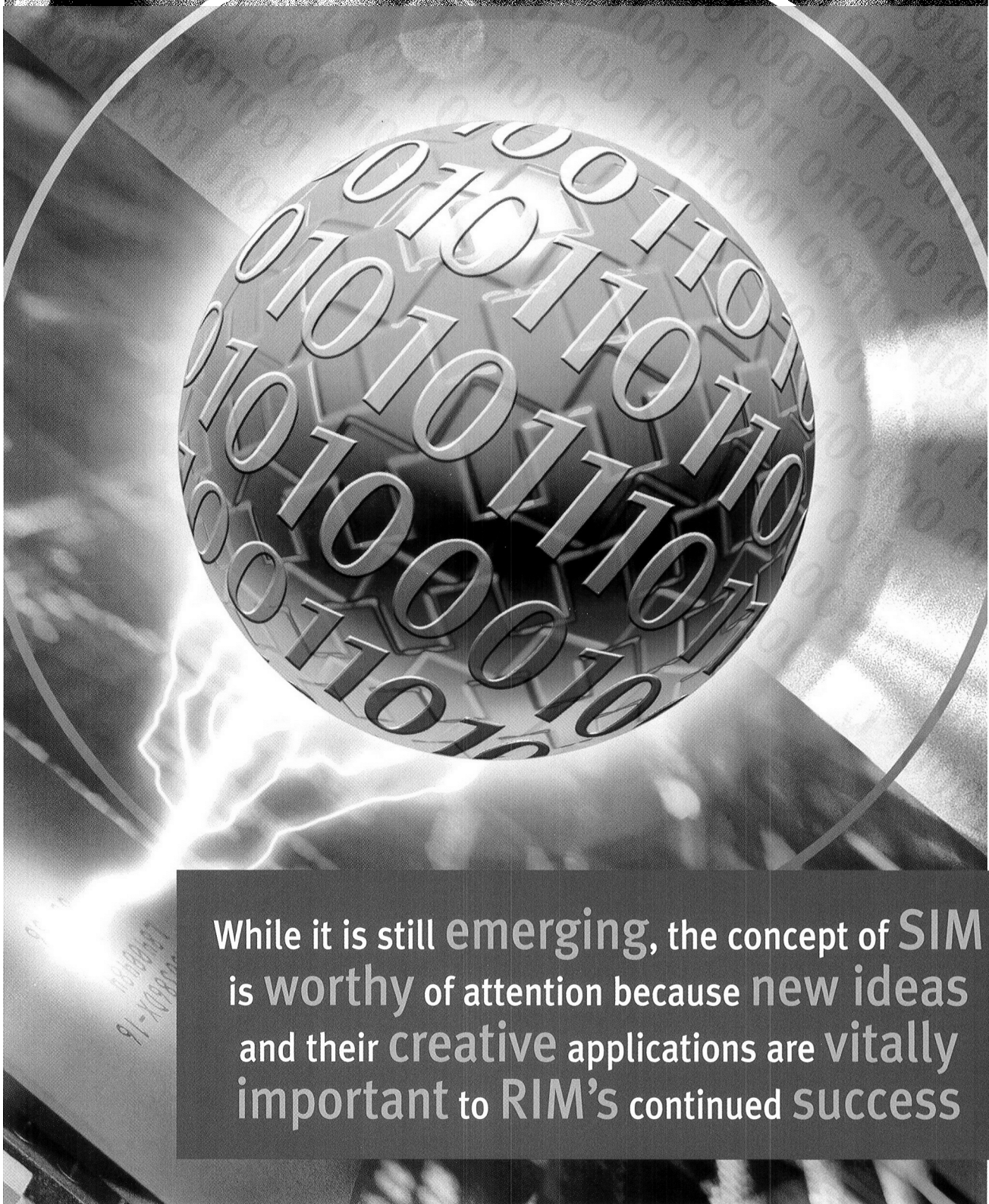
> While it is still emerging, the concept of SIM is worthy of attention because new ideas and their creative applications are vitally important to RIM's continued success

the technology to create, transmit, and present that information. One hallmark of sound strategic management is its flexibility, responsiveness to change, and ability to respond to new challenges. A strategic approach involves planning, choosing, and trading off, including sometimes improvising or shifting approaches on the fly. It has a military flavor – "strategy" comes from the Greek *strategos* ("general") – of out-thinking and out-maneuvering an adversary, knowing that the adversary is also trying to out-do you as well. According to Avinash K. Dixit and Barry J. Naelbuff's book *Thinking Strategically: The Competitive Edge in Business, Politics, and Everyday Life*:

> ...think of the difference between decisions of a lumberjack and those of a general. When the lumberjack decides how to chop wood, he does not expect the wood to fight back; his environment is neutral. But when the general tries to cut down the

enemy's army, he must anticipate and overcome resistance to his plans. Like the general, you must recognize that your business rivals, prospective spouse, and even your child are intelligent and purposeful people. Their aims often conflict with yours, but they include some potential allies. Your own choice must allow for the conflict and utilize the cooperation. Such interactive decisions are called strategic, and the plan of action appropriate to them is called a strategy.

