Records in the Modern Workplace:
Management Concerns

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Résumé
À l’approche de la seconde moitié de la décennie, des politiques ainsi que des solutions pratiques doivent être rapidement trouvées afin de solutionner les questions reliées à la gestion des documents. Le rythme accéléré des changements technologiques a laissé les politiques et les procédures de la gestion des documents derrière un nuage de poussière. La présence des ordinateurs fait que la mémoire collective est désormais remise entre les mains inexpérimentées des opérateurs d’ordinateurs. Des formats sans cesse changeants menacent de rendre caduques les documents électroniques encore plus rapidement que leurs cousins, les documents textuels. Les archivistes doivent travailler de pair avec leurs collègues des disciplines connexes de l’information dans la gestion des documents opérationnels et archivistiques.

Abstract
Policy and operational solutions need to be found quickly for records management issues as we move into the latter half of this decade. The pace of technological change is leaving record-keeping policy and procedures behind in a cloud of dust. Computers have enabled care of corporate memory to be placed in the unwary hands of front-line computer operators. Changing formats threaten to make electronic records obsolete faster than their paper-based cousins. Archivists must work together with their colleagues in related information disciplines in support of both the archival and the operational record.

Introduction
The purpose of this article is to set some context for addressing records management issues for which policy and operational solutions need to be found as we move further and further into the workplace of the 1990s. The particular context of
the article is the Canadian federal government workplace, but readers in other sectors will recognize much of what is described here. An underlying premise of the paper is that it is futile to attempt to solve modern records management problems without understanding the nature of the environment in which records play out their life cycle. Thus the paper begins with a description of some of the larger realities of the modern workplace.

Two Important Realities

There are at least two important factors that will pervade nearly all activity undertaken in the workplace of the 1990s. The first, restructuring, is relatively new — at least in terms of the scale and pace we are now seeing. The second, the nature of people, is an enduring feature of the workplace.

Restructuring is Everywhere

During the past couple of years, restructuring has become a nearly constant part of our lives. Restructuring is occurring on at least three levels:

Institutional - At all levels of government, institutions are being rearranged, combined, and in some cases eliminated entirely. This has some very practical implications for archivists, such as the disposition of records from organizations that are eliminated virtually overnight. There are also shifts in the roles of some key players. For example, the establishment of the position of Chief Informatics Officer in the federal government has given an entirely new profile to information management issues. New structures, such as Special Operating Agencies, are being established, often funded on a cost-recovery basis, rather than from appropriations. Will these institutions be less interested in preserving the archival record?

Organizational - Organizations are restructuring within institutions as a result of downsizing, rightsizing, and other “sizing” initiatives. Many federal departments now have an Assistant Deputy Minister of Corporate Services, bringing together a variety of administrative functions under one organizational group. It is not yet clear whether this will result in a higher or lower profile for records management functions.

Programme delivery and administrative renewal - Whether the term is re-engineering, reinventing, or simply renewing, people everywhere are looking at new ways to deliver programmes. How will single-window service, self-service, and twenty-four-hours-a-day service from locations as diverse as shopping malls and homes affect the keeping of corporate records? Similarly, in response to pressures to cut costs, government departments are experimenting with locally-shared support services. This is an arrangement whereby, within a limited geographic area, organizations can share support services, either as a host or as a user. This can create situations that are mutually beneficial for both users and host organizations, while reducing overall costs to government. What are the privacy, security, information sharing, and record-keeping protocols that should accompany these innovative arrangements?
**PEOPLE ARE STILL PEOPLE**

There are many ways in which people issues have an impact on record management, but two in particular come to mind—attitude and capability:

**Someone else will worry about my files** - There are few jobs in large organizations such as government that do not involve the creation or processing of records. In very practical terms, this usually means accepting input from an in-basket, from oral instruction, or from e-mail, taking some action or other to create or process a record, then moving the record somewhere else. From very early on in an office-worker’s career, the action of then appending a PA (standing for Put Away) instruction on the record means, “and now, someone else will do whatever it is that has to be done to this record until someone needs it again.”

As recently as five years ago, there were safeguards in most offices to ensure that, at the very least, records were assigned file numbers and, hopefully, sent to a records management centre for safekeeping and eventual disposition. Most records were paper-based. The “someone else” was an individual in a typing pool or a file clerk, who may have had the assigning of file numbers and the proper care of records as part of his or her job. Increasingly, the migration of office workers to personal computers and workstations has removed those safeguards; individuals now receive records electronically, process them, and pass them on electronically. The “someone else” is now out of the picture entirely.

