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Module for the Photography Sector**

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Managing Your Photographs: The Basics



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Introduction to the Guide

Have you ever looked around your photo studio, home or small office and thought about the photos, the paper and electronic information you get through the mail box and email every day? What happens if you need those receipts from 3 year's ago because you are being audited. Many of your financial records, bank statements, invoices from the phone and water company are saved both electronically and on paper. You pay bills on line in some cases and in others still pay by cheque at the bank.

What about all of the photos you've taken? Some are prints, some on 35 mm slides and yet others stored on your computer. How can you get at them if all the equipment you need to look at them keeps changing? Can you replace the lamp in that slide projector? What about the tape recordings and videos? And since you got that flat-bed scanner, you are now scanning photos and negatives into your computer so you can get at them more easily and dispose of the paper.

It all needs to be managed so that you can find it when you want to celebrate that 60th birthday, or need it for that tax audit. But how can the myriad types of information be organized and described? How can the important ones be preserved for the long term? How should email messages be handled? You need answers to these questions so that you can work effectively to get the information you need when you need it.

Why Create a Guide?

The photographic sector was one of the quickest adopters of digital technology, and today digital cameras far outnumber their analog counterparts. However, while photographers quickly went digital and took advantage of the opportunities for quick development, online publishing, and especially the fact that essentially a shot does not cost anything, many professionals are just beginning to realize the dangers of keeping all photographs in digital form on their computers.

The questions being raised in today's photo studios and offices about managing photographs and information, and the issues being identified are wide ranging, complex, and increasing in significance. We rely more and more on computers for communicating and sharing information. We create more information now than ever before in history. Are there simple, cost-effective methods available for storing, organizing, and disposing of your information?

This guide, broken into a series of modules, will provide some steps to manage your information so you

- a) don't have a totally cluttered archive,
- b) can find photographs and photographic material that you need when you need it,
- c) can get rid of them when you can, and
- d) meet the legal requirements to keep certain information.

What is the Guide?

The guide is a series of modules which provide a series of high level tools and methods you can use to get control of your paper and electronic information, whether it's for your family or your small business.

In addition, you will find links to other resources which expand further on the points in each module. The quick tips give some hints about what you should be aware of and how you can simplify things.

The modules include:

- An overview of managing information;
- Creating and capturing information;
- Classifying and organizing information;
- Storing and handling information;
- Protecting your information;
- Accessing and securing your information;
- Retention and disposition of information;
- Digital preservation; and
- Email management.

Who is the Guide For?

The guide has been developed for professional and amateur photographers as well as small photo studios that are looking for way to get all the photographs and corresponding information under control. It provides some insights on how to manage your photographs efficiently and gives you links to other resources that you will be able to use to.



Module 1: Managing Photographs: An Overview

Introduction

This module will provide you with an overview of records management and why it is important to you both from a personal and a business perspective. It will describe the steps and tools that support information management and will provide an overview of what will be covered in other modules in the series.

Real World Vignette:

Pete is a professional photographer in a small town where he established a prime location for a wide variety of photography: general portraiture as well as taking pictures at weddings and parties are part of his portfolio. People trust him and are always satisfied with the outcome and how he captures their important moments in a photo. He is always up-to-date, uses cutting-edge technology and adopted digital photography almost at a time where colleagues considered its chances dim. Pete also is a passionate collector and preserver and never wants to throw things away as they could gain value in some year's time and probably help him making his business big.

Recently, this small town suffered from a hundred year flood where numerous homes were flushed away. Miraculously, no lives were lost but many discovered their invaluable memories in the form of analog and digital photographs gone. Pete's photo studio suffered severe damage too. But as Pete invested a lot in safety measures of various kinds he was certain that he could abate his customer's sustained loss by giving them back their memories. Will he be able to do that?

Managing Information

You create and receive so much information today both on paper and electronically. Today it is even more important to keep on top of it so that you

- Know where it is (Is it on my computer or in a paper file?);
- Understand how long you have to keep it (Do I need to keep it to satisfy any legal requirements, such as income tax);
- Can dispose of it when you no longer need it so you can free up space in our office files, or delete information from our computers on a regular basis; and
- Know that you can look at again in future if you get a new computer, have a disk crash or the medium (diskettes, CDs, Beta tapes, etc) are no longer readable.

You can spend hours looking through paper to find that one item you know is there but if you don't have the right software or the drives to read the computer information you will not have access to electronic information over time.



Every day, whether you are paying bills or creating reports or sending emails, you may want to keep that information to show what you did. It is your proof that you made a payment or sent a report.

Most of us have to pay taxes. And our income tax departments tell us for how long they expect us to keep our financial records in case they want to audit us. You also don't want to have to keep information forever, so the laws help us determine when you can get rid of it .

Information management provides a set of tools and guidance to help you more effectively manage your information. By applying the tools outlined in this guide and managing your information you will be able to improve the way you create, receive, keep, use and dispose of your information. You will be able to find those agreements and client files, locate all your paper receipts and show those photos of your son's 1st birthday when you need them. At the same time, all the irrelevant information can be disposed of so that it is not taking up space unnecessarily. You will have evidence of what decisions you made and what business you transacted.

Why Do You Need It?

Even in a small business or in your home office you can be taken over by the amount of information you received on a day to day basis. You receive emails from clients and colleagues, bills in the mail, send out invoices, create photo series, catalogues and exhibitions, and manage finances. Over time, if you don't manage the information properly you will:

- Waste space because you are not getting rid of paper files regularly
- Run out of space in email boxes or on our computers
- Lose valuable information because you don't remember where it is
- Not be following the legislation that requires us to keep certain for specified periods of time

The bottom line – information is created as evidence of transactions that you all carry out on a day to day basis, whether you are dealing with our personal or business information. Some of it has to be kept, some can be destroyed. Knowing which is which is important.

What If You Don't Manage Your Information?

In today's environment, it is easy to think that you can keep creating information because you have so much space on our computers. But without a proper plan in place to save and organize everything, update it as new technology is introduced, back up digital photographs and regularly dispose of the non-current/relevant pictures, you will not be able to effectively manage your businesses (even with Google Search).

Real World Vignette: What if...

... Pete stored all photographs in the cellar of his studio?
His cellar has been flooded and almost the entirety of Pete's collection is lost.

... Pete stored additional copies on CDs under the roof?
The temperatures under the roof of his home soar up in summer; all CDs that have been there for more than one summer are damaged.

... Pete kept safeguards on hard disks in his neighbour's garage?
As his cellar, the garage was flooded, albeit only partly. Some of the disks are still intact, but most of the valuable photographic collection is gone forever.

What are the Benefits to Managing Your photographic collection properly?

Managing your information ensures that you have the information you need when you need it. Having control over your information will:

- Help you meet legal requirements to keep Information for certain periods of time;
- Let you do your job better because you can find what you need quickly;
- Reduce storage costs by regularly disposing of information you don't need and free up filing and computer space;
- Let you get back into business if you have an emergency (Pipes burst, computer crashes, etc.);
- Find the right information you need to support your business planning and decision-making faster; and
- Ensure that your electronic records, which have long-term value, are still available to you, even though you bought a new computer and CDs no longer exist.

What Does It Involve?

Information management within a large organization normally involves staff who develop policies and procedures and who survey all departments to understand what information they create. In a smaller organization or to manage your personal files, you should apply some information management tools to help you capture, manage and dispose of your information.

The "Self-administered Records Management and Long Term Access Module" offers practical in-depth information for each of the following aspects in short and precise format.

The main things you need are:

Module 2: Methods of capturing and storing information

For physical files these may include file folders, cabinets, labels, boxes, etc. For electronic files¹ this could include electronic folders on your desktop or in shared directories on your network². (*Module 2: Creating and Capturing Information*)

Module 3: Organisation

A method of organizing your photographs so you can find them, and dispose of them. (*Module 3: Classifying, Organizing and Managing Information*)

¹ Photographs, drawings, word and excel documents, emails, etc.

² Depending on the size of the organization, you will likely implement a electronic document/records management application (EDRMS) which ensures that electronic records are authentic and reliable to meet legal requirements.

Module 4: Access and Security

Steps to make sure that your photographs are secure and accessible as you need them. (Module 4: *Accessing and Securing Information*)

Access must be secured on two levels

- *Storage:* Digital photographs are nothing more than bit-streams stored on data carriers, often in large numbers. In the event of accidental damage, such as fire or flood the damage to an analogue film would mean 20 to 36 pictures might be lost. In contrast, the loss of a hard drive might mean that a lifetime's work of photography falls into a digital black hole. This high concentration of data means that in the case of relatively common events such as fire and flood happening, the damage could be catastrophic. Therefore, a proper backup strategy is essential.
- *Logical:* Digital photographs are, unlike their counterparts, intangible. While printed photos can lose their colors and fade, they continue to be understandable and meaningful to a human. Digital information in contrast can quickly become a unusable stream of zeros and ones not interpretable by future computers and technologies, if the necessary precautions are not taken in time. While JPEG images are likely to be readable for a long time, the raw camera data that is widely used in the professional sector does not have the same software support. Every camera has a different RAW profile and often needs specific software to function, which might not be available in the future.

Often, proper backup strategies present a significant initial investment for a photographer not only financially, but also in time and effort to investigate options and become familiar with the technology. In many cases, this investment acts as a barrier and the necessary backups and precautions are not taken. Frequently it is only after experiencing loss of data that individuals realize the value of their archives by far exceeds the cost of securing it for the future.

Module 5: Retention and Disposition

- A document that tells you how long to keep which types of photographs and outlines steps to dispose of them. (Module 5: *Retention and Disposition of Information*)

Module 6: Protection plan

- A plan which identifies the photographs and supporting information you MUST have in case you cannot access your files. (Module 6: *Protecting Your Information*)



Module 7: Storage

- A plan to make sure that as technology and the media on which your photographs and supporting information are stored properly and steps to make sure that you can access your information when the technology changes. (*Module 7: Dealing with Storage and Technology Changes*)

On What Medium Should I Store My Information?

1. Do not solely rely on CDs, DVDs and their variations. The average lifespan of these discs is short and, more importantly, unpredictable, with quality varying. Even more importantly, handling becomes very effort intensive as the amount of data increases.
2. Use Hardware RAID systems, either attached to servers or as networked-attached-storage. These systems offer high redundancy and speed while being practical and affordable. Hard drives do not last forever; thus, redundancy is important. Replacing a hard drive in a RAID system is relatively straightforward.
3. External hard drives, if used as additional back-up media, need to be activated regularly, at least once every month.
4. Convert original images to a stable standardized format such as TIFF (LZW compressed).
5. Keep the original RAW file if you want to be able to improve image results in the future, if needed.
6. Regularly check if the backup data can be restored successfully.

Module 8: Email

- Steps to manage emails that may contain important information relating to your business, client contacts, or even the exchange of photos. (*Module 8: Email Management*)



Module 2: Creating and Capturing Information

Introduction

This module will assist you in understanding the importance of capturing your documents and information so that you have evidence of business decisions and transactions you have made. It will provide guidance on naming documents and files to improve access and retrieval.

Real World Vignette

Every day we receive emails telling us about events coming up, colleagues send along information in both emails and attachments. We get photographs from friends and, those never ending jokes. At the same time, we can go online and get our bank statements, pay the electricity bills via the internet and get notes from our internet service provider telling us that our bills are online and ready for pick up. We also create our own reports, spreadsheets, emails, photographs, etc. electronically and print to paper. What do we do with it all so that we can get it later on?

What is Meant by Creating and Capturing Information?

The information you create documents what you do on a day to day basis. If you pay your bills online or through the bank branch, the bank provides you with a statement which details the payments. Those statements are records of your transactions with the bank and are legal documents for you, showing that you actually deposited the money. You have created a record of that bill payment. Do you throw them away or delete them? No, you want to maintain them as part of your financial files. They record what you did and in case of a dispute and are the evidence of what you did.

If you are a consultant and are working on a project, you may be asked to produce a report. In the process of developing the report, you may create several draft versions to which you make changes. Eventually you create that final report and dispose of all the earlier versions. The final report is the "record".

Why Do You Need to Capture a Record?

There are legal requirements that require you to keep certain information to meet tax and other requirements. There are also requirements with electronic information to show that they have not been changed since they were created. As a result, you want to make sure that you have a method in place to save your final versions either on paper in a file folder or in an electronic folder that is only for final versions. There are software tools available that will allow you to create an electronic filing cabinet which saves "records" and does not allow any changes to be made. However, these are typically used by larger organizations. You can create a series of shared folders that have permissions given to them that will not allow people to change the content once it is put in the folder.

The contract that you have with the client may require you not to keep certain information once the project is completed. If you don't have a method of saving the information, then you may be losing information that you are supposed to keep.

How Do You Capture Records?



Think about all the ways that things come to you – you have emails about that project you are working on, photographs that document something about the project, reports that go to the clients as updates, spreadsheets that relate to the budget. In our old paper world, these used to be put into a file folder. Right now, though, you could have the photos in a photo file, the emails in your email folder and the other documents in your office folders. Is that a good way to manage them? No, because you have to look for them in three different places. How do you know you have all the information you need?

