INFORMAA QUARTERLY

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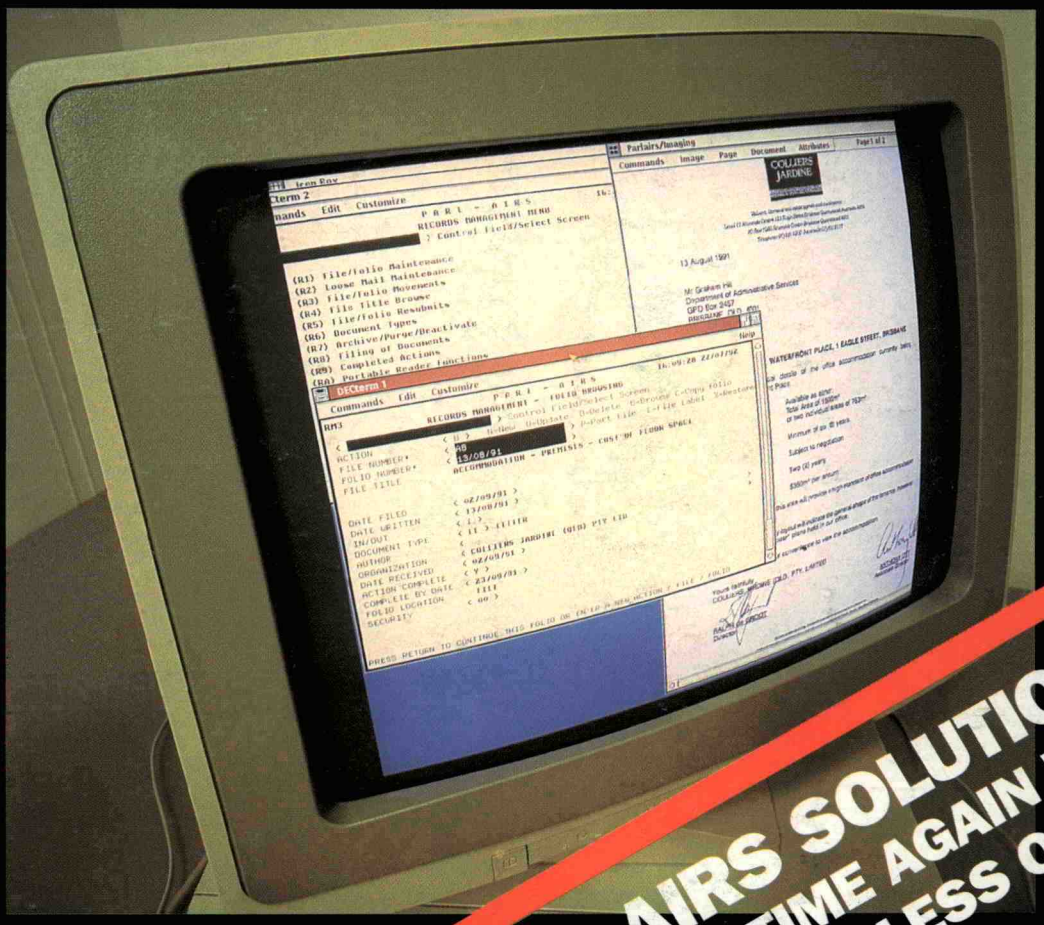

THE PARL-AIRS SOLUTION
CONVENTION TIME AGAIN !
TOWARDS THE 'PAPERLESS OFFICE'

Entrance to the Government Records Repository

It costs only 5 cents per week to store your records in the Government Records Repository

The Government Records Repository is the cheapest place for you to store your records. It costs as little as 5 cents per week to store a box of records in the Repository.

Cheapest

A recent survey, undertaken by independent consultants, proved the Government Records Repository was by far the cheapest provider of records storage space. "The Government Records Repository has been able to maintain extremely low rates [its] charges have been substantially lower than those of commercial organisations".

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The Government Records Repository is one of the largest and most efficient records storage facilities in Australia. It provides for the storage of all records formats, their retrieval and disposal. The economies of scale achieved in the operation of the Government Records Repository enable it to offer its clients the best facilities and services for the lowest possible cost.

Many organisations can benefit, in terms of both efficiency and financial savings, by storing appropriate records in an 'off-site' records storage facility.

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Leasing premises to store your records is a waste of time and money. The Government Records Repository is cheaper, more secure, professionally managed and offers fast reliable retrieval. There is simply no better or cheaper place to store your records.

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GOVERNMENT RECORDS REPOSITORY

O'Connell Street, Kingswood

Postal: PO Box 516, Kingswood NSW 2747

Telephone: (02) 673 1788 Fax: (02) 673 3977

GRR

EDITORS

Jim Shepherd MRMA

Thomas Kaufhold ARMA

Judy Watts ARMA

Ray Holswich ARMA

Ross Thompson ARMA

CONTACT DETAILS

The Editors

INFORMAA QUARTERLY

GPO BOX 293

DARWIN NT 0801

PHONE:

Judy Watts 089 852222

Jim Shepherd 07 2254600

Thomas Kaufhold 06 2764709

Ross Thompson 06 2807665

Ray Holswich 089 466076

Advertising, editorial and print production

MEDIA FOCUS Pty Ltd
PO Box 254

Gladesville NSW 2111

Geoff Wyatt

Nigel Dique

Phone: 02 879 6655

Fax: 02 879 6282

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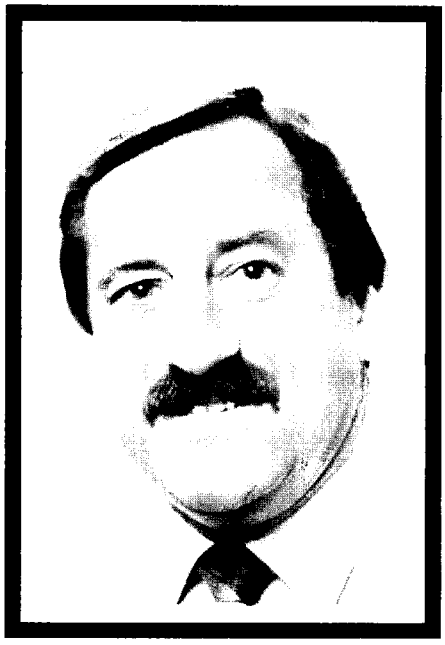
INFORMAA

CONTENTS **AUGUST 1992**

Contributors' opinions do not necessarily represent the views of the Records Management Association of Australia.

The next edition of INFORMAA QUARTERLY will be in November 1992.

HOW ABOUT SOME VOLUNTEERS?



In recent correspondence to the membership of the WA and Tasmanian Branches of the Association, I took the opportunity to emphasise the "voluntary servant aspect" attached to the RMAA, in that no one member receives remuneration for the time and effort spent on association activities. To those members who have found it necessary to query or to complain as to why the RMAA overall has not been very active, let me assure you that the members of Federal Council are very mindful of the time constraints placed on themselves and, more importantly, the members of the respective Branch Councils, and we are very grateful for their assistance. Please don't think that I am castigating or discouraging members for speaking their minds. But in doing so, give some consideration to the "volunteers" of the Association. Better still become a volunteer yourself.

During the last ten months two major and costly initiatives have been put into place, namely the marketing exercise and the "new" INFORMAA Quarterly, as mentioned in a previous edition of the Quarterly; the marketing survey will in many ways change the future directions of the Association. Members will recall that summaries of both member and non-member surveys were published for all to see in the February and May editions. Again I urge members to liaise with their local Branch Councils, federal directors and/or direct with Federal Council on matters of concern. Please remember that it is your association and your points of view are appreciated.

Marketing Advisers for Professionals Pty Ltd who conducted the national survey have presented to Federal Council a marketing strategy for the Association. The document itself details some very interesting subjects for consideration, such as:

- current marketing segments
- mission of the Association
- role of the RMAA
- current promotion
- external opportunities
- external threats
- competitive analysis. Other like associations (strengths and weaknesses)
- strengths and weaknesses of the RMAA
- action and promotion plans
- marketing positioning
- possible mergers
- education etc.

The marketing strategy will be discussed at length during the September meetings of Federal Council and I think it highly probable that the results of our deliberations will be published in full in the November edition of INFORMAA Quarterly.

RAY HOLSWICH
FEDERAL PRESIDENT

WHAT MAKES A GOOD RECORDS MANAGEMENT SYSTEM?

I don't normally write to complain about articles (this is my first time), but as much as I appreciate Ms Horsfall's good intentions, I am growing very tired of self-proclaimed "experts" reviewing RecFind without ever asking to see the latest release and without even trying to contact gmb.

For the record, Ms Horsfall in her article "What makes a good Records Management System" (Informaa Quarterly, May 1992) made no attempt to speak to gmb before writing her "evaluation".

Gmb will happily demonstrate RecFind to any consultant. We will happily provide application and technical information to any consultant. We will happily participate in any "evaluation" exercise. This same willingness to participate is, I am sure, shared with other Australian developers of records management systems.

Like our major competitors, the Towers and Ortexes of this world, gmb have invested millions of dollars over the last 10 years or so developing sophisticated records management systems. Between us we have around 1000 Australian sites. We have spent the money and have taken the risks. We each support hundreds of companies and government organisations using our products. We think that we know more than a little about "what makes a good records management system".

Gmb didn't develop RecFind in isolation. Release 1.0 was designed with considerable input from eight Australian government departments. They reviewed the functional specifications, the screen designs and the Beta versions of the software. The design of RecFind was not an academic exercise, it was done in full consultation with the expected end users.

Since RecFind 1.0 in 1986, gmb has produced at least one major update per annum. Each of these updates was designed in consultation with the users and was finalised only after we had actively solicited suggestions for improvements from our base.

The major changes in functionality in each and every release of RecFind have been directly based upon the requirements of our users.

Each year gmb invests hundreds of thousands of dollars implementing new functions in order to keep up with the expectations of our users. We maintain a very expensive team of analysts, programmers and support specialists for this very purpose.

If Ms Horsfall took the trouble to speak to us before she wrote her article (it would have only taken a few minutes by phone), we could have given her the latest information on RecFind. For example, we could have told her that RecFind runs on DOS and DOS/Networks such as Novell and 3Comm. RecFind also runs under Windows 3.1 either as a full screen application or within a "window". It also runs on any variety of Unix and on the IBM AS/400 system. Describing platforms with terms such as "NEC" and "Unisys" is inaccurate and meaningless.

We could have told Ms Horsfall that there is no such product as NEC RecFind, nor was there ever a product NEC RecFind. There was only ever one RecFind. That same product was marketed by NEC and Sigma and many other companies.

Ms Horsfall concludes that:

"None of the RMS packages that I looked at met all the basic functional requirements of a good off the shelf software package, as specified in this paper. However, this is only to be expected given the lack of discussion on what basic functional requirements a good RMS package should have."

I put it to Ms Horsfall that without actual experience in designing, building, selling and supporting a "good RMS" package that her views on the matter are unjustified.

I also put it to Ms Horsfall that her arrogant assumption about, "the lack of discussion on what basic functional requirements a good RMS package should have", is totally wrong and insulting to the hundreds of records management professionals who have had input into the design of RecFind. What does she think organisations like gmb and Tower have been doing for the eight years or so? What about the thousands of hours of discussions we have had with customers and prospects (and consultants and computer companies etc)? Why do we support user groups? Why do we employ analysts and programmers and records management consultants? Why do we employ support people to liaise with our base?

Does Ms Horsfall think that we design records management software with our heads in the sand? I personally speak to hundred of "real" records management users each and every year. Are their views worth nothing? Apparently so according to Ms Horsfall. With all respects Ms Horsfall, gmb doesn't believe that you know what you are talking about. You have also managed to produce an inaccurate and misleading article which is a disservice to the thousands of records management professionals who read the Informaa.

Next time you plan to write a review, do us all a big favour and actually speak to gmb first. You will be surprised at how easy it is.

FRANK MCKENNA
MANAGING DIRECTOR
THE GMB GROUP

Gmb is a long standing member of the RMAA. Mr McKenna is the designer of RecFind, gmb's computerised records management system reviewed by Karen Horsfall. He is also a systems analyst by profession (with 25 years experience in designing computer systems), a member of the Australian Computer Society and an Associate Member of the Government Technology Users Association of Australia.

MUST A SENTENCE MAKE AN ESSAY?

Dear Editor,

Thank you for allowing me to respond to the letter form Mr McKenna of gmb research & development in this issue.

Mr McKenna claims that he is "...growing very tired of self-proclaimed 'experts' reviewing RecFind without ever asking to see the latest release...." It is worthwhile pointing out to Mr McKenna that RecFind was not evaluated in any shape or form in my paper. I for one would never evaluate a package without first checking to see if I had the latest version. However, for the record I would like to state that RecFind was never evaluated by me before I wrote the paper nor have I evaluated it for any purpose since I wrote the paper. In fact the article clearly states that "Being limited to time and location I was only able to look at four software packages on live systems". As stated in the article, the four records management packages evaluated for my paper were Dossier, CARMS, TCS and TRIM.

The only place that RecFind is mentioned in the entire paper is the table of records management software. If Mr McKenna considers a couple of neutral lines in a table a negative evaluation of a product, then a sentence must make an essay. The

LETTERS

Continued from page 3

table was included to show the wide range of records management packages on the market. It is not an exhaustive list of every records management package available in Australia today and was never meant to be.

Further, Mr McKenna seems to be obsessed with proving to me that gmb discusses their product with their users, and are user responsive. Again there is no statement in my paper that would indicate that they do otherwise. In fact the article states quite clearly that the developers of the four products that were evaluated "...responded to suggestions for improvements" and "...that the developers were constantly updating and improving the software to meet user needs".

Overall, Mr McKenna believes that my article is "...totally wrong and insulting to hundreds of records management professionals" and that it is "inaccurate and misleading". I put it to Mr McKenna that in searching the literature one doesn't find any public discussion on the basic functional requirements for records management software. Ms Duggan didn't find any in 1989 and nor did I in 1991. The basic functional requirements I suggested in the article came from discussion and interviews with records managers, consultants and archivists in Adelaide about the functionality of records management packages. However, if Mr McKenna feels that the basic functional requirements that I suggested are worth "very little" then he is entitled to this opinion.

Personally I do not believe he speaks for the hundreds of records management professionals he claims are insulted. The facts are that the four developers of the packages evaluated, or their representatives, and records managers in Adelaide, were sent the article before it was printed and asked for comment. Furthermore, I have received a number of letters and telephone calls from record managers, consultants and software developers, in support of such functional requirements. I believe that this response is an indication of how much a public discussion on this issue really is needed and welcomed by the whole records management community.

I feel it is unfortunate that Mr McKenna could not debate the real issues discussed in the paper, that is, what should be the basic functional requirements of a records management software package, instead of aggressively defending a software package that wasn't even evaluated, and by personally attacking me.

Yours sincerely,
Karen Horsfall
BA, Grad. Dip. Ed., Grad. Dip. Lib. and Info. Man., MBus(IT). ALIA, MACS, RMAA
Lecturer, University of South Australia

This issue is now closed - Eds.

SORRY, MEMBERS!

Dear Editor,

The following Life Members from Victoria were not included in your list accompanying the article on Graham: Leon Bourton, Alan Skerman and Murray Bassett.

Regards

R. Kaozynski ARMA

Victorian Branch Secretary

The list of Life Members, as printed, was provided by the RMAA Eds.

PARL-AIRS IS COMPREHENSIVE

Since 1988, Brisbane based software house Dialog Information Technology has been responsible for the marketing and development of the PARL-AIRS Information Management System. This marketing and development is performed under an agreement with the Queensland Government, which owns the product.

