

# COMPUTER APPLICATIONS AND THE MALTESE LEGAL PROFESSIONS

**JOSEPH A. CANNATACI**

"As a society we're heading into the computer age.  
Courtrooms have to do the same thing" (3)

Samuel Gardner is not a computer salesman. He is Chief Judge of Detroit's Recorder's Court, the city's criminal court which handles 12,000 felony cases a year. It is hardly surprising however that he should have been the source of the above comment. Within four feet of his bench, Gardner has, like each of the court's 29 judges, a terminal which gives access to an IBM System 38 Computer. Available at the touch of a button are appointment details for any lawyer or judge which are consulted in order to avoid scheduling conflicts and unnecessary adjournments, as well as information on 72,000 cases heard during the last six years. Not only has the computer helped to dispense with a backlog, which in 1977 stood at 7,000 cases, but the docket management system that it provides ensures that half the court's cases are disposed of within 30 days. Defendants charged with a non capital crime can expect a trial in 60 days and those charged with crimes such as murder or rape usually go to trial within 90 days. No wonder that Gardner claims that "It would be impossible to manage the court without it".<sup>4</sup>

Docket management is but one facet of the application of computers by legal professions outside Malta. It falls, in fact, within the second of two main categories of application, the local development of which will form a basis for dis-

---

**Joe Cannataci** studies Law at the University of Malta and is Editor of **ID-DRITT Law Journal**. As Hon. Treasurer of the **Historical Society** of Malta, he also serves on the Editorial Board of **MELITA HISTORICA**.

cussion in this paper: **Legal Information Retrieval (LIR)** and **Administrative/Management Automation (AMA)**. Before considering the computer's utility in these two fields however, a basic question must be examined: Can a lawyer or law student afford to indulge in computer illiteracy?

## **THE COMPUTER AGE - EDUCATIONAL REQUIREMENTS & LEGAL IMPLICATIONS**

In a 1970 publication of the American Association of Junior Colleges, one recommendation was that "computer literacy should be required of all college students and of all high school students too, whatever their field of work might be." **All educated persons**, the report continued, should have a knowledge of (1) the development of information processing, (2) the basic concepts of computer hardware and software, (3) the social impact of computer usage and (4) the ways in which computers are applied.<sup>5</sup>

Whilst doubtless hoping that the powers-that-be will bear the above in mind when embarking on the next round of educational reform, those of us who have not had the benefit of such an education would do well to try and catch up with developments in the computer world. Lawyers and law students simply cannot afford to be ignorant in computer basics, especially since computerisation may have many legal implications. To consider but three:

Clients and opponents will be using computers to process records, and these records may be entered as evidence in court cases. How reliable are they? Have they been tampered with? In the same way that one requires expert testimony from medical doctors, architects and engineers, one may have to call computer experts to testify to the validity of computer-produced evidence. Lawyers have to learn enough about computers to communicate with, or at least understand, the experts testifying for or against their clients. Professor Vaughn C. Ball put the point admirably: "The expert on computer-controlled production comes in, and you ask him 'How did the program and the machine work to produce this result?' If all he will say is 'This program califlams the whingdrop and reticulates the residual glob', it is perfectly clear that you are going to have to study up somewhat, in order to make up your mind about what went on."<sup>6</sup>

Lawyers may increasingly be involved in cases concerning computer-related theft or fraud. The classic example is that of the 1972 case in Oakland, Califor-

nia where "a computer expert was charged with stealing industrial secrets by telephone from a computer memory bank. The expert was accused of using a special code and account number to obtain a computer program worth \$25,000... from an Oakland organisation."<sup>7</sup>