Naming or Describing Documents

Every day we create documents and name them, based on our immediate thoughts, not thinking about the longer term retrieval and access requirements of others, such as our family members, tax accountants, or business colleagues.

Establishing rules for creating document names makes it easier for people other than the person who created the document to retrieve information and for computers to search for information. Understandable and meaningful file names will simplify the task of finding an individual document, and of linking together related documents.

“Naming conventions” provide a set of rules which will assist you creating a title for an electronic document. They should be:

- Simple: *meets the needs of the business and family members. If it is too complex, keeping it up to date will not only be expensive but will make it difficult to determine how or where to file the documents;*
- Brief: *keep titles short and to the point;*
- Meaningful: *properly describing the content of the document or folder;*
- Specific: *use very concise terms.*

The naming components of the title should be placed in a consistent order. The actual order will depend on the structure of your folders where you file the document. Document titles should contain enough information to identify them if they become detached from the correct folder.

When you create an email or document and give it a name, there are several things that you should consider:

- Name the components of the title in a structured and consistent way; locate the most specific information at the beginning of the title and the most general at the end;
- Ensure that the title of each document reflects the content of the document;
- Determine what separators you will use or have used in the past and keep them consistent;
- Define what standard abbreviations you will use and avoid the use of words that add no value; e.g. CRA instead of Canada Revenue Agency; U of T instead of University of Toronto;
- Give previous versions of documents the same title and structure it the same way; Use a two digit version number to facilitate sorting and displaying of a document and identify DRAFTS and the FINAL version:

<Document title> - <version number> - <draft/final>.document type extension

Thompson Travel Presentation July 2009 – Ver. 1.0 - DRAFT.doc

Thompson Travel Presentation July 2009 – Ver. 2.0 – FINAL.doc

- Avoid the unnecessary use of dates (remembering that the operating system will date-stamp the document at time of creation and edit); however, if needed standardize the format, i.e., YYYY/MM/DD or use January 2009;



- Use first initial and last name for naming authors; J. Wood; H. Hofman; J. McDonald.
- Specify the type of document when describing the document (e.g. MIN for “minutes”; AGR for “agreement”; and
- Ensure that the application in which the document has been created is identified (e.g. “.doc”; “.xls”; “.pdf”).

Some System Limitations to Consider

To facilitate sorting, a consistent separator should separate all elements of the naming structure. The most common separator is the use of the underscore (_). However, other means of separating elements could be used, including a dash (-) or space. Spaces are not practical as a separator since there will be spaces within the elements themselves (e.g., document name). It is important that a standard separator be adopted.

Electronic file names **cannot** include any of the following characters: forward slash (/), backslash (\), greater than sign (>), less than sign (<), asterisk (*), question mark (?), quotation mark ("), pipe symbol (|), colon (:), or semicolon (;).

Character Limitations in Naming Electronic Files

In setting up the folders, and subfolders, it is important to understand that in standard desktop applications, the entire path and file name are treated as one name and therefore users should look at the number of characters in the folder/document title. If the name is longer than 255 characters, the software application will shorten it. (*Note: This example is not 255 characters. This is for illustration purposes only.*)

C:\ Christine Ardern\My Documents\IMS Consulting Inc. RIM Project\Standard Naming Conventions for Electronic Records\Communication and Training Module for University of Toronto Ver. 1.0 2009_12_03 ...

Information which may be important for access and retrieval purposes may be lost when the system shortens the document name, for example:

C:\ Christine Ardern\My Documents\IMS Consulting Inc. RIM Project\Standard Naming Conventions for Electronic Records

Applying naming conventions to both working and final “official” documents ensures that they can be found more easily and associated with the folders to which they belong. Maintaining a naming discipline will help to ensure that your working documents, which eventually become formal information, are appropriately titled and easily linked to related items and can be tracked to previous versions.

Use Headers and Footers to Identify Documents

Some of the components of the document/record descriptor may be placed in the header or footer of a document. This will help identify the location of the document in the system and can be referenced back to the printed copy if necessary.

Using the Windows Properties Function

The Windows “properties” function has been used by a number of organizations to capture details about individual documents. (See Figure #1) Specific information (also known as Metadata) is put into the properties template to allow better control and searching and retrieval.

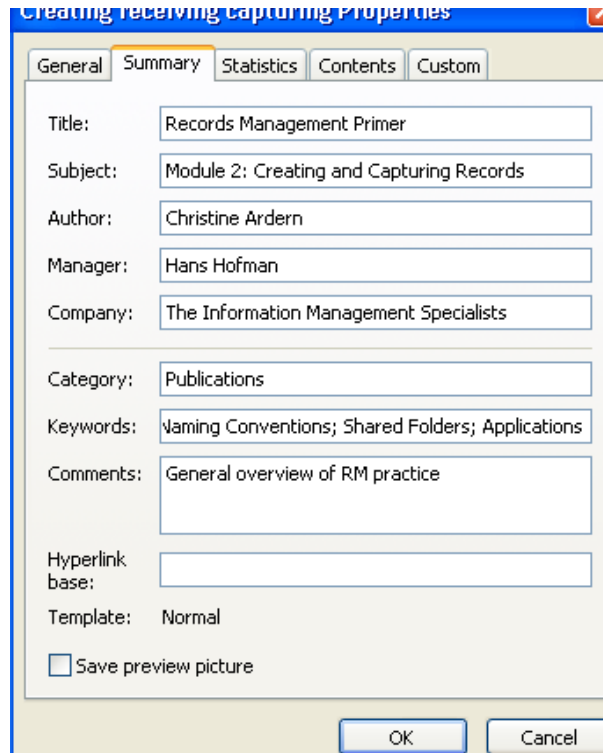
A screenshot of a Windows dialog box titled "Creating receiving capturing Properties". The dialog has five tabs: "General", "Summary", "Statistics", "Contents", and "Custom". The "Summary" tab is selected. The fields are filled with the following information:
Title: Records Management Primer
Subject: Module 2: Creating and Capturing Records
Author: Christine Ardern
Manager: Hans Hofman
Company: The Information Management Specialists
Category: Publications
Keywords: Naming Conventions; Shared Folders; Applications
Comments: General overview of RM practice
Hyperlink base: (empty)
Template: Normal
There is an unchecked checkbox for "Save preview picture" and "OK" and "Cancel" buttons at the bottom.

Figure #1

Where Do You Save Records?

Capturing a record means that it becomes fixed, so that it cannot be altered or deleted. In some systems, capturing may need to happen manually, such as when you print out an electronic document and put it on a paper file.

In the paper world we use file rooms, filing cabinets, desks and off-site storage to manage our paper files. Sometimes we become overwhelmed with the process!



Figure #2

Capturing Paper Files

Filing cabinets, folders and labels are familiar resources to store and access paper files. You may wish to use color coded labels to help locate files more easily. More information on paper file management is provided in the links at the end of this section.



Figure #3: Example of Color Coding System

Capturing Electronic Files

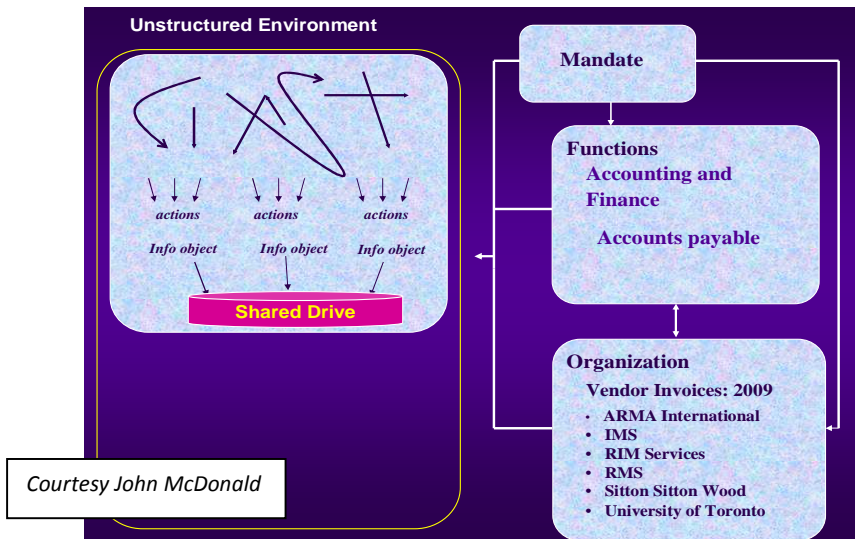
If you are working with an electronic system, it may capture the record automatically or give you the choice to save the record into the system. Several options are available to you. However in today's electronic workplace, you should be moving towards creating, capturing and storing your information electronically. In our electronic world, we have several options for capturing information. We can place them

- on our PC in the "c" drive (which needs to be backed up regularly);
- on a network drive in shared folders;
- in a space that is designated for access by the entire organization;
- external storage media such as CDs, DVDs, USB drives, external hard drives, optical disks, tapes, etc; and.
- in a records management application³ (which, depending on the size of your organization may be an option.

The Network Drive and Shared Folders

The network drive (Figures #4 and #5) can be configured to store a variety of folders so that different users can have different rights to access and retrieve information. Placing information into a network drive reduces duplication.

³ The records management application automates the management of the classification scheme and retention schedules and ensures that electronic information meet the legal requirements for authenticity, reliability and trustworthy information.



Courtesy John McDonald

Figure #4:

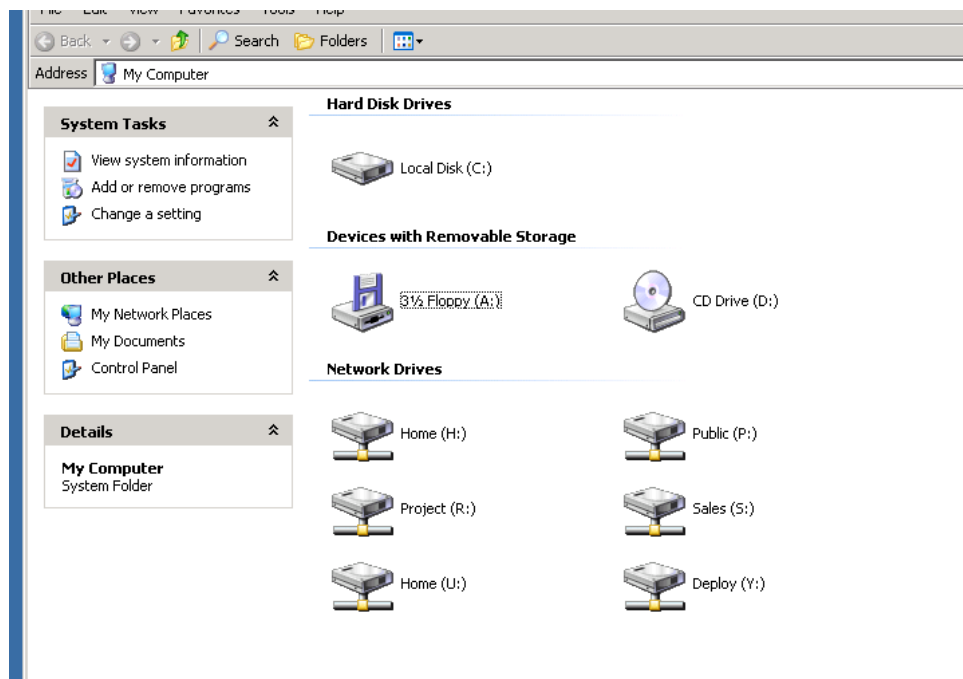


Figure #5: Example of Shared Folders

Shared folders (Figure #5) provide an opportunity for placing information into a common area so that they can be accessed by those who need to see them. They are backed up on a regular basis, ensuring that information is available in an emergency. They can be secured according to specific user access controls, so do not automatically allow access to everyone in the organization.

Within the sales drive, the sales department can create and keep all its folders relating to its activities.



In addition to establishing a centralized locations into which files can be stored, shared folders

- develop good housekeeping practices for organizing and deleting electronic documents, including e-mail;
- encourage access to a central record repository and reduce duplication;
- establish control over folder creation;
- support file plan structures; and
- help apply common terminology, naming conventions, links to paper filing system,
- *BUT* - someone has to manage them.....

Records Management Technology Solutions

A system with records management capability⁴ offers much more than shared folders, email software, local drives or personal folders. The records management system facilitates the management of both paper and electronic information from creation to disposition. The systems:

- provide search and retrieval functionality;
- implement a file plan and rules about how long information is kept;
- support disposition reporting; and
- manage physical files

What Are the Benefits of Creating and Capturing Information?

Records are created to document activities and as evidence of transactions and decisions made. Some are subject to legal requirements and have to be kept. Others, such as personal photographs, music, etc. may be captured for personal reasons. Regardless of the reason, capturing the record allows you to keep it over time in case you ever have to produce it for legal, tax, personal or business reasons.

At some point, you will probably want to destroy the paper or delete the old electronic documents so having them organized according to a "file plan". By setting up some rules by which you can save files, finding them will be much easier. How many times have you gone to look for that one piece of paper or can't remember what you called that document you created yesterday? Setting up a file plan for both your paper and electronic information sets the framework.

