Global access through Sharp software and services

I.P. Sharp Associates, the Toronto-based international software company that offers a comprehensive range of computer products and services, has experienced rapid growth since it was formed in 1964 by Ian Sharp and seven colleagues.

Celebrating its twentieth anniversary in 1984, the company had expanded to support a diverse international user base with offices located in 55 cities in 22 countries. With exports accounting for more than 60 per cent of the company's business I.P. Sharp Associates has wholly owned subsidiaries in Australia, Austria, Belgium, Denmark, France, the Federal Republic of Germany, Hong Kong, Italy, The Netherlands, Norway, Singapore, Sweden, Switzerland, the United States, and in Britain which has offices in England, Ireland and Spain. The company also has representative agencies in Finland, Italy, Mexico, Korea and Japan.

Advanced timesharing system

Company officials attribute the developments of SHARP APL, a high-performance time sharing system, and IPSANET, the company's own packet-switching network, as two of the main factors for the firm's rapid growth.

Established in 1969, the SHARP APL is based on a computer facility which now supports the largest APL time-sharing operation in the world. SHARP APL, the company's major software product, is a concise and flexible programming language with powerful built-in functions and debugging aids.

Local access to the mainframe computers of the I.P. Sharp time-sharing or distributed systems is available *via* IPSANET, I.P. Sharp's own communications network, from Canada, United States, Europe, Australia, Hong Kong and Singapore. In 1976, the company introduced its own internally developed packet-switching network with 47 cities on the network. At present, the network contains some 180 communications computers, called nodes, that are linked together providing a continuous network that includes most major cities.

The network also interconnects directly with many major public data networks including Datapac, Datex-P, PSS, Telenet, Telepac, Transpac and Tymnet. Through the local access cities of these networks, together with their interconnections to other public data networks throughout the world, access is provided by a local phone call in more than 600 places in 46 countries. The interconnection with the Telex network provides a means of access from any other location not served by IPSANET or public data networks.

Software

I.P. Sharp offers an extensive library of application software including packages for data base management, project planning and control, financial planning and consolidation, electronic mail, forecasting, business graphics, time series analysis and reporting, actuarial applications, econometric analysis, and survey analysis. These packages are flexible and designed to work together. In addition APL programmer tools to assist in model building, to build graphics applications, and to maintain and document systems are available and customized software can be developed.

The company combines the use of its software and its network for managing its day-to-day activities in the use of its electronic mail system, MAILBOX. For over ten years I.P. Sharp Associates has been operating almost totally free of memos, telephones and telex, as MAILBOX is used to co-ordinate daily operations and nearly all management interaction.

Specialized systems

The Special Systems Division of the company has been involved in implementing on-site computer systems for a variety of applications including defence, air traffic control, nuclear reactor control, police information, stock exchange and brokerage, microfilm retrieval, and data communications. The company has specialized in developing real-time and on-line systems for manufacturing, including facilities monitoring, process control, conveyor control, computer aided manufacturing, production and inventory planning and control, and business information systems.

Research and development projects for both the Canadian Department of National Defence and the US Department of Defense, have been undertaken in radar signal processing, secure language processors and the security of operating systems. More recently, the group has begun production of software packages available under licence, for process management of semiconductors, and for police dispatch and information systems.

Continued expansion

Combining both network services and software has allowed the company to develop integrated computer technologies for mainframes and personal computers on a world-wide basis. This integrated approach or *Global Information Centre,* led to the development of systems like the Electronic Markets and Information System (EMIS) in 1983 to provide a worldwide oil and petrochemical trading and information system.

During the past year, I.P. Sharp has expanded further in the international banking community by developing a comprehensive range of products including the Global Limits Control System which permits multinational banks to monitor and control their exposure in international money markets. The company has also recently become a supplier of computing services to the International Institute of Finance and will provide member banks with a country reporting system and private data base.
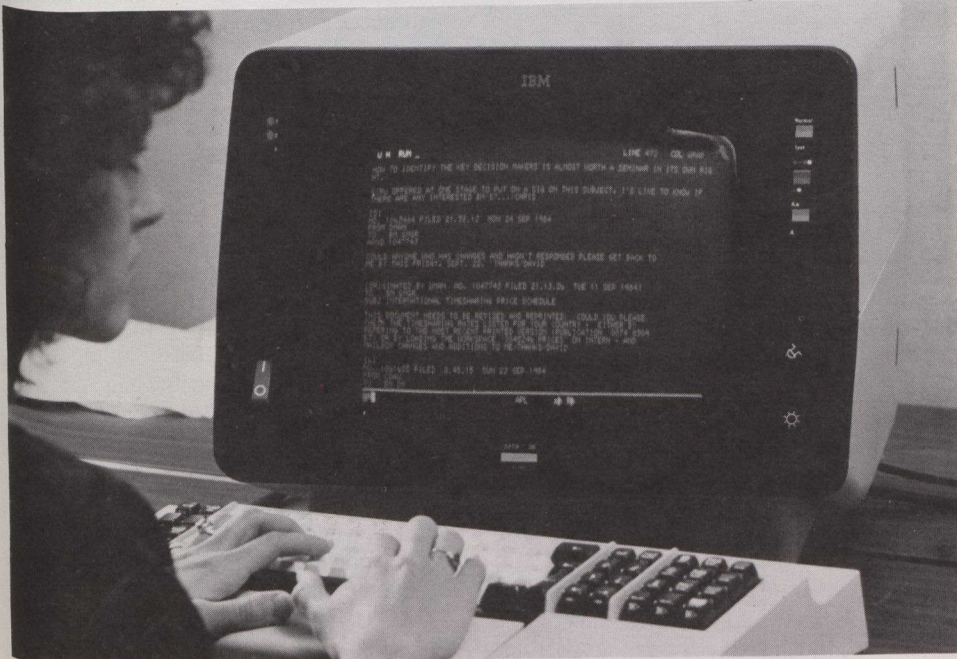
Employee at I.P. Sharp uses the company's own electronic messaging system, MAILBOX, to communicate with colleagues throughout the world.