One might equally witness a Maltese version of the controversy that has raged in America since the mid-1960's, over the threat posed by computers to what the Americans view as legitimate rights to privacy. The ability of the computer to collect, process, store and retrieve data more rapidly than any human, coupled with the ever increasing number of computerised data banks, makes it possible for private industry and government agencies to compile sizable information files on individual citizens. The misuse of such information may make the computer's potential for harm infinite. The controversy had gained momentum when in late 1966, after eleven months of study, a special government Task Force on the Storage of and Access to Government Statistics recommended to the Bureau of the Budget that a National Data Center be established. This center would consolidate all data compiled by about twenty U.S. federal agencies. This data would naturally be invaluable to private and public planners and decision makers. It was contended however that although the government may have legitimate reasons for collecting information about individuals, "if knowledge is power, this encyclopedic knowledge gives government the raw materials of tyranny".<sup>8</sup> Congressional debate and increased public criticism prevented the formal setting up of such a centre, although in reality various government agencies can still share their computerised data. Donald H. Sanders has defined American concern thus: "The creation of a federal government superbank with a complete computer-based dossier on every individual would give considerable power to those in charge of the bank, and the development might be the beginning of a drift towards the 'big brother' state created by George Orwell in his book 1984."<sup>9</sup>

Before examining a Maltese hypothesis, the question must naturally be understood in its American context. By 1967, 48 percent of U.S. government records were computerised. The files contained more than 27 billion names, more than 2 billion current and past addresses, 264.5 million police histories, 916.4 million records on alcoholism and drug addiction, and at least 1.2 billion income tax records.<sup>10</sup>

In the late 1960's therefore, it was already perfectly natural for the average

American to contemplate the feasibility of having one's C.V. compiled, checked (against arbitrarily pre-determined criteria) and perhaps even singled out for inspection by a computer, in much the same way as their income tax returns were analysed by the computers of the U.S. Internal Revenue Service. Fear of the advent of 'big brother' is evident in the following extracts from the proceedings of the U.S. Senate Sub-Committee on Constitutional Rights in 1971:

"Whether he knows it or not, each time a citizen files a tax return, applies for life insurance or a credit card, seeks government benefits, or interviews for a job, a dossier is opened under his name and an informational profile on him is sketched. It has now reached the point at which whenever we travel on a commercial airline, reserve a room at one of the national hotel chains, or rent a car we are likely to leave distinctive electronic tracks in the memory of a computer - tracks that can tell a great deal about our activities, habits and associations when collated and analysed. Few people seem to appreciate the fact that modern technology is capable of monitoring, centralising and evaluating these electronic entries - no matter how numerous they may be - thereby making credible the fear that many Americans have of a womb-to-tomb dossier on each of us." (11)

(Professor Arthur R. Miller - Univ. of Michigan Law School)

"However much we try to rationalise decisions through the use of machines, there is one factor that the machine can never allow for. That is the insatiable curiosity of government to know everything about those it governs. Nor can it predict the ingenuity applied by government officials to find out what they think they must know to achieve their ends.

It is this curiosity, combined with the technological and electronic means of satisfying it, which has recently intensified government surveillance and official inquiries that I believe infringe on the Constitutional rights of individuals." (12)

(Senator Sam J. Ervin Jr. - Chairman, Constitutional Rights Sub-Comm.)

The Americans have not yet found a satisfactory legal remedy to what is, in essence, an aspect of the perennial and all-too familiar conflict between individual rights and public interest that haunts any serious study of Law. The issue was again given prominence in a four-page spread which opened the **LawScope** feature of the American Bar Association Journal of May 1983, and seems to have been re-thrust into the limelight by the publication of a 489-page report by the California Commission on Personal Privacy. Underlying concern is evident in **LawScope** headings like **PRIVACY IN PERIL: technology and government erode protections**<sup>13</sup> and **BIG BROTHER? Does IRS know too much?**<sup>14</sup>