What if You Don't Capture Information?

You capture information so that you can remember that family vacation, or the business agreement you made. In the business world you have legal obligations that must be met. Without the information that show what decisions you made or what business was transacted you may not be able to address those legal obligations and may be reinventing the wheel when you have to redo something because you didn't keep a copy originally.

In the paper world, when you aren't able to find things, you could spend hours looking through a filing cabinet and eventually find it. While you have search tools with your computer and will likely find information eventually also, the computer does not store pages or files, unless you create them initially. The computer will also find what you ask it for, so if you can't remember the name of a document or a colleague called it something different from you, then it will take longer to find and may never be found.

⁴ Guidance for selection and implementation of these tools is referenced at the end of the section
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In a nutshell, your business will not run as efficiently and you may risk losing a lot of information.

The next section of the primer looks at the tools you can use to help you organize information and improve search and retrieval.

Highlights & Quick Tips

- Set up shared folders to allow better access and retrieval and reduce duplication.
- Use standard terms to describe information when you create it. Consistency in capture will improve access and retrieval.
- Standardize the naming conventions used for your documents and apply them to emails, images, digital recordings, etc.
- Look into records management applications as part of a long term electronic information strategy.

Links (URL's)

-  <http://www.opentext.com/2/global/landing-gartner-leaders-quadrant2008.htm>
-  <http://www.iaac.org.uk/>
-  www.arma.org: Filing standards
-  www.im.gov.ab.ca/publications/pdf/namingconventions.pdf
-  www.naa.gov.au/records-management/create-capture-describe/index.aspx
-  http://www.nationalarchives.gov.uk/documents/active_rec_man_guide4.pdf

Module 3: Classifying, Organizing and Managing Information

Introduction

This module will assist you in determining how to name or describe your documents and what you should consider when developing a file plan or structure: that is, how and where you will file the documents so that you can retrieve them.

Real World Vignette:

You have just received a call from John who is at a potential clients' office preparing to give a presentation. He is covering for you as you are at home sick with a cold. He can't find it on the shared directory where you said it would be and does not know where to find the presentation. He thought that you said it was in the folder called 'PRESENTATIONS' but could not find it there – he looked under "SLIDES" and under the "CLIENT" folder. Not only is he late for the presentation and his level of frustration is rising - !!!@?\$\$\$! (Figure #1)

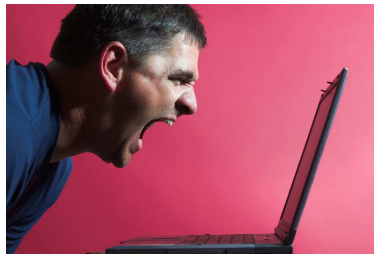


Figure #1

What is Meant by Classifying, Organizing and Managing Information?

We organize things around us every day so that we can find things more easily. Every store you go into, whether it's a **grocery store**, a clothing store, book store, etc. has things organized in groupings so that you can find them more easily. They are grouped according to kind of food (sauces, snacks, **coffees and teas**) or type of book (Fiction, non-fiction, travel, business) or type of clothing (sweaters, jackets, pants, etc.) or the type of coffee (**Arabica, decaffeinated**). In the office environment we classify both paper and electronic files according to the groupings in which they are created and saved. (Figure #2)

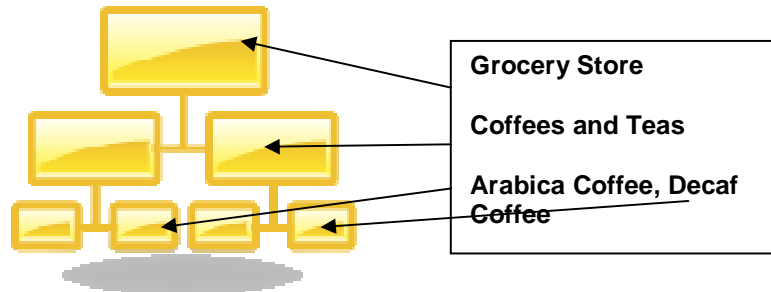


Figure #2: Example of Classifying Documents

Classifying documents involves identifying, naming and arranging your business or family documents into categories according to a logical structure that will be meaningful to you and others when you need to retrieve information. The management of information that you create or receive in a typical day can be greatly facilitated by developing simple methods to organize your documents. In order to do this, you need to understand:

- The key functions and activities of your business;
- The types of documents you receive or create on a daily basis (agreements and contracts, financial spreadsheets, photographs, slides or videos, etc.);
- The subject of the content of these documents;
- How and where you store them;
- How you normally name and organize them; and
- How long you keep them.

Why Do You Need to Organize My Information?

In today's digital environment we expect to have information at our fingertips; the right information, when we want it. We do not want to sort through reams of information to get at the one document, slide or video we need. The process of classification helps you in this process by describing, organizing and managing information regardless of whether they are an email, document, graph, spreadsheet, photograph or slide. It creates order in understanding what your business does and how it does it and allows you to share this information with others.

Organizing and managing your information ensures

- that you can find documents dealing with a specific topic, project or activity together over time;
- ease of access and retrieval of information between business partners and family members because everyone understands how the information is described;
- regular disposition of information which is no longer required in accordance with relevant legislation;
- protection of critical documents in case of a disaster; and
- protection of documents that have long term value despite changes in technology hardware and software.

If you do not organize your documents into a consistent, simple system, searching and disposing of them can be time consuming, raising not only your frustration level but also wasting time and money! (Figures #3 and #4)



Figure #3



Figure #4

How Do You Classify and Organize the Information?

There are several considerations to keep in mind when determining how you will classify and what the structure of file plan should look like. There are several options available and the key question you need to determine at the start is what option is best for you and your company.

Today, in the electronic world many companies structure their file plan on a business functional and activities basis, rather than the traditional subject, geographical or chronological system. A *file plan* allows you to break down your information into logical, workable units.

When you classify your records by a functional system, that is your work processes, it ensures that the electronic records and the associated information (the metadata) represent the work processes in which they were created. From a business perspective it is structured on what your business does and why the record was created. A brief outline of how to structure your file plan and classify your records is detailed under the “developing the File Plan” section in this module.

Before you develop your file plan you need to determine which approach is right for you and your business. Therefore, you need to understand the your business functions and activities and the types of information created or received; where is it stored (on your pc's personal “P” drive or on multiple pc's, shared drives, or printed to paper); how you currently file and name the folders and the documents within the folder; and how you decide when documents can be deleted or destroyed? Remember information can be filed in many different ways for different purposes. You should consider who will need access to the information other than yourself. Once you have determined what you have you can begin to develop your file plan.

Key questions to consider include:

- How should we classify the documents and the structure the plan? - Will it be based on functions and activities of your business, by subject or theme, by your organizational groups or a combination of any of these three? For additional information on these options see “Links” at the end of this module.
- What are the primary and secondary functions of the business? - Consulting Services maybe the primary operational function (the reason you are in business) and hiring of staff may be a secondary function under Human Resource Management;
- What work processes or activities are we involved in? - Determine the content of the documents – what are they about? what subject or function do they cover? (i.e., is it related to a client file; a reference to a subject?)
- What records do we create or receive on a daily basis? - If you don't know, this may mean you need to conduct an inventory⁵;

⁵ *Records Inventory*: An identification and quantification of all the documents/records possessed by an organization or business.

- What is the value, that is, the importance of the documents to us or the business – do you need to retain them for legal or financial reasons or retain them long term – for future generations?

Identifying What Information You Have

Looking at your files, both paper and electronic, will give you some insights into how they are currently being kept. Have you created folders to keep them in or are they in a big pile on your desk and just randomly stored in the computer? Are you keeping both paper and electronic copies of your documents? Depending on the volume of information you have, you should start by making a list of the types of documents and files, dates covered, and think about the reasons you keep them. If you have a large volume of documents you may want to do a records inventory or have a specialist come and help you.

You may discover that you have

- contracts and agreements with clients or vendors;
- invoices and statements from suppliers, such as your internet service provider, the telephone company and your bank;
- project files that you are working on;
- personnel files of staff that you hire part-time, or full time;
- photographs of your family vacations; and
- old diskettes that you haven't looked at in years and are not really sure what is on them.

Developing the File Plan

Once you know what information you are maintaining you should develop a file plan. No matter which option you select to classify and organize your documents by

- business functions or work processes and activities;
- subject or theme;
- organizational groups; or
- a combination of any of these three⁶.

ensuring that the structure is simple, and easy to use. Whatever structure you select you keep the categories broad so that you do not end up making a new file for only a few documents.

Although it is still common practice to classify documents according to their subject content, many businesses around the world base their classification on the functions or work processes and activities of the business.

Functional Classification Scheme/File Plan

Because the functional classification scheme is widely used to manage electronic records by many businesses today, it is worth discussing further. Functional classification is based on an analysis of the unique business functions, work processes and activities of your business, but is independent of your organizational structure which is likely to change over time – especially if your business grows. It is flexible and promotes effective information sharing with others within your business.

The first level represents your business's *Primary Functions*, while the second represent the work processes and activities or transactions that generate the records. The third level can be broken down into subjects or themes.

⁶ Also known as a Hybrid system.
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Several functions are common to all businesses, large and small as well as to family activities. They may include

- Administrative Management
 - This function covers the activities associated with the overall administration of the organization. Records may include conference and meetings materials, project files, organization charts, policies and procedures, manuals, strategic planning, program development and internal support or services such as computer support, equipment maintenance and office supplies.
- Corporate and Legal
 - This function covers the corporate and legal activities relating to the governing of the organization. Records may include board meeting materials, resolutions and bylaws, legal advice or opinions, contracts and agreements, legal claims and resolutions.
- Finance and Accounting
 - This function addresses the financial and accounting activities, such as cash management, accounts payable and receivable and financial reporting. Records may include bank statements, tax returns, budget planning, invoices and expense claims.
- Human Resources
 - This function addresses the human resource activities, such as recruitment, planning, recruiting, training and development, and performance measurement. Records include personnel records, job analysis and descriptions, salary rates, pay administration (payroll) records, leaves, medical information, conditions of employment, performance appraisals and employee training and development activities.

In addition to the functions which we find in all organizations, there are operational functions which create records more unique to a specific type of industry. For example, if your business is a consulting business, you might have an additional function called "Consulting Services", in which the majority of your files may focus on project proposals and project files. (Figure #5)

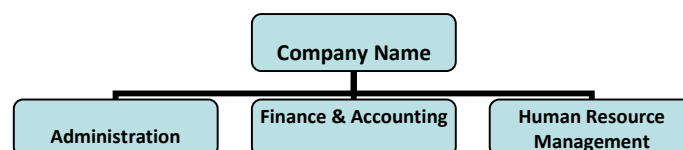


Figure #5: An Example of Primary Level Functions

The secondary level of the hierarchy is sub-functions. *Sub-functions* are the unique steps of your business processes that fulfill a function. (Figure #6)

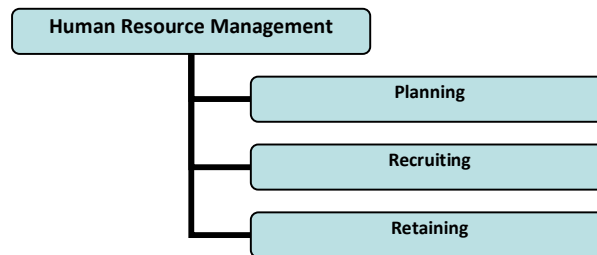


Figure #6: An Example of the Secondary Level – Sub-Functions

These can be broken down further into related activities. *Activities* are derived from the major tasks or actions performed to accomplish each step (i.e., *sub-function*) of the business process. Activities encompass transactions, which in turn produce records.

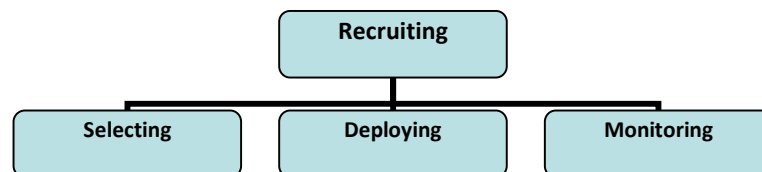


Figure #7: An Example of the Third Level –Activities

Below the three level hierarchy of the business work processes or activity structure (i.e., *function*, *sub-function*, *activity*), records can be organized by:

- transaction;
- project;
- employee or case files; or
- subject content.

The complexity of the filing system will be dependent on the complexity of the organization and files you have to manage. Keep it simple. If you create a complex system that is not easily understood it will not be used. The number of additional levels of classification should correspond to the need for additional levels of precision. *For additional information on these options see “Links” at the end of this module.*

Filing Methods

Based on your survey or inventory of the files in your office you determined that you have several different types of documents which might end up as a group called a “record series”. These documents are a group of identical or related records that are normally used and filed as a unit and that permit evaluation as a unit for retention scheduling purposes. *(For additional information on retentions refer to Module 5: Retention and Disposition of Information.)* These collections or groupings of documents may include contracts and agreements, budget files, staff personnel files, property files or client files. Once these are identified you will want to further identify what the file folders and documents structure will look like.

