A Reply to A.F. Sheppard's Commentary
On the Admissibility in Court
of Computer Printouts

by KEN CHASSE

Tony Sheppard's "Counterpoint" critique in Archivaria 19 of my article in Archivaria 18 on the admissibility of computer printouts reflects a weakness which is very common in the legal profession — lawyers and judges don't know much about records management and how the computer has fundamentally changed records keeping. Therefore, I would ask readers of Archivaria to send me descriptions of how their records keeping systems have been changed by computerization so that I may pass this information on to my colleagues in the legal profession. Of particular importance are the changes made to professional accountability for the integrity of the whole of a records-keeping system. Please write to:

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If we could be sure that the world of records management would return to what it was ten years ago, I would agree with Professor Sheppard's criticism of my thesis.

If we could be certain that lawyers and judges will remain as ignorant of data processing and computerized records keeping as they appear to be now, I, like Professor Sheppard, would be content to make nothing more than cute comments such as, "Reform? Sir, do not speak to me of reform; things are bad enough as they are."

If we could be certain that judges and lawyers in the future will not have to greatly lengthen trials and increase their cost because they feel duty-bound to ask probing questions of records managers to how their computerized records systems actually work and how they can be certain that computerization gives them a sufficient guarantee of reliable information, then I too would be content to leave the law as it is.

If we could be certain that computerized systems will become just as simple and standardized and well understood by ordinary people as are traditional paper-original records-keeping systems, then I too would argue against changing the Evidence Acts across Canada.

If we could be certain that computerized records keeping is not complex and infinitely varied in its applications, then I too would say it is not unfair to ask the ordinary

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courtroom litigant of modest means to prove (as the law at present does) that the records being presented against him are unreliable, rather than requiring the party that owns the complex system that produces the records to prove that they are in fact reliable records.

And if matters of computerized data processing and records management were not every bit as complex in many cases as the technical expertise of doctors, engineers, and accountants, I too would not have argued (as I did in my article) that having records managers who can qualify as expert witnesses in court, as do doctors, engineers, and accountants, is a far better solution than using the law of evidence to determine the admissibility of such complex matters of evidence; nor would I have argued (as I did in my article) that until we do have such qualified records managers, we must change the law of evidence to meet the new complexity and the fundamental changes the computer has brought.

And if the law of evidence at present was adequately serving the world of business and government documentation by means of clear, unequivocal, well-established, unquestioned principles of law that guarantee the admissibility of computer printouts and clearly set out the terms under which that admissibility can be achieved (as I argued in my article that it does not), then I would never have bothered to have spent the last several years studying this area of the law as it stands throughout the English-speaking world.

My chief argument for change to those rules of the law of evidence that deal with the admissibility in court proceedings of computer printouts is that the effect of computerization on records management is often to reduce the reliability of the records-keeping system. This is caused by the removal of accountability in any one person for the whole system. This in turn is caused by streamlining the system when it is computerized in order to speed it up, reduce the number of people who maintain it, and thus reduce its costs. As a result, computerization often makes records systems more efficient but less secure and less reliable. Security has to be more intentionally added on to a computerized system, whereas the relative inefficiency of a traditional paper-original system provides an inherent security. There is an inverse relationship between efficiency and security. Redundancy lowers efficiency but increases security. The computer, if intentionally applied to security, can make records keeping more secure than any traditional system of paper-original documents, but that security feature has to be intentionally added back or built in rather than leaving it to the inherent nature of the system.

It is difficult for lawyers to understand how computerization has made fundamental changes in records keeping. Few of them have any familiarity with records management, and very few are systems-oriented, although their law offices have extensive records-keeping problems. To most, the computer appears to be just a better adding machine. Therefore they argue, as does Professor Sheppard, that the existing laws of evidence should not be changed.

The example I most often use with lawyers, when I am arguing my views on how the laws of evidence should be changed to improve the admissibility of computer printouts, is the records system that is involved in legal research. I am the director of Canada’s largest legal research agency, The Research Facility of the Ontario Legal Aid Plan in Toronto. A key aspect of my responsibilities is making use of computer technology in relation to legal research. Every year there is a massive volume of new legal literature. It is my job to maintain systems that efficiently turn that raw data of judgments, articles, textbooks, and
other legal treatises into usable legal research memoranda for practising lawyers. Therefore, I am much concerned with indexing systems, word-processing technology, and systems for database retrieval.