PARL-AIRS incorporates modules for Records, Library and Text management. A simple to use yet powerful searching tool, EASY SEARCH, has been included recently to allow any information stored within PARL-AIRS to be found quickly.

In the early 1980s the Queensland Parliamentary Library commenced development of the system as a text and Library Management package. The Premier's Department became interested in this development and assisted with the inclusion of the Records management capabilities of PARL-AIRS, with the Premier's Department being the first site to go "live" in mid 1986.

Since then, the product has been further developed to meet expanding client needs, with total users of the system exceeding 250.

Sites include Pacific Power in NSW which is using PARL-AIRS to provide the records management facilities for over 40 separate organisational areas. Security within PARL-AIRS gives complete control over who is given access to the records stored on the system.

The Qld Parliamentary Library has used PARL-AIRS to store the full text of sections of Hansard, which can then be searched using powerful search operators such as word proximity searching to allow accurate and fast searches of the text.

Following the introduction of the training Guarantee legislation, the Qld Department of Business Industry and Regional Development (DBIRD) has used PARL-AIRS to develop an application for the use of the Human Resources area that allows details of course providers, course details and course attendees to be linked and searched.

Reports have been designed and generated using the PARL-AIRS report writing capabilities.

User groups have been established and regular meetings facilitate information exchange both between sites and with Dialog about uses of the system.

The user group also examines future enhancements to the system and assists with the preparation of detailed user requirements prior to development by Dialog. In this way the system is constantly being refined and expanded to reflect the requirements of its users.

PARL-AIRS currently operates on UNIX based systems as well as VAX VMS.

Dialog has developed an imaging module for PARL-AIRS which provides even greater flexibility to sites for storing information.

Having recognised the need to make the best use of available technologies, Dialog is developing a Graphical user interface (GUI) for PARL-AIRS.

Further details about PARL-AIRS can be obtained by contacting Dialog Information Technology, (07) 368 2011.

ANNUAL CONVENTION

FOCUS ON SYNERGY

The 9th National Convention of the Records Management Association of Australia has stirred a great deal of interest with over 200 professionals registered. To be held at the Sydney Hilton from September 8-11, 1992, the conference promises to be both informative and entertaining, and has a strong social programme.

Based on the theme "A Focus on Synergy" convention papers will look at professional skills and areas such as records management, archives and information management, the similarities and reasons for differences.

Training requirements of these professional groups and a review of the impact of technology and technological change will be addressed.

An impressive range of Australian and New Zealand speakers have been invited.

Each is a specialist and brings a unique perspective on the industry and the issues to the conference.

Professor Mairead Browne of the University of Technology, Sydney, will deliver the keynote address on Day 1. In her presentation, "Professional Development Through Education", she will show that the pace of developments in information technology has left many confused. Professor Browne poses the questions: How might the new generation of records managers be prepared for a lifetime of effective services to users? How might they develop the ability to recognise the central concerns and constants of information work when modes of operation and organisational structures are in a permanent state of flux?

She will argue that the best preparation for a career as an information worker in a changing environment, is one which builds on the theoretical foundations of information transfer activities.

Professor Browne drew on research that analysed 1600 job advertisements for information workers in Australian newspapers which indicated knowledge, skills and attributes employers were seeking for their organisations.

The arguments for a common curriculum based on theories underlying information provision and the data in the job advertisements are integrated and the implications for policy on the education of information workers will be discussed.

Keynote speaker on Day 2, Phillip Wing, will ask the question: "Where is Technology Moving?". Mr Wing is partner in charge of technology for KPMG Peat Marwick Management Consultants.

He is an experienced consultant in information technology and has conducted many strategic planning exercises for large public sector and private organisations. Mr Wing will be reviewing the role of technology in business today and addressing the management issues that companies will need to take on board over the next few years.

Day 3 features a keynote address by David Major on "The Synergy of the Information Professions".

According to Mr Major, there have been many areas of convergence within the information technology industry. The distinctions between voice, data, text and image have increasingly disappeared and the range of technology available to manage information has become hard to keep up with.

He says that the ability to make effective use of information and technology has become one of the key differentiators between today's organisations and in many instances, may mean the difference between success or failure.

Mr Major suggests one key factor in the effective use of information is the degree of synergy that exists between all those within an organisation that have ownership and stewardship of corporate information. His paper will outline trends within companies around the world to achieve this synergy and how information professionals can face the challenge of today's technology.

Guest Speaker from New Zealand is Joanna Newman, Archives & Records Manager for Fletcher Challenge Ltd.

Ms Newman's presentation, "Using Synergy to Business Advantage", will examine this topic with reference to business information in general and Fletcher Challenge in particular. The paper will focus on:

- Why Fletcher Challenge strives for synergy in information provision benefits
- Background to information services in Fletcher Challenge
- What Fletcher Challenge is currently doing, where it is going, what it plans to do and how it is going to get there.

A social programme has been planned in addition to the impressive list of speakers.

Included is a welcome cocktail party, a "Trip Down the Nile" formal dinner. An evening at the Opera House or lunch on a tall ship are optional.

To register simply fill in the registration form, opposite, and send it to:

THE SECRETARIAT
9TH NATIONAL CONVENTION
RECORDS MANAGEMENT ASSOCIATION
OF AUSTRALIA CONFERENCE
ACTION PTY LTD
PO BOX 1231
NORTH SYDNEY NSW 2059
For further enquiries:
TELEPHONE: (02) 956 8333
FACSIMILE: (02) 956 5154

REGISTRATION FORM

Please type or print in BLOCK letters in BLACK and return by mail.
Please complete all sections.

For Office Use Only	
	RD
	ENT
	ACK

SECTION A: PERSONAL DETAILS

DELEGATE

Title (Mr/Mrs/Ms)	Family Name	Given Names	Sex (M/F)

Address

State	Postcode	Telephone	Facsimile

Name for Badge

Financial Member RMAA: Please (✓) tick the appropriate box. Yes ☐ No ☐

ACCOMPANYING PERSON

Title (Mr/Mrs/Ms)	Family Name	Given Names	Sex (M/F)

Name for Badge

SECTION B: ACCOMMODATION

Please make accommodation for me as follows; tariffs quoted are per room per night.
Please (✓) tick the appropriate box.

Code	Hotel	☐ Single	☐ Double	☐ Twin	Deposit	Payment
01	Sydney Hilton Hotel	$175	$175	$175	$175	$ _____
02	The YWCA of Sydney	$ 60	$ 85	$ 85	$60/$85	$ _____
03	Hotel Nikko Darling Harbour	$165	$165	$165	$165	$ _____
04	Waldorf Apartments 1 Bedroom				$145	$ _____
	2 Bedrooms				$165	$ _____

Deposit: This deposit is not refundable and will be forfeited if the room is not occupied on the date stated.

TOTAL PAYMENT SECTION B: $ _____

SECTION C: SOCIAL EVENTS (included in Registration Fees)

September 1992		Code	Number of persons	Payment
Tuesday 8	Welcome Reception	SA	____	$ N/C
Thursday 10	Convention Dinner	SB	____	$ N/C
Friday 11	Farewell Reception	SC	____	$ N/C

TOTAL PAYMENT SECTION C: $ N/C

SECTION D: CONVENTION DINNER ONLY

Please complete this section if accompanying person is only attending Convention Dinner.

		Number of persons	Payment
Thursday 10	Convention Dinner $85 per person	____	$ _____

TOTAL PAYMENT SECTION D: $ _____

SECTION E: ONE DAY REGISTRATIONS

For One Day Registration Only : Please indicate which day ☐

SECTION F: OPTIONAL TOURS

September 1992		Code	Cost per person	Number of persons	Payment
Wednesday 9	Lunch on a Tall Ship "Solway Lass"	DTA	$ 49.00	____	$ ____
Wednesday 9	Evening at the Opera House				
	Concert	DTB	$ 49.00	____	$ ____
	Opera	DTC	$109.00	____	$ ____
	Drama	DTD	$ 47.00	____	$ ____
Thursday 10	Northern Beaches	DTE	$ 78.00	____	$ ____
Friday 11	History and the Arts Tour	DTF	$ 39.00	____	$ ____

TOTAL PAYMENT SECTION F **$ ____**

SECTION G PRE OR POST CONVENTION TOURS

Tour	Itinerary	Code	Deposit		Payment
Pre Tour A	The Fairmont Resort, Leura	TA	Single	@ $150 per person	$____
		TA2	Twin	@ $150 per person	$____
Pre Tour B	Peppers Guest House, Pokolbin	TB	Single	@ $150 per person	$____
		TB2	Twin	@ $150 per person	$____
Pre Tour C	Resort Hotel, Bowral	TC	Single	@ $150 per person	$____
		TC2	Twin	@ $150 per person	$____
Post Tour D	The Fairmont Resort, Leura	TD	Single	@ $150 per person	$____
		TD2	Twin	@ $150 per person	$____
Post Tour E	Peppers Guest House, Pokolbin	TE	Single	@ $150 per person	$____
		TE2	Twin	@ $150 per person	$____
Post Tour E	Resort Hotel, Bowral	TF	Single	@ $150 per person	$____
		TF2	Twin	@ $150 per person	$____

TOTAL PAYMENT SECTION G: **$ ____**

SECTION H: PAYMENT OF FEES

Registrations should be accompanied by a cheque.
All cheques should be made payable to : Records Management Association of Australia.

		Before 30 June 1992	After 30 June 1992	Code	Payment
1.	Registration Fee	A$495		FE	A$____
	(Member)		A$675	FL	A$____
	Registration Fee	A$595*		FE	A$____
	(Non Member)		A$775	FL	A$____
	One Day Registration	A$250		DE	A$____
	(Complete Section E)		A$250	DL	A$____
	Each Accompanying Person	$175		AE	A$____
			A$225	AL	A$____

*(includes one year's membership)

2.	Accommodation deposit (Total Payment Section B)	A$____
3.	Social Events (Total Payment Section C)	A$ N/C
4.	Convention Dinner Only (Total Payment Section D)	A$____
5.	Optional Tours (Total Payment Section F)	A$____
6.	Pre or Post Convention Tours (Total Payment Section G)	A$____

TOTAL PAYMENT **A$____**

Signature _____ **Date** _____

TOWARDS BETTER MANAGEMENT OF COMMONWEALTH RECORDS

Both the Freedom Of Information (FOI) Act and the Archives Act 1983 allow for public access to information held by Commonwealth Departments.

Both Acts deal with access to information. Inherent in the interpretation of both Acts is the assumption that access will be granted to information irrespective of whether it is on paper, fiche, film, magnetic disk/tape or optical disk.

The FOI Act is generally used to follow up on personal or general research, to gain access to more recent information, whereas the Archives Act allows for public access to Commonwealth information that is 30 years old.

How do people determine what information is available for personal and general research? The FOI Act Sections 8 and 9 Statements require that Commonwealth Departments in their annual reports detail under the agency's function the following:

- description of the functional organisation of the Department
- brief description of the operations of the Subprogram areas within the Department
- description of the types of documents held by those areas
- arrangements for public contribution in running the agency.

In complying with the above, some Departmental annual reports do identify which information is held on computers. However, most Departments do not identify data or information held in electronic format. Therefore a personal or general researcher, after examining the Section 8 Statements, can establish which Department or Departments hold the information they require (though not necessarily in which format), and can then submit an FOI request.

Let me digress for one moment, and look at how information in a Department is generally managed.

Most Departments have their information stored in four discrete areas:

1. The library
2. On mainframe computers, medium range computers or optical disks
3. On standalone PCs or PC-based distributed networks, either local area (LAN) or wide area network (WAN)
4. On paper.

Departments generally have a registry, a highly

Continued on page 10

important and often under-valued information centre that utilises information management procedures to ensure it has access to its information. Some Departments have excellent, well-organised registries while others do not employ good management practices.

AN OBLIGATION

However, irrespective of what level of management practices registries have in place, it traditionally only manages the Departments paper records.

What happens when an FOI request comes in? The FOI Co-ordinator usually only approaches the registry and hence the FOI request is satisfied only to the extent that the Department's information resides on paper.

The FOI Co-ordinator has an obligation under the FOI Act to also provide information residing on computers. For the FOI Co-ordinator to fully respond to an FOI request, a Department must recognise that it has islands of information and recognise that they should be managed as a whole.

FOI requests are fully responded to if:

1. The annual report FOI Section 8 Statements are an accurate reflection of the Department's activities and information holdings.

2. The FOI Co-ordinator has been informed about the Departmental information banks not managed by the registry.

3. The Department manages its information base holistically.

If the principles of information management utilised in registries extended beyond paper management and included information held on PCs, mainframes and maybe libraries, the FOI Co-ordinator's job in responding to requests would be easier and the internal Departmental officers would naturally benefit.

The expansion of information management to include these other information bases could be taken on by the registry because the descriptive principles that control paper can be used to control information held on other mediums.

Departments are tending to put less material on paper - they are storing material on hard disk, or corporate file servers. This means that the registry may in the future be managing `old' paper while the `new' information is held only in electronic format.

NO LIST

Though a substantial amount of a Department's information is held on mainframe computers and most departmental transactions are conducted on them, many Departments do not have a comprehensive list of what applications they hold, what they are used for, how old the databases are, and what size they are. Few Departments have a register of applications.

Most Departments do not know what information is held on their PCs or PC–based distributed network. Often they do not realise they are creating islands of unmanaged information.

Under these circumstances, FOI Co-ordinators cannot do their job properly, nor comply with the spirit of the FOI Act. They usually do not know what information is held in electronic format unless an information management system that indexes, describes, registers and manages all the Department's information, is in place.

'OFTEN THEY DO NOT REALISE THEY ARE CREATING ISLANDS OF UNMANAGED INFORMATION'

Unfortunately we do not know what a Department holds on its computers or PCs. The registries in Departments have not been given the role of managing electronic information. The individual Departmental programs and sections may know what information is available in computerised form, but generally, there is no information management centre that pulls it all together and registers what is held as a whole.

What I have discussed is the problem associated with intellectual access to information in computerised form. Even if that is overcome there are problems of ensuring physical access. What procedures are there in place within the Department to ensure that the FOI Co-ordinator can physically access that data? Procedures for physical access can be set up within departments more easily than intellectual access but it can still pose a problem.

The Archives Act ensures that Commonwealth records are not destroyed unless agreement has been reached between the Department and the Archives on their disposal.

This means appraisal of information to determine whether it is of short term, long term or permanent value, and when it can be disposed of, or transferred to the Archives. A percentage of material of long term or permanent value will be in the form of electronic records.

It should be remembered that paper records and computerised records need to be appraised, as neither can be destroyed without issue by the Australian Archives of disposal authorities.

Commonwealth Departments have the problem of providing intellectual access to operational information stores held in computerised form to both external and internal users. Australian Archives has the problem of providing intellectual and physical access to certain electronic records of 30 years that come into the public access period. There are some Departmental databases that are now 20 years old, so the problem is becoming immediate and Departments need guidance on what information in electronic form is of permanent value, and how that information should be managed.

DRAFT GUIDELINES

The Australian Archives has therefore initiated a project to test a set of draft guidelines developed to manage Commonwealth Electronic records. The guidelines encompass the Australian Archives' preferred strategy for the management of electronic records. A project team has been set up to test how well these guidelines can be implemented in terms of:

- technical feasibility
- cost effectiveness and ease of implementation
- user acceptance

Implementation of the guidelines will be tested in a pilot study prior to Australian Archives adopting them as policy. It is anticipated that this investigative work will be complete by September this year.

If the project shows the guidelines are feasible, the Archives will adopt them as policy and develop a plan for implementation.