**We have become fair typists but we are still terrible file clerks** - Even those who take the attitude that good records management is important may not succeed because they have neither the skills nor the tools to manage records properly. In stand-alone and LAN-based systems, the organization and disposition of electronic files is normally under the control of the individuals who create them. Not surprisingly, individual approaches to file management quickly emerge. One popular e-mail package has a main in-box where new mail is deposited but leaves it up to individuals to determine what to do with mail once they have received it. The package provides the capacity for users to create sub-directories (and sub-sub-directories and so on). Some individuals like to keep an in-box relatively clean; they read their mail and if they decide to keep it electronically, they put it in one of a limited number of functionally-named sub-directories—say, information policy, security policy, and perhaps the ubiquitous “other.” A colleague might decide to establish sub-directories for each person she receives mail from or sends it to. Another colleague may have no sub-directories, preferring to leave all of her mail in the in-box once she has read it. In a busy office, such an approach can quickly lead to having hundreds of messages to scroll through. Eventually, any of the foregoing approaches will lead to clutter, providing a very easy “delete” target when the hard drive nears its capacity.

**The Nature of Work**

The ways that records are created, stored, and transported are affected by the nature of work—how it is done, where it is done, and by whom it is done. This section describes some realities of the modern workplace.
Although new tools such as teleconferences are helping to reduce the amount of time that workers must spend out of the office, travel is still a necessity in many jobs. Two electronic devices have emerged to keep up the pace of work while travelling. The first is the electronic organizer. Once little more than calculators, they now carry schedules and contacts lists, and with some models one can create detailed notes. In fact, the first draft of this article was written on a Sharp ZQ-6300 organizer during a business trip to British Columbia, as were all notes from the trip. Despite the functional advances, however, it is still not a trivial task to get information transferred from an organizer to a computer—not impossible, but a bit of a nuisance, hooking up cables, translating from one format to another, and so on. Thus, one can tend to be less than rigorous in transferring and saving records created on organizers, and with such a limited memory capacity, it is not long before something has to be deleted.

Portable computers are less of a problem in some ways. If documents are created on them, it is not difficult to transfer them to a desk computer. However, version problems can arise when one uses a portable frequently—back and forth to home for example. The problem is that the computers are often not assigned exclusively to an individual—they are still too expensive for everyone to have one of his or her own. Thus the portable is often one of a pool of computers that the office owns, and there is no assurance that one will get the same computer twice in a row. Unless all users are fastidious about cleaning up the hard drive after using the computer, it is possible to find oneself working with an old copy of a document, or a copy of a group document that someone else has altered, or worse, if a user forgets to take his or her document off the computer, someone else can copy another version right over top of it. This problem is exacerbated in computer environments that allow only a limited number of letters in a filename, leading unimaginative users (that is, most of us) to name their documents “MYFILE1.DOC,” “MYFILE2.DOC,” and so on.

Another aspect of the virtual workplace is the use of multiple e-mail systems. It is thus quite possible to leave records scattered all over the cyberspace landscape—on Compuserve, on the Internet, on office e-mail, and on specialized electronic bulletin boards. In all of these systems, work is being carried out and records created. Who is taking responsibility for the care and nurturing of this data shadow that we are leaving?

**WORKING VIA E-MAIL**

Formal, hierarchical organizations are giving way more frequently to special-purpose work groups—clusters of individuals from different parts of an organization, or even from different organizations or sectors entirely, who are brought together to work on a specific problem, then disband. In order to save time in meetings and in travelling, much of the communication among such work groups is via e-mail. The nature of these groups, their communications, and their working practices are worth the attention of records managers.
E-mail threads—context or clutter? - The practice of creating “threads” is well-known to those who use e-mail. A thread is a kind of sequential discussion on a given topic, common within work groups. Someone will make a statement and then through the process of re-posting, others add their comments. This practice often involves appending every previous message in a given sequence of e-mails to every new one. The final product is a record full of both context and clutter, and the interim messages all have “stages” of the discussion built-in. These may all exist in different record-keeping systems if the discussion took place among several departments. Which is the “real” record? And regardless of what the doctrinal answer to this question is, what should users of the system be keeping—how do they get rid of all that clutter?

How will we keep track of encryption? - Encryption is the practice of scrambling information so that it can be unscrambled only by the holder of a decryption key. Software and hardware encryption of electronic transmissions is expected to become commonplace in a few years. Among other uses, encryption can offer secure communications to members of a work group, even if their transmissions are carried out over public communication lines. Will we be able to read these encrypted records years from now?

“Speculating” in the electronic domain - Across government, attention is being focused on finding radically different and more efficient ways of carrying out work processes within departments and within work groups. For example, in the federal government the budgetary process at the end of the fiscal year has always been very paper-heavy. There are often several forms for contract budgets, communications budgets, personnel budgets, and so on, and every year managers may go through several iterations of each form in order to determine the best balance for their budgetary items. Many records can be created in this process, documenting the permutations and combinations of the annual wrestling match with the figures.