SIM is still being invented; it will inevitably change, merge with other trends, and maybe take on a different name in the future. But the concept is worthy of continuing attention and development. Although it is still emerging and being defined, the term "SIM" is used broadly here to connote the imaginative,

> Being **strategic** includes taking an **enterprise-wide view** rather than focusing on a particular **department**

systematic management and use of information to achieve objectives that are clearly aligned with and contribute to the organization's objectives.

Five examples illustrate opportunities and needs for further development and application of SIM concepts and methods:

1. Better information management might have thwarted terrorists. A recent congressional report – "Report of the Joint Inquiry into the Terrorist Attacks of September 11, 2001" by the House Permanent Select Committee on Intelligence and the Senate Select Committee on Intelligence – focuses on strategic intelligence information but illustrates strategic information management issues that are found, with variations, in most large organizations:

- *Multiple pieces of information may obscure the "collective significance" needed for deep understanding and action.* The report found that "relevant information" regarding the 9/11 attacks was available to the intelligence community prior to

the attacks but that "the community too often failed to focus on that information and consider and appreciate its collective significance in terms of a probable terrorist attack ... the intelligence community failed to capitalize fully on available, and potentially important, information." This is a common issue in large organizations where people must constantly receive and process information and strive to see patterns, connections, and trends, often within tight timeframes and highly competitive settings.

- *Superabundance of information overwhelms ability to sift through, organize, and act on it.* Information, of course, has varying degrees of timeliness, pertinence, and importance. Having too much information is sometimes as great a challenge as having too little. SIM tries to address that challenge. The congressional report notes that "some significant pieces of information in the vast stream of data being collected were overlooked, some were not recognized as potentially significant at the time and, therefore, not disseminated, and some required additional action on the part of foreign governments before a direct connection to the hijackers could have been established."

- *Individual face-to-face meetings provide opportunities to share – or withhold – information.* The report includes several examples of informal or formal meetings where individuals from intelligence and security agencies met and had the opportunity to informally share information on the spot, face-to-face – one of the oldest, and still one of the most effective, means of sharing relevant and current information. But too often, the report reveals, this opportunity was not taken.

- *Fresh information may trump more reflective, seasoned information and vice versa.* The congressional report offers a number of examples of reflective reports that attempted to piece together patterns but were swept aside by the continual incoming stream of fresh data and information. There are also examples of the opposite: Fresh information that did not fit an established pattern was disregarded. For instance, an FBI field office agent in Phoenix reported a pattern of young Arab-American men enrolling in U.S. flight schools. The FBI's New York office found it "speculative and not particularly significant." Other offices saw it and did not act, but, in retrospect, as FBI Director Robert Mueller acknowledged, it should have been more broadly shared, and "it should have triggered a broader analytical approach."

2. Chief information officers (CIOs) must become strategic managers. CIOs have responsibilities that are broadening well beyond management of information technology resources, and their roles are likely to continue changing. In their 2003 *Optimize* article, "Behold the Conquerer, the CIO!," Peter Skarzynski and Lloyd Switzer say CIOs must "become partners with their internal customers, sharing in setting corporate direction and seizing growth opportunities ... what counts is for the IT [information technology] organization to foster its innova-

tive capability to exploit changing conditions, then to imagine how the business and IT strategies interweave to create value ... [IT must] tighten alignment with business strategy ... increase the IT group's business savvy ... partner and integrate ... [focus on] strategic intent ... IT must think about remaking itself as a revenue generator by proactively identifying and acting on opportunities to accelerate business strategy."

CIOs know the importance of technology but increasingly, they value communication and strategic thinking even more highly, according to a recent survey conducted by *CIO* magazine.

"The state of the CIO in 2003 is *strategic*," noted a summary of the survey. Being strategic includes taking an enterprise-wide view rather than focusing on a particular department, involving business heads in planning, devising budgets that meet the needs of the enterprise, and "being aware of the powerful effect IT has on organizational competitiveness."