The legal twists and turns of the issue may be summarised thus: There is no mention of the word 'privacy' in the U.S. Constitution although some rights of privacy are guaranteed by the restrictions against illegal search and seizure in the Bill of Rights. (The Maltese Constitution is very similar in this respect especially in Section 39 although the explicit uses of the words 'private' and 'privacy' in our Constitution merit much serious study.) Yet, in 1974 Congress

enacted the Federal Privacy Act declaring that informational privacy "is a personal and fundamental right protected by the Constitution." "At times," writes Vicki Quade in LawScope, "that personal right takes a back seat to the public's right to know, as protected in the Freedom of Information Act. Just how far privacy can be carried is a delicate question."<sup>15</sup>

Here in Malta, widespread use of computers by the government might only appear to be a remote possibility. The legal implications would therefore seem to be equally remote. Yet, the financial status of persons banking with Barclays, (now Mid-Med and government-controlled) has long been monitored by computer; the two most powerful institutions on the island have both turned to computers for help: the government has set up its own computer centre at Dingli (and not much concern has been voiced about its future uses being potentially threatening to privacy) and the Catholic Church has invested in computers to ensure that its administration functions efficiently. Like many commercial and industrial concerns certain government departments and parastatal organisations are bound to go computer within the next ten or fifteen years. Likely candidates are the Department of Inland Revenue, the Department of Social Services, the Public Registry, Police Immigration and Criminal Records, Air Malta, Enemalta and Telemalta.

In a socialist state with a tendency towards nationalisation, little breathing space is left if one were to collate all the information held on the individual by the above departments and organisations alone. If centralised, the data would permit an entire c.v. to be printed out in a matter of seconds to anybody having access to the computer. On the credit side however, the Archbishop's Curia has only introduced the computer into its administrative set-up and not into the confessional! In any case, which law will protect the individual from (1) inaccurate entries in his dossier? (2) tampered electronic evidence tendered in legal proceedings against him? (3) misuse of his dossier? (4) an invasion of his privacy?

Although perhaps not immediately, the Maltese legal professions will have to face the issue of privacy. At the Constitutional level the curious nature of **Section 33** will again be highlighted. At first glance this section seems to be a resume of the fundamental rights and freedoms of the individual that are then entrenched in further detail in the sections that follow it. In this sense, the legal draughtsman responsible for the Constitution seems to have systema-

tically expanded upon sub-sections (a) and (b) of section 33, throughout sections 34 to 46. Yet, in the same way that one encounters no other mention of protection from discrimination on grounds of sex in the Constitution apart from the opening sentence of section 33, there is no further elaboration on the provisions of 33 (c) "**respect for private and family life**". In fact the privacy protected in section 39 is included within the general notion of the protection of "the enjoyment of property" first outlined in sub-section (a) of section 33. "Respect for private and family life" is not enunciated as a fundamental right '**per se**' other than in 33(c). To confound the issue, although it is entrenched as strongly as sections 34 to 49, being shielded from amendment by the requirements of section 67, section 33 is not explicitly enforceable in terms of section 47 of the same Chapter IV of the Constitution.

At the legislative level new laws are required to protect our individual rights in an electronic age. The American experience has shown that the most recurrent suggestions for legislative reform centre around guaranteeing the individual's right to have access to his dossier and to have the subsequent opportunity of clearing his file of false or adverse information. Alan J. Westin, professor of public law and government at Columbia University in New York and a long-standing American authority on privacy has made a very important contribution on this point that may well be implemented in future Maltese legal reform. The proposed protection of personal privacy by giving people the right to know what their computerised records contain, has been termed by Professor Westin as a writ of '**habeas data**', under which the individual could challenge the accuracy of information compiled about him. He reasons, "The Great Writ of English Constitutional History helped bring kings under the rule of law; perhaps a new Great Writ will help us do the same with uses of computers." "Someday," Westin has said, "there might be a button the citizen could push to produce for his own inspection and verification a giant print-out of all the information held about him by the government."<sup>16</sup>

The case of **computer vs. privacy** calls not only for serious study but also for a general awareness of the issues involved. While very much a matter of public concern the legal professions would ignore the implications of computerisation at the peril of the society they are supposed to protect. In a democratic state lawyers have a vital role in the running battle between individual rights and public interest. Malta is no exception.

