of waiting for a purchase order to make its way through the typing pool and then the postal system.

EDI takes on strategic importance by enhancing relationships between companies and their suppliers on one side and their customers on the other side. EDI helps companies to reduce their inventories and associated carrying costs. In a number of industries, such as the grocery industry, where margins are slim, the cost/benefit that EDI yields can significantly increase productivity.

EDI has a great future as a time-driven, integrative component of the organizational electronic infrastructure. New applications are continually being designed for such industries as aerospace and the ready-to-wear apparel industry, where electronic graphics are important in the purchasing process because blueprints or drawings are required to support the purchase decision.

EFTS

In order to take full advantage of the banking and stock exchange systems, the Electronic Fund Transfer System (EFTS) was invented. It replaces paper money with electronic money processed by computers and their networks. EFTS is a tool to communicate, transport, integrate, and share information among financial institutions and their customers.

On October 28, 1974, the Congress of the United States provided for the creation of a National Commission on Electronic Fund Transfers. It is a new information infrastructure for the facilitation of payment mechanisms. But not only is it an electronic tool for payments, it is also a tool for the generation of new financial and information services.

Once EFTS is in operation, online exchanges can take place. Not only users from financial institutions, but also consumers and private investors can fix deals electronically via Automated Teller Machines (ATM), Point-of-Sales (POS) machines, credit and debit cards, smart cards (with a chip), and information kiosks located in such public places as malls, libraries, hospitals, airports, bus and railroad stations, and other.

FURTHER TRENDS

Future trends in the EII development are:

- Broadband capacity should radically increase the speed and carrying capacity of telecommunications and computer networks,

- Data compression should squeeze more information into a smaller space and therefore should accelerate the speed of digital services,
- Network intelligence and flexibility should improve the ability of service suppliers and end users alike to customize the management of online information resources,
- Interactive capabilities will allow for loading and retrieving the most complex information such as a video anytime, anywhere,
- Multimedia applications and services should allow for teleconferencing anytime, anywhere,
- Intelligent information appliances, such as pocket-size telephones (PCS) and multimedia personal digital assistants (PDA's) should improve the mobility of the enterprise's workers and their ability to access and retrieve information anytime, anywhere,
- Navigational tools should allow for the application of intelligent agents to navigate that information which is right for a given user,
- Reliability, security, and safety improvements in order to make EII more robust,
- Wireless communication should improve the delivery of the applications to/by the mobile workforce and consumers, increasing the velocity of transactions and decision-making.

CONCLUSION

A business enterprise is not any more supported by a single (e.g., MIS) or system set (e.g., ERP) of applications. The latter evolves into an Enterprise Information Infrastructure (EII), a system of six layers handling thousands of IT components that support business/organization processes.

The same process of emerging information infrastructures takes place at the level of:

- Local, supported by the Local Information Infrastructure,
- Nation, supported by the National Information Infrastructure,
- Global, supported by the Global Information Infrastructure.

These four information infrastructures are being interconnected, creating a new civilization information infrastructure, following and interacting with the 10,000+ years old agricultural infrastructure, 6,000 years old urban infrastructure, and the 200+ years old industrial infrastructure. The purpose of the EII/LII/NII/GII is not to replace the other two civilization infrastructures but to optimize their development and operations.

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ENDNOTES

1 This service was used at the beginning of the Internet Era, nowadays has been replaced by www.

2 This service was used at the beginning of the Internet Era, nowadays has been replaced by www.

3 More on EIP's in Chapter 4.

4 This system is less frequently used now; however we speak about it to complete a list of potential Internet systems and services.

5 WFS is described in depth in Chapter 4.