Speech by DAGMAR PARER, Director Electronic Records, Australian Archives, to the Freedom of Information Practitioners Forum in Canberra on March 13.

KODAK DONATES $3000 TO TRAINING

NSW TAFE computing and information services training specialist Peter Smith happened to be talking to Arthur Langford-Smith, Manager of the Government Business Centre of Kodak (Australasia) Pty Ltd, about TAFE's drive to involve industry in funding curricula development and course resources.

At the time they were talking about a project for funding a National Core Course in Records Management. This resulted in Arthur visiting the Computing and Information Services Training Division premises at St Leonards with Dennis Fitzpatrick, Kodak National Sales Manager, Office Imaging Division to present a cheque for three thousand dollars ($3,000) towards the project.

Tony Whittingham, Computing and Information Services State Manager, said Kodak's support and vision of the importance of education in information technology (IT) was a clear indication of its commitment to helping provide quality education. Support such as this reflected an era of co-operation between TAFE and industry- co-operation which would provide educational resources and curricula that ultimately produce graduates attuned to industry needs, said Mr Whittingham.

DAS CONTRACT REVEALS PRODUCT DEPTH

Canon is the only vendor which has products listed in all 16mm categories of the Department of Administrative Services' (DAS) contract for the supply and maintenance of micrographic equipment.

Canon's Information and Records Management National Marketing Manager, Tony Poynton, said this was because of the depth of the Canon product range.

The four 16mm sections in the DAS micrographics contract are: microfiche readers; microfiche and microfilm reader-printers in A4 and A3; microfilm systems; and optical disk systems.

The microfilm systems category includes: planetary and rotary cameras; film retrieval stations and computer aided retrieval (CAR) products.

Canon's desktop optical filing system, Canofile 250, named "Friday", is the only product listed in the optical disk systems category of the contract. Friday, with a built in magneto optical disk drive, provides a compact solution for large volume filing problems.

Mr Poynton said Canon had a strong performance record in winning contracts administered by DAS.

"We are the market leader in micrographics and have the product range to provide uncomplicated and complete solutions to a full range of records management applications," he said. "Canon also has an excellent history and reputation in maintenance."

DAS made the move in May to bring all micrographic product categories under the same government contract. The contract number is PC02/11727R-1.

FASTER QUALITY PRINTS FROM THE MP 90

Canon has released a new records management product, the MP 90, which offers the fastest printing rate for an A4 universal micrographic reader-printer.

The MP 90 can read every type of microform. It prints stored images on A4 paper at 10 pages per minute.

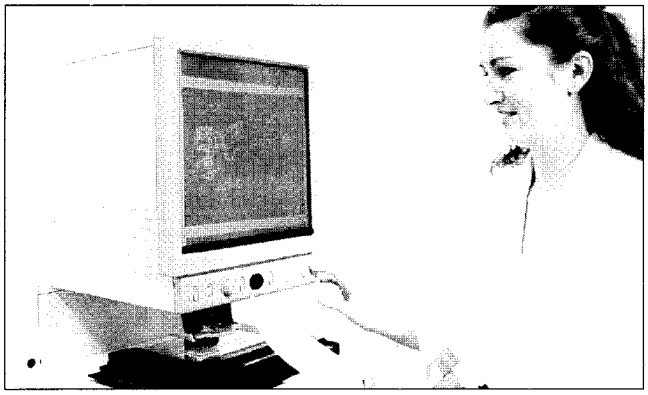
It has automatic exposure control which takes into account the darkness of the stored image and automatically adjusts the machine to print a high quality copy.

The MP 90 supersedes the PC 80, currently the most popular universal micrographic reader-printer in Australia.

It offers additional upgraded features at no extra cost and is more economical to operate.

The MP 90 uses less power and the cost per print is lower because the all-in-one replaceable cartridge is less expensive than the PC cartridge used in other models.

Toner can be saved by using the programmed image masking feature which enables unwanted text and borders to be blocked out. At the press of a button an isolated image can be printed on its own.



The MP 90's easy to use features enhance productivity. The optional 90 degree image rotation printing feature, ideal for use with computer output microfiche (COM Fiche), allows immediate vertical printing of horizontal images.

Manual 360 degree rotation enables easy correction of skewed images. The MP 90 can retrieve roll microfilm, microfiche, aperture cards, blipped film for computer aided retrieval (CAR) systems and 35mm positive and negative film.

All cartridge printing machines including the MP 90 are virtually maintenance free because the all-in-one replaceable cartridge contains the parts that normally run or wear out.

According to Canon's Information and Records Management National Marketing Manager, Tony Poynton, the cartridge printing system is the key to the reliability and long life of Canon machines.

"Replacing the cartridge refurbishes the machine," he said. "After replacement the machine is ready to print and is as good as new," he added. The MP 90 is ideal for libraries, records management bureaux and businesses that store information on a variety of micro mediums.

BRANCH REPORTS

NEW SOUTH WALES

The following Councillers were elected:.

President	Chris Fripp ARMA
Vice presidents:	Allan Yeates
	Pam Camden
Secretary:	Cathy McGrath
Treasurer:	To be confirmed
Minute Secretary:	Pam Camden
Education Committee:	Peter Smith
1992 Convention:	Fiona Meyer
Status & Standards:	Allan Yeates
	Richard Brown
	David Lilley
	Peter Smith
Federal Directors	Chris Fripp
	Pam Camden

Congratulations to all and I look forward to an exciting year of challenge and growth with an enthusiastic Branch Council.

We are expecting a large turnout at the 9th Convention in Sydney next month with 200 delegates already registered.

If you haven't registered yet, hurry - there are only a couple of weeks to go.

TAFE (NSW) has obtained national funding to develop national core courses in records management. By the beginning of 1993 courses in records management at a vocational level will be available Australia-wide.

This will bring recognition, standardisation and portability to the industry.

The RMAA and in particular the NSW Branch has formed an Industry Reference Group. It will oversee material to be used in courses put forward by the Project Committee (made up of interstate members of TAFE).

CHRIS FRIPP

NSW Branch President

NORTHERN TERRITORY

With fewer Associate members able to devote time to the organisation of activities and administration of the Branch as Office Bearers, a special Branch meeting was held on 26 June 1992 to determine which members would be prepared to assist in a more active way. The meeting was successful and thanks go, in anticipation, to those members who attended and/or indicated their willingness to assist.

Congratulations to Murray Maynard and David Wilson on attaining Associate status.

The Annual General Meeting of the branch was held at the Australian Archives office on August 7, 1992. The following Councillors were elected to office for the year 1992-93.

President	Judy Watts ARMA
Treasurer	Kay Moody
Secretary	Ray Holswich (interim)
Registrar	Marlene Hewitt
Chairs of Committees	
Status and Standards	Joan Grist
Activities	David Wilson
Education	Judy Watts
Federal Directors	Ray Holswich, Judy Watts

JUDY WATTS

Branch President

QUEENSLAND

Queensland Branch Council has been approached by the Local Government Training Council Qld, to participate in its 1992/93 Local Government Satellite programme, with a telecast to all Local Authorities on the 19th May, 1993, titled "Records Management".

Branch Council will have a trade stand at the Queensland Local Government Association Annual Conference from 24 to 28 August 1992 at Jupiters Casino, Broadbeach (Gold Coast), to assist in promoting the Association.

MICHAEL HANGAN ARMA

President

TASMANIAN

The Annual General Meeting of the Branch was held July 13, 1992. We were disappointed with attendance, however, members present raised several issues of concern to the Branch and the Association nationally. Branch Council members for 1992/93 are:

President/Federal director	Tina Howard ARMA
Secretary	Jill Saunders
Treasurer	Ray Cooper
Registrar	Jane Weston
	Bill Taylor
	Helen Adkins
	Trish Wichmann
Federal director	Dennis Wheeler ARMA
	Coral Matoham
	Kathy Holland
	Russ Middleton
	John Behrens

We welcome new members and thank retiring members for their contribution during 1991/92. We are continuing to conduct training workshops on a monthly basis and have been busy planning for the 1993 National Convention to be held in Hobart 5-9 September 1993.

TINA HOWARD

Branch president

VICTORIA

The last three months have seen the Victorian Branch focus more on the provision of training for our members. The new Council has an action plan for a series of "Back to Basics" workshops, to be held August to December 1992. The branch has been working on a financial plan to allow for expenditure in areas where members benefit.

The Annual General Meeting was held on Wednesday, 22 July 1992. While attendances were down, all present enjoyed a valuable presentation by Phillip Reynolds on `The Effects of the Trade Practices Act Amendment Regarding Product Liability'. I'm sure that all were unaware of the implications of legislation on records management. For those who missed out, we are making every effort to see if we can publish a copy of the paper in our local INFORMAA.

Incoming Branch Councillors include:

President/Federal Director	David Moldrich ARMA
Vice-President/Minute Secretary	Judith Ellis
Secretary/Federal Director	Rosemary Kaczynski
Treasurer	Russell James
Editor INFORMAA	Robin Scaife
Registrar	Candace O'Shaughnessy
Education Co-Ordinator	Chris Hurley
Status Co-Ordinator	Peter Clarke
Councillors	Julie Apps
	Peter White
	Kay Lewis
	Gary Omond

The Local Government Chapter is gathering momentum, evidenced by the attendance of over 30 Council representatives at the Chapter's first AGM. Fourteen apologies were received. Preceding the AGM attendees were addresses on the subjects of `Records management - an executive view', and `Freedom of Information & Local Government'.

There is a marked increase in local government membership, with an encouraging number of applications to upgrade to professional status. At the

continued page 14

OPPORTUNITY FOR STUDENTS AT NEXT YEAR'S CONVENTION

The 1993 RMAA National Convention will be held in Hobart during September and the Convention Planning Committee is looking for willing and qualified speakers. To encourage students in the records information areas, the Committee is seeking papers from them and the best will be presented by the student at the conference.

Entry is open to students at all levels, including certificate, post graduate, and higher qualifications. Similarly, there are no age limits. The Committee will judge all entries. The author/presenter of the winning paper will be flown to Hobart and their accommodation and registration expenses paid for the three days of the conference. The winner will be acknowledged in the convention program. The student will be expected to present his/her paper at the allocated time on that program.

If the Committee decides there are other papers of excellent quality, the authors may also be invited to attend the conference and present their papers.

The theme of the 1993 conference is: `Records - the Heart of Management' and it is expected that the topic of presentations will reflect this title. The presentation is to be delivered over about 45 minutes, with an additional 15 minutes of question time.

The final presentation may be supported by overheads, audio visuals, slides or whatever the presenters believe to be appropriate. Although open to current students, the Committee is aware that the time frame between announcing the competition and the final presentation poses some problems. Therefore, entries will be accepted from students who will complete study in 1992 or 1993. Naturally, if fortunate to be employed overseas following graduation, some alternative arrangements may be required for air travel.

Entries should reach the Conference Committee at the address below no later the 31 May, 1993. Authors are to use a nom de plume. Actual names are to be included with the entry but must be provided in a sealed envelope to be opened by the Committee following the selection of the winning paper. The Convention Committee's decision will be final.

Entries to:

Ms K Holland
Convention Committee RMAA
Box 35A GPO
HOBART TAS 7001

For further information please contact Kathy Holland through the above address or by calling or faxing the following numbers:

Ph: (002) 74 0301
Fx: (002) 73 1056

This is an excellent opportunity to use your knowledge and impart some ideas, or discuss a topical issue that you believe to be of significant importance. A win will look impressive on your CV - as will a similar notation indicating that you were a participant. It may also be a way in which information contained in a major assignment, thesis, or similar piece of academic work, can be disseminated into the working world.

If you wish to discuss the project with your lecturers and bounce ideas off them, I am sure they will be only too happy to assist with advice and support.

BRANCH REPORTS

Continued from page 13

Chapter inception (Nov. '91), only nine members held Associate status or above -today there are 22.

Readers are reminded that State Seminar papers are still available from the Secretary for $25. Interested parties are requested to mail an order to: GPO Box 2270U Melbourne VIC 3001

R KACZYNSKI ARMA

State Secretary

WESTERN AUSTRALIA

The WA Branch meeting for May, held at Castledez, was well attended. An informative and professional display of KolorKode filing and storage was enjoyed by all.

The Association thanks Ian Dewar and Paul Lamont, our hosts for the evening, for a great presentation.

The June meeting held at the State Archives proved to be enlightening in regards to the latest in archival methods and insights into the Records Management Office.

Many thanks to Kandy-Jane Henderson and Janinie Douglas, who hosted the visit.

Chairperson of New Technology, Nigel Chartres, will be forming a committee to assist with the formation of the draft standards of Records Management document.

The Education Committee, with Maggie Exon as Chairperson, will look at upgrading the syllabus for the Certificate of Records Management course at Perth TAFE. Maggie is working on the national ACTRAC project, which will, hopefully, see all TAFE Records Management courses throughout Australia credited and standardised. Branch Council is busy preparing for the AGM to be held on Tuesday July 21, 1992. 1991/92 President, Neil Granland, would like to thank all Branch Councillors for their professionalism and support during the last year, and WA members for participating in the various functions.

NORMA EASTHOPE

Secretary, Western Australia Branch

Continued page 32

TAFE RM PROJECT

On 25 and 26 June, I was RMAA representative at the TAFE National Records Management Project Team meeting held in Sydney. The Computing and Information Services Industry Training Division of TAFE has successfully sought funding from the Australian Committee on Training Curriculum (ACTRAC) to develop training in the area of information management. This particular meeting related to records management and the development of a national core course for TAFE.

There are four phases in the project proposal:

Phase 1 Liaison and consultation
Phase 2 Framework and structure of national curriculum
Phase 3 Curriculum model
Phase 4 Modules

Details will be communicated through this article and as they are reached and acted on.

The Project Committee meeting dealing with Phase 1 was charged with the liaison and consultation regarding the structure and content of the proposed core course. Major requirements of this phase include:

i. The design of the core course, based on feedback from the participation of all State representatives and invited participants;

ii. Courses and content already being provided in other States to be taken into account when compiling and structuring the course;

iii. Identifying appropriate subjects, number of subjects, subject duration, and award level; and

iv. Discussing the availability of input to particular subjects from specific States and their involvement in subject production.

On the first morning of the meeting a perspective of present records management was provided by Sandra Hinchey, Corporate Information, OTC. Peter Smith (TAFE) gave an overview of the project and the tasks that the project team would be required to undertake. Peter emphasised that the modules to be developed in records management would be stand-alone units, which could be offered independently by trainers across Australia as well as being included in courses other than specific records managment programs, which training bodies such as TAFE would develop.

It was revealed that competency clusters must relate to industry awards and correspond to SAA Standards. Modules should be appropriate for levels from entry level to Associate Diploma. Discrete modules are essential at various levels, to correspond to industry awards from traineeship to records clerk to records manager. However, awards for the industry have yet, as we know, to be determined, and uniform job classifications decided on.

Concern was expressed about how overall coherence can be ensured in modular courses. Team discussion referred to the fact that the modules have to take account of a variety of learning environments and methods of delivery. Peter suggested that the first step to ensuring that the modules meet the needs of the industry was to carry out a needs and demand survey out of which standards framework and match industry standards and job classifications. Module descriptors would be devised once the survey was completed. All agreed that industry representatives must be involved at every step, clarifying defining competencies required and how these can be translated into modules.

Existing courses on offer by TAFE throughout Australia were tabled. It was also pointed out that courses presently cater for both dedicated records management professionals and others employed across a range of administrative functions. Any core course must offer similar access.