Remember if you are keeping a parallel system in both paper and electronically ensure that the file plan is the same.

The file folders may be identified

- Alphabetically (by name or subject);

- Chronologically (by year, month or day);
- Geographically (by county or city); or
- A combination of any of the three.

For example,

- Contracts and agreements may be filed by name or a vendor number;
- Budget files may be filed by year;
- Staff personnel files may be filed by employee number or name;
- Client files may be filed alphabetically by client name;
- Property files may be filed by city, street and number.

A good rule of thumb is not to open a file for “Just In Case” documents or one off documents; open a file when the volume warrants it.

Managing Shared Directories and Folders

Development of the file plan structure establishes consistency in setting up shared directories and folders. Paper and electronic records differ only in their format. Maintaining links between related records is done by developing and implementing a file plan. Paper and electronic records cannot be stored in the same physical folders but they can be stored in the same logical ones – i.e. the same place in the overall structure.

For example, if a document is about a job that you are recruiting for, it would be files under a directory called Human Resources: Recruiting. In order to manage the folders, you would identify the year of the recruiting and then file by job title. All the documents associated with a specific position for which you are recruiting would be stored in that folder. (Figure #8 and Figure #9) Remember to ensure that the creation of folders and subfolder titles match the folder structure of any paper files you have created.

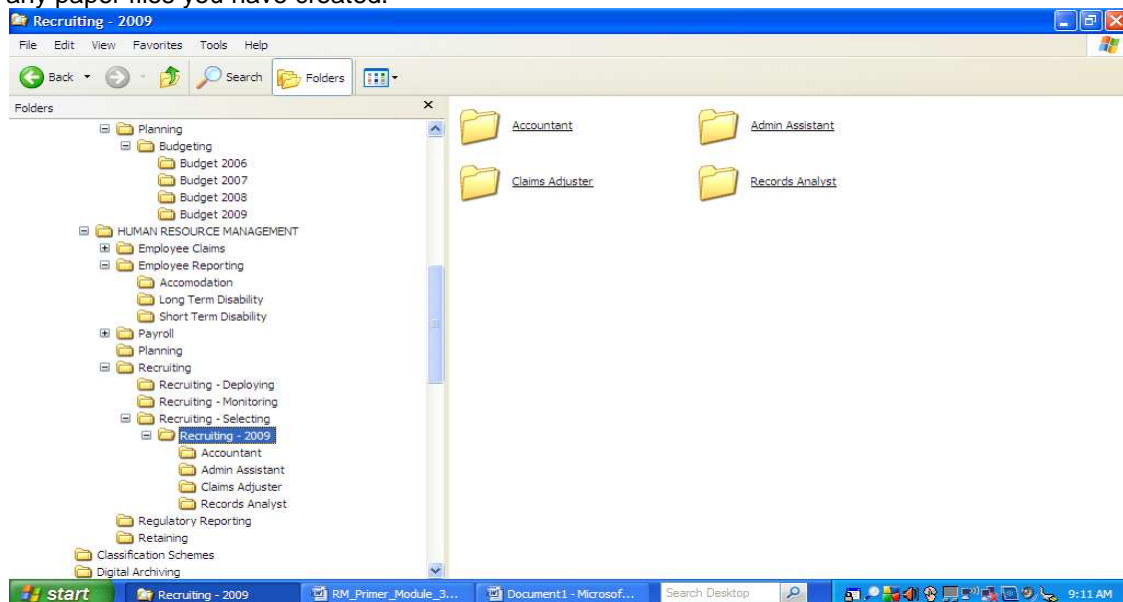


Figure #8: Example of File Plan Structure for Electronic Documents

Records Analyst

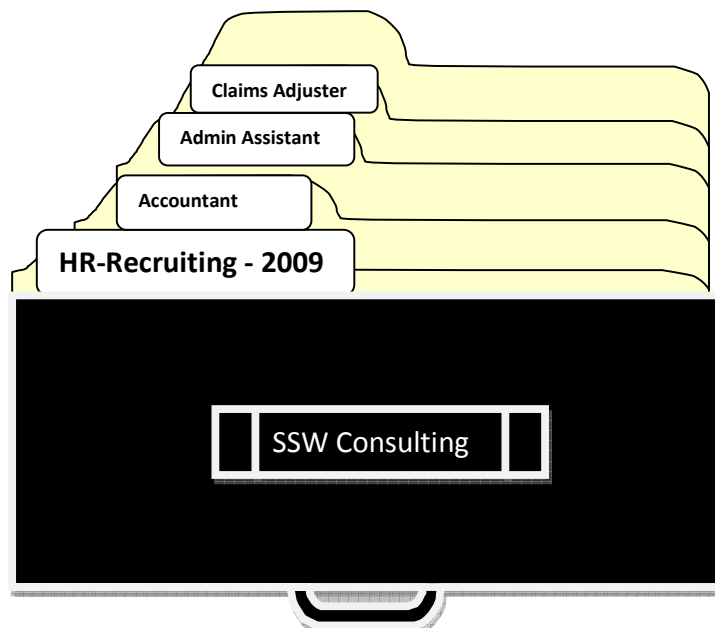


Figure #9: Example of File Plan Structure for Paper Documents

What Are the Benefits of Organizing Your Information?

Think about the number of documents you create on a day to day basis. Each of us works independently at our own computers or on laptops remotely from home. We may be linked to a network on which we can save our documents and files. What if we are out of the office for two weeks on vacation or on a course? Will other people be able to find information that they need to do their jobs if it is only in your computer, filed under some interesting name that you created for that particular day? Developing a file plan that defines the organization's records and is used by everyone to save files will save time and effort in finding and managing records.

Applying the file plan to the shared folders will

- Simplify searching;
- Reduce duplication;
- Allow others who are familiar with the classification scheme to find things; and
- Allow you to identify where records are so that they can be disposed of according to the retention schedule.

What if You Don't Organize Your Information?

- You will spend time searching for information unnecessarily which will take you away from your business;
- Other people in the company may not be able to find information they need if you are out of the office;
- You will not be able to dispose of your records without spending hours searching through the thousands of documents on your PC and network; and
- It will cost you money in the long run because of time wasted looking for what you need.







Highlights & Quick Tips

- Create a file plan that is easy to understand and use. The more complicated it is, the less people

will use it.

- Apply the file plan to both your paper and *ALL* your electronic documents⁷ to create a link between the two.
- If you use a functional or work process file plan ensure that the terminology you use reflects the functions of your business or family activities.
- Do not create “Speculative Files”. Establish a file only when the amount of documentation warrants it.
- Do not file documents by the media in which they were created, i.e., paper, slides, film. For example, if you file all your slides under the category “SLIDES”, in time, you will not remember what they were about. Instead file by the content of the file; the subject (“Vacations-Family”/“Vacations-Friends”); by year (“2009”); by Trip Name (“UK Visit”). Put all related information into the same folder (emails regarding the set up of the flights, brochures, and all associated information).
- Determine how long you need to retain the information and what you need to protect.

Links (URL's)

-  <http://www.im.gov.ab.ca/>
-  www.naa.gov.au/recordkeeping/dirks/dirksman/dirks.html
-  www.nationalarchives.gov.uk
-  http://www.archives.qld.gov.au/publications/PublicRecordsBriefs/functional_vs_subject-based_classification.pdf
-  <http://sbinfocanada.about.com/cs/management/qt/filingsystemjc.htm>
-  <http://sbinfocanada.about.com/od/datamanagement/a/computerfilemgt.htm>

⁷ Whether they are stored on shared folders, on your desktop, on laptops, CDs, etc
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Module 4: Accessing and Securing Information

Introduction

This module will introduce you to the issues associated with accessing, retrieving and securing electronic information. One of the biggest challenges with electronic documents is that they are easy to change and manipulate. Since a number of different people may be using the same computer, it is important that access to the computer, folders and documents is secure and protected.

Real World Vignette:

As a consultant, you work on projects which require you to maintain client confidentiality. You have both paper and electronic information that requires security. You also have personal information about your business on the computer, which is shared with a colleague for business purposes. There are different levels of access and security required because of the information you are working on. You both need access to the computer, and certain folders, but some information is restricted access for you only. How can you address it? You also travel a lot and worry about the security of your cell phone and laptop.

What is Meant By Accessing and Securing Documents?

Accessing and securing information focuses on the need to ensure that only those people who are supposed to see the information can do so.

If you are working in an office with several other individuals and have paper files that only you have access to, because they contain personal information about clients, you will need filing drawers and cabinets that lock to provide the level of security required. You may even have a clean desk policy that requires you to put away those files at night so the cleaning people cannot look at your work. The tools required are keys, doors and drawers to lock and the folders themselves. Determining who has keys determines who has access to which files.

With your electronic information, depending on the work you are involved with and the files on your computer, you may want to have some open for all your team to look at and you may have restricted access to others. Security and access can be applied at different levels depending on your requirements, rights to view and edit certain information and the business needs. Depending on your level of access, you can be given permission to:

- Access the computer network;
- Log onto a specific computer;
- Access a shared folder or folder on the desktop;
- Access specific documents within a file; or
- View and edit specific documents.

Why Do You Need Access and Security?

With concerns increasing over privacy of personal information, both in paper and electronic form, you have to ensure that information is secured to meet legal requirements if you are dealing with clients. An insurance broker, dentist or doctor, has personal information about all his or her clients

which are, for the most part, stored on paper. Storing the paper files in lockable cabinets when they are not in use provides the security necessary to protect them

With so much information stored on computers and the issues around ensuring that electronic records are authentic and reliable, it is critical that the information be secured. You may want to provide your colleagues with an opportunity to view and edit reports until such time as the final version has been created. After that, you will want to “lock down” the final version so that people can only view it. The author may have rights to open it again, but everyone else has limited access to viewing the document.

In certain types of organizations, where a lot of personal information is kept to support the business, there are specific requirements regarding privacy and data protection⁸ that must be followed. For example, student records, personal health records, financial records are all subject to stringent requirements to maintain privacy. If, as a consultant, you are working for a school board and you allowed access to certain files for your project, there will be a requirement that you maintain the privacy and confidentiality of that information. You cannot save it to shared folder that permits access to everyone.

Why Do You Need To Know How to Do It?

Individuals have all been locking up necessary information for as long as they have been using paper files. However, the world of electronic information provides greater access opportunities. You will be accessing the computer, setting up folders and files. Where you require security on any of these components, you will have to set up the security through the software. For purposes of this section, we are showing how the security can be set up using the Microsoft Word functionality.

How Do You Manage Security on Your Computer?

Microsoft will allow users to define who has access to which folders in the directories. At the PC level, you can set up your own permissions. In the network environment, IT has to provide assistance to control access to the folders

Our consultant is in the process of determining that a client folder has to have controlled access and works through the process of setting the permissions. By right clicking on the desired folder, Windows opens up a window which allows the consultant to start the security process (Figure #1):

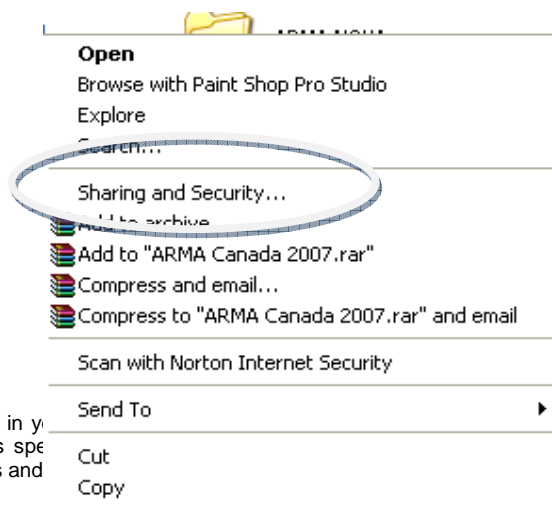


Figure #1: Example of Microsoft Sharing and Security Features

⁸ Look in your local laws for specific definitions of what constitutes personal information and how it should be protected.

For example, in Europe, the Data Protection Act 1998, and in Canada PIPEDA and provincial laws that govern

By clicking on the Sharing and Security line, Windows opens up a dialogue box which allows the client to begin to set up the sharing permission and general security levels. (Figure #2) The “General” box allows the consultant to create the presentation as a read-only folder and allows additional restrictions to be placed on it if required. Anyone who opens the folder will see the files but not be able to edit or make changes to them.