3. Lack of systematic, reliable information flow causes business failure and decline. Sidney Finkelstein's *Why Smart Executives Fail and What You Can Learn From Their Mistakes*, which focuses on the leadership of companies that failed or

CIO Skills

CIOs ranked the following personal skills most important to their success:

Ability to communicate effectively	78%
Strategic thinking and planning	76%
Understanding business processes and operations	66%
Ability to influence/salesmanship	45%
Thorough knowledge of technology options	26%
Negotiation skills	14%
Technical proficiency	13%
Other	1%

Source: *CIO*

substantially downsized during the past several years, could be used as a case study of why SIM is needed. It discusses "lost signals ... why businesses don't act on vital information" and identifies many crippling information management practices, such as:

- Vital information comes to the organization but employees who receive it cannot assess its significance or underestimate its importance, often because they have not been shown how to evaluate information for its strategic importance.

- Employees do not know where to send the information; for instance, a corporate research department comes across new information or a good idea but does not know where to direct it in the company.

- There are no regularly established channels of communication between people who have the information and those who would be able to use it; information sharing is not part of the corporate culture.

- Employees are reluctant to share information because they are not sure of its relevance or reliability or do not want to "disturb the boss" by sharing it.

- Executives suppress negative information or information that might reflect negatively on their decisions or performance; as a result, almost everyone in the organization is reluctant to share negative information.

- Companies simply do not have enough information – about products, markets, or customers – and fail to carry out due diligence when planning major acquisitions of other companies or do not carry out enough investigation when preparing to branch out into new products or markets.

- In their haste to keep moving and stay competitive, companies lack time to consider and digest information; one of their constant refrains is "sorry, no time to worry about that!"

- Boards of directors are satisfied too easily with too little information or are overwhelmed with too much information and place too much trust in the chief executive officer (CEO) rather than pouring over information and deciding key issues for themselves.

- Routine information from traditionally reliable sources is received, processed, and analyzed, but the company lacks a means of getting fresh, complementary, or potentially dissenting information.

"When we track vital information that's been ignored at companies suffering breakdowns, we find in case after case that it wasn't an isolated slip-up or instance of incompetence on the part of an individual employee," Finkelstein says. "In virtually every example, it was *the way the system had been set up* that was to blame."

4. A growing recognition that it is the information rather than the information technology that really counts. SIM asserts
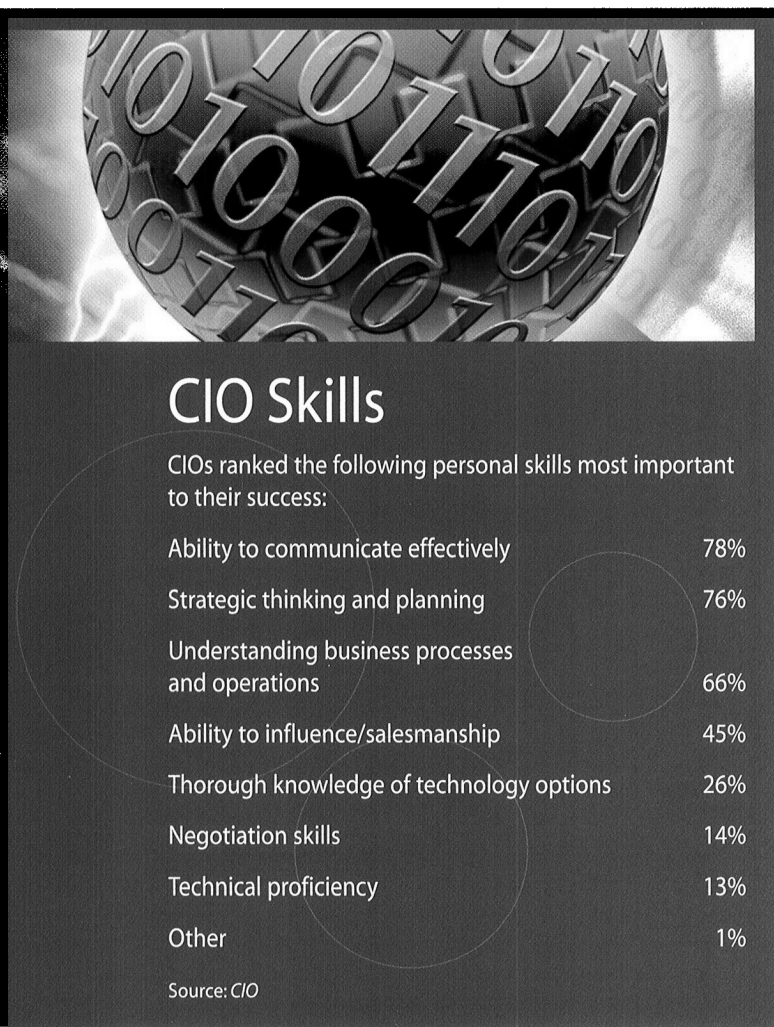
that *information* must be managed strategically and that technology is only one of the tools or strategies needed to do this. Focusing too much on the technology and not enough on how people will create and use information often leads to unsatisfactory results.