Considerable time was devoted to the requirements of a National Curriculum Project as set down by ACTRAC. Cathy Barry of TAFE discussed and supported the necessity for a needs and demand survey by indicating to the group that quality in curriculum arose from ensuring that it:

- is based on the needs of industry/community;
- is based on sound current research and evaluation;
- assures accreditation/recognition
- incorporates recommendations of MOVEET, Finn, Mayer and Carmichael committees;
- is competency based;
- is adaptable;
- offers maximum flexibility/articulation; and
- caters for special learning needs.

Much discussion centred on the requirements of ACTRAC and also the report on training needs analysis which was the outcome of the National Survey of Entry Level Skills in the information technology industries. The fact that ACTRAC now requires evidence of industry standards to ensure that current research underpins the competencies which are incorporated in the learning outcomes of new curicula further strengthened:

- The perceived need for an industry survey of records managment employees and
- The involvement/establishment of an Industry Reference Group.

A list of names of those considered appropriate for this Group was drawn up. RMAA will be represented.

Philip Taylor, TAFE Queensland representative, and I led the group through the development of a very comprehensive framework for the construction of a national survey. Following validation of the completed document through a trial run, it is proposed to implement the survey throughout August/September with particular emphasis on the RMAA Conference in September. Compilation of the survey will be the responsibility of TAFE through one of the organisation's professional suppliers.

The National Training Board requires a competecy standards body and the meeting suggested that the RMAA was appropriately placed to undertake this responsibility. The Board is to be approached on this matter.

TAFE had hoped to have the core course in place by the commencement of the 1993 academic year. However, it is obvious that this will not now be the case. Inputs from industry and those at the work face are vital and will provide credibility to the final product. Final results of surveys to develop modules by States will be called for and discussed early in 1993 and the writing and evaluation completed by September of that year ready for implementation in 1994.

To assist with this process I would request that as many peoples possible in the profession complete a survey form and return it within the indicated timeframe. The availability of up-to-date and concise information will benefit all those intending to undertake TAFE courses in records managment and the industry as a whole. It is intended that State branches of the RMAA will assist with the distribution of the surveys.

DENNIS G WHEELER

Chairperson, Education Committee, RMAA

RM AND IMAGING - TOWARDS THE `PAPERLESS OFFICE'

Records management is an art that has been practised since the dawn of time. All ages of man have kept records and systems have included notched sticks, cave paintings, shells, stones, engravings, handwritten manuscripts, the famous "Doomsday Book", plus a multiplicity of other methods and procedures.

Our forbears also applied "systems" to the practice of records management. They used arrangements of sticks and stones, colour coding, indexes, pigeon holes and other systematic "standards" to organise their records.

The requirements of the art have changed very little. The basic questions are still:

What do we have?
Where is it?
Whom does it belong to?
Where do I keep it?
What are we doing with it?
Who needs it?
How long do we keep it?

The tools, the methods and the systems are also little changed.

Let's examine the similarities between 1972 and 1992.

We still use pens and ink, (albeit ball point pens instead of quills).
We still use paper.
We still use filing drawers or `pigeon holes'.
We still store older records in boxes.
We still need to ask an `expert' to locate information for us.
We still lose (temporarily misplace) records.
It still takes days or weeks to find and collate information.
The filing system rules are still unintelligible to everyone except the records department.

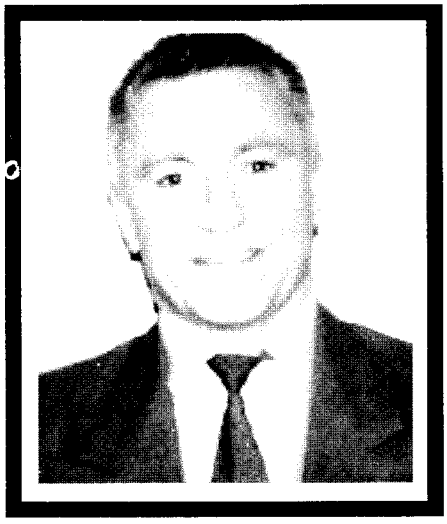
WHAT'S HAPPENING IN AUSTRALIA?

By gmb's reckoning, approximately 99 per cent of all records management systems in Australia are still paper-based. Of these, approximately 90 per cent don't use any form of computer automation or use only rudimentary tools (such as listing the files in a word processing package such as Word or WordPerfect).

The owners of these "all paper" systems are probably using twice the amount of staff time they should for managing paper, and are wasting enormous amounts of money chasing information.

Study this quote by David A. Harvey from the US Byte magazine, April 1992:

"Not only does American business waste paper, but according to various sources, it costs about $25,000 to fill a four drawer filing cabinet and $2,160 to maintain that cabinet for a year. In addition, about three per cent of all documents are



incorrectly filed or lost, and the average cost to recover a document is around $120. Finally, the average executive spends a grand total of about four weeks per year waiting for documents to be located."

Gmb's experience in the Australian, European and US records management industry convinces us that these conclusions are:

a) probably ultra-conservative; and
b) apply equally well to the Australian situation.

Cost justifying the implementation of a modern, automated records management systems should never be difficult. Savings of 50 per cent or more are common. Cost recovery within one to two years is the norm. On top of the savings, you should also realise enormous benefits because of improved access to information. The art of records management is nothing more or less than the art of storing, managing and providing access to information.

This is the heart of the matter.

Records management is not about paper, documents, file covers, microfiche, diskettes, cassettes, videos, faxes, electronic mail, etc. These are merely the mediums used for collecting and holding information. It is the information itself that we are interested in.

In most organisations with non-automated records management procedures, the collection of paper records constitutes the largest and least accessible database within the organisation.

How do we change this?
How do we eliminate waste?
How do we save money?
How do we improve productivity?
How do we provide better access to information for our staff?
How do we provide a better service to our customers?
How do we begin to move towards the Paperless Office?

The steps are as follows:

1. Survey
2. Review
3. Agree on objectives
4. Agree on standards
5. Systemise
6. Cost justify automation (including the conversion)
7. Convert
8. Train
9. Automate (if justified)
10. Review

1. THE SURVEY

Questions include: What do we have, where is it and how do we handle it? What are the volumes, frequencies and procedures? How many files? How many documents? New files per day? Movements, resubmits? Daily, weekly, monthly procedures? What classification standards are we using? How do we handle mail?

Summary: Size everything, and determine the workload and workflow.

2. THE REVIEW

What are we doing? (We should know this after the survey is complete). Why are we doing it? ("Because we have always done it" is not a good enough response). What should we be doing? (What are our business objectives, how are they best served?).

3. AGREE ON OBJECTIVES

What do we want to achieve? When do we want to achieve it?

4. AGREE ON STANDARDS

Classification standards - yes or no? Which classification standard? Numbering standards - files and documents? Use barcoding? How? Physical storage area - adequate or change? Procedures - professional, end-user. Who does what and how? File covers, colour coding, labels etc. Archival and disposal standards: what do we need to keep, how long should we keep it, and when can we archive or destroy it?

5. SYSTEMISE

`Clean up' and organise the manual system BEFORE computerisation. Make absolutely sure that the standards and procedures you have designed are appropriate to all cases. Computerising a poor system won't make it better.

6. COST JUSTIFY

If you can't cost justify it, then don't do it! List the major tasks under the manual system. Time and cost each of them using a standard labour cost for time. Perform these same tasks on a `test' or `prototype' computer system, and time and cost, eg, the time to locate a file under the manual system versus the computer system. Compute the savings. Cost your current storage space. Calculate the savings when computerised.

You can usually cost justify a computerised records management system without factoring in the benefits of improved service.

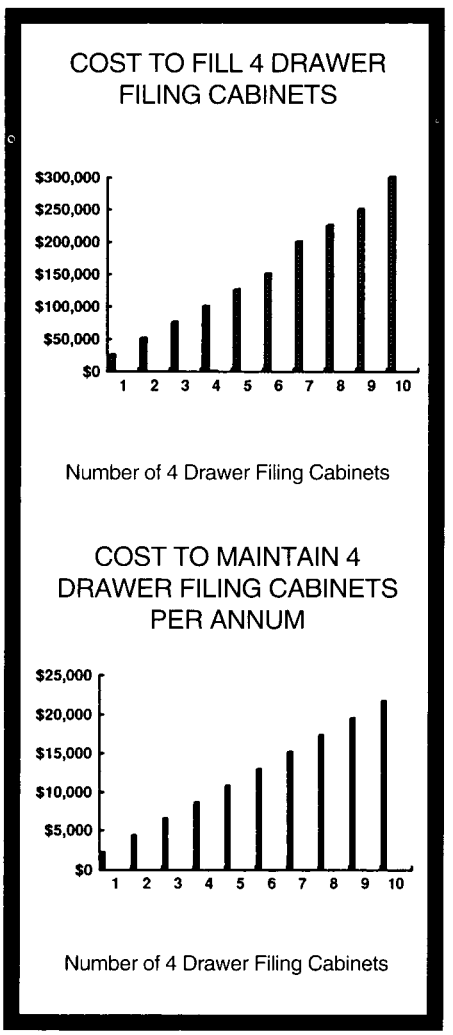
NB: Don't forget to add in the cost of converting your existing records (index cards, old computer system etc).

7. CONVERT

This always looks harder than it is. Call in the experts - you will save money. Don't expect your existing staff to do it, because they already have full time jobs. Convert only the absolute minimum, i.e., why convert records of archived or destroyed files? Always convert current file records. Usually convert recent movement records. Rarely convert document records. Rather, start recording documents from Day 1.

8. TRAIN

Train the records staff, the end-users, management and the technical support people (so that they understand the application requirements).



"Sell" everyone on the benefits. The best system in the world won't work if the users don't want it!

9. AUTOMATE

Plan it well and advise everyone well in advance. Expect some pain during the first few weeks but don't panic, it's normal!

10. REVIEW

Review the system regularly as your business needs change. Make sure that you are getting out of the system the results you expect. Although you have automated there is still a mountain of paper -why is this? If you have implemented a modern records management system (without imaging), it should work as follows:

a. There is an organisation standard for the classification of files and documents.

b. Files are either held centrally or in a number of strategic locations.

c. All key inwards and outwards correspondence is registered, and key information recorded, such as: date of correspondence, date received, author name and address, recipient name, an abstract of the subject matter, any actions required, responsible action officer(s) and date reply sent etc.

d. All key people within your organisation have access to the on-line records system (each with an appropriate privilege level) via a terminal or PC on their desk.

e. The majority of enquiries can be handled by referencing the records system via a terminal. There is little need to see the actual paper.

f. You can instantly find out where something is and who is handling it. However, although we have significantly reduced our paper handling costs, and have significantly improved our access to information, we still have a filing area, and thousands of cardboard file covers and millions of pieces of paper to file and manage.

WHY IS THIS?

Even though we can access summary information instantly, and find physical files in seconds rather than days or weeks, we still need to keep a significant amount of paper because our computer system only contains a small part of the information contained within our paper mountain. There are legal requirements to consider. Your archival/disposal schedule is your best reference for how long different types of records have to be retained. The rules of evidence in Australia don't yet accept digitised copies in lieu of originals.

There are cost requirements. It costs considerably more to "capture" all of the information from your paper mountain on computer. It is therefore extremely unlikely that you will see a truly paperless office within the next five years or so. We need changes in the law and we need to see major improvements in the availability, functionality and cost of "imaging" solutions.

However, we can get considerably closer to our ideal by utilising today's imaging technologies.

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WHAT IS IMAGING?

In the records management application, imaging refers to the ability to "capture" the whole document, rather than just a summary. With the appropriate imaging techniques in place, you should be able to capture correspondence, electronic mail and faxes as they are received. These same documents should be accessible via terminals throughout your organisation. In theory, once you have a comprehensive imaging records management system in place, you should never have to refer to the original source documents.

What's needed for an "imaging" solution are realistic expectations, plan, more money and more patience. Components (software, hardware, etc) required include:

A powerful central processor/file server.

A network.

A large amount of (fast) mass storage (disk drives).

Image capable terminals.

A scanner.

A laser printer.

An image capable records management system.

Optical Character Reading (OCR) capability.

Automatic "abstracting" capability.

A powerful central processor/file server is needed to support all users (there is little point in having images on-line if your staff can't access them); to "drive" the network (because processing "images" takes a lot of computer power); and to manage a much larger amount of mass storage (because we are now storing far more information on our computer system).

Network. There is no point in having a computerised records management system if it can't be accessed. The network allows users to connect to a file server. For imaging systems, this must be a high throughput network such as Ethernet. Asynchronous, low speed lines are not good enough.

A large amount of (fast) mass storage (disk drives). Not only will we be storing more textual information, we will also store "images". Images are LARGE. For example, an A4 typed page stored as text uses approximately 2,000 characters (or bytes) of disk storage. The same A4 typed page scanned and stored as an image uses approximately 50,000 characters (bytes) of disk storage even after it has been "compressed". In the worst case, an image disk system would need to be 25 times larger than a text disk system!

Image capable terminals. The real problem! Typical "dumb" Unix terminals such as VT220s and Wyse 60s are not in the race - their resolution is far too low.

Older PC screens such as CGA or EGA are also not in the race. Even VGA screens (now on most PCs) aren't really good enough. But, unless you are prepared to spend up big on high resolution screens (thousands of dollars rather than hundreds per screen), VGA is the default.

WRONG SHAPE

The first problem is that VGA screens are the wrong shape! Take a piece of paper and place it in front of your computer screen. The paper is tall and narrow, the screen is short and wide. Unless your screen can be turned on its side (unlikely), it can't effectively display a whole A4 page.

Secondly, VGA screens don't have sufficient definition! The average VGA screen is about 9.5 inches wide by 7 inches deep. Its effective resolution is approximately 75 dots per inch (dpi). You would normally scan and print images at 300dpi. Trying to display an A4 page scanned at 300dpi on a screen which can only display 75dpi means we can only see a small part of the page at any time, (e.g., the top left hand corner). It simply doesn't fit. Our computer screen effectively becomes a small "window" which we have to move around the document in order to see it all. This approach may be acceptable for other imaging applications (like graphic arts) but it is not acceptable for records management where we need to display and read the page in seconds, and page up and page down a multi-page document.

In order to "see" an A4 page on a VGA screen we need to employ reduction techniques that remove "bits" from the image but still leave it legible. This means a major loss of quality and readability when we print the scanned image on a laser printer.

As a general rule of thumb: scan at 150 to 300 dpi; print at 150 to 300 dpi; and display on the screen at 37.5 to 75dpi.

We display at 37.5 dpi if we want the whole A4 page on the screen in the correct "aspect ratio", (remembering that the screen is the wrong shape). In this instance our displayed A4 page will be much smaller than the real A4 page.

We display at 75dpi if we want to show the whole A4, in the correct aspect ratio over two screens, i.e., using page up and page down to view both halves of the A4 page.

Using 75dpi is obviously the easiest to read.

A scanner captures original source documents. It functions in the same way as a fax machine in that it converts whatever is on the paper into millions of "dots".

MILLIONS OF DOTS

To capture information from documents sent to us, it is the only means available to us.

Note that we can also capture internal documents this way but there is a better way. It is preferable to capture your own documents electronically. The imaging system could capture the source document direct from your word processing database rather than scanning the paper. This is faster and has the additional benefit of capturing the document as "text" rather than as an image (i.e., millions of dots).

Laser printer. You can print images on a dot matrix printer, but it takes a lot longer and the quality is not as good. Invest in a good quality laser printer (preferably with Hewlett Packard emulation) if you are serious about printing images.

