

Our Problems With Machine-Readable Records

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Robert Sharman's paper on "Public Archives and National Information Policy" is supplemented here. That the matter is indeed of considerable concern to archivists was also illustrated by two papers on the subject at the recent Australian Society of Archivists' Conference.

Our first problem in the archiving of machine-readable records is that inertia is no longer on our side. We now confront the one circumstance that is worse than the accumulation of non-current records in great neglected heaps *viz* their wiping out in seconds by merely putting a command through a keyboard to "delete" or "update". And this is coupled with an incentive to do just that - in that the magnetic media are designed to be re-usable. Hitherto, discipline on the disposal of records, in the context of current records management, was highly desirable. In future it will be absolutely essential.

Our second problem is that the advent of machine-readable records is shifting record-making into the hands of a new group of people who have no conception that disposal of their records has anything to do with archivists. Having laboriously won some belated recognition of our role with "conventional" records, we now need to start all over again with regard to materials which seem to the average person to be poles away from archives.

Our third problem is that current magnetic media are physically impermanent. To preserve these records it will not be enough to simply store them in optimal conditions, or even to carry out some once-and-for-all equivalent of de-acidification. We will have to exercise every tape, about annually, and recopy tapes before they deteriorate. Fortunately, through the magic of digital recording we can have copies that are absolutely as good as their originals, and it may well be that if we hold on for a while we will get media that can be both permanent and machine-readable.

Our fourth problem is the impermanence of the language and conventions of machine-readable records. Records that have survived

physically will be unintelligible, perhaps not even physically mountable, if we do not:

- preserve with them the hardware and software environment in which they were created; or
- copy them into forms compatible with current technology, and keep on copying as that technology changes; or
- establish some unchanging conventions governing the media and codes in which permanent records shall be archived.

Our fifth problem is that machine-readable records tend to be cryptic and enigmatic, unlike the correspondence and minutes we are used to, which generally leave the intelligent reader in no doubt as to what they are and what they mean. Archivists have traditionally emphasised the importance of recording the administrative context of records, and their relations to other records, especially contemporary control records. With most machine-readable records this will be essential, and it will also be necessary to explain formats and codes in great detail.

Our sixth problem is that while machine-readable records are coming increasingly into vogue, we are still totally out of our depth trying to cope with the old sorts of records. Our staff levels leave us no scope to tackle new problems.

Our seventh problem is that the staff we have are not trained in this new field, indeed, archival expertise in this field has to be developed from scratch against all the odds.

Fortunately, there are people appearing in our ranks, who have the beginnings of such expertise. (To say they have more, in the absence of developed procedures in which such expertise is routinely developed and applied, would be rather too sanguine). Perhaps some of those people will care to take up the problems I have raised, and show how I have exaggerated them, or how they can be solved. Their solutions, I expect, are bound to call for human and capital resources beyond our present imagining. However, if we are ever to find such resources, the first step must be to spell out the necessity for them.