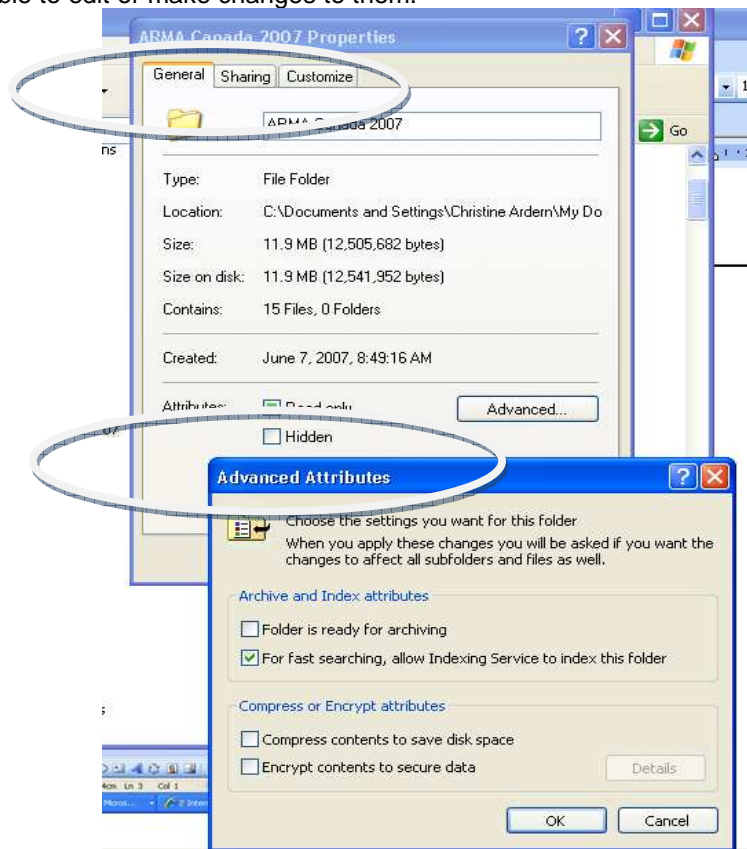


Figure #2: Microsoft General and Advanced Settings

The Sharing function allows the consultant to determine whether or not the folder will be accessible through the shared folder either on the specific computer or on the network.

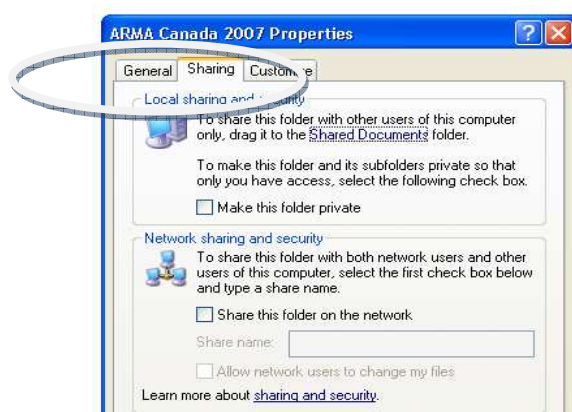


Figure #3: Example of Microsoft Sharing Feature

In setting up the protections for the document, Microsoft allows you, through to Tools menu, to set up your parameters to protect the document. Several levels of document protection can be implemented

- Formatting the document
- Editing the document
- Selecting sections for editing

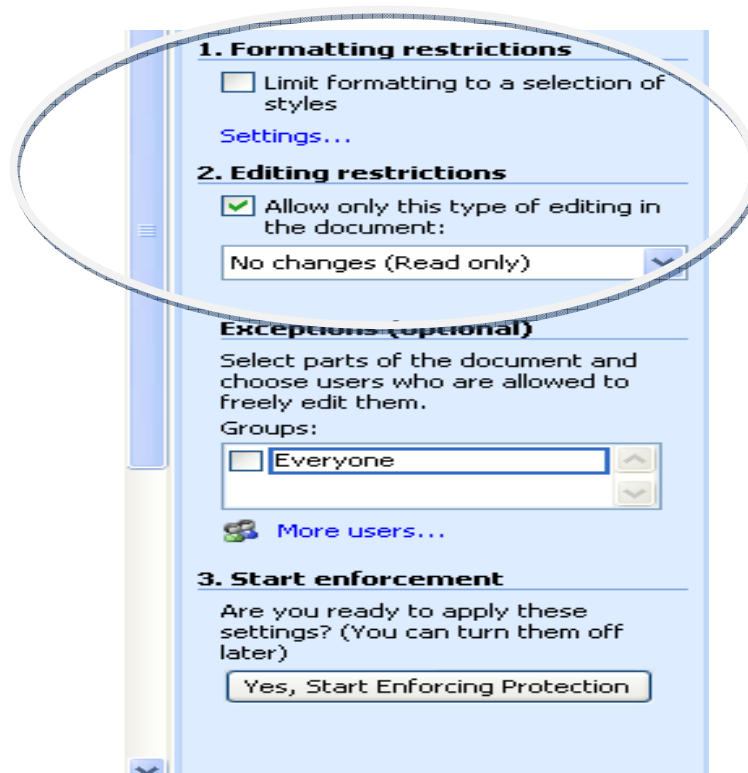


Figure # 4: Example of Microsoft Security and Access Restrictions

Defining who has what rights to the folders and documents provides the security and access restriction options to protect your records. As this is just an example, it is important to recognize that you must understand the security and access features of your current software.

Security and Access on Mobile Devices

In today's age of PDA's, USB drives, laptops, etc. it is not only necessary to think about security at the desk but also security on the mobile media and tools. As with the PC in the office, security and access controls should be applied to your mobile devices. A number of companies are now

establishing policies that do not allow employees to store business proprietary or confidential information on your laptop, cell phones (text messaging) or other portable devices such as flash drives.

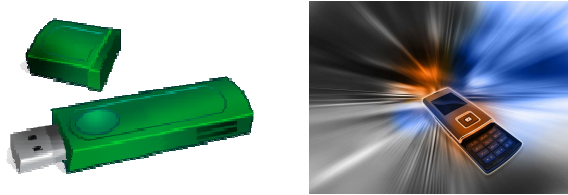


Figure #5

With identify theft being the fastest growing crime it is becoming increasingly important to protect sensitive information such as proprietary business information, and confidential personal information such as name, age, social insurance or health information, address, credit card information etc. This information may be stored on hard drives, CD's, flash drives, answering machines or cell phones. The following scenario, as reported through the internet shows how easily information can be misused:

This lady has now changed her habit of how she lists her names on her mobile phone after her handbag was stolen. Her handbag, which contained her cell phone, credit card, wallet etc. was stolen. 20 minutes later when she called her hubby, from a pay phone telling him what had happened, hubby says 'I received your text asking about our PIN number and I've replied a little while ago.' When they rushed down to the bank, the bank staff told them all the money was already withdrawn. The thief had actually used the stolen cell phone to text 'hubby' in the contact list and got hold of the pin number. Within 20 minutes he had withdrawn all the money from their bank account.

Access and security have become a major concern in today's technology-centric environment. Awareness of the legal and personal requirements is key to ensuring that your information is secure.

What Are the Benefits of Setting Up Access and Security Controls?

Having security and access controls such as locks on filing cabinets allows you to control who has access to which information and helps to ensure sensitive and personal information is protected.

The access and security controls protect your computer from wrongful use and access. Regardless of whether you use it for personal banking or for business purposes and save confidential information on it, there is likely information that you do not want others to see. Setting up the access and security controls will protect your files and documents and provide with the confidence that your information is controlled.

Having said that, there are external risks that you may not be able to control but should be aware of:

A consultant recently took a PC in to have it checked and updated. The company asked if she used her computer for online banking and she replied, yes. Although she had been using an

internet security package, the technician suggested that she might have malware on the PC and recommended that the PC not be used for online banking, since it could lead the hacker to her bank accounts. This is something to think about when you are setting up your security and access.

What Are the Risks of Not Addressing Access and Security?

Without any access and security controls, your computer, folders and files can be accessed by anyone who gets into the office. In some cases, this may not be a concern. In others, where you are storing proprietary or confidential information, it poses serious threats to your business and your credibility.

Highlights & Quick Tips

- Think about the information you are working with and decide if it needs to be secured.
- Consider who has access to your offices after hours and whether or not they might be able to look at your files.
- Consider buying a shredder or arranging to have a shredding company get rid of your files, rather than throw them into the dustbin or recycle bin.
- Ensure that you are aware of the security features on your PC, mobile phone, PDA's etc. for access to information.

Links (URL's)

-  www.nationalarchives.gov.uk
-  www.naa.gov.au/records-management/
-  Data Protection and Privacy Issues: <http://www.privacylaws.com>
-  ISO 17799-2005 Information technology -- Security techniques -- Code of practice for information security management <http://www.iso.org>
-  <http://www.naa.gov.au/records-management/secure-and-store/secure/index.aspx>

Module 5: Retention and Disposition

Introduction

This module will assist you in determining what information should be saved for long term preservation; what you should consider when preserving them; how you have decide what documents should be destroyed; and how you go about disposing of these documents in a secure and reliable manner.

Many of us traditionally think of museums and archives as places that store documents for long term preservation. However, small businesses and families also create records and need to retain them for specified periods of time. For example, families want to preserve images created on digital and video cameras of family members at a point in time to show the history of the family and their activities to future generations.

Real World Vignette:

Every day we communicate via email, manage our phone or financial accounts online, capture significant events (both family and business) with digital and video cameras, and phones and share information through our personal web pages. Although some information has term short value and can be destroyed immediately, other materials have legal implications or are documents with sentimental value that we want to share with future generations. How do we manage and preserve those documents that need protection and how do we destroy those that have outlived their usefulness?

What Is Meant by Records Retention and Disposition?

For anyone who creates and keeps documents, whether it is to keep the household bills and pay income tax, or a consultant who is serving clients and taking on projects, there are both legal and business requirements to keep information and get rid of it when it is no longer needed. A key tool in the determining what to keep and what to dispose of is known as a retention schedule. The retention schedule

- describes the documents that you create and maintain;
- defines the time periods for which documents must be kept to meet both internal business and external regulatory requirements;
- identifies which is the “official version” so that users know that they can dispose of their copy;
- identifies the official medium of the records (paper/electronic/data/image); and
- identifies those documents that are vital (must be available in case of disaster recovery) or historical (have long-term value).

A number of financial and business documents, as well as human resource documents are subject to legislation which defines periods of time for which information must be kept. For example, articles of incorporation and bylaws must be kept until the dissolution of the corporation according to such legislation as business corporation’s acts⁹ or commercial codes and related laws. Personnel records are maintained under labor codes for the period of time the person is employed with the company plus a period of years. These requirements are stated in the laws and must be complied with.

⁹ Legislation will vary from one country to another.

If you attend a seminar or a workshop and get copies of presentations and handouts, there are no laws to govern how long you must keep that material so you can establish your own period of time, based on your needs. But you don't have to keep everything forever, just in case!

The disposition of documents also relates to the removal of the data from your system when it is no longer needed. In the paper world, organizations use external service providers to store boxes for them if they have to be kept for a period of time but are no longer required in the office. Doing that saves you space in your office. Given the amount of storage space you probably have on your computer, it is unlikely that you will run out of space, but if you do, you can set up a process whereby you move your older data onto an external hard drive or DVD. By moving it from the PC to the hard drive, it is not taking up storage space on the PC itself, but is still accessible to you if required.

Why Do You Need to Know?

Creating a schedule that tells you how long to keep information will help you to identify those documents that need to be protected for future use and those which can be disposed of. The schedule will help you to implement appropriate protection methods if information has to be kept for a long period of time. You need to ensure that your personal and business information is identified and destroyed in such a way that the information cannot be recreated and you can continue your business. Any sensitive personal or confidential business information such health information or external contractor information must be destroyed in an appropriate fashion to ensure that it cannot be recreated or returned to the owner of the information when no longer required.

How Do You Decide What to Keep and When Can You Destroy Information?

When disposing of information you need to consider the value of the information to you and your family and/or to your business. As well, consideration must be given to your financial, operational and administrative business requirements, and your country's legal and regulatory requirements. If you don't understand the value to you and your business you may not put the appropriate methods in place to protect this information. Imagine if your credit card application, voice recordings on old answering machines, or used printer ribbon information gets in the hands of the wrong people!

Deciding what you should keep and how long you should keep it is primarily based on the what business you are in the functions of your business and its specific activities. Many records, particularly those you receive on a daily basis such as email are for information purposes only, and once read are not longer useful. These documents can be destroyed immediately. Examples could include luncheon invitations, family jokes, and thank you notes.

On the other hand, there are documents that may have legal or historical implications. For example, tax receipts and filings, contracts, marriage licenses, and historical family photos. Generally speaking, documents that have financial value such as tax filings are normally kept for seven years, unlike a contract or family photographs which have a longer term value to you, your business and your family.

From a business perspective you need to ensure that you are keeping business financial records such as tax records, and invoices in accordance with the law, which is typically 7 years. You must also protect those records that give you a competitive business advantage, such as your potential client lists, and be ready for the "tax man". At the same time you need to evaluate those records that are deemed to be of historical personal value to ensure that they are available when you need them for the next family gathering!

Establishing a schedule (which identifies how long, when and by what method you will destroy your documents) will take away the individual decision-making and support consistency when destroying information.



Figure #2

How Do You Dispose of Information?

Information should be disposed of on a routine basis in accordance with your file and retention plan which specifies when the document is no longer required. Remember that all versions of your documents should be destroyed at the same time; the copy on your shared drive, personal notebook and any that are retained in paper format.