An image-capable records management system. The computer hardware (network, scanner, big disk drives etc) is no use without application software that can drive it. Beware of image solutions that only provide the software to scan, store, "cut and paste" and print. Remember we are looking for a records management system with image capabilities, not an imaging system on its own. The imaging component of a good records management system

would only comprise about five per cent of the total functionality.

Optical Character Reading (OCR) capability. When a scanner "scans" a page of text it reduces it to millions of dots and converts them back to readable characters.

In order for a scanned image to be recognisable as text, a program needs to examine the millions of dots and convert them back into legible characters.

There are a number of packages on the market that do this. Omnipage and Perceive are two. This is also an area in computing which is receiving significant investment dollars and techniques are improving each day.

ERROR PRONE

Be aware that OCR is not a panacea, it is slow and is still error-prone. The time taken to scan a typical letter, convert the text portions to text, spelling check it and correct any errors is approximately two to five minutes per page. Although a lot of processing can be done in "batch" mode (modern scanners can easily handle up to 50 pages per minute), a human still has to review and correct the final output. There are two kinds of errors to consider when correcting OCR output. The first is when the OCR software can't decide on a particular character. It then displays that character and asks the operator to make a decision. The second is when the OCR software makes a mistake and turns an O into a C. This will only be spotted by the spelling checker or by the operator visually checking the final document.

Critically review the claims of OCR vendors. Test their software with your sample documents. Realise that an error rate of one per cent means that a typical A4 page of text will have 20 or more characters wrong. This could translate into 20 or more misspelled words, or one error every second or third line! Also remember that when we scan a page as an image we retain everything: the logo, handwritten notes, signature, diagrams and drawings. These things are normally discarded when we use OCR techniques so that we end up with only the net "text".

Automatic "abstracting" capability. In most records management systems with an "imaging" capability, we store document pages as images and "link" those images to document abstracts. The keywords in the abstract are used in a search to locate the abstract, which then "points" to the stored images that can either be displayed on the screen, or printed. A trained operator constructs the abstract after reviewing the document to be stored.

In a totally automated system, the source document would be scanned, converted by OCR techniques to text and then the application software would "read" the text and compose an appropriate abstract of keywords which we could use to locate that document during a "free text" search of the database.

The automatic abstracting software uses powerful lexical techniques to analyse the text of a document and determine a set of keywords appropriate to an organisation's particular keyword Thesaurus.

An alternative to automatic abstracting to is "index" every word in the document, (as is done with many word processing indexing packages such as Isys). This technique is not recommended for most records management applications as there is no control over the vocabulary and a free text search would produce large quantities of erroneous material. A controlled vocabulary narrows the path of the search and provides far greater accuracy when trying to locate a specific subject.

CONCLUSIONS AND RECOMMENDATIONS

There is no doubt the majority of organisations currently relying on manual records management systems would benefit significantly from the implementation of a computerised system.

Even the most elementary requirements of F.O.I absolutely require on-line access to key information.

There is no way any public sector body can survive the pressures of the 90s without some form of computerised records management system.

The development costs are nil as there are a number of well-established and proven records management packages on the Australian market. In fact, this is one area where Australia clearly leads the world. There is absolutely no need to "reinvent the wheel". It should cost thousands to buy a good RM package but could cost millions to develop one.

The key issue is to "clean up" and "systematise" the existing manual system prior to computerisation. This need not be a lengthy or onerous task as there are Australian records management companies with a great deal of experience in computerising manual systems. Ask your records management systems vendor for advice.

As a general rule, implement a computerised records management system before moving up to an imaging solution. You will benefit from the experience and may avoid an extremely expensive experiment.

Final advice for those seeking imaging solutions: if possible, let someone else do the pioneering. Always try to be a close second, never a pioneer!

FRANK MCKENNA

Managing Director gmb research & development.

17TH ANNUAL GENERAL MEETING

Notice is hereby given to members that the 17th Annual General Meeting of the Records Management Association of Australia will be held on Thursday, 10 September, 1992, at 11.45am, at the Sydney Hilton Hotel, Pitt Street, Sydney NSW 2000.

In accordance with Article 57 of the Association's Memorandum and Articles, any member wishing to bring before the Annual General Meeting any motion or business not relating to the ordinary annual business of the Association shall give notice thereof in writing not less than 45 days before the day of the Meeting, and no motion or business other than the business brought forward shall come before the Meeting unless notice thereof has been so given.

RAY HOLSWICH Federal President/Secretary

A LOOK AT TURNKEY RM PACKAGES

INTRODUCTION

In 1989, at the 2nd IRMC Congress/6th National RMAA Convention, a paper was presented by Fiona Meyer which reported on a survey of records management software in Australia (Meyer, 1989, p.179-278). The survey was not exhaustive and included 16 software packages. Of those included in the review, six can be identified as Australian turnkey records management packages.

Turnkey packages are those available "off the shelf", requiring no in-depth development or alteration to meet user requirements (bought, installed, switched-on, and operational).

At the same convention I was a joint presenter of a paper which was a critique of Keyword File Title Classification (an indexing methodology). In the paper five turnkey passages were briefly considered for their ability to support Keyword File Title Classification. It was at this time that I began to consider the development of Australian packages.

Since the presentation of the papers, there have not been, to my knowledge, any new packages which contribute any more than those already on the market. It is also fair to say the existing packages have not undergone any major metamorphoses. The activities of 1990 and 1991 have been associated with the porting of packages onto other operating systems to increase their market potential. Although developers are continuing their research and development in terms of integrated information systems and imaging applications, future developments are not yet openly available in the marketplace.

This paper aims to present an overview of development of turnkey records management packages in Australia. Computerised systems which have been developed in-house, using anything from a large mainframe database system to personal computer text retrieval packages, and packages which require detailed customisation have not been included in this review.

AUSTRALIAN RECORDS MANAGEMENT

There are 914 Local, six State, two Territory and one Federal governments in Australia. Over 15 per cent of the potential working population in Australia is employed by government (Australian Bureau of Statistics). The States were colonised independently, starting with NSW in 1788. Public record systems were developed to operate as those in "Mother England". The influence of England was stronger than the influence of respective States upon each other. In 1901, through Referendum, Australia adopted Federalism, and a Federal Government was formed. This did not reduce the governing responsibilities of the States. From a records management viewpoint it guaranteed the continuation of the need for public records officers. The States continued to operate independently and they all appear to have adopted a Registry for central storage and control over records.

In 1950, the "Business Archives Council of NSW held four evening sessions...[on]...'Retention Scheduling of Business Records'" (INFORMAA Quarterly Editorial Note, 1987, p.17). The aims of the Business Archives Council, which was formed in the late 1940s, were "...to collect and recover important business archives and this required educating people in retention and disposal scheduling" (Linton, conservation, 1991). The Council met the needs of private enterprise in NSW during the 1950s and 1960s.

In 1954, a records management seminar was held in Canberra, attended by representatives from the Commonwealth and State Archival Authorities, Dr Schellenberg from the USA and representatives from the WA and NSW Public Service Boards (WA Public Service Commissioner's File No. 657/54, folio 99, SAWA Accession No. 1619). It appears it was an inaugural meeting aimed at establishing policy and standards for Commonwealth Department Registries. It is interesting to note some of the issues discussed in 1954 are still debated today. For example, the provision of clear definitions for the terminology used, the types of records which should be maintained in a registry, and the role of a registry in a department.

Establishment of formal archival systems for public records was late to develop in Australia, with the earliest attempts in the 1920s and the greatest amount of activity in the 1950s. All State and Federal Governments addressed the establishment of State and Federal Public Record Archives independently. All took the approach of placing the Archives under the responsibility of the State or National Library.

NO CLOSER

The Records Management Association of Australia was formed in 1968 (Lovett, 1987, p.13), becoming a national Association in 1973 (Nunn, 1990, p.70). Nationalism of the Association has not brought the States closer to embracing common practices, procedures and terminology. Even within Western Australia itself the terminology adopted for a particular procedure may vary from one organisation to the next. For example, the practice of sending clerical staff out of the registry, usually termed Records Section, to locate files and record their location for the updating of the loans file, is

called tracking, wanding, barcoding or auditing.

Throughout the 1970s, the emphasis of records management in Australia was directed towards the improvement of retrieval efficiency for active records by improving the classification and indexing techniques. The Keyword File Title Classification System was developed, for which John Eddis Linton may take significant credit. His system was designed for private industry, and was established as a commercial venture in 1972 (Hoo & Cowcher, 1989, p.369). The same concepts of file title classification were adopted and developed by the NSW Records Management Office for application by NSW government departments.

HIERARCHICAL

Both applications of the system are based on the theory that it is possible to identify a selection of keywords which broadly describe the activities of an organisation. A title must commence with a keyword and can be supported by up to four further descriptor terms which, when combined, will define the subject and contents of the file. There is a hierarchical relationship between the terms once they are combined to create a file title. Keywords cannot be placed any lower in the hierarchy of the file title than as the first term in the title. Throughout Australia the system has gained wide acceptance, particularly in the public sector, with the NSW Records Management Office's Thesaurus of General Administrative Terms (GADM) being used at over 60 sites (Hoo & Cowcher, 1989, p.371).

The latter half of the 1970s saw the Federal and State Governments attempt to trim expenditure and raise productivity, with the introduction of fuctional reviews and productivity assessments. Records management systems with their high proportion of transactional and clerical activities, were considered ideal for productivity increases.

It was considered that productivity increases could be gained with improved information flow, speedier file identification and quicker responses to matters. It was the emphasis on quicker response which encouraged Australia's approach and development of correspondence control.

In Australia correspondence/document control describes registering correspondence, allocation of specific actions, action timeframes and determining dates for action completion. Control tracks correspondence throughout the organisation, monitors its progress towards completion and reports on progress.

Australia is a large country with a small population. There are problems associated with distance and time differences, making communication important. In the early years, communication in any form was difficult. Although this is not the case in the 1990s, Western Australia is a very isolated State over four hours flying time from Sydney and five hours from Singapore. In addition, there remains, from our early colony days, an air of independence between State and Federal Governments. Some States have almost outright antagonism towards each other. In terms of records management, I am of the opinion that WA suffers more than most from being isolated from other industrialised cities. Some may say that this, in the early days of computerisation, was to WA's advantage. The isolation meant that WA had to consider and solve its own problems without being influenced by neighbouring States.

The atmosphere of competitiveness, isolation and a need for independence has resulted in Australia developing systems, both manual and computerised, to meet its own records management needs.

THE PACKAGES

The following packages were reviewed:

RMS
CARMS
FiLCONTROL
Recfind
PARL-AIRS
TRIM
KIS

RMS - COMPUTER POWER

RMS was developed as a joint initiative by Computer Power, the Western Australian Government and the Systems Research Institute of Australia. Formal development of the package commenced in May 1982 and the first completed test version was released in February 1984 (Report for the Public Service Board for the year ended June 30, 1984, p.8). The design and development phase took less than two years.

Computer Power and three Western Australian public servants (Graham Watt, Denis Moore and in particular, Peter Newman) deserve acknowledgement for their foresight in seeing that records management systems could be improved by the computerisation of many transactional activities.

Three government departments were selected to represent Western Australian Government. They were:

- WA Water Authority - an instrumentality
- WA Agriculture Department - a research department
- WA Public Service Board -a policy department

The records management systems of the departments were flowcharted and the results overlaid to identify common processes. Common processes were the transactional activities of the systems, which RMS was developed to satisfy. All government records managers were given an opportunity to comment on the specifications prior to the program being written.

LEADING THE WAY

Once RMS was operational it became obvious that WA was leading the way in the development of computerised records management systems in Australia. The WA Public Service Board and Computer Power spent a large portion of their time showing the system to visitors from other States (Newman, conversation, 1991). The package was developed to improve retrieval, through the powerful free-text retrieval capabilities of STATUS. Whilst placing a heavy emphasis on the "free-text" ability, consideration was given to the adoption of thesaurus facilities. However, the closest application to thesaurus control RMS ever adopted was the use of the synonym facility and text checking ability of STATUS.

At the time it was a state-of-the-art records management package using hierarchical menu systems and clearly defined transaction screens. However, searching techniques were reliant upon the STATUS query language with no user–friendly search screens. This was acceptable to the regular user, but unacceptable to the novice. RMS has the same searching methods today, although Computer Power has indicated that a "user-friendly" search technique will be available in the next release.

RMS is lacking in terms of its reporting ability, its inability to adequately support the disposition of files, its ability to allow the assignment of action procedures for standard correspondence types, and the reporting of the progress of such actions.

Many existing records management systems have benefited from the development of RMS in terms of integration of file and document management and the application of barcode technology for the issuing and tracking of files and

documents. The operations of RMS reflect the manual methods of the government registries. As such, it may have limited appeal to private enterprise or even government registries in other States or countries.

The package is still on the market and has sites throughout Australia and Singapore. In the UK Harwell Computer Power market a product called CORA (Control of Registries and Archives) which is based on STATUS.

Computer Power has indicated that future developments for RMS will include improvements in reporting facilities, retention and disposal management.

CARMS - ORTEX INTERNATIONAL

CARMS (Computer Aided Records Management System) was launched in mid 1987. It was developed with support from the Federal Government under the Industry Incentive Scheme. Ortex applied for, and was granted government support in 1983. It took four years to develop the product ".....with a lot of input form NSW and Federal Government Records Management experts" (Information Retrieval: the Fast Way, quoting Bob Trewin, 1987 p. 32-33). The basic concept behind the development of CARMS was, in Bob Trewin's (the developer) own words, "...to develop a system that did not require continual retraining. It couldn't introduce new concepts from records management practices established over the years. Organisations are not about to change their structure just to cope with a new piece of technology." (Information Retrieval: the fast way, 1987, p.32).

Early versions of CARMS offered an organisation the ability to manage "...three main Records Management types..." which were "File Management, Asset Management and Library Management" (Ortex Australia Pty Ltd, n.d.). The registering of correspondence was included under File Management. This was changed in later versions to be separate from files, which moved it away from the concept of integrated information resources.

CARMS, as RMS, had computerised the manual processes of the government registries. As the processes were simplified and the system totally menu driven with easy-to-follow search methods, it was acceptable to both the public and private sectors.

The selling points of the package, from the market point of view, are the ease of retrieval, and tracking and search facilities. In earlier versions (more recent versions have not been sighted), the disposition facilities were no more than a date field for a review date, and a final disposition field to indicate whether a file should be destroyed or archived. A report was available for files due for review.

The CARMS package is based on "keyword" indexing. There are no thesaurus controls or synonym facilities. There is a "Stop Word" facility to prevent the indexing of commonly used words. In addition, terms (i.e., more than a single word to express a concept) cannot be retrieved without using boolean operators and retrieval of words in correct proximity to one another cannot be guaranteed. For example, retrieving items on the topic Social Security, by using the search technique SOCIAL AND SECURITY, not only will retrieve items assigned the term Social Security but also will retrieve items which may relate to the security of the organisation's social club funds.

CARMS is a mature product still available on the market and continuing to undergo development and enhancements. It is marketed in Australia, Hong Kong, the USA and Canada.

In 1989 Ortex developed a "Master File Plan Utility" to link a thesaurus module to CARMS. This allows operators to determine file title and file notation structures and online thesaurus support. The thesaurus used at the time was the NSW Records Management Office's GADM. Little more had been heard of these developments but the most recent trade literature (February 1991) does make reference to it as being an optional module. Ortex did not respond to a request for information regarding its development history or future developments and as such no further information is able.

