The use of cards and other forms of automatic dialing of frequently required connections will increase. The telephones of the future — and, indeed, these possibilities are technically feasible now — will be used for accounting purposes, paying bills and other requirements. For example, the store at which you wish to charge a purchase, will insert a plastic card into a slot in the telephone and this will transmit fixed data such as the code for the store, date, etc., and also information about your purchases. The result will be that your account at your bank will be automatically charged with the amount of the purchases and the store will be credited. Many transactions will be completed in this way without any use of paper.

The Post Office Department of Canada has just contracted for an electronic computer and data collection units similar to the card reader of the telephone system, which will convey instantly to the computer the times of start and stop, the account number involved in the work, the cost centre, and the number of the employee engaged on manual work on which this type of work measurement is used. This computer will be established in the Toronto office. If this trial is successful, the application will be extended to other cities.

Security of Information — Up to this point we have been talking a great deal about questioning electronic computers for information through the medium of peripheral equipment. I am sure some of you have been wondering how secure or private the information contained in one's own computer really is when anyone who has a Touch-Tone phone, a Telex or any other "on line" device could make contact with your computer and ask it for any information he would like to have. What is to prevent anyone making such a call and altering the records or obtaining secret information? Proper precautions are taken. I mentioned previously when I was citing the example of the customer dialing a bank transaction that he inserted a private code. Without this code the computer would not accept the call. You must have the correct code before you can question a computer at all. This code is good only for the computer receiving this code number and others like it. The computer is programmed to release only the information it is supposed to release and no more. It will refuse all other enquiries. The computer will permit changes only in those areas authorized for alteration or updating.

Information Retrieval Systems — The term "information retrieval" itself imples that we are about to embark upon a system and/or equipment that will help us find documents that are lost. They might just as well be considered lost when you consider the volume of paper that is raised in government, business and institutions. I have been informed that you believe that when you occupy your new building four years from now your Department, at its present rate of expansion, will be generating close to 500,000

J.H. Crossan.