The primary means of disposal of paper media containing confidential information is by tearing or shredding. You should shred any junk mail or routine business information that has any personal identifying marks. If you have a large volume of paper, there are many companies who provide shredding services that ensures the security of the destruction of these documents contents from point of pick up to the point of destruction. Do not use home "recycle bins" for confidential information. Remember, once you put that information out for pick up, any privacy or confidentiality concerns are not going to be addressed. If the information is confidential, it should be shredded before being disposed of

Disposing of electronic information is not the same as disposing of paper and requires more than just moving the message or document into your deleted items folder. The destruction of documents should be irreversible; once properly destroyed, a document cannot be recreated again in its original format. The news media constantly carries stories about personal and financial documents that have been found in garbage bins or on computers that were thought to be destroyed. These are situations which you want to avoid. There are different methods for disposing of electronic/digital information and you should ensure that you are aware of them. (For further information see "Links" at the end of this module.)

You must take care when you are disposing of, selling or transferring computers or other hardware that store electronic records. All information stored on the pc or other devices (voice recordings, phones, scanners) must be adequately removed to ensure that it cannot be restored. Simply deleting it from the hard drive/disk/chip does not ensure that the information is gone. (For example, deleting emails from your PC does not mean that they have been erased/removed from your hard drive.) Hard drives need to be wiped clean by the use of special software programs to ensure that the information is erased and cannot be recovered. Destroy any CD's floppy disks, tapes or recordable media. Don't just pitch them in the garbage even if the median states that it has generated "read errors".



Figure #1



Figure #2

What Are the Benefits of Regularly Disposing of Information?

The benefits of establishing and implementing clear retention rules

- Minimizes the time spend going through information that is either out of date or no longer required;
- Reduces storage and maintenance costs for equipment, supplies and materials;
- Release cabinets, CD's, magnetic tapes etc. for reuse;
- Assists in identifying those records that are deemed to be vital to you and your organization and need protection (*See Module 5: Protecting Your Information*); and
- Destroys documents that have served their usefulness.

Establishing a process of how and when to destroy your electronic documents allows you to dispose of those that have short term value, and make available storage space in your PC, phone, and filing cabinet and will reduce the time and effort spent in searching through old, out of date information.

What If You Don't Dispose of It?

It is not necessary to hold onto everything forever. If you don't dispose of files on a regular basis:

- your filing cabinets will get full,
- your email box and server will get full
- you will spend time looking through a lot of irrelevant information

Highlights & Quick Tips

- If you are using a paper shredder-use cross cut models-to ensure the documents are truly shredded
- Ensure that you destroy all copies/versions of records.
- Implement regular "refresh cycles" to ensure that records retained long term are copied to new media or software programs.
- Do not store your passwords on your PC, or cell phone.
- Keep confidential or sensitive information off portable devices (flash drives, notebooks).

- Before you send that computer off to the dump, take out the hard drive and smash it so the data cannot be tracked.
- If you have finished working on a document and are ready to make it the final version, save it to PDF/A.

Links (URL's)

 www.recordsmanagement.ed.ac.uk/

Records disposal

 http://www.naa.gov.au/Images/Sentencing_tcm2-6108.pdf

Model Retention Schedules

 <http://www.nationalarchives.gov.uk/recordsmanagement/advice/schedules.htm>

Disposition Publications:

 <http://www.archives.gov/publications/records-mgmt.html>

Module 6: Protecting Your Information

Introduction

This module will provide insight on how to store and handle electronic records; specifically, how to protect your records, how to develop simple backup strategies, and how to decide whether to store e-records on hard drives, magnetic media or optical media.

Real World Vignette:

The small business owner recognized the need to have backups, based on the work she did on a day to day basis. When she went to buy a new computer, she decided to get a machine with an internal mirrored drive. The assumption? If one hard drive crashed, the other one would still operate. What she didn't anticipate was the power supply dying. The result? All the data was still in tact but the computer kept shutting down. After speaking with her technical support staff who were in another city, she took the computer to a local IT service. Rather than making the assumption that both drives would still maintain the data after any diagnostics had been done, she opted to buy an external hard drive. She now has to internal drives AND an external hard drive. Better to be safe than sorry.

What Is Involved in Protecting Information?

In today's environment we are relying on technology as our information management resource. We create records, communicate, keep our photos, download songs, through systems which we tend to take for granted. You may make duplicate copies of important paper files or make backups of your computer information. The method you select will depend on what the information is, how it is created and stored and how you need to retrieve it.

Why Do I Need to Know?

Protecting your data ensures that

- you can access what you require if there is some type of disaster that forces you out of your office for a period of time;
- backups are available if you lost data through a system crash or a virus;
- you have plans in place to move your old files from diskettes, to DVDs to whatever the next best technology is;
- you do not damage the data as a result of improper handling or storage.

Creating Backups of Your Data

Backing up your computer is one of those things that we think doing, but rarely do. And yet it is one of the most important things that we should do on a regular basis to protect our information. As boring and time consuming as we may feel backing up data is, it's a small price to pay for peace of mind. Most of us do not think about how much information we store on our pc's (music, photos, business information, video, e-messages and notes), but for some it's our life on a hard drive! You may not immediately notice that you have a virus or your system is corrupted but when you do the backup will provide added protection against loss.

Given the number of files we store on our computers, and the number of times our computers experience crashes and glitches the time and effort required to backup our data seems insignificant. Just imagine losing your parents 50th anniversary videos, or your wedding pictures, or that contact name for your next interview! If you've ever had a hard drive failure and lost your files, you know exactly how this feels!

If you haven't lost data, or had a hard drive crash, then count yourself lucky. Regardless of whether you are a one person office or a small business, you should have a plan to back up your data on a regular basis. Determining how much you need to back up and what must be backed depends on the information you are creating and storing. What would happen if you lost your data? Would you be able to recreate it and if so, how and how long would it take? Are there any legal requirements to ensure that you have backup to protect the information:

- For personnel records;
- For financial accounting, tax assessment or audit records.
- Is there any business reason or personal reason to backup the information?

If you are required to maintain it for legal reasons for specific periods of time, obviously it is a candidate for being backed up. Look at your business and see what you would need to get up and running again:

How Do You Create Backups?

Depending on your situation, the number of computers and the network configurations, you have several options to consider. Making the process as simple as possible is important.

- If you have several PCs which are not connected but require backup, backup software and external hard drives are important to ensure that you don't run into problems if you have a computer crash.
- If you work in a home office but are linked through a network to your main office, you can save information to both your PC and the central folders in the system. This not only ensures that you have information backed up but also allows you to access it remotely when traveling.
- You can also create backups on other storage media including CDs, DVDs, thumb drives and even an external service provider such as Google

Storing a copy offsite in another location is also a good idea.

Managing the Backups

Having determined that you need a backup process and identified which records you will back up, you should follow several steps to ensure that what you have

- Ensure that you label clearly your backup media, including the date, time, content.
- Ensure that your backups are done on a routine basis at specific time intervals (monthly, weekly, daily), especially for information that is critical or vital to you and your business. Store your media in a safe place, in a locked drawer or fire proof safe, or ideally, in a place away from your office or home, so that in the case of a disaster (fire, flooding) you can recreate this information.
- Ensure that you test the process of restoring not only to ensure that you know how to do it but also to confirm that the information is all there.

Vital Records Protection

Typically about 3% to 5 % of your organizations files are "vital". That is, if you could not get into your office for a month, what would you *absolutely* have to have access to. We've seen pictures of recent disasters where people are telling the reporter, they've lost everything and the things that they cannot replace are those photos of their family.

From a business perspective, your vital records might include

- payroll records for your staff,

- accounts receivable records so you know who owes you money (Don't worry about accounts payable, the people will come after you fast enough!)
- current project files that you are working on. The closed project files would be less important since they are finished and the clients have received their deliverables

Having looked at your business and determined which records are important in an emergency, you can determine how you want to duplicate them.

Protecting your vital records is an ongoing process because the information changes and what is vital will change. Once your current project close, you will want to replace them with new projects in your vital records program.

What Are the Benefits of Protecting Information?

Regardless of what we do, we may suffer from some type of system failure or loss of data. Being able to get at your vital records and back up data if you have a flood and your computer is waterlogged is critical. If you rely on it for business and it is your only information source, then you are at serious risk.

You need to understand how your information supports your family and your business. If it's not there what will happen? The benefit of ensuring you can access those important photos or that report you did for a client two years ago outweigh the risks of doing nothing.

If there is any type of situation where you need the information after some type of unexpected event, the backups and copies will ensure that you can continue to work or have those important memories still with you through photographs, etc.

What If You Don't Protect Information?

We all hope that we will not have a computer crash or lose those family albums in a fire or flood. Protecting the information is like having an insurance policy. If you don't protect it and something happens, it won't be there when you need it.


Highlights & Quick Tips

- If you decide to use an external provider to store your records, ask them where their server is stored. Some countries have less stringent privacy laws than others and other laws override personal privacy which means that you think your information is safe but it may be open to scrutiny by a foreign government if they deem it necessary¹⁰
- Think about the situations that could affect your information: fire? Flood? Loss of data from your USB drive or computer? A computer virus?
- Look at option for protecting your information. Backups? Copy and store offsite? Special safes to protect information.
- Look at options for backing up your data and consider the appropriate method.
- Decide what information you need to protect in case of an emergency and make copies to be stored in another location.
- Set up a schedule for regularly backing up/copying important information.

Links (URL's)

-  www.pro.gov.uk
-  www.records.nsw.gov.au/
-  www.naa.gov.au/records-management/

¹⁰ Of particular interest in the US PATRIOT Act.

-  www.dpconline.org
-  www.archives.gov/records-mgmt/vital-records/index.html
-  <http://www.im.gov.ab.ca/publications/pdf/DigitalPreservationResGuide.pdf>

Module 7: Dealing with Storage and Technology Changes

Introduction

This module will provide you with guidance on how to store and handle your information whether it is in paper, electronically, or on film. It will also look at issues you should be aware of resulting from technology changes, so that you can still get at your photographs, documents, spreadsheets, etc. despite all the hardware and software changes. It provides guidance on how to ensure that you can still access and read your electronic information as technology changes.

Storage and Handling

Real World Vignette: Storage

Raymond provides a management consulting service to his clients. Most of his time is spent on the phone or on the road. He does not seem to have time to organize his documents which consist of slides, electronic documents, emails, and photographs stored not only on his pc but flash drive, CD's and of course, some have been printed to paper. But as always ... he says he can find it!

Recently, however he went looking for information to prepare a presentation for a client; while doing so he knocked over his coffee – oops! Not only on the paper, but the CD's and of course onto his flash drive!! But that did not bother him. Ah ha! I have a backup. He went to retrieve it from the flash drive, only to find there was nothing on it because the drive was corrupted. Raymond, however, was not deterred – he went to his old reliable paper files, only to find that all the labels on the folders had fallen off!



Figure #1: Examples of Storage Equipment and Labels

What is Covered in Storing and Handling Information?

The storing and handling of your documents is important to ensure that you can access them when they are required regardless of the media or type of documents you have. For example, the storage and handling methods of paper documents or photographs is quite different from digital images or electronic documents and tapes. In the paper world, we use file folders, labels and filing cabinets to store our files. In the electronic world, we have disks, tapes, USB drives, CD's, DVDs and whatever comes next. Information stored on electronic storage media requires more care and attention than does information on paper. Storing and handling looks at the methods for protecting the physical medium on which you information is stored.

On What Medium Should You Store Information?



How you store your information and the storage medium you select will depend on a number of factors such as:

- Where the information is created: is it electronic or on paper?
- Frequency of access; If it is looked up a lot, then an electronic version is easier to use than paper;
- Security of the medium;
- Quality, age and condition of the media; and
- Storage requirements for the medium.

Storing Your Documents and Digital Media

Paper documents are typically stored in boxes or in file folders in filing cabinets. The filing cabinets may consist of either open shelves or drawers. Consideration should be given to the type of filing equipment or boxes you require; the type of file labels you use. You should ensure that you have a good labeling system ... and when you label the folders, cards or binders ensure that the file name matches your file plan! You can purchase software to create labels, or purchase a small labeling machine or if your handwriting is clear and concise you can write on the folder. Storing special media such as photographs, microfilm or slides requires specialized folders and sleeves that will not react with the media¹¹.

The fragility of the media on which the information is stored is also a concern. We take for granted that the CDs and DVDs can always be read. Have you rented a DVD lately and watched it skip sections of the movie because the DVD is scratched or someone, with butter all over their fingers from popcorn, put it back in its cover? Fragile storage media, including tapes and disks, add to the concern.

Depending on the method you use to create duplicates of vital records, "archive" copies of system data, backups of systems and files, you will be managing and storing different media. Computers, networks and mainframes, as well as tapes and disk storage do not survive well in areas where the temperature fluctuates a lot or is very hot. As a result, data centres and storage facilities for digital media are normally air conditioned and temperature controlled facilities. It is unlikely that you will be able to create the types of storage facilities in your own home or office, so depending on the importance of the information you need to store and back up, you can consider using the services of a records centre or archive facility in your area. These facilities will pick up and deliver your disks, tapes, CDs, DVDs, on a regular basis, as part of their ongoing service. They provide environmentally controlled facilities which will assist in the preservation of your information.