FILCONTROL - HAXTON PTY LTD

Harry Haxton conceived a group of records management packages in 1984. The first installation was in 1985. Each package was developed to satisfy the requirements of a particular size records management system. FiLCONTROL was a total system for the mainframe environment whereas Fileclerk was its baby brother for the PC environment. Other packages in the family were:

DocControl
DocClerk
DocClerk Plus
Freedex
Freedex Plus
Kwokfile
Kwokindex

Harry should be acknowledged as the developer of one of the first group of packages to be designed and marketed independently of any government involvement. That is not to say that the processes applied in the FiLCONTROL group of packages were not those applicable to government departments. In fact it was noted by those attending a demonstration of the packages in Western Australia in 1986 that the packages were "...skewed towards government..." (Hoo, unpublished, 1986). This point is further enforced by the list of users in April 1986, all of which were government departments (Haxton, unpublished, 1986).

One feature which was unique to the packages at the time of their development was the ability to construct a thesaurus online and access for both file titling, assigning of additional subject terms, and searching. It was useful to be able to search on a forbidden term, and be told what was acceptable and then, by the press of a key, have the system search the approved term. In addition, one was able to include homonyms in the thesaurus and indicate clearly the definition of the term. The power of thesaurus control allowed retrieval by either word or term searches.

The FiLCONTROL group of packages are no longer on the market. However, Harry has recently released a new package using the product name FiLCONTROL. This product does not resemble the original product referred to in this paper. The new product continues to address indexing, movements and tracking and has also included correspondence control due to market demand and imaging (Haxton, taped response, 1991). The product has moved away from hierarchical classification and thesaurus control. It now provides "keyword" indexing of the title with no vocabulary control. It is aimed towards the low-end personal computer market.

RECFIND - GMB RESEARCH & DEVELOPMENT PTY LTD

Recfind was conceptualised in the mid-1970s by Frank McKenna, the developer and managing director of gmb research & development. It took two years to develop and was released in June 1986.

Frank's first attempt at development of a computerised records management system was DocFind, designed and launched in 1984. DocFind

was an attempt at a totally integrated information system where one system could "...be used to control any systematically ordered collection of information, whether that information be stored in files, documents or any other form of media (cassettes, films, diskettes, etc.)". (DocFind Trade Catalogue, n.d.). The project was too ambitious for the time and it was appreciated that different types of information were required for the indexing of files than for the indexing of a book. It was decided that resources would be allocated to developing a records management package, RecFind, and a library package, LibFind, as stand-alone systems.

RecFind was developed independently of any specific user request. However, the specifications, once written by Frank McKenna, were "...reviewed by a collection of 'friendly' records managers in the public sector. ...The final specification for release 1.0 reflected the combined requirements of these departments rather than any one user." (McKenna, unpublished, 1991). The influence of government is apparent in the package. However, it has developed its functionality over the years which makes the package acceptable to both the private and public sectors.

RecFind's strength is in its integrated approach to file and correspondence control. It allows correspondence to be registered as a loose document, or as a folio of a file, and allows the tracking of both documents and files. In addition, multiple actions may be assigned to a document and it provides reports on the progress of the actions as they become overdue. It also supports disposition functions with a disposal schedule facility.

RecFind does not support the construction or maintenance of an on-line thesaurus. Its thesaurus function allows identification of synonymous terms which are included by the system when a search of such a term is carried out. The reason given for not pursuing thesaurus development was that "...we did not believe there was a place in RM for a 'standard' keyword thesaurus (and we still don't!)" (McKenna, unpublished, 1991). The system allows vocabulary control, by applying a file title standard. The standard determines the words or terms which are acceptable at any level of the four level title field. The system may be configured to apply standard terminology to one or more of the four levels, providing for total or partial control over the construction of file titles. Further, a hierarchy may be established identifying words or terms which may only appear after the selection of a particular term which may only appear after the selection of a particular term in the previous level. This method of file titling follows the concepts of Keyword File Title Classification, without allowing allocation of definitions to terms defined. The system reflects an appreciation for the need to establish a controlled vocabulary for file titling. It appears the policy of the NSW RMO to enforce the acceptance of the GADM "warts and all" has confused the developers of RecFind. gmb seems to think that providing online thesaurus support means the enforcing of a standard terminology for all organisations rather than providing organisations with the tools for building their own terminology, including definitions.

RecFind is a marketable product available in Australia and the US. Attempts to market it in the UK were unsuccessful, although it was available through a distributor in December 1990. Future development of Recfind is moving towards integrating imaging facilities. gmb is also setting goals for 1991/1992 in terms of ensuring that Recfind is able to "...interface to E-Mail (Electronic Mail) and faxes" and "....support the electronic transfer of documents such that the physical movement of a document will be rarely necessary" (McKenna, unpublished, 1990).

PARL-AIRS - DIALOG INFORMATION TECHNOLOGY

PARL-AIRS (Parliamentary - Alemson Information Retrieval System) began its development in 1975 through the requirements of the Queensland Parliamentary Library. It was originally known as AIRS and became PARL-AIRS in 1984 when it was enhanced to meet the records management needs of the Queensland Premier's Department. Dialog was contracted to develop the system (Dialog Information Technology, c. 1989, p.2) and although it owns the marketing rights, the system is owned by the Queensland Government. The product was originally marketed by the Queensland Government with its release in 1986. The marketing rights were then transferred to Dialog in 1988.

The package is module-based allowing users to adopt only one aspect (ie, just the library system) or a fully integrated system which allows control and access of information through one system. PARL-AIRS markets its powerful searching techniques which can be carried out across a number of databases.

The system supports all standard public sector records registry requirements and is particularly strong in its thesaurus support. It appears to be significantly lacking in the monitoring of action timeframes for correspondence, and the management of the disposition of records. Archiving in this package appears to be in terms of purging files and folios from the database onto secondary storage, to ensure the database does not grow too large. There have been concerns by users about the complexity of search language - as a result Dialog will develop an "Easy Search Module" for novice users (PARL-AIRS News, March 1991, p.6).

Until recently, the package was limited to the VAX/VMS market. It is now available under Unix. In March 1991 it had been installed in 14 sites across Australia, all government departments. Dialog is planning future developments to integrate an imaging system with the package (PARL-AIRS News, March 1991, p.6).

TRIM - TOWER COMPUTING

TRIM (Tower Computing Information and Management System) was conceived by Brand Hoff, the Managing Director of Tower Computing Services, in 1984. It was launched in the market in 1985, after two years of development.

It was developed independently of specific users' requirements, although it appears that it was developed with government registries in mind. In fact in 1987 all 45 installed sites were government departments and a large proportion of these were regional or divisional offices of Commonwealth Government Departments (Tower Computing Services, 1987).

TRIM is one of the few systems which supports online thesaurus development and thesaurus support for file titling and retrieval. It is a module-based product which includes:

TRIM Accountant - financial management

TRIM Fixed Assets Manager - asset tracking

TRIM Departmental Delegations Manager - managing delegations

TRIM Registry File Manager - records management

TRIM Correspondence and Folio Manager - document and action tracking

TRIM Librarian - information resources

Not all products were developed at once. They are designed to operate as stand–alone systems or as integrated systems. For example, the TRIM Registry

File Manager allows for the management of files from creation to disposal. It can be integrated with TRIM Correspondence and Folio Manager for management of documents as loose items or attached to files. The user may enquire on loose correspondence, attached folios or complete files. Regardless of what type of item is retrieved, the system allows quick access to determine the contents of a file or the location of a file, if only correspondence was retrieved.

Enhancements continue to be made in an effort to meet user demand and increase market potential. The last release of TRIM included 150 enhancements (Hoff, unpublished, 1991). The system allows users to interface with word processing and has the facilities to interface with imaging systems and electronic mail.

KIS - EDDIS LINTON

In 1989, J. Eddis Linton was responsible for the developed Keyword Indexing System (KIS) to support his concepts of Keyword File Title Classification. The package is a PC system. It meets the requirements of Linton's system of classification and control over files. The system supports the production of a list of keywords, with definitions and listed forbidden terms. Linton's Keyword Thesaurus, with definitions, is included with the package and may be amended to meet user requirements. There is, however, no provision for inclusion of descriptors in the thesaurus. There are no correspondence/document facilities. Bring-up and file tracking facilities were not available in the original release, but have been included in the 1991 release.

The package addresses records management from a completely different perspective. This reflects Linton's conviction in his approach as he devised the original manual system for the private sector.

THE FUTURE

The future for Australian Turnkey Records Management packages seems to be with imaging technology and integrated information systems. Both TRIM and RecFind have allowed for an integration with imaging technology, as has the new FiLCONTROL product. Imaging technology was available in the mid- to late-1980s, however, the cost of such equipment (because imaging software was predominantly hardware specific), meant development and planning was subject to availability of cost effective equipment. In 1991, imaging technology was significantly less expensive and the graphics technology of standard PC terminals allow reasonable quality image display. I feel that records management systems, as Australian Records Managers know them, will transform in the next three to five years into what Marita Hoo calls "document/correspondence management systems" (Hoo, 190, p.14) which will allow both scanned images and text files to be:

- indexed
- distributed
- assigned to action officers
- assigned action procedures
- monitored to ensure the progress of the actions assigned
- retrieved on-line and
- amended or annotated

In addition, the systems will allow records managers to manage the information in terms of reporting facilities and interfacing with word processor and spreadsheet software. Managers will be able to present statistical data relating to the system's performance indicators graphically, and numerically. It will allow responses to incoming correspondence to be generated through word processors which access information such as the name of the addressee, the address, the subject of the correspondence and the reference number or classification of the item from the records management system. These facilities are available now. However, the developers are ahead of user demand and many users are not yet ready to meet the challenge of the new technologies. Many feel safe with their paper-based systems, using the current batch of records management products as computerised manual systems. In addition, there is the feeling that developers of correspondence/document control systems are "force-feeding people with the need to over index...[and]...improved methods of file classification would solve many of the problems experienced by records managers" (Haxton, taped response, 1991).

CONCLUSION

While not being exhaustive in the review, the major packages and players in the development of Australian Turnkey Records Management systems have been mentioned.

There are many records management systems which have been developed in–house and there are other packages on the market which provide computerisation of records management systems, but they are not off-the-shelf systems. Systems such as Paperchase and Recman allow for development to meet specific user requirements. They have the functions of records management systems but could not be considered to be "purchase, install, switch-on and operate" systems.

As demonstrated in the overview of the packages, computerisation of records management has been significantly influenced by government and its demand for increased productivity. The private sector seems to have been unaffected or uninterested in records management, at least in terms of turnkey packages. From my experiences in mining and exploration companies, there is evidence that this industry has an appreciation of the value of information but chooses to develop in-house rather than select commercial products.

GADGET MENTALITY

Australia is a "gadget" country. It "...has long been a 'proving ground' for Japan vs United States products and there is an innovative approach" (Hoff, unpublished, 1991) to systems development. The inhabitants have taken wholeheartedly to computers, compact disk players and especially mobile telephones. With this mentality it is not surprising to think that the concept of computerising records management systems should be seen as anything other than a normal challenge. In addition, the latter half of the 1980s has seen Australians exhibit a greater appreciation of information and, as such, the market potential has increased. This is supported by Frank McKenna's statement:

"In 1985 we probably saw no more than six or so tenders for a computerised records management solution. In 1990, practically every public sector request for information or request for tender included a section on records management." (McKenna, 1990, p.1)

When I consider all the packages that I have reviewed and evaluated over the past six years I have still not found the ultimate package. Duggan sums up the feeling of frustration when she states: "Each package has its own strengths and weaknesses. One may be strong in language control but poor in the archival area. This of course is very frustrating. It appears that if one of each package was acquired and by some magical process they could all be married together perfection may be reached." (Duggan, 1989, p.9)

The packages which have a strong position in

the market place are those which have adopted an integrated approach to information - developing vocabulary controls, tracking facilities and correspondence/document control facilities. These packages are being further developed to address integration with other information technologies.

The future for Australian records managers is exciting, if they are willing to take up the challenge. Australian turnkey records management packages have met the demands and needs of government in the past, as they pushed for development. Developers see the potential of new technologies before record managers, and integrate them with existing systems. Packages are ready to meet demands of the new breed of record managers who are still considering the same issues of control, management and increased productivity.

SHIRLEY R COWCHER

B.App.Sci (Lib 7 Inf studies), Grad.Dip.Comp. AALIA, AACS, ARMA

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TIME CHART FOR THE INFLUENCES OF RECORDS MANAGEMENT AND THE DEVELOPMENT AND RELEASE OF REVIEWED PACKAGES

WA Functional Review of State Archives	1989	KIS released
SA Public Records legislation drafted	1987	CARMS released
	1986	RECFIND, PARL-AIRS released
SA Public Records Office established	1985	FiLCONTROL, & TRIM released
Commonwealth Archives Act effected	1984	FiLCONTROL, RECFIND, PARL-AIRS commenced development. RMS released
NT Archives transferred from Aust Archives		
Commonwealth Archives Act passed	1983	CARMS commenced development
TAS New Archives passed		
NT Archives Service established		
SA Archives Act embodied in Libraries Act	1982	RMS commenced development
		WA RMAA Branch formed
Vic Government Review of Rec. Management	1979	
NSW Archives Authority given responsibility for the NSW Records Management Office		
NT attainedSelf-Government		
	1976	Qld and SA RMAA Branches formed
NSW Records Management Office formed	1975	
Commonwealth names Australian Archives	1974	Australian Society of Archivists formed
WA Archive Legislation embodied in Lib Board Act		
W. K. Lamb report recommended Federal Archives	1973	RMAA registered as a Federal Assoc.
Vic Public Records Act passed and PRO established.		
	1972	RMAA Federal Constitution Drafted
	1969	Inauguration of NSW & Vic RMAA branches
	1968	Vic and NSW RMAA Pilot Committees formed
Tas Archives Office established	1965	
Commonwealth Archives Office in National Library	1961	
NSW Archives Act passed	1960	
Qld State Archives established	1959	
Qld Libraries Act proclaimed	1958	
WA J. S. Battye Library formed incl. State State Archives	1956	
WA Library Board took on archive responsibility	1955	
Vic Archives Division of State Library formed		
Inaugural records management seminar for Commonwealth Department Records Managers	1954	
NSW Archives Department of Public Library	1953	
National Library Archives Division established	1952	
	1950	NSW Business Archives Council Seminar
WA Archives Branch of Public Library	1945	
Commonwealth Archives program commenced	1944	
Qld Libraries Act proposed	1943	
Tas Public Records Act passed		
SA legislation to protect archives passed	1925	
WA State Archives Board appointed	1923	
SA State Archives established	1920	
Vic deputation to form Public Records Office	1919	
WA Principal Librarian Custodian of Archives	1903	

GET ACTIVE, OR GET ARCHIVED

HOW TO USE TECHNOLOGY EFFECTIVELY IN INFORMATION MANAGEMENT

The profession seems hesitant, uncertain, reluctant to leave the culture created by paper based records management and venture beyond, among the technocrats, to claim its rightful place at the head table of the information management age. Why can't we see the obvious? Truth to tell, we often can't see: the picture we paint of technology is vague or incomplete, an ephemera of short-lived expectations cloaking a long period of difficult transition. I would like to suggest a set of navigation tools, principles that will provide you with confidence, and a high chance of success in the journey away from paper-dominant systems. This is a hitchhiker's guide to the possible.

We will look at the now, at techniques and tools of the present or immediate future and we will attempt to prove that the records manager, if not the Captain of the Enterprise, is surely the only candidate for Lieutenant Spock.

NEW LEGISLATION

Australian business, as we see daily, is not a pro-active enterprise. Rather it is hide - bound and works at preserving the status quo. Our executives look to the future to determine how they will be viewed for their behaviour today not to assess opportunity. In this environment the emergence of new leglislation is a powerful motivating force for change.

