Although the proverb "Better late than never" may be applicable to many situations, it rarely applies to library users' information needs. Most users prefer timely access to information regardless of its location. In response to this, libraries of all types are meeting users' information needs by installing facsimile (or "telefacsimile," or "fax") machines to speed interlibrary loan requests and document delivery service. And the number of libraries offering fax services is rapidly increasing: the 1991 edition of the
DIRECTORY OF TELEFACSIMILE SITES IN LIBRARIES IN THE UNITED STATES AND CANADA lists 3,924 sites, up 63% over the previous year's edition and almost 800% over the 1986 edition. Boss (1990) reports that at least 1,000 new facsimile machines were installed in libraries in 1989-- double the number installed in 1988.

DEFINITION

Facsimile machines combine a scanner and a modem to send and receive printed or graphic information across telephone lines. The sending facsimile machine scans a document and converts it to a digital copy consisting of a series of black and white dots (or half-tones, in the case of a more sophisticated machine). This digital information is then converted to analog signals that can be transmitted over telephone lines. The receiving facsimile machine re-converts these analog signals to digital information and prints a copy of the document on plain or thermal paper.

A more recent development in facsimile technology is the FAX BOARD which, coupled with a computer and the appropriate software, allows the computer to transmit information to other fax machines or computers with fax boards. However, fax boards are limited to sending electronic information, which may be a disadvantage for use in library applications. To enable a computer with a fax board to send printed information, one must purchase and install a scanner to convert print information to electronic form.

The International Telegraph and Telephone Consultative Committee (CCITT) has divided facsimile machines into four groups according to protocols and signals exchanged between machines:

- Group I: (almost obsolete) transmits a page in six minutes;
- Group II: transmits a page in approximately three minutes;
- Group III: (the current standard) transmits a page in less than a minute;
- Group IV: uses high-speed and digital data networks (not yet widely available) to transmit documents in three to four seconds.

HISTORY AND CURRENT USES
Libraries began experimenting with facsimile usage in the 1960s. Many early projects, however, were impeded because their Group I machines were incompatible and relatively expensive. With the advent of compatibility standards and decreasing prices, facsimile usage has become more widely implemented. As in the business world, libraries are using facsimile machines for general communications. However, libraries predominantly use facsimile to speed interlibrary loan materials and requests. Fax networks involving combinations of academic, public, school, and special libraries have been formed to share resources and expertise (Brown, 1989). For example, Reference by GammaFax, an Illinois project funded by an LSCA III grant, is a multitype fax network that shares access to CD-ROM databases and forwards queries and search results via facsimile (Fitzwater & Fradkin, 1988). An advantage of such networks is the ability to cooperatively develop collections without impairing service—an important consideration in the face of rising periodical costs and budgetary constraints.

CONSIDERATIONS REGARDING FACSIMILE POLICY

The implementation of a facsimile service necessitates a number of policy decisions. Following are some of the many questions that must be considered.

General:

- How will facsimile services be integrated with the