## ARE YOU BEING SERVED, SIR?

In spite of the fact that computer technology and law are occasionally uneasy bedfellows, the wiser members of the legal professions are in the process of exploiting the very characteristics that make the computer potentially dangerous. This is true of the situation in the developed countries of the Western world especially the United States, where lawyers are busy taking advantage of the computer's ability to store and process vast amounts of data in looking up case-law, court administration, client records, accounts/billing, word processing in standard legal documents etc. Maltese interest in this respect does not seem to be very high. This may have been one of the main factors behind the very low returns in a survey carried out in conjunction with research for this article. The July 1983 questionnaire sent to 187 lawyers, the 149 undergraduate law students registered with the University of Malta and the dozen-odd computer firms on the island yielded the following result: only 33.3% of the computer firms, 12.8% of the lawyers and 9.4% of the students returned the questionnaire completed. The poor response notwithstanding, more than 95% of those who **did** send in the questionnaire were interested in using a computer in their day-to-day work. It was apparent however, that many lacked a clear idea of what the computer has to offer to the legal profession.

### Legal Information Retrieval (LIR)

In his introduction to the proceedings<sup>17</sup> of an eight-day Advanced Workshop on Computer Science and Law held in Swansea in 1979, Bryan Niblett<sup>18</sup> described the study of the use of computers to search legal documents as a 'well-worn subject'<sup>19</sup>. It is true that he was speaking mostly in the context of the scientist who **designs** the machine rather than the lawyer who **uses** it. Yet, he concluded that "It is fair to say that the computer science aspects of these machines, the techniques of storing large volumes of legal data, the design of suitable interrogation languages, are, in large part solved"<sup>20</sup>, only after evaluating the practical success of LIR: "As a recent survey<sup>21</sup> has recorded there are now in the U.S.A. a variety of computer-based legal retrieval systems which are used in everyday practice by lawyers. Experience shows that by and large these systems meet successfully the objectives set for them: they are able to find, quickly and comprehensively the relevant legislation and the opposite precedent."<sup>22</sup>

The above is in essence a basic definition of LIR. A large and sophisticated computer is capable of storing enormous amounts of information and of rapidly scanning this information, searching for given words or word-patterns. The concept of LIR has utilised fully these two characteristics and thus the computer serves as an electronic library with a compact capability for storing vast amounts of legal information (such as statute law, case-law, subsidiary legislation, indexes, etc.) It is especially useful where conventional printed publications are either rare or unavailable. The extent of such a reference library is further enhanced by the computer's ability to search, locate and retrieve desired legal information with unmatched speed, ease and accuracy, particularly where the system incorporates full-text storage and permits full-text search.<sup>23</sup>

The prerequisites of successful LIR are logically therefore:

1. The building-up of as comprehensive a legal data-bank as possible. This implies the often monumental task of feeding the computer with the full text of the law, the case law for a considerable number of years, etc. This initial effort, requiring hundreds of thousands of man-hours, must be complemented by the creation of a system wherein the data-bank is kept up-to-date.
2. Computer hardware large (and expensive) enough to cope with the immense volume of legal data that it will be required to handle.

It is immediately evident that the time and volume of work required to set up the system, as well as the expense of the hardware puts the realisation of LIR beyond the resources of individual lawyers. Indeed many of the LIR services existent outside Malta are operated by commercial companies that function as 'electronic' legal publishers. The major LIR systems such as EUROLEX, LEXIS and WESTLAW, offer great ease of access to their 'electronic libraries' (put more technically: their legal data bases). The individual lawyer conducts research from his own office using a keyboard to relay research instructions and a VDU<sup>24</sup> and/or printer to receive information. These are connected, using a special device known as a modem<sup>25</sup>, via the ordinary telephone lines, to the organisation's 'main frame' computer which stores, controls and outputs the legal data.

