

WORD PROCESSING APPLICATIONS IN AGRICULTURE CANADA LIBRARIES

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ABSTRACT

Spectrum of word processing applications from administration and management to technical services, acquisitions and public services are covered.

APPLICATIONS POUR LES SYSTEMES DE TRAITEMENT DE TEXTE
DANS LES BIBLIOTHEQUES D'AGRICULTURE CANADA

RESUME

Toutes les applications pour les systèmes de traitement de texte de l'administration des services techniques, des acquisitions et des services auprès du public seront considérées.

THE APPLICATION OF WORD PROCESSING
IN THE AGRICULTURE CANADA LIBRARIES

Jane Wu

Who would have thought a few short years ago that terms like 'information processing', the 'wired city' and the 'integrated office', would have become so commonplace? They, and many others of the same genre have crept into our day-to-day lives through mass marketing of a myriad of mini and micro-computer products geared to attract a wide range of purchasers. Four years ago when we were looking for effective solutions to some of our paperwork and computer file update problems, we didn't have this multi-dimensional array of alternatives. The merging of data and word processing technologies was only being whispered about and was limited to a small number of suppliers with an even smaller subset of systems available in Canada.

After analyzing our requirements we selected a Wang System 25-3. We have now had over three years of experience with a fairly sophisticated word processor in a library environment. [Today, with many more systems available it is possible that we might choose different hardware but our basic priorities would remain the same.] These requirements can also apply to non-library environments. This is important to note when planning the acquisition of office automation systems which will not be solely dedicated to library applications.

The system had to be easy to learn because we wanted to use it in the workplace -- i.e., automate the office -- without having the traditional buffer and potential bottleneck of specialized operators. The system could not be mute or self-contained. It had to be able to communicate with all external computer systems we were using at the time -- including Alphatext, Datacrown and UTLAS. The system had to be able to accommodate large files and to allow certain logical search, locate and manipulate operations to be carried out on these files. In addition, it was important to be able to construct simple programs to allow formatting, reformatting, sorting and other decision processing. Most important, however, was proof of system reliability, minimal down time and local maintenance service.

The equipment we chose met all of these requirements but the

day-to-day operation has resulted in the surfacing of those few additional quirks which seem to be designed to make life more interesting. We have survived most of these surprises with few scars and it will therefore not be too painful for me to add that little touch of reality to my description of our applications.

Our system is a shared logic system which allows linking of many CRT's and printers to one CPU and disc drive. The shared disc is a hard sealed disc to protect from loss of data which can frequently occur with a shared floppy system. Archive diskettes are the standard 300K floppies and all staff using the system are responsible for backing up their own files on archive diskette whenever they are updated. Our system is upgradeable without replacement of peripherals and we have already upgraded to a 5 megabyte disk from a 1.25 MB disk because of increased requirements. All libraries are plagued with the need for maintaining those various vertical files and collections of pamphlets and extension type publications. These are not usually considered for individual cataloguing but they are retained because they are frequently the source which treats a particular topic. We are no exception and this is one area where our staff quickly saw the utility of the equipment and its preprogrammed capabilities. A number of pamphlet inventory files -- CANADEx, AGDEX and FAO leaflets were input using brief 150 character records for global searching and retrieval by public and technical services staff using any word or word string from the title or words added to a non-descriptive title. Global searching can easily be made faster by such commonsense ideas as sub-structuring files in some logical manner and using the first page of a document or file as a general index or menu to direct the file users. New entries are simply added at the end of each sub-file and the sub-file sorted to alphabetically or numerically interfile entries as desired.

Our Central Library has over 1,700 exchange agreements with over 80 different countries for agriculture-related publications -- many of which cannot be obtained through other means. Although we have used form letters in the past, we found the personalized letter received a much better response, particularly in initiating exchange agreements. This resulted in a considerable workload and a difficult manual process for tracking the status of exchange agreements was also very time consuming. The word processor allowed programming of prompts for the personalized touch, allowed quick selection from a number of sets of preprogrammed text and once letters were sent, allowed stripping of the preprogrammed text to create an automated inventory of in-process gifts and exchange agreements. This has streamlined the process considerably and has also made a repetitive task more enjoyable.

