

Until recently, technologies such as telecommunications, data processing and office equipment were considered separate entities. But these different technologies are now evolving and converging into integrated information systems performing a multitude of functions and providing an array of new services. Large mainframe computers and powerful "mini" computers linked through telecommunications networks to numerous terminals, make possible such services as automated airline reservation systems, automated bank tellers and electronic cash registers (known as point-of-sales terminals). In Canada, as in other industrialized countries, these computer applications are already taken for granted. Other consumer services such as teleshopping, remote emergency alarm monitoring and videotex data banks, are increasingly becoming a reality of Canadian life.

It is the office environment, however, that is the major focus of technological change. Virtually every kind of office work, from exchanging information to decision-making, is being enhanced by computer communications technology, a term referring to a combination of computing, telecommunications, information services and related technologies. Business is increasingly being conducted with the help of such tools as electronic mail, teleconferencing and data banks. Today's office is evolving into an integrated information management system in which separate pieces of equipment such as telephones and word processors are combined in multifunctional workstations which in turn communicate with other "intelligent" office machines.

Not surprisingly, the computer communications industry has grown rapidly in recent years, despite world recession. According to the estimates of one government analyst, Canadians are expected to spend some \$10-12 billion on computer communications products and services by 1985, almost double the amount that was spent in 1980. By 1990, the figure is likely to reach \$16-20 billion.

Canada has a vibrant and growing computer communications industry. In addition to several major companies, numerous excellent small and medium-sized firms produce computer hardware, peripherals and software and offer time-sharing, consulting and other services. An area of particular strength is in the computer services industry which includes such areas as time-sharing, software production and a wide range of consulting services, including systems development, custom programming, systems engineering, training and research. In the area of equipment, Canadian-owned firms have generally focused on specialized product lines designed to meet the needs of a particular market niche. Our products and services are in demand both domestically and abroad.

### The Office Communications Systems Program

It is clear that Canada's economic well-being in years to come will depend very much on (a) successful applications of new technology, particularly in the office environment and (b) capturing a large share of the market in information-handling systems.

The impetus towards office automation in industrialized countries is fuelled by the need to improve the productivity of office work, especially since office costs now constitute a large proportion of business expenditures. But how quickly and to what extent new technology can be introduced depends on how it is adapted to human and organizational needs. There is still much debate on how new systems can be put to most efficient, effective use and how people using the new systems will be affected.

To help answer these questions and promote the development of our information technology industries, the government of Canada is conducting several

*From this studio in Toronto, Teleglobe Canada provides international teleconference services between Canada and Britain.*