Nobody has disputed the utility of such a system in Malta. As to the necessary investment in terms of time and finance, a variety of suggestions have been



put forward:

1. That it be financed by one or a combination of the following: the Law Courts; the Camera degli Avvocati; the Attorney General; the University of Malta and/or a private commercial company.
2. Economic viability is important but not essential. Such an incentive to research ought perhaps to be aided by public and/or private funds in the interest of organisation and scholarship.
3. A national legal data centre would preferably be administered by an independent non-governmental agency. A further suggestion has been that this autonomous agency would include representatives from the Law Courts, the Camera degli Avvocati, the Attorney General and the University of Malta. (This, of course, would depend on who finances the project.)
4. That it might form an integral part of a court administration/docket management system as illustrated in the opening part of this paper.
5. That it offers the same ease of service to the individual lawyer as comparable systems abroad, i.e. with terminal facilities in one's office and in the Law Courts etc. Law students at the University of Malta, (as well as research students in other disciplines) ought to be given special facilities for research.
6. That it be linked to international systems through facilities such as the EURONET network.

Whatever the form that Maltese LIR will take, its realisation depends largely on the constructive and imaginative approach required on the part of the interested parties, namely the Camera degli Avvocati, the Law Courts and the government. Since the government pulls the financial strings, the participation of the Attorney-General and the University of Malta is as conditional as that of the Law Courts.

### **Administrative/Management Automation (AMA)**

Imagine entering a dentist's clinic consisting of a room bare save for a stout chair at one end and a rope dangling through a pulley attached to the wall at the other end. That this, today, is an absurd proposition, is a sign that the dental profession has moved with the times and constantly adapted technological

innovations to serve its needs better. A plea of toothache is now faced with an impressive display of drills, electronically controlled multi-position couches, X-ray equipment, special lighting, hygienic fittings, glittering stainless steel impedimenta etc.

The computer assumes very much the same position vis-a-vis the legal professions. Progress has put at our disposal, a powerful tool which ought to ensure a faster, cheaper and less tiring way of rendering service to clients. Yet, office equipment has apparently never ranked high on the list of the Maltese lawyer's priorities and the local tendency towards a continuation of spartan traditions in this respect does not seem to have been dented by the advent of computerisation.

Except for the use of Court Administration/Docket management as illustrated in the Detroit example which opened this paper, legal AMA is very much a matter of individual initiative. If a lawyer or law firm wish to upgrade their capabilities the likelihood is that they will invest in a computer to help run the legal office. As an item of office equipment, the size and type of the computer would naturally depend on the size of the legal office that it is to serve. Thus for the sake of convenience one would normally have a VDU and keyboard for each regular user of the computer. In a partnership this would mean one for each partner and/or associate as well as one for the secretary. Regardless of the size of the legal office the uses of the computer remain pretty much the same:

1. **Word Processing** - Any legal document that is reasonably formulaic may be usefully prepared by computer. In this function a standard form of the letter or document required is recalled from the computer's memory and displayed on the screen. The lawyer or notary simply changes or inserts words, phrases etc. where necessary. A touch of a button and the prepared document is printed out ready for use. As many hard copies as required may be printed while the new document drafted may be stored in the appropriate client's file where these are also electronically stored. Word processing is invaluable in the preparation of standard letters and documents such as certain contracts, leases, wills, bills and even court pleadings.
2. **Accounts** - This falls into two parts: office accounts and clients' accounts. In the latter case postage and copying fees, telephone calls,

Registry fees, in fact every disbursement on behalf of a client are entered together with 'professional fees due for services rendered' and are available instantly. In conjunction with word-processing, this facilitates billing immensely.

3. **Clients' Records/Case Histories** - Details of every case handled by the legal office including pleas, documentary evidence, judicial decisions, dates of hearings, client office appointments may all be held in storage by the computer.
4. **Diary** - From clients' records the computer can easily make out a diary of court and office appointments, lists of cases pending etc.
5. **Case-Law** - Many lawyers specialise to varying degrees in a particular branch of law. Important precedents in that field stored in the computer make a valuable addition to the lawyer's own case records.
6. **LIR** - The same equipment used above would, by means of a modem, allow the lawyer access to a large legal data base via the telephone lines. Research could thus be carried out from the lawyer's own office.