This year in one department, budget managers received an e-mail with several electronic attachments to fill in (again electronically) and return to the Branch budget manager. There was no need for the document to leave the electronic domain during its time with the division-level manager, and since the forms were embedded in electronic spreadsheets there was no need to create interim records to do a “what-if” analysis. Combinations came and went in minutes, and when the budget was balanced there was no way to tell (unless one had printed out the interim versions of the spreadsheet forms) that any interim records had ever existed. Upon arrival at the top level of the budget process, there was an automated roll-up of all the inputs to the organization’s budget. Is there any value to those interim records that only existed in the mind of a machine? In re-engineering this process, a great deal of time and effort was saved, but was anything of value lost?
The Nature of Our Tools

SOME "MODERN" MEDIA MAY BE LESS PERMANENT THAN PAPER

While we are on the verge of media that appear to be more sound from an archival perspective—such as optical disks—we are still storing most of our electronic records on magnetic media, and these media appear to be very volatile. Some readers may notice that they are already getting disk errors on floppy disks that are five years old. We are not entirely certain that the video tapes we are making now will be reliable in ten or twenty years. Certainly, the information can be transferred to new media, but is the role of the archivist now to include copying all material to a new medium every time a better one arrives? And, by the way, was the medium itself part of the archival record?

THE MACHINES THAT READ OUR RECORDS ARE CHANGING

Many may still have in the basement a relic of a few decades ago—the 8-track cassette, an artifact that lost out in the great standards war to the cassette that we now use. If we store records on, say, a CD ROM machine now, there may no longer be CD ROM readers around in five hundred years to access the records. What advice do archivists have on this issue for those who are rushing out to buy the latest gadgets available?

MORE WORK-RELATED EVENTS ARE BEING CAPTURED

Because we have the tools to do so, massive numbers of events are now being recorded—on voice mail, e-mail, and so on, and are available for keeping at low storage costs. How far does one go in keeping these? For example, we are often videotaped while speaking at conferences and can easily purchase a copy of those tapes. Those appearing at conferences where avid Internet users are present should not be surprised to find a detailed summary of their presentation available on the Internet the next day. The cost of acquiring and storing records such as these—particularly those in digital form—is extremely low. But as we know, the cost of organizing them for retrieval can be very high. To what extent should this opportunity to enhance the archival record of the institution be exploited? Whose responsibility is it to monitor and capture such records? Furthermore, at what point does this record-keeping begin to tread on privacy grounds? For example, the building pass that can find you anywhere can also track you everywhere and make records of your comings and goings.

ENTRY POINTS FOR INFORMATION HAVE INCREASED

Before the telephone, the primary entry point and exit point for records in an office was the mail system. Now there are telephones, e-mails, fax machines, portable computers, and floppy disks arriving and leaving offices at an ever-increasing pace. How do we keep track?
Final Thoughts

WHO IS THE NEW INFORMATION MANAGEMENT COMMUNITY?

Given the rapid pace of change and enduring ingenuity of the human race, it seems possible that technological solutions to these and other related problems of the modern office can be found. A greater concern is that in order to put the tools in place and make them part of the way we work, there will have to be cooperation among communities that have not historically operated in close partnership. If that cooperation is not forthcoming the solutions will be, at best, partial and will ultimately fail in the overall objective of creating an enduring and usable information base for government organizations that meets corporate, operational, and administrative needs, public accessibility and accountability requirements, and archival and historical needs.

The lines between libraries, documentation centres, records offices, archival data centres, and database management are blurring. What is needed in the planning of office systems and, at a higher level, public corporate information systems, is a methodology that takes into account what information is needed for long-term use and archival retention and that sets out the form and nature of that process. This will require a host of new information management rules of the road and the adaptation of older principles, including the need to document the legal, policy, and operational activities of an organization over time.

This, in turn, requires records managers, librarians, and IT professionals to begin to develop the principles of information management that hold the value of the information much more sacrosanct than the vagaries of the technology that channels data to their various uses. In turn, those principles need to be of such a compelling nature that they are adopted easily by programme managers and users as important ways of rationalizing what is, at times, a confusing technological array. To this extent, information principles need to be built into the hardware and software used in the office and on the road. This can only be done with information management principles that can be translated into systems design.

Those principles can be created only if the fragmentation between competing information disciplines ends. We need to understand who the partners are in the "InfoCulture" that is pervading our workplace. We need to bring people together who, in many cases, do not speak the jargon, have entrenched professional ideologies of their own, do not understand each other’s priorities, and, in some cases, may not have a great deal of respect for each other’s roles. As with the information systems themselves, there is a need for "integrators" who can begin to develop the information management principles that will be a vital asset to the Information Age. Archivists can become leaders in this process of integration and testing of principles.

A second point, related to the first, arises from the need to focus on the management of the information. As this article has described, there is a yawning gap in the application of technology. All too often, technical systems still take precedence over the programme or service delivery objectives and the information require-
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ments that must underpin these. We are at a crucial time in the development of the “InfoCulture,” where those charged with overall public administration are beginning to recognize the importance of the information over the technological carrier. They are looking for those very information management principles and organizations that will finally make information one of the management pillars of government and, yes, preserve the vital corporate memory that has been an essential component of administrative practices since the time of the earliest states. The major question is whether all those interested in the information disciplines are up to providing clear and implementable principles and practices. The challenge is great and the time is short.