Federal and almost all State legislatures are now preparing or enacting new evidence legislation. This will change forever the role of the records manager; to either that of an archivist or of an essential member of the organisation's strategic evelopment team.

NSW EVIDENCE BILL 1991 DICTIONARY OF TERMS USED IN THE ACT

Document includes:

a. Anything on which there is writing; and

b. A map, plan, drawing or photograph; and

c. A thing from which sound or visual images (including writing) are capable -with or without the aid of a device - of being reproduced;

d. Any thing on which there are marks, symbols or perforations having a meaning for persons qualified to interpret them, and also includes a part of a document (as so defined) and a copy, reproduction or duplicate of a document or of a part of a document.

This Legislation gives equal merit to records in all their guises and makes spurious a Records Department that concerns itself only with paper. I have never seen a better excuse to stand before the Board or the Minister and demand increased control. You could abjure the responsibility, renounce forever your right to contribute meaningfully and retreat behind a wall of suspended files, hanging like your aspirations.

I know records managers will not take this negative course but will welcome the chance to contribute more to their organisations. This legislation provides the legal, moral and economic justification to assert records management authority over all aspects of information management in the organisation. This must occur to ensure the future security and efficient operation of your organisation.

Therefore we shall assume that, like us, you now believe that records manager is a poor description of your role. You are now record information managers, responsible for all records covered by the legislation with an input into the procedures that create and use those records. We shall also assume that you recognise your MIS manager, and his favoured DP vendor, as your mortal enemy in the battle for the future and you will stop at nothing to ensure your victory.

We shall now discuss the real trends in information processing, how they impact your role and perhaps how you should view them.

EDI - ELECTRONIC MAIL

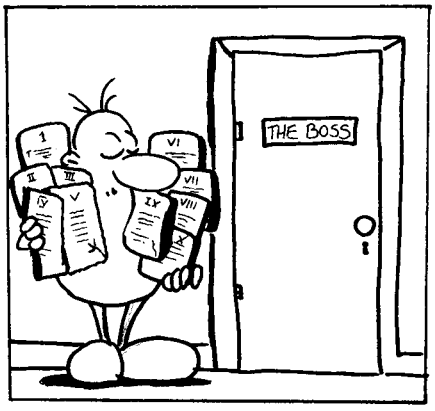
Most of us are aware in the broad sense of Electronic Data Interchange, the process by which business documentation can be exchanged electronically through computer links. In reality, the nature of its adoption requires an unusually tight and effectively controlled set of standard procedures.

EDI is a "many to many" relationship. Purchasers of products are able to transmit purchase requests to many vendors who are able to transmit delivery and billing documents to many purchasers. To establish the myriad individual links is impracticable so the key players are vendors of EDI services who provide the hub.

All messages must route through this hub of which there are seven major providers in Australia employing either the ANSI X.12 or EDIFACT standard. These standards designate everything to do with possible document constructs and variables in terms of range.

The new legislation ensures that these electronic records now enjoy the same evidentiary weight as a paper record would. However, who has

responsibility for storing these records? Who has responsibility for ensuring that these records are unaltered - that the latest version is maintained - that searches of the organisations information file turn up all EDI records that might contribute to the integrity



of the response? In most applications this role should be assumed by an internal record keeper whose responsibility is to store, file, maintain, ensure version integrity and audit the data.

When we began the Canon records manager Student of the Year Award this year the topic was EDI and records management. We asked the Vice President of the Australian EDI Council to be a judge. His first statement, on reading the entries, was that he had not realised until then the need for records management on EDI transactions.

A key role is to wrap the electronic record in proof. Through recorded circumstance, coding and attachment ensure that the validity of your version of the record can be substantiated. Mercy on your organisation if these roles should be left to the EDP Department.

Some from Government Departments may wish to avoid this issue having determined that they do not trade, therefore will not indulge in EDI. Government is the main user of EDI services within Australia. Government is now in the business of selling services and information. Because it comes from such a low technological base and is so often the sole supplier, it is able to adopt EDI quicker than many commercial enterprises.

All the requirements for EDI apply to E-mail; only more so with the increasing tendency to send electronic memos and the adoption of PC networking systems which inherently encourage this practice. I have yet to see one implemented E–Mail solution with a records management component.

Recently I attended the Victorian Conciliation & Arbitration Commission where I watched an employer lose a clearly justified dismissal case. This not uncommon circumstance was due to the employer's reliance on E-mail to send his warnings and instructions. The employer could not prove what he had done and, he didn't even have transcripts, just his recollection.

E-mail records are often vital records as they are made in the heat of the moment. They are essential elements of the complete record and must not just be stored on some dusty tape in the archive but "filed" with all that implies in indexing.

As records managers you know that being able to produce half the record is often worse than none. Your Company is at a strong commercial and legal disadvantage if a file does not mean a collection of all relevant information.

THREE TECHNOLOGIES

Distributed processing, downsizing & client server computing are component parts of one overall emergent trend that seems to have irresistible logic and impetus. This is the desire to do away with the artificial constraints imposed by mainframe EDP systems and replace them with more flexible, human-enabling devices that more closely reflect the way organisations want to work.

More than any other trend, this power sharing process will affect the records manager's organisation and consequently more than any other process will require his or her input.

When computers appeared, they had great difficulty in contributing much to the workplace - only the largest of systems had sufficient power to undertake task processing, so of necessity these expensive behemoths were centralised and tasks were restructured to accommodate the computer. This was the only method that would ensure these devices were cost-justified.

BINARY BAPTISM

Around this centralised computing requirement grew up a whole raft of head office functions and cultures, not least of which is records management. We humble workers fought with each other for the attention of the machine's acolytes so that we could be the first to prostitute our Department's needs and become computerised. Being chosen for the next EDP project was like a binary baptism, only more akin to mental circumcision.

Centralised data processing is the second last great bastion of the bureaucrat, the final manifestation of that colonial management system that dictates we are far too ignorant to be entrusted with performing work as we determine - rather it must be systematised, flow-charted and controlled. We are not to be trusted with a desire to perform or the ability to think.

Distributed processing is the process of putting computing power with the users, spreading the dollars and the machinery around to where it is most useful. This puts flexibility into the system, work groups and individuals create, store and process data in the manner they deem most suited to their task, as the task itself changes frequently to adjust to the market.

Distributed processing is inevitable and its growth in the last two years has been extraordinary. Already it has the twin children client server computing and downsizing which are methods of implementing distributed processing.

Client server computing is a very difficult system involving multiple protocols and standards and has been the subject of heated debate within the industry as to the actual definition. DP people shroud it in complexity beyond the ken of we mere mortals.

Large servers maintain corporate databases and provide access to many little clients who grab the chunks they need and process them. Typically, they are Unix servers and PC clients.

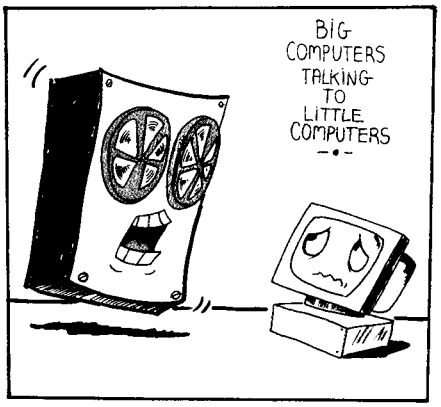
Downsizing is even more revolutionary. Although disillusionment with the major computing vendors and their solutions has been obvious for several years, the rapid advance and acceptance of downsizing has stunned even its biggest boosters.

Downsizing is simply throwing out that expensive mainframe and all its life support systems and putting in PC networks. This is the ultimate expression of faith in people - not the machine.

To understand the scale of the revolution, look at the Commonwealth Bank, a Government organisation. They recently downsized their back office support function at 250 odd branches to a network of a thousand PC's. The bank firmly believes this will provide the tools and incentive for its staff to provide significantly better customer service. They are also saving a fortune in both capital and running costs.

Do not make the mistake of believing that either your MIS Department or your vendor is nescessarily on the side of distributed processing. Far from it! Many talk the words but their meaning is likely to be entirely different. I completed my

education in computing in the mid-seventies in the mainframe/mini environment of that time, and recently had the opportunity to catch up with half a dozen of my class mates who are now all MIS managers of fairly large EDP Departments. Amongst other questions, I asked them if they were adopting distributed processing and its allies. Five



confirmed they were, yet not one of them explained that they were trying to put processing power into the users hands. In fact, the one benefit they all agreed on was - "It would give me control over all those PC's out there".

Why is this trend so vital to you? On the first level you will gain the flexibility advantages in your Department. You will be able to develop and implement timely and inexpensive solutions and grasp opportunities to provide better service. On a second and more fundamental level it affects your whole operation. As DP services decentralise so do the processes of creating, altering, receipting and using records. There will now be many different formats those records take, yet you are still responsible for them and for wrapping them in your services.

Don't throw your hands up in despair! This is not a disaster but an opportunity. All those users running around changing things need your skills more than they ever realised under the old structure. Just as with EDI, you need to wrap the information in proof, provide integrity and classification etc. And to do this truly well, you will achieve it without insisting on specific platforms or lots of rules. Unlike the MIS manager you will provide service through the flexible application of your skills, thus increasing the value and status of your services.

I said that distributed processing was the single most significant factor in the records manager's future. I also said that centralised DP is the second last bastion of the bureaucrat. The records repository is the last. Although a significant part of the records manager's role is ensuring retention of a true and accurate record, providing systems for the retrieval of this information and the control of access and maintenance, it does not follow that records have to be centralised to perform these functions - it's just easier.

It does follow, however, that if DP and the electronic record is to be distributed then a powerful imperative exists for distributing the paper record as well.

This does offer a great challenge to the records manager, either to stay in the paper castle which will become merely the repository for all that is old and unwanted - an archive; or to transfer your skills to the new reality. To learn to impose your disciplines on a widespread information store. To undertake the creation of controls that ensure version integrity across many sites and over many potential systems. The maintenance of a Recorded Information system consisting of many types of data that is dynamic and supportive of the business function.

Simply, this challenge is to ensure that the records manager has a function in the new order and that it is "a warm place in the field", under fire, but at least, in the arena.

We must view this challenge as the opportunity to establish the records manager's further importance. Get active or get archived.

OBJECT ORIENTED PROGRAMMING AND SQL

Two other technologies enjoying rapid adoption are object oriented programming and structured query language. Again, these techniques are influencing the environment for records management, hopefully with our co-operation.

Traditional programming, like traditional computing, was task oriented. It required the careful analysis of each task, issuing a licence, and paying an invoice. Each step had to be carefully plotted and allowed for. To work there could not be allowance for movement outside the system. This straightjacket is ideally suited to centralised control and monolithic systems.

Object oriented programming defines not so much tasks as individual procedures and the data they relate to. It begins by defining an object, say an invoice, and then defines what procedures or tasks can be performed on that object. To change the way we do business does not mean rewriting our entire systems, simply changing the tasks associated with an object or creating another object. This non-procedural architecture more accurately reflects the way we prefer to function and the fluid nature of our environment. It also changes the way we look at a record. A record becomes not the result of a process but rather part of a process or multiple processes. Any record belongs intrinsically and potentially to thousands of objects. A record is potential not history.

SQL, relational databases, query by example and all the other offshoots should be the second major impetus for change in records management. They fundamentally alter the way an RM Department should file data by challenging the principle tenet. We should no longer file. If filing is the process of attaching a newly receipted document to a file then this should stop. Why do we file? It is because a document belongs somewhere. This is a tradition forced upon us by paper and old computer systems. A record does not belong anywhere in particular; it intrinsically belongs to thousands of potential files depending on which aspect of the record is being viewed at the time.

A file is nothing but a search of your records at the wrong end of the cycle.

Of the entire database of records held, we search by creating subsets, perhaps broad to start then slowly tighter until we have achieved the desired set of conforming documents. Historically, we have aided this approach by attaching each and every document at the time of creation or receipt to a group. With old technology this was the only practical way to find that document again. However, it serves the purpose of limiting our view of that document to one overriding and fairly arbitrary aspect. We have put the record into a subset before we even begin searching.

We then spend the rest of our time trying to overcome this limitation by talking to vendors of technology and asking them to show us ways around our self imposed filing limitations.

Almost any record could reasonably belong to many files if we were free to create any file that circumstance required. SQL allows us to create files on demand - give me everything on Adams John, any subject excluding health, over the last three years, where the matter is still active. This is a file but created at the correct end of the cycle, on inquiry. This "what if" search capability is available

to your users for all their other data. They will expect it from you.

Each document must be an entity in its own right. Described fully as to its contents and thus available to all users under all circumstances including the ones we cannot think of yet. Files are ad hoc creations for the moment, created to meet a need now, then discarded. One document can belong to many thus ensuring it always belongs where it is vital and needed. This allows into our records system the flexibility we are beginning to see from our DP systems. The processes we have discussed so far are not really technological issues. Certainly, as trends, they are enabled by new, powerful microprocessors and advances in operating systems. However the impetus for their development has been the changes occurring in the workplace. They are an expression of the new management belief in empowering employees - these trends are attempts finally to provide what the user wants.

Too often, when speaking to our clients, we approach technology from the wrong stance. Whether expressed or not we look to technology to drive our development. Hence, we become paralysed by possibility, captives of a future not real because we are not defining our own version of the future; rather we are trying to determine how we will react to predicted technological forces. Technology as the master not the servant.

In too many organisations I see senior management looking to the MIS centre as some all-seeing oracle. Tell us the future and we will structure our business accordingly. This structure is embodied in the "Strategic Plan". I wonder why we reject all sorts of quackery normally but are only too quick to mortgage our future to a breed of people that spend 90 per cent of their waking moments talking in some arcane language to machines.

Strategic imaging plans are not worth the brain cells they were created with - typically not much of an investment.

We have touched on some current technologies that we believe will dramatically impact progressive records managers. I want to now talk about some futures if only to illustrate some poor thinking in the present. Events in Europe show us that in the age of news conditions can change with a rapidity beyond our conception. For the first time we see an environment where desirable social goals might well be achieved and therefore we cynics must review our definition of the possible in human affairs. We have already seen that systems are in place to put data and processing power wherever the worker is; we have seen that management principles are changing to where granting more autonomy in work practises is seen as beneficial. We know that more than 50 per cent of the population is now employed in services; taken all together my prognosis is that the home office may soon be a reality and RMs will have to deal with it. In fact many already should.

Three things stopped the home office the first time around in the early 1970s:

1. The corporate culture precluded it. This has changed.

2. Man is a gregarious creature; we don't like to work alone. Well, now we see people form themselves into small, one to five work groups which provide company.

3. Finally, technology could not truly support it. Now it can in terms of software and processing power. There remains only one obstacle - network capacity.

Current network technology is far too expensive to link to every home and to operate at image or other business traffic densities. At this point it is still more efficient, for most job classifications, to spend $11,500 a year to park bottoms in Queen St, socially undesirable as it is.

I believe the solution might be under our nose.

72 per cent of Australian households have video with an average cost of about $500 for the drive and a similar sum for the monitor. What's more the monitor has potentially thousands of interfaces built in.

Some time soon our airwaves will be opened and two new technologies will join the everyday: cable and pay-to-view satellite. Suddenly we have an inexpensive, high band - width stable network available to all. Network performance is the single biggest inhibition to the widespread adoption of imaging technology. Video could well be the answer except the resolution is terrible. However HDTV, (high definition TV) is on the way. Now everything is available, cheap recording equipment, cheap, mass produced, reliable playback gear and a universal, no-problems-with-standards, network.