Whether you are storing paper, digital images or documents, videos, tapes, CD's, DVD etc. you must ensure that you store them to protect them against damage. Remember an ounce of prevention is worth a pound of cure! Protect your information from:

- Pest infestation (e.g., mice, cockroaches, silverfish);
- Fire, smoke, and sprinkler damage;
- Water damage, either from leaky pipes and leaky foundations, or from trapped moisture in walls, floors, and ceilings; and
- Damage from magnets, since magnets can damage digital data on magnetic storage media and thereby damage your electronic information.

Some things to consider:

- Store tapes and disks vertically;

¹¹ Information can be found at the American Museum of Photography site: <http://www.photographymuseum.com/archival.html>



- Never place magnetic or optical media under heavy objects or subject them to pressure;
- Never expose electronic media to direct sunlight or heat (store the media in protective casings);
- If you decide to store and manage your electronic documents the following should be considered for magnetic media (tapes):
- Wind and rewind magnetic media before recording;
- Every three to four years — or more frequently if you read them often — rewind each tape under controlled tension; and
- Before they are ten years old, re-copy tapes onto new tapes to ensure preservation.

No matter what media you are using you should take care to ensure that you

- Purchase and use high quality storage media;
- Conduct a statistical sample of recorded media annually to identify and correct any loss of data;
- Prohibit smoking and eating in areas where your information is stored; and
- Maintain media in storage areas that are dust-free and controlled for temperature and humidity.

To ensure maximum protection for those documents you deem are critical to your business or your life experiences make two copies for protection.

The Physical Handling - How Do I Do It?

The storage and handling requirements of electronic information are quite different than those for information stored on paper and how you physically store and handle your electronic information is extremely important. Paper files, photographs, drawings, etc are susceptible to heat and humidity and can be damaged by improper handling. If the documents or photographs are old and brittle, you should consider wearing cotton gloves to handle them to minimize the damage to them. The links at the end of the chapter provide information from several National Archives about specific techniques for handling special media.

Protecting or safeguarding information also means managing how you handle the medium that the information is stored on. Improper handling of CDs, DVD's tapes, etc. is a common problem that causes physical damage to the information recorded on the medium. The following list provides you with some guidelines for handling disks, CD's, DVD's, and other optical media:

- Don't handle disks on the surface. Handle them by their side/edges (creams, skin oils and fingerprints can damage them);
- Do not write on disk with pen, pencil, or fine tip marker;
- Do not touch or mark the data side of the disk surface. Be careful not to damage the label side of the disk;
- Apply labels carefully (write in ink not pencil). Do not apply or attempt to reposition adhesive labels;
- Check the disk for damage or contamination after each use. Clean only when surface contamination is visible by wiping in a direction going around the disk;
- Keep tapes away from magnets; and
- Store media in closed or locked metal cabinets to protect against heat and dust.

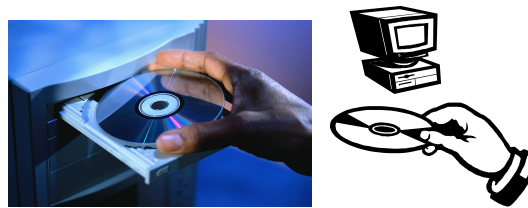


Figure #2: Handling Disks

Commercial cleaning equipment and supplies are available for certain types of magnetic and optical media. Make sure you follow the instructions when you use them!

What Are the Benefits of Storing and Handling Information Properly?

- Storing and labeling your information properly (both paper and electronic) will help you find it when you need it;
- Keeping the information in the right storage conditions will make sure that it is protected against deterioration over time; and
- Proper handling will make sure that it does not get damaged through regular use. If it is damaged, you may not be able to read the information on it.

What If I Don't Do It?

Over time, without proper storage and handling, your information may get unintentionally damaged to the point where when you need it, it may not be there. Don't assume that because you have it in a safe place, it will be fine. The storage needs to be consistent with the requirements of what you are storing.

Highlights & Quick Tips

- Don't leave paper files in damp areas where they can get musty and may grow mold.
- Make sure that your tapes (audio as well as computer) are rewound regularly and check them from time to time
- If you have photographs and paper files that may require long term storage, check with suppliers of archival storage materials to see if you can get acid-free paper and folders
- If you decide to use an external provider to store your information, ask them where their server is stored. Some countries have less stringent privacy laws than others and other laws override personal privacy which means that you think your information is safe but it may be open to scrutiny by a foreign government if they deem it necessary¹²
- Batch test new optical or magnetic media to validate manufacturing quality.

¹² Of particular interest is the US PATRIOT Act.



Dealing with Technology Changes

Real World Vignette: Technology Changes

You are in the process of preparing a presentation and report that you created in Office 2003 for a client. You send it to a colleague for her review before the meeting and she calls you and says that you have weird bullets and formatting in the document that make it look very strange. What did you do? She has recently upgraded to a different version of Windows and all the formatting you had in Windows 2003 has changed as a result of the new version.

At the same time, she volunteers to add some pieces to the document from an old presentation she created a few years ago. But when she goes to look for it, she realizes that while the information on it can still be used, she saved it onto a diskette that she cannot access. Where do you go from here?

Being Prepared For Technology Changes

Technology today is rapidly changing; for example, information that was stored on 5 ¼ and 3 ½ inch floppy disks is now stored on USB drives; text messages and photo images can now be stored on your phone; and software packages such as MS Windows are routinely upgraded. Each time technology changes we have to be aware of information that we created two years ago may not be accessible; information may be lost during conversion to new software and as hardware is replaced. Will we be able to read those word documents we created in 2006 if the software will not read older versions of documents?

Information that is important to the continuation of your business may need to be protected and preserved for the life of the organization. Files such as client files, which are kept for as long as the client works with you, or your incorporation documents and legal agreements must all be available over time despite the changes in storage media and software updates. From the personal perspective, family photographs, life insurance policies, home and car ownership documents need to be kept over a long period of time.

The ongoing changes and advances in technology dictate that you must store your electronic information on media that will allow you to access them in the long term. The information must be accurate, reliable and complete if you require them to be admissible in court cases/legal situations. Unlike microfilm or paper, which if stored in a controlled environment may last up to 100 years, the life expectancy of electronic information stored on CD's, DVD, magnetic or optical media is much shorter. You may also have the CD or DVD but not have the software to operate it or the computer drive to read it. If the storage media becomes obsolete you must examine alternative ways of storing and migrating them to a new reliable media. (Figure #3) Printing everything to paper is not the best solution, particularly for databases, because you will lose not only the metadata but also the functionality.

You need to determine the retention period – how long you want to retain specific records – to ensure that you select the right medium. You do not want to be surprised in 10 years that those precious moments during your honeymoon or special vacation are now gone! Selecting the right media to store the information over time will save you a lot of anxious moments.

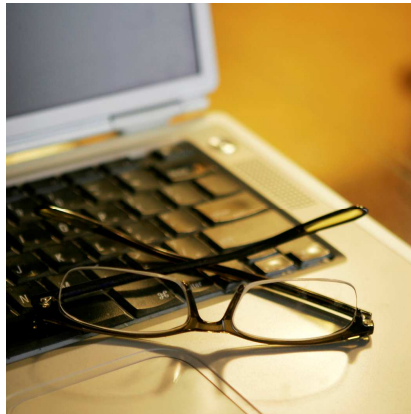


Figure #3: Think About Changing Technology

Why Be Prepared For Technology Changes?

You've already seen that over a five year period, the storage media and the software can change. Knowing that, and understanding which of your information you will need long-term, you need to devise a plan to move information as required. By planning which information you need over the longer term, you can determine how to capture them for long term access and transfer them to new storage media as required. Remember, not everything has to be kept forever and being selective can make the task much easier.

How Can I Prepare For Technology Changes?

In preparing for the technology changes, look at what information you have and for how long it is needed. Consider the impact of not being able to retrieve the information compared to the cost of converting it to new media and decide what needs to be planned for.

There are two key issues that you need to consider to make sure that you can retrieve your information over time:

- The software that the information is created with may change over time or may not be compatible with another vendor's product (Early versions of Word and WordPerfect); and
- The medium on which you have stored the information may become obsolete.

In the first situation, where the software changes, standards¹³ are being developed and adopted to ensure that information is not left in folders to die over time. At the same time there is more awareness of the need to have plans in place to move from one medium to another and convert critical files. Having a plan will help you be prepared for the transition so that you do not lose valuable information over time.

Many laws suggest that where electronic information replace paper, the owner of the information must be able to prove that they are "authentic and reliable" – the information must be kept in a form and format as close to the original as possible.

You will have to consider the file format in which you save the information so that it can be transmitted, read and maintain its authenticity. Databases and spreadsheets pose different

¹³ Standards such as PDF-A, ODF, XML, RTF, Jpeg, are being adopted to ensure that information is not totally software dependent and will be accessible over time.

challenges from text documents, since the need to be able to capture formulas and maintain the ability to manipulate the data is important. If you convert the image of a spread sheet to PDF-A, you can create a snapshot in time, but if you need to be able to sort data and create reports, you will have to look at saving the files into XML, ASCII or CSV (Comma Separated Values).

Two Key Standards to Be Aware Of

Two important standards that you should be aware of are Portable Document Format (PDF-A) and Open Document Format (ODF).

- PDF-A¹⁴ is a file format which is used to capture electronic information of long-term value. It identifies a "profile" for electronic documents that ensures the documents can be reproduced the exact same way in years to come. All of the information necessary for displaying the document in the same manner every time is embedded in the file¹⁵. When you save a file in PDF-A format you remove the reliance on the original software (Word/WordPerfect, etc) so that it is still readable over time.
- ODF¹⁶ – Open Document Format is a set of instructions which can be built into software so that you can share documents and retrieve them over time. You are not depending upon a specific software vendor's product to allow you to access and retrieve your office documents.

Keeping electronic information for long periods of time has always been a concern for archivists and librarians because of the nature of the information they keep. Over time, the standards being developed will become part of the software products that you purchase. You need to be aware of why the standards are important so that you can ask for help with new hardware and software. (Figure #4)

If you are in a small organization or looking after your family information, talk to your local computer specialists or your Information Technology (IT) department at work, to see if they have suggestions for you. Often, too, your local archives will be able to help since they deal with this all the time with the electronic information of historical value they keep. The National Archives of Great Britain has undertaken a number of projects (DROID) that address the technical issues associated with long-term access to electronic records. Its "PRONOM" site provides information about the file formats, software products and other technical components required to support long-term access to electronic records. The PLANETS¹⁷ project provides additional guidance on digital preservation challenges facing everyone in today's computer-centric world.



Figure #4: What are the new Standards?

Updating the Storage Media

¹⁴ ISO 19005-1:2005

¹⁵ Wikipedia

¹⁶ ISO/IEC 26300:2006

¹⁷ Preservation and Long-term Access through Networked Services



The electronic information that you have identified as having continuing value or essential to your business must be converted and moved each time you upgrade your hardware or software. This must be done in such a way that you retain the integrity of the information (neither the content nor the context should lose meaning because of the transfer). Technological obsolescence or the short life span of the storage medium may make the documents vulnerable and at risk.

Your information may be saved to your PC, but the average life span of a computer hard drive is only 5 years. You've backed everything up to CDs and DVDs. CDs and DVDs may not be the answer because they do not last long, unless you consider buying gold CD's which have a life expectancy of 100 years or silver CD's which have a life of 20 years. And because the computer drives change rapidly, in 20 years you may not be able to find a drive that will read your CD.

In order to preserve electronic information you should ensure that you:

- Determine what the new media will be and the life expectancy of the media (ensure that it has long term capabilities);
- Develop a plan to ensure that you routinely schedule the transfer of your documents to the new media;
- Once transferred, verify the integrity of the information to ensure that the content and context of the document has not changed; and
- Once completed, ensure that you destroy the previous version.

What Are the Benefits of Planning For Technology Change?

- The obvious one is that you will be able to access your electronic information over time, regardless of changes in technology. As a result of knowing this you can create your processes and methods of saving information when you create it.
- Saving them in a standardized format when they are created will be more cost effective than going back in a few years to deal with them.
- You will ensure the authenticity and reliability of the electronic information to meet the legal requirements.

What if You Don't Plan for Technology Change?

If you don't have a plan to move your data from one technology to another over time and address the issues of obsolete storage media (those 100 diskettes you have from 1998?) you may need to get at the information but not be able to.

- Think about the information you created three years ago on those diskettes. Would it help if you could access some of it? If you do not plan for change, you will lose those digital photos of your family growing up
- Not having a strategy puts you at risk of having information you need but not being able to get at it over time.

Highlights & Quick Tips

- Keep an eye on the latest information to see what standards are recommended for capturing and storing electronic information of long-term value.
- Identify the information you know you will need over the long-term and save it to a separate space on your computer so it can be moved when required.
- Understand the standards and how they will help you, and then apply the recommended standards to save your information.
- Apply the standards to the information you create on a day to day basis.
- Create a plan to update and move your information/folders from one storage medium to another as the media changes.