For over three years we have used two communicating terminals of the system to transfer data file updates using a TSO(Time Sharing Option) preprogrammed instruction set of C-list on the Departmental service bureau, Datacrown, in that mysterious process known as

online batch. At the time we acquired the equipment we had done a cost/benefit analysis to determine whether it was more effective to attempt to transfer the two systems from the service bureau to an in-house system or whether an upgrade of the existing Datacrown programs combined with an update to file update mechanisms would be less expensive and more stable. Without going into details, I will simply state that the latter was chosen for overwhelming financial reasons. The word processor was thus to be used as a simple intelligent terminal. Transactions to update the subscriptions and automatic routing programs are prompted for and input into the word processor sorted, proofread and edited on the word processor interactively but still offline then the host computer is dialed, either through Datapac or directly to a local number and the C-list program is activated, data is transmitted and requests for jobs submitted. Master file updates and jobs are usually run overnight to minimize costs and the output is received the next morning. The data verification and transmission process is thus streamlined and the TSO costs are minimized as much as possible.

Since the fall of 1980 we have also communicated with our field libraries through our Departmental computer network, Agrinet, quite extensively. We can create text on the word processing system and communicate it via the Agrinet electronic messaging utility to any number of locations on the system, using an electronic messaging list. We can also receive data sets from certain external systems in machine readable format then edit and format them internally before printing. The communications capabilities of the word processor obviously increase its versatility but we have come across some areas where standardization is essential -- particularly in communication of diacritics and in controlling the integrity of large files and when transmitting documents to an external hosts when the response times of the external hosts are very slow.

We are able to use the word processor quite extensively for creating and controlling purchase orders and for generating claims. The facility of the equipment to allow programming of prompted data entry, string searching and retrieval of publisher addresses has allowed us to eliminate many of the manual files we previously required. We can strip extraneous text for claims control and archival purposes. Commitment control is made easier through use of mathpak software to calculate totals from these stripped records. This process has had the additional advantage of making tedious work much more enjoyable. We are currently, however, having less success moving towards production of cheque requisitions using the word processor. This is more a result of being unable to dispense with some of the paper backup and subsequent double handling than a deficiency of the equipment and its capabilities.

Anybody who has karded in parliamentary standing committee papers and bills will sympathize with the problems they present particularly if this type of publication is only one of many other irregular documents received by the library. With immense manual

files, close tracking of all priority documents is impossible. The word processor is being used to alleviate the burden of controlling receipt of the many bills from parliament and the legislatures. Access can be by title, number, reading, session and jurisdiction. This solution is not ideal but it does allow multiple point access by various sections in the library requiring this information.

Once we were satisfied with the stability of the system, we decided to attempt the transfer of some of our serials inventory data from an external text processing service bureau. This saved us some money but also made us quite aware of the lack of standardization for communication of diacritics. We were saved from disaster by the global replace features of our word processor.

From the very beginning our staff have been interested in and enthusiastic about the equipment. Had this not been the case, we would not have been able to introduce some automation into the rather complex and work intensive circulation control procedure. We have set up rudimentary circulation control files on the word processor whereby borrowers name and address files are linked by code to brieflisted outstanding items and dates loaned or renewed. Files can be sorted by title, borrower code or due date and claims can be produced from this information. Since the word processor does not, as yet anyway, have the capability of reading barcodes, we do not at present see any way of making our word processing based circulation less labour intensive. It is, however, an important interim step towards a more sophisticated system.

I have touched upon many types of files and procedures supporting library operations but have not forgotten about the word processor for management support. Most of the literature on office automation deals with voice recognition devices, scheduling, graphics and immediate access to administrative and management information at all levels of the organization. We are nowhere near that but we are using our word processor to maintain such management support files as performance evaluation schedules, personnel files, report due schedules, work planning and goal setting documentation and control as well as for regular office support. In order to meet Branch deadlines for workload and time management reports, we make extensive use of the Agrinet to word processor interface to collect data from our 26 field locations. We expect to make better use of this interface as our automated Divisional Management Information System is developed on our Departmental minicomputer.

In conclusion, I would like to emphasize that, overall, the introduction of the word processor in our library has been a very positive and rewarding experience. Rather than receiving complaints about glare and noise, I find myself the happy recipient of new ideas, stimulating questions and inevitable requests for more terminals. I believe I can say without bias that this access to modern equipment and integration of it into day-to-day library operations has made many tedious and complex tasks more enjoyable and of more immediate benefit.