

modernizing and optimizing their transmission and digital information processing structures from and to different sources -- databases, photographic, audio or video databases, located in or outside the firm.

At the present time, more than 280 telephone companies worldwide have installed ATM technology in their central control systems. The purpose of using this technology in telephone companies is to improve the quality of voice and data communications and effectiveness and to introduce of a variety of services in the near future.

Four telephone companies in Chile are currently experimenting with ATM in their internal signal switching structures, involving an investment of between US\$1 and US\$3 million. In addition, three banks are attempting to interconnect their local networks through an investment of between US\$200,000 and US\$1.5 million. CTC is planning to bring into service the first public ATM network in Latin America in March 1996 by installing 44 stations in Santiago for a total investment of 6 million dollars US. (It should be noted that there are only three ATM networks in the world.)

CTC's first ATM project was with the Catholic University of Chile through its telemedicine network. Simply by sending X-ray plates, medical histories and medical examinations over a high-capacity multimedia network, specialists in Chile, Brazil (in the Sotero de Rio hospital) and Argentina have been able to diagnose patients and simultaneously discuss the results of medical analyses through video conferencing.

It is anticipated that beginning next year the telephone companies will include ATM technology in their range of telephone services. This will facilitate introduction of new services like private multimedia networks for large companies, enhanced development of the Internet and a detection system to signal when and where someone has been connected to or disconnected from the network.

### **3.2 EDI (Electronic Data Interchange)**

This telecommunications sector is currently growing in Chile. There are about 5,000 EDI users and 60,000 automatic teller machines in operation in the country; worldwide, there are 4 million subscribers reachable via a computer, a telephone, a fax machine or telex machine. About 10,000 firms have an EDI account to link their communications networks and it is estimated that this number will double in the next two years.

The system began to operate in Chile in 1992 and experimented with a number of innovations. This service is similar to E-mail but with a standardized format. Business documents for transmission have a predetermined format based on the Edifact international standard: purchase orders, invoices, bank credit notes, etc. For example, it is now possible to transmit directly by EDI business quotations,<sup>2</sup> health plan contributions and VAT tax accounts, which previously required several hours of transmission time. In addition, using EDI can cut the administrative costs of a company by up to 70% and promote international trade, since 60% of business