The volume of work thus handled would reduce the amount of secretarial and clerical time required to run the office. At the same time the lawyer has instant access to anything that he may require in the course of his work.

The successful development of the Maltese application of computers in the legal office also requires the availability of certain facilities: (1) a consultancy service to assist individual lawyers and partnerships in the selection of the suitable hardware and software; (2) custom software tailor-made for Maltese legal documents, client accounts and records etc. In the meantime, while the lawyers slowly realise that computers are useful **and** affordable, scientists are busy designing machines capable of giving legal advice. Is it possible to write a computer program that can match the performance of experts? According to Bryan Niblett, a well-bred electronic colleague "will be designed so that it can combine and assimilate the experience of many legal advisors acting separately. This is the most exciting feature of a consultation system. A law machine can be a more judicious advisor than any single lawyer because it can incorporate the separate understandings and the separate experiences of individual advisors. Every new problem presented to the system improves its knowledge base."<sup>26</sup> A Maltese lawyer has already prepared his first request for legal advice: "Who would the client sue for professional negligence?"

## NOTES

1. This included Christian Farrugia, Tonio Fenech and the author, all three law students at the University of Malta.
2. **PANTA COMPUTER CO. LTD.** of Msida, Malta have been mostly engaged in the provision of computer hardware to the public sector in Malta. They have already assisted various academic projects assessing and promoting knowledge of computer technology.
3. Samuel Gardner, Chief Judge, Detroit Recorder's Court as quoted in **NO BACKLOG: Computer keeps court rolling**, American Bar Association Journal, U.S.A., March 1983 Volume 69 p.266.
4. Condensed from **NO BACKLOG: Computer keeps court rolling, op.cit.**
5. **The Computer and the Junior College: Curriculum**, American Association of Junior Colleges, Washington, 1970 p.6. (Donald H. Sanders, **Computers in Society**, U.S.A. 1973 p.xi.)
6. Vaughn C. Ball, **"The Impact of Data-processing Technology on the Legal Profession"**, Computers and Automation, April 1968 p.44. (**Computers in Society, op.cit.** at p.288)
7. **Computers in Society, op.cit.** at p.241.
8. Senator Charles McC.Mathias (testimony U.S. Senate Sub-committee on Constitutional Rights) as quoted in **The Computer - How it's changing our lives**, Washington 1972 p.131.
9. **Computers in Society op.cit.** p.83.
10. **The Computer - How it's changing our lives op.cit.** p.126.
11. **ibid.** at p.124.
12. **ibid.** at p.125.
13. **LawScope**, American Bar Association Journal, USA, May 1983, Vol.69 p.565.
14. **ibid.** at p.566.
15. Vicki Quade, **Privacy in Peril, ibid.** at p.567.
16. **The Computer - How it's changing our lives op.cit.** at p.134.
17. **Computer Science and Law**, ed. Bryan Niblett, C.U.P., USA, 1980 viii + pp.238.
18. Bryan Niblett is Professor of Computer Science, Univ. Coll. of Swansea, U.K.
19. Bryan Niblett, **Computer Science and Law op.cit.** p.3.
20. **ibid.** at p.7.
21. Bing J. & Harvold T. **Legal Decisions and Information Systems**, Universitetsforlaget, Oslo, 1977.
22. **Computer Science and Law op.cit.** at p.7.
23. For a survey of computerised legal research and full-text search see Michael Frendo, **Why should lawyers get mixed up in Computerised Research?**, DE JURE, Malta, June 1983 Vol I No.2 pp.66-73.
24. Acronym for **V**isual **D**isplay **U**nit (screen for displaying information).
25. **modulator/demodulator**
26. Bryan Niblett, **Computer Science and Law op.cit.** at p.17.