Now if you are one of the MIS people I have suggested this to you will invariably say to me, "Oh yes, but there is a problem. It takes much longer to search for an image on video than on OD because video is a linear medium whereas OD can be searched more directly". This is a good example of a furphy. The exact same statement is made about microfilm with the same amount of substance.

The fastest imaging systems in this country at the moment are microfilm-based CAR. I know of several of these where the images stored are in excess of 10 million yet any individual record can be screened in under 30 seconds. I have yet to see this in a working environment from any OD system including Canon's. The video player you have at home is probably much better than my six-year-old Canon. But my video in fast search mode over that same 30 seconds covers 66,000 still video images - in colour, far more capacity than any OD or other media. It translates to 23 minutes of video playing time. The extraordinary thing is that at this point as soon as we leave paper we are also forced to leave colour. The next great barrier to be overcome is colour. Canon invented digital colour photocopying and printing and we also created still video. Prices have fallen effectively 60 per cent in the last two years so there might be colour in our future sometime soon.

ARTIFICIAL INTELLIGENCE

A very quick discussion of artificial intelligence, fuzzy logic and neural networking.

All these systems are simply aimed at making computers more powerful through fundamental restructuring of the architecture. The key area of interest to us is the potential they have to improve OCR reading dramatically and to automate document classification, key wording etc.

When they become commercially available as application development tools they will offer these enhancements, but they will serve as aids to the records management function, not a replacement. You will still need to design and manage the thesaurus.

The measuring stick for the success of R&D effort worldwide is taken to be the number of US patents a company can achieve each year. Over the last ten years the most successful and innovative companies in the World have been Hitachi, Toshiba and Canon, who each regularly top the table with about 900 new processes, techniques, chemicals, etc, every year.

Thus, I am more privileged than most in that I have some idea of what is in the labs, of what might be possible and the general thrust of R&D, yet I cannot with any confidence predict the imaging

industry two years out. However, if I do want to know what is going to happen with absolute certainty I forget about Tokyo and go and ask the nearest MIS manager who will tell me all about the next five years.

All that any responsible individual can do in such a volatile industry is to fashion an environment that can readily accept whatever new technologies come along. To build a system based upon standards and principles and feel that this will protect you from change five years out is ludicrous. This builds an expensive commitment to platforms and tools rather than a system from components that are cost justified in themselves to perform the task for the next five years whilst being dispensable.

The true indication of an effective information management strategy is not how stable the components are, not the adoption of indispensable elements, but that every individual component is readily dispensable.

Technology should be throwaway, whereas we see huge investments in enterprise wide systems which by the time they have reached the goals set for stage one, will be obsolete. So much emphasis is placed on future proofing, we never enjoy benefits in the present.

The best possible assurance for your future is that no single component's investment is so great you cannot afford to throw it away when something more cost - efficient comes along.

To delay enjoying the fruits of technology now while you spend a few years building an orchard means you can starve before your trees bear fruit. What's more, no one can truthfully predict what fruit your trees will bear - they might be lemons.

One example from our industry: WORM research is 20 years old. Media 10 years old and the first commercially available systems about eight years old. I remember as late as 1987 the industry pundits and experts were predicting commonly available erasable media by the turn of the century.

Yet, Canon released the first erasable drives in February of 1988. More importantly the technology had been sitting in our labs unused for ages until Steven Jobs, one of the founders of Apple, saw the drive and decided to use it in his revolutionary new work station, NeXT.

Since we released that first MOD drive, many other vendors have announced product to where this second graph shows something amazing. WORM is dead. Most major manufacturers have stopped making it, Canon included. It's too slow and very inflexible.

WORM died before it ever got started, yet was supposed to be one of the key technological advances of our time.

By the way, you are feeling uncomfortable now because you feel WORM can be archival while erasable is not. This is another furphy: they are identical. Both can be altered in exactly the same way which is the same as paper. If you delete the index or can't find the original document, you can then replace it with an index to a more desirable copy. This is the only way you can alter a record on either WORM or erasable and the reason, both will be equally valid under the new legislation.

IMAGING SYSTEMS

Let me suggest an imaging design that will provide inexpensive entry into imaging while giving you disposable components. Firstly, media. Many people place a thoroughly unwarranted importance on media, probably the least important decision you must face. Media can be chosen on hard empirical evidence. The decision should never be subjective except in one instance: historical imperative. I would hate to think that the Magna Carta could only be viewed on CD-ROM.

Too often we see organisations struggle with media issues on the basis of future possible, not today's probables. Accordingly, they reject perfectly valid current options at fractions of the cost on the basis they might wish to take advantage of new technologies around the corner.

A classic example was a freight company dying under the burden of 15,000 proof of deliveries a day. Their MIS department would not let them go to a sophisticated microfilm CAR system that was fully cost, justified as they felt they might go to OD in two years when the costs came down. They had determined OD media was too expensive for the moment. MIS said that microfilm now would cost them too much, as they would have to convert it all too digital when they upgraded later.

We pointed out to the managing director that 99.5 per cent of all enquiries happened on documents less than 90 days old. Therefore, they could change to a new system any time in the future without spending a cent on conversion while enjoying real benefits now!

The real definition of "Future Shock" is that for a lot of dreamers there won't be one.

ALL IMAGING, NO SUBSTANCE

Despite all the publicity, implementation of digitally based records management systems remains a non-event. A quick analysis of our estimates of the installed base in the three markets of interest demonstrates two points:

IMAGE PROCESSING SALES

	TOTAL	DEPARTMENTAL
JAPAN	8,000	7,500
USA	4,000	1,500
AUSTRALIA	150	100+

1. Despite the interest, a very low adoption rate after eight years. Sales of four thousand in the US market is a drop in the bucket. IBM can take as many orders for a $100,000 computer system in a week.

2. Unlike the US market, Japan shows a huge proportion of "stand - alone" systems and a relatively higher adoption rate.

In discussing these points, an understanding of why you and others have not utilised these now old technologies might be gained. Although Japan was active in the development of optical media from the start, the early push in system design and creation came from the US and was driven by a very unusual and strong imperative: the urgent need of the insurance industry to improve claims processing.

Claims Processing (CP) is the function of receipting, vetting, compiling and approving or rejecting your claim on an insurance company when something unfortunate happens. It is an extraordinary application, as unlike almost every other paper based process in the gamut of human affairs, it is entirely logical and process driven. Only about twelve steps are involved and at each there exists usually two, maybe three options such as:

"Request more information" or "Move to the next step" or "Reject".

The first movers and shakers in creating systems were founded on providing solutions for the CP application and were almost entirely funded and owned by insurance companies.

Unfortunately, this early concentration led to the development of systems predicated on two unsound principles:

1. That systems need to be large with stations on all workers' desks.

2. That "work flow" programming is an essential element.

Most RM practitioners know that a very small percentage of the functions we perform can be "programmed" or, in fact, predicted with any accuracy. We dwell in the real, human world where decisions and processes may take many courses, bound only - we hope - by procedural guidelines. Few applications are as easy as claims processing.

Another challengeable assumption is that the more data on the system the better it will work. All information should be available to everybody. This accords well with the new age slogan, "The Information Age", and is advocated by the same production team that brought you the exciting Sci-Fi adventure, "The Paperless Office". I have always found slogans dangerous. However, asked to nominate a favourite, Alvin Toffler's, "Information Overload" would contend. The computer vendors who touted the paperless office have a vested interest in promoting the concept of a total information store, an Enterprise Wide system: it means they continue to maintain control of your site.

You have to have some concerns about taking advice from people on how to manage records when those same people created most of them while saying their systems would reduce paper. How many of us believe those big computers in their special rooms with their team of expensive acolytes crunch numbers efficiently, let alone exhibit the necessary talents to handle the real work?

These large, monolithic and expensive "enterprise wide" imaging systems are just all too difficult and require too great a leap of faith. Perhaps this is why few imaging systems are installed and fewer still producing the goods.

Here lies the dilemma: most of us appreciate the intrinsic benefits available from imaging; however we find ourselves unable to adopt the technology. As a vendor I am vitally concerned with this problem, so I posit an alternative implementation strategy.

Enterprise wide information systems exhibit several characteristics. They must revolve around corporate platforms meeting corporate needs, which means:

- They must be all things to all people, servicing the needs of the warehouse and the board, essentially the common denominator or that worst of all things, a compromised system. There's an oxymoron if there ever was one.
- They require a strategic decision. The investment demands determination of at least the next five years' organisational goals, structures and commitments. The only thing I know that is planned out that far ahead is daytime TV.
- They are communications dependent. The critical performance issues are all determined by the investment in network capital and operational costs, which are enormous.
- We are told the true benefits and cost justifications will finally be realised when the volume of information available on the net reaches some critical mass. This is fuzzy logic.

Most people don't work horizontally, the majority of their functions are carried out departmentally with a vertical reporting structure. Results of their activities are then released to other departmental groups. To properly function we need information, but the right information, germane to our function. To simply make it all available for processing, like a sausage grinder, will have the predictable result - a sausage.

Departmental imaging systems are the alternative and they also demonstrate consistent characteristics:

- They are functionally designed and justified. Targeted at a process and equipped to perform effectively without compromises and required to meet another department's perceived needs, wish list or strategy.
- They aren't strategic. They are not life-threatening. If something comes along to change the function then change the system, it's small and flexible.
- Communications are eliminated as the major concern with positive impact on developmental and operational charges.
- They are simple. Easy to implement, productive immediately because their purpose is defined.
- They require little support. You aren't at the mercy of computer gurus.
- The systems are expendable.

Perhaps the strongest reasons for adopting imaging departmentally in small work group applications is that these systems are off the shelf, they're not an information octopus that needs to spread its tentacles everywhere and consequently you may obtain 80 per cent of the benefit for 20 per cent of the cost.

If, however, someone still insists that this imaging must link up with the mainframe, it must fit your "strategic" architecture, well, there is some hope for you as long as you put a records management perspective on the exercise.

As we have seen, these larger systems are touted as integrated packages, one vendor responsible for the entire monolithic structure. But if you look at an imaging system it really consists of three quite distinct components.

1. The essential element is, of course, the records management package, the "Index Server". This item is responsible for classifying, cataloging, managing, archiving, controlling access, co-ordinating work procedures, providing inquiry and reporting - all the things that are the true day to day keys to any successful system no matter what the media.

Now, the great thing in our favour in this country is that we really know what we are talking about when it comes to records management systems. It amuses me that imaging vendors (who mostly come from two countries that are 20 years behind in records management) offer database software on platforms originally designed for financial systems and that many organisations get excited about it.

So the first component is one of Australia's great records management packages which are available on just about any mini/mainframe environment you want.

2. The second component is the Image Server. In this design its role is much simplified: it relates the document description from our index server (the records management package), to an image. It should be capable of easy adaptation to multiple media, paper, optical, film, video and whatever the future brings. It needs to respond to requests from the index server and provide images to the requestor.

It needs to be able to archive images and it must be vendor and media independent.

3. The last and least important component is paradoxically the only one we look at and the one everybody purchases - the Retrieval Station. I think we're asked to focus on this because this is the one with all the bells and whistles. This is where you zoom and rotate, make little notes, scroll etc., in fact, this is the bit where you do the things you automatically do on paper without even thinking about it. Being able to turn a document around 90 degrees or 360 degrees is hardly a real decision criteria for a records system folks.

All this retrieval station really has to do is open a window to talk to the mini / mainframe, talk to the Records Management package so you can tell it what you want, open another window to allow the image server to send you the file you want, display the image, provide a few simple image handling features while keeping a window open to the Records Management package allowing updates etc. and access to whatever other systems you are running such as accounts payable.

Now, unusually, the best way to provide retrieval stations is also the cheapest, P.C.'s networked with terminal emulation to your mini/mainframe system and running one of the myriad off the shelf, windows-based image handling systems.

Each of our three components requires different skills and emphasis, each should be selected on their own merits and the retrieval stations and their software should be selected last and independent of the other two.

This approach has another key advantage, if you go the other way no matter how simple an application you begin with, you will be required to make a large initial capital investment because the system infrastructure and programming requirement is much the same whether you have five screens or twenty. Our alternative approach is truly modular as none of the three components are performance related to the other two.

Of course, you are going to meet a powerful obstacle in implementing such simple and effective imaging principles as we have outlined here, systems with a strong departmental and records management base. The EDP department, or as they are calling themselves this year, Management Information Services has a strong bias to centralised control.

I offer some rules then.

1. DON'T PILOT! If you can't find a small departmental problem that can cost justify imaging from the first day it is installed then chances are somebody is having a good-time with your money and a vendor is learning their craft at your expense.

2. IF IT DON'T WORK - DON'T PAY! If a system is properly specified on a strict commercial basis, not on some ethereal future benefit, then any reputable vendor should be happy to give you a money back guarantee.

3. DEPARTMENTALISE - Again use cost justification and hard benefits like getting and winning customers for specific applications.

4. BE MEDIA INDEPENDENT - Don't purchase a system because of the media. Assure yourself you can mix and change media easily. Don't dismiss a media because it's old.

5. THE KEY STEP OF SUCCESSFUL IMPLEMENTATION -For successful imaging implementation - you first have to implement something! Get active or get archived.

And most of all .....

6. BE REALISTIC! Most times you will get 90 per cent of the functionality for 20 per cent of the cost if you focus tightly on real needs, not future possibilities or current fantasies.

In summary, imaging should be more widely adopted than it is. We should remove the mystique and utilise it like any other piece of office equipment and put the control of the process where it belongs, under Records Management guidance, not the Management Information Services Department. Records managers must drive this issue or they will be left behind and lumbered with something they don't want and they can't control.

And systems should be implemented departmentally, not enterprise-wide. No human can comprehend the full complexity of any organisational unit, so why do we expect an imaging system to do it?

TONY POYNTON

National Sales & Marketing Manager
Information & Records Management Division
Canon Australia

As presented at the RMAA National Convention, Darwin, 1991.

BRANCH REPORTS

Continued from page 14

SOUTH AUSTRALIA

The Annual General Meeting was held July 30.

The Branch Council for 1992/93 is:

President - Helen Francis ARMA
Vice-Presidents - George Smith and Helen Onopko
Secretary - Helen Schoder
Treasurer - Margaret Mainland
Registrar - Rosemary Gabell
Editor - George Smith
Chairperson, Education - Helen Onopko
Chairperson, Status & Standards - Tony Aldous
Chairperson,Convention Committee - Helen Francis
Federal Director - Helen Francis
Federal Director - George Smith
General Council - Brian Tyndale, Matt Selfridge

Programme of meetings and events, August to December, 1992:

August 11, 12.30pm Forms Design - or no design at all! Ross Hurley, consultant, API Club, 12 Pirie Street, Adelaide

August 27, 12.15pm Branch Council meeting, Australian Archives, Derlanger Avenue, Collinswood

September 21, Branch Council meeting, API Club, 12 Pirie Street, Adelaide

October 13, 12.30pm Ausdoc, Document Exchange, Waymouth Street, Adelaide

October 23, 9.00am Regional Seminar, Commodore Motel, Mount Gambier, SA

November 10 to be advised

December 8, 12.00noon Christmas luncheon, Fishcaf, Flinders Street, Adelaide

Regional Seminar

Distance between major centres does not permit attendance at a lot of city functions, for people working in country regions. In answer to a cry for help, the Convention Committee has scheduled a one day seminar to be held in Mount Gambier in October. This will be the first Records Management Conference to be held in the South-East of South Australia. Members and delegates from the city are being encouraged to make the trip to Mount Gambier.

Transport will be leaving Adelaide on the evening of the 22nd and returning on the morning of the 24th. For further details phone Helen Francis (09) 364 2377 or facsimile (09) 332 1336

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