

using a computer terminal and a telephone link-up.

The data base was collected from a number of sources, including the federal and provincial governments, the United Nations Food and Agriculture Organization and the International Monetary Fund.

Toward Tidier Trading Systems

THE CANADIAN Organization for the Simplification of Trade Procedures (COSTPRO) has developed a new concept to facilitate the preparation and transmission of trade documents and data between trading partners.

Called TRADEX, for Trade Data Element Exchange, it is the result of an extensive survey of Canadian business practices, a review of international trade documentation, and an analysis of the international requirements for trade data interchange.

The TRADEX device is a programmable word processor, simple to operate and inexpensive since it replaces the functions of the typewriter, electronic calculator, telephone, telex and the postal service for inter-office business transactions.

The device has a forms-creation software package that allows the user to create his own forms quickly, and it incorporates a communications software package that meets the international Open Systems standards for packet-switched or circuit-switched networks. It formats trade document data to the internationally-accepted syntax rules for data transmission. Consequently, forms data and outlines can be interchanged electronically to any required location over any telecommunications network.

One of the three major benefits of using a TRADEX device is that from the moment an order is placed until the invoice is received, there is no repetitive entry of information. Consequently, documentation errors are avoided, information processing and distribution time is reduced, and clerical workload is lessened. These savings are enjoyed by all automated participants to the trade transaction.

Other benefits are that TRADEX's data and document transmission capability eliminates postal delivery delays, therefore, reducing the time taken to submit orders and to effect carriage, and that the device minimizes document delays at shipping and border points.

COSTPRO's TRADEX device will provide substantial time and cost savings to Canada's trading community and its associated trading links by enabling Canadian traders to become more efficient and effective in their document processing and distribution methods.

Doctoring by Disk

A COMPUTERIZED education program developed by the Montreal *Institut de recherches cliniques* (IRCM) has made it possible for people suffering from high blood pressure to obtain answers to questions about their illness without having to see a physician. *The Systeme d'information et de communication* (SIC) will be placed in the waiting rooms of hospitals, where it will be available to patients and to the general public.

The system consists of a micro-computer, a small television screen and a keyboard not unlike those found on some telephones. It is very simple to use and does not require any programming. The answers are obtained simply by composing a number on the keyboard.

The device can answer all kinds of questions on treatment, prevention and medication, and it also asks questions. Questions, answers and the frequency of the questions are recorded automatically, thus giving health specialists information about patient interests and concerns. It was observed during tests at the IRCM that patients would ask the computer questions they were afraid to ask physicians.

At present there is only one disk—on high blood pressure—but the program designers plan to produce others soon. Among the subjects being prepared are diabetes, Parkinson's disease, hyperlipidemias and arteriosclerosis, sex education, as well as health services.

Terminals Streamline Table Service

THE RESTAURANT industry has entered the computer age and a Canadian company has produced what is considered to be the world's first wholly computerized restaurant management system.

In less than a year, sales for Remanco Systems Limited of Toronto reached multi-million dollar levels on an international scale.

The Remanco Restaurant Management System (RMS) identifies the who, what, where, when, how-much and to-whom of every transaction on the floor. Moreover, it provides concise reports, an analysis of inventories with business summaries, and an evaluation of staff performance.

The RMS enables waiters, bartenders, cooks and cashiers to "talk" to one another with greater speed and accuracy, but without leaving their posts. Two-way communications are sustained by RMS terminals and printers located in strategic service and preparation areas.

Additionally, the manager's office is equipped with a data base console, a

library of floppy disks, and a processor keyboard to "call up" required information.

Up-front, servers use a personalized "access key" to operate a terminal for placing food and beverage orders. Behind-the-scenes, each message reappears on a printer in the appropriate bar or kitchen preparation area. Simultaneously, each entry on the guest's bill is recorded on the cashier's unit and the manager's console. Mistaken, duplicate or lost orders—accidental or otherwise—cannot go undetected.

Each Remanco RMS arrives with a virtual library of application programs. Remanco can easily tailor-fit additional software programs to suit the individual data processing requirements of each restaurant.

The system is not confined to Canadian establishments. It has been installed overseas—in the Commonwealth Holiday Inns' hotels in England, and in Belgium, the Netherlands, and Finland. Remanco has also received orders for the RMS in Miami and Atlanta in the United States. Remanco's future objectives include establishing its presence in another 50 U.S. cities.

ASEAN Market Interests Canadian Companies

SINGAPORE and the other countries of ASEAN have become markets of considerable interest to Canadian computer hardware and software companies. More than 14 Canadian firms have established agencies in Singapore to participate in the expanding market for computer and communications technology in the ASEAN region and several companies have already enjoyed commercial success.

After less than two years in the market, AES Data Limited has already sold over 90 word processor systems through its local agent Equatron. (Also, see News Briefs, p.16.)

Mitel Corporation, through its local agent Paterson, Simons and Company, has sold more than 25 of its PABX systems. Among Mitel's customers are Singapore government ministries.

Northern Telecom, one of the world's largest telecommunications firms, expects sales of \$50 million in Asia during 1982, with a significant proportion in ASEAN countries. Northern Telecom has developed a digital PABX system, known as SL-1, based on a software package that caters to the unique requirements of banks, hotels, and government institutions. To date, almost 100 of these systems have been sold in ASEAN.

The Ottawa-based company spends over \$20 million a year on research and