CEOs are frequently disappointed at the low business yield on high-priced technology systems – partly the result of inadequate planning and failure to carry out the analysis needed to link information to the strategic purposes of the institution. "We can't talk about technology agendas anymore," said the president of the National Association of CIOs at a recent conference. "Instead, we're looking at management, at process tracks; we're talking about business practices."

Other speakers at the conference emphasized the need for carefully harnessing and focusing IT. Virginia Governor Mark Warner, a leader in IT planning, noted that when he became governor, no one knew how much state IT cost. A nine-month study pegged the cost at around $900 million but also discovered that state government was using "every e-mail system known to man" and that each of its departments was operating within its own technology silo. The chair of the IT Commission in Utah, a state also known for its IT leadership, noted that until recently the state's IT system was "underutilized, not connected, silos, [and] not interactive." Noting the need for leadership and better management to remedy this situation, Utah's new CIO quipped that "sociology is more important than technology."

In its 2004 budget report, the White House identified chronic problems that are impeding progress toward e-government, including agencies continuing to automate existing outdated processes rather than fixing underlying problems, duplication of IT investments, failure to link IT to business goals, and little evidence that IT investments significantly improve agency performance. The number of IT skeptics is growing and there is growing realization that managers, rather than IT experts, must make key decisions such as: How much should an organization spend on IT? Which business processes should have priority for IT applications? How much downtime can the organization afford? Who gets blamed if IT initiatives fail?

5. Unexpected and unintended disclosure reinforces the need for strategic information management. Practically every day, a major business or government agency is surprised when the press, a government investigator, or some other party gets and makes public copies of sensitive, revealing e-mails and other documents. The root problem is the absence of corporate e-mail policies, lack of understanding of the importance of e-mail, lack of records schedules, and lack of full understanding of the appropriate use of e-mail and other documentation.

This trend also highlights the increasing use of electronic records in litigation, another issue of concern in SIM. Three recent examples include:

- As reported in the *New York Times* and *The Washington Post,* the Securities and Exchange Commission (SEC) and New York state attorney general obtained internal e-mails that unethical stock analysts thought were long gone. "Armed with hundreds of internal e-mails and memos that show how Wall Street analysts touted the stocks of companies they knew to be of dubious value so their firms could win investment banking business," government officials brought charges of fraud, levied heavy fines, and posted the e-mails for potential convenient use by other people who may wish to sue the companies. More recently, a New York official declared that many mutual funds are mismanaged, to the detriment of small investors; the investigation is based in large part on internal corporate e-mail.

- Sen. John McCain (R-Ariz.), a critic of Air Force overspending, released e-mails from Boeing Corp. that documented meetings with White House officials on a proposed deal for leasing tankers from the company. One reads: "Andy Card

[White House chief of staff] needs a 'new' figure on tanker price ... to take to the president in order to close this deal."

- In an extraordinary sweeping up and releasing of e-mails and other documents, the Hutton Inquiry, the United Kingdom's investigation into the suicide of a government scientist, has revealed vast amounts of information about the U.K.'s planning for the war with Iraq. The group is making available details of secret meetings, phone calls, and other documents that normally would have been sealed for 50 years or more. For instance, in August 2003 the investigators posted to their

The **information-proficient** organization **effectively** **manages** its records as part of an overall **approach** to **SIM**

Web site a "restricted and personal" document detailing "Meetings in the Prime Minister's Study," which occurred only a month earlier and summarize discussions among Tony Blair and his top advisors about how to respond to criticism of their policies.

Taking SIM to a New Level: The Information-Proficient Organization

An information-proficient organization is one that routinely uses sound SIM practices and tactics and prizes records and information for their value to the organization. Building an information-proficient organization is a worthy goal for any organization that aspires to leadership, success, and greatness. An information-proficient organization would have the following traits in several key areas:

Business Practices
- *The organization's leadership is inspired, energetic, and visionary* – this is essential for business success and to provide a setting for strategic deployment of information resources.
- *A clear business strategy and consensus on what makes the business successful is understood by all.*
- *The organization's information clearly increases the value of products and services* – it improves productivity, quality, customization of products, or adds value in some other way.