In my view the agencies in Canada responsible for developing computer applications for legal research are rendering legal research less reliable. The computer is being used to make the traditional system of legal research faster, but the responsibility for the end-product has been removed by creating an assembly line that reduces accountability. It is a good example of what happens to many records-keeping systems when they are computerized. Efficiency is gained by reducing professional accountability. Therefore, I argue that for records-keeping systems that are to produce documents for proof in court proceedings, the law of evidence should be changed to ensure that that professional accountability is not taken away by computerization. A witness can be cross-examined; a printout cannot be. Therefore, let us make sure that there is someone who will account for the reliability of that printout before we accept it in court in place of the opportunity we have given up to cross-examine a flesh-and-blood witness who has personal knowledge of the facts of that printout.

In Canada, computerized legal research has imposed the following degradations upon the traditional system of doing legal research:

1. the database searched is not the original judgments from the courts, but merely summaries and headnotes;
2. the same weak indexing systems are used, but without the support of the full text of the documents that they index; i.e., the computer searches not the whole of the document, but merely its indexing and an abstract summary of it;
3. law library computer search services, i.e., “Public terminal” services that do computer searches for practising lawyers, are manned by law librarians and young lawyers who are not expert in the areas of law being searched;
4. the database is searched and sorted at the front end of one’s research project, i.e., one has to frame an inquiry string of terms with which to activate a computer search at the lowest point of one’s knowledge of the concepts and materials in the area being researched;
5. responsibility for the quality of the research produced is removed from the chain of command within the lawyer’s office, i.e., the practising lawyer cannot command the same degree of accountability from an outside legal research service that he can command from a junior lawyer in his office who is looking for career promotion; and
6. so-called computer research is not really legal research at all; it is merely searching with a computer through a very limited legal database using a very simplistic, unsophisticated search strategy of word and phrase frequencies. Thus the level of required skill in legal analysis and synthesis of legal opinions is even higher if one takes on and endures the risks and limitations of computerized legal research as applied in Canada, in order to enjoy its very small increase in speed over traditional methods.
These degradations to the traditional legal information delivery system and to traditional methods of legal research can substantially lower the quality of legal research if the practising lawyer does not check the results of someone else's computer search by means of his own manual or computer search or research. And that of course is the official answer given in reply to my arguments against computerized legal research services — the lawyer who purchases the service is still responsible to his client for the quality of the research service he uses, whether it is his own research or that of a computer service. But in fact there is a strong economic incentive not to double check the quality of someone else's research; one turns to a computer service to save time, not to increase the expense to the client by having to check someone else's work.

The computer can give us greater speed in our document flow, but often at the expense of accountability for the quality of the documents flowing. And so it is with many records-keeping systems when they are computerized.

Therefore, I argued in my article that the party in legal proceedings which adduces the computer printouts as evidence should bear the onus of proving their reliability, rather than imposing a burden upon the opposing party to show their unreliability, as the law at present requires. Professor Sheppard wishes instead to keep the law as it is. I argued that computer systems are too varied in the quality and variety of their records-keeping applications for the present law; it is unfair and unrealistic to expect an opposing party to be able to have the resources to determine if a computerized records-keeping system produces accurate records. Just as very few lawyers know how a computerized legal research service works and would not know how to cross-examine and test witnesses in court who were trying to put its printout products into evidence, so they would not know how to begin to test a records manager or data processing supervisor on the reliability of the records-keeping and data compilation systems they use. Therefore, we should revise the laws of evidence in a way that requires the courts to obtain some proof of the reliability of a computerized records-keeping system before they accept its printouts.

Tony Sheppard is a professor of law who has a reputation for the highest quality of legal scholarship. He would never allow his students to blindly rely upon the results of computerized legal research services. Legal research is an example of a records-keeping system that has been fundamentally changed by the computer. It has not simply been speeded up; it has been rendered fundamentally different because the social relationships that determine its accountability have been greatly altered. Therefore, new rules are needed to reflect this change.

Similarly, records-keeping has been fundamentally changed by the computer. The computer can be used to enhance accountability or to greatly diminish it in order to get speed and cut expense. Therefore, the party which owns the system that produces the printout should have to prove how it is applying the computer. And therefore the rules of evidence should be changed to reflect the fundamental changes that the computer has caused. In that way we can get back the accountability and proof of reliability that comes from the simple requirement of having someone testify under oath in detail why it is he says his records are reliable. I speak to you of reform, Professor Sheppard, because things really are bad enough that we need it.