**Links (URL's)**

- 📄 Digital Preservation Europe: www.digitalpreservationeurope.eu/publications/briefs/database_preservation.pdf
- 📄 Digital Preservation Coalition: www.dpconline.org
- 📄 www-itl.nist.gov. This guide discusses the physical characteristics of various optical media, as well as methods for their proper care and handling to ensure longest possible use in any given environment. A useful glossary is included.
- 📄 Open Document Format: <http://opendocumentfellowship.com/introduction>
- 📄 www.thenationalarchives.gov.uk
- 📄 www.naa.gov.au/records-management/secure-and-store/physical-storage/storage-standard.aspx
- 📄 PLANETS: <http://www.planets-project.eu/>
- 📄 <http://www.im.gov.ab.ca/publications/pdf/DigitalPreservationResGuide.pdf>

Module 8: Email Management

Introduction

This module is designed to give you information about emails and the importance of making sure that you consider them part of your information management program. The module will look at why some emails are considered records and address the challenges of managing emails. It does not address specific email systems but the principles behind managing them.

Real World Vignette:

Your boss has just been told that the company has approved this year's budget and emailed you to tell you that your portion of the budget is \$50,000. Is that information you should retain?
Your girlfriend has just sent you an email, asking what you are doing at the weekend and whether or not you are available to go to the movies with her. Is that information that you should retain?

One of the challenges with electronic documents and emails is that they are created in different software products. In the world of paper files, we put everything into one folder because it was printed or typed. In the electronic world, we create word documents in word, emails in the email system and save them in two different places, making it very difficult to piece together that complete picture. Compounding the problem is that you may capture your emails in your email folder, which means that no-one else can see them.

Why Would You Manage Emails?

Email is a means of communication and method of transmitting information to your family, friends and colleagues. An email can document a decision made, approvals given or simply be like a phone call to someone asking them for lunch. Prior to the Iran Contra hearings in the US, no-one thought about keeping emails. But the turning point came when the judge determined that because there is additional information hidden in the computer system about the email (metadata), a paper print out was not an exact copy. The information to which the **metadata** (Figure #1) is associated is a **sales promotion** (Figure #2).

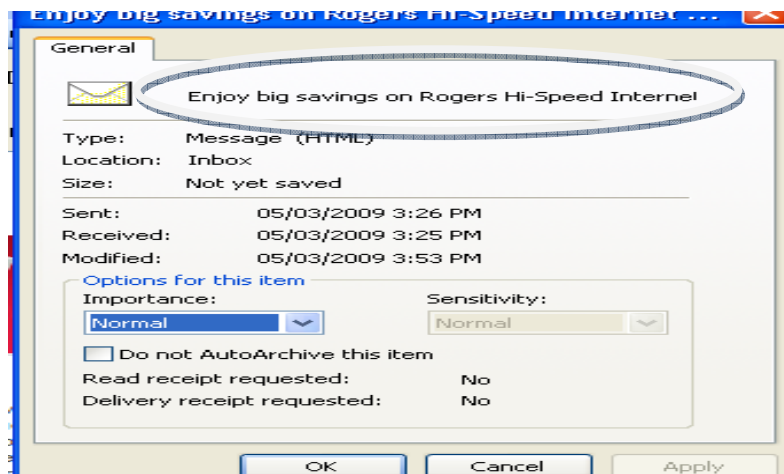


Figure #1: An Example of Metadata



SURF AND SAVE
WITH ROGERS HI-SPEED INTERNET EXPRESS

Dear Valued Customer,

These days, it's important to make every dollar count. That's why Rogers works hard to offer exceptional value on all our products, at prices you can afford. Now, we'd like to help you save even more with Rogers Hi-Speed Internet Express. Independent research proves it's the fastest and most reliable. Period.¹

Switch to Rogers Hi-Speed Internet Express to enjoy:

-  Faster speeds – download a song (4MB) in approximately 6 seconds²
-  60 GB monthly bandwidth download allowance – allows you to download up to 15, 200 songs a month²
-  Security with Norton AntiVirus and Norton Personal Firewall (a \$59.99 value)²
-  Wireless Home Networking – now everyone in the home can stream movies, download songs and play games, all at the same time for only \$1.50/mo

Switch to Rogers Hi-Speed Internet Express before March 12 and save \$60 with this special offer. Call us now at 1 866 600-9110 and an Advisor will be happy to help you.

Switch to Rogers Hi-Speed Internet Express from only **\$39⁹⁹** /MO for 6 months.⁴
SAVINGS OF \$60
Includes Regular Modem Rental.

Figure #2: An Example of Metadata Association

In addition to the “hidden metadata” there is metadata associated with the email itself that tells you who sent the email, who it was sent to, the date and the subject. Most of that same information would appear on a letter, but in the example above, no such detail appears. In a legal situation, that additional information is both important and valuable.

Why Do You Need to Know?

Having determined that some emails are records, and therefore become part of your business file they need to be captured, like other documents:

- So you and your colleagues can find what you need;
- So that if you are not in the office, someone else can find the information if they need it;
- So that those emails that are considered “records” are saved properly; and
- To get rid unnecessary email so that it does not take up space on your system.

Remember, email is just like the mail man delivering mail to you. You would never just file an envelope without opening it. (Figure #3 and Figure #4)



Figure #3



Figure #4

Creating Emails

One of the challenges with emails for the recipient, in this age of viruses, scams and overall email overload is, knowing who the email is from and whether or not they should open it. Make sure you put a clear description in the subject line so that the person receiving it understands what the email is about, opens it, and can determine where it should be filed.

Often we think about a number of issues when we are sending emails and may cover a number of topics in one email. Since you want to file it, make sure that you can do that. Do not put different subjects into one email because it is difficult to save them in the right spot.

If you want to use someone's email address in your in basket, make sure, before you send your email, you change to subject of the email if it is not the same topic as the one you are replying to.

These may appear to be simple steps to take but they make saving the content of the email much easier.

Sending Attachments

Attachments take up a lot of space in the email system and also duplicate information which is stored elsewhere. If you are sending information to people in your office, rather than sending it as an attachment, which everyone else will save in their inbox or folder, think about putting it into a shared folder and directing people to it in the folder. Not only does that save space on the email system but it also makes it easier to dispose of the information when it is appropriate.

Obviously, if the email is going to people outside the organization, that approach will not work and an attachment will be required.

Who is Responsible for Saving Emails?

The responsibility for saving the email should be with the sender BUT the sender should save the email in the appropriate shared folder so that the people who need to see it have access to it.

Where Should I File My Emails?

You have several options, depending on your email system. You can

- Print and save them in a paper file;
- Leave all your emails in your inbox, which over time will get full;
- Save them to folders that you create in your email system;
- Save them to folders on your "c" drive or personal folder; or
- In a document management solution which allows you to transfer the emails, with their metadata into a shared folder.

The preferred method is to save them into the shared folder so that:

- they are removed from the email server;
- they are accessible to others who may need the information;
- they can be filed with other related information; and
- they can be disposed of more easily as part of the regular records disposition process.

Depending on the content of the email, it may or may not have value to you. If it documents a decision made or a transaction, it should be maintained in the appropriate file in your shared folders.

Capturing Email: Some Considerations

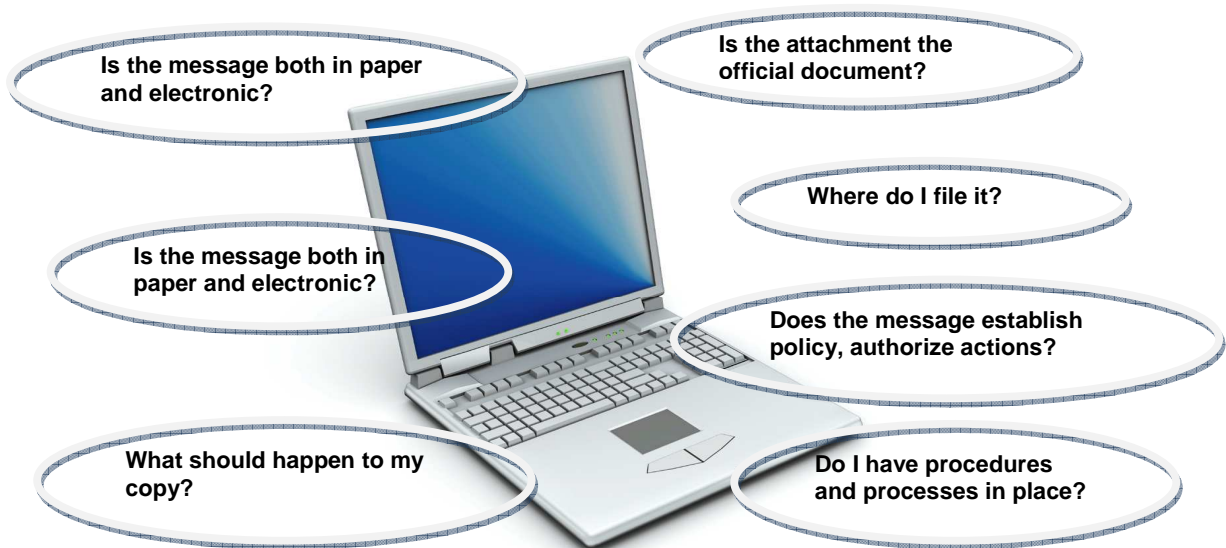


Figure #5: Email Questions for Consideration

Responding to an Email

It is important with email to make sure that you can understand the context within which the message was sent. At some point other people may need to review the emails so someone reading a one word response which says Thanks, or yes, will not understand what you are responding to.

How Long Do You Keep Emails?

In a small business, your email inbox is governed by the gigabytes of storage available to you. Once it is full the email system will not allow you to send or receive emails. In an organization which is supported by an Information Technology (IT) group or supported by an external service provider, you may find that there are limits on the size of your mail box, or that emails are deleted every 30 or 60 days. Assume that the content of the email relates to a financial issue that has to be kept for seven years. Will the revenue department be satisfied with your statement that our IT department deleted everything after 30 days?

There is no concise answer to the question of how long do I keep emails. The answer will vary since it is the topic of the email that is important, not the email itself. The email that gives you budget approval would be placed in a budget file in the shared folders. If a vendor sends you a contract for work being done, you would put it into your contracts and agreements folder, under a sub-folder by the client name. Each of those folders would have a different retention period. By associating the email with a specific file or activity, you have identified the period of time for which it will be kept.

What are the Benefits of Managing Emails?

Each of you receives many emails every day of the week. Some relate to your business and personal activities and need to be kept. Others are communications between you and your colleagues or friends which have no long term value. Managing emails, as we do our other information, ensures that we have what we need when we need it, and allows us to dispose of unnecessary emails.




What Are the Risks of Not Managing Emails?

In a nutshell, not managing email is like putting all the envelopes you now receive in the mail, into a big box, without ever opening it. How can you determine what to keep and what to get rid of? You have to open up the emails, read them and determine the value. If you keep all your emails, you will run out of space very quickly and will have a huge task ahead of you in deleting them, or your system may not allow you to send or receive emails. Without managing your emails you will have volumes of unorganized information.

Highlights & Quick Tips

- If you decide to use an external provider to store your records, ask them where their server is stored. Some countries have less stringent privacy laws than others and other laws override personal privacy which means that you think your information is safe but it may be open to scrutiny by a foreign government if they deem it necessary¹⁸
- Talk to your IT specialist about how to link your emails to your other documents to maximize your efficiency. Without guidance you may end up losing important metadata on your emails.
- Get rid of emails that are for information purposes only.
- Keep email titles short and concise.

Links (URL's)

-  <http://hbswk.hbs.edu/archive/4438.html>
-  <http://www.recordsmanagement.ed.ac.uk/InfoStaff/RMstaff/ManagingEmail/ManagingEmail.htm>
-  <http://www.naa.gov.au/records-management/systems/email/index.aspx>

¹⁸ Of particular interest in the US PATRIOT Act.

About the Authors

Christine Ardern is a records and information management consultant, based in Toronto, Canada. She has provided consulting services to Canadian and International organizations in both the private and public sectors to develop and implement archives, records and information management programs and technologies. In addition to working in North America, her projects have taken her to Barbados, India and Hong Kong. Prior to becoming a consultant, Christine was the Manager of Archives and Records Management at CIBC, The Art Gallery of Ontario and The Salvation Army, all of which are headquartered in Toronto, Canada.

Christine is a certified records manager, a past president and Fellow of ARMA International, and a winner of the prestigious Emmett Leahy award. Christine teaches in the Professional Learning Centre at the University of Toronto and is a regular speaker at local and international ARMA seminars and workshops.

June Wood has over 35 years of experience as a records and information manager and consultant both public and private organizations. She has provided consulting services to Canadian and International organizations in both the public and private sectors in the areas of strategic planning, development and implementation of classification schemes and retention schedules, electronic content management and electronic records management system implementations.

June is a business manager with expertise in all aspects of records and document management, project management, and supervisory and staff skills development. Ms. Wood has been a guest speaker on records and document management at community colleges, universities, and national and international associations.

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