- *The organization is "information-aggressive"* – it routinely collects, analyzes, and uses information in key areas relating to customers, products, changes in the business environment, and other carefully defined areas.

Organizational Culture
- *Employees understand that their performance matters to the purpose and results of the organization* – people who feel this way will reach out for, and make creative use of, information.
- *There is a notion of empowerment that includes valuing initiative, encouraging people to take responsibility for advancing organizational objectives, and providing people with the information resources they need to act.*
- *The organization has a culture of openness, sharing, and exchanging information within and beyond the organization (as appropriate)* – this is regarded as the norm and is supported and rewarded.
- *Employees are continually encouraged to broaden and enrich the information resources they use and apply in their work for the organization* – the organization provides appropriate computers, access to the Web, databases, and corporate libraries.
- *The physical office space layout, design, and configuration encourages interaction and information sharing.*
- *There is a provision for employees in scattered or remote locations to access and share information.*

Information Policy
- *Information is recognized, discussed, and understood to be an important strategic resource and asset in advancing organizational goals.*
- *There is a written information policy statement articulating the value of information and its strategic usefulness in advancing organizational objectives* – the policy guides deployment of information resources and is revisited from time to time and changed as needed.
- *Provisions are in place for revisiting and adjusting the use of information as the information environment changes and as organizational needs change.*
- *The organization is prepared for change* – the application and use of information has changed over the past few years and can be expected to continue changing.
- *Senior managers understand that implementation of information policy is one of their major responsibilities* – it is spelled out in their personal work plans and their offices' work plans.
- *The roles and contributions of particular information specialists (e.g., librarians, records managers, and archivists) are broad, clear, and appropriate.*

Records Management
- *Records are clearly defined as part of information, and records management is integrated with information management.*
- *Legal and operational policies for records management are clearly articulated and followed.*

Technological Infrastructure
- *The organization uses appropriate technology and analyzes specific information and application needs before developing technological solutions.*
- *There is provision for updating and upgrading computer systems and capacities to provide optimal access to and use of information.*
- *Employees have easy, reliable access to a wide variety of internal and external information.*
- *Employees can easily connect with and communicate with each other and access appropriate databases and other information.*

SIM and Records Management

The information-proficient organization effectively manages its records as part of an overall approach to SIM. However, more attention should be focused on how to creatively link records management to information management. After all, e-mail, photographs, and many other documents are actually *records* or *recorded information* and deserve appropriate management. Noted author and University of Pittsburgh's School of Information Sciences professor Richard Cox, among others, has argued that there is a need to revisit the relationship between SIM and records management. The U.S. National Archives and Records Administration's (NARA) struggle with this challenge provides helpful guidance and insights. In its July 2003 strategy document, NARA identifies several strategies:

- Create mutually supportive relationships and partnerships.
- Demonstrate that effective records management adds value to agency business processes.
- Stress flexibility – there is no one level to which records must be managed.
- Agencies may choose a variety of means to manage their records.
- Rely on ISO 15489-1, the records management standard, with its emphasis on authenticity, reliability, integrity, and usability.
- Give priority to records that are essential to the government for accountability, protection of rights, and documentation of the national experience.
- Apply NARA resources based on the degree to which records relate to rights and accountability, the degree to which they have archival value, and the degree to which they are at risk.
- Provide leadership, with other stakeholders, to focus attention on electronic records needs.

NARA has promised to use tactics that are also compatible with SIM and good management in general, including:

- keeping communications channels open
- providing guidance and training as appropriate
- providing direct assistance based on strategies noted above
- carrying out periodic studies and reports

Building an information-proficient **organization** is a **worthy goal** for any organization

• emphasizing planning and evaluation, and being flexible and responsible in appraisal and scheduling

NARA anticipates providing assistance and education to federal agencies, carrying out studies as resources allow, and providing planning and evaluation tools. The agency also proposes to take a new approach to scheduling records, including more flexibility in guiding agencies in scheduling records to any level of aggregation that meets business needs. Two measures of success also show insights in linking records management with broader information management strategies: "NARA is agile in adapting to changes in information technology and in the federal recordkeeping environment," and "[r]ecords management is viewed by agency leaders and managers as an important component of asset and risk management."

But the SIM concept needs further attention and development. The RIM community should keep this discussion going; new ideas and their creative applications are vitally important to our continued success and the success of the profession as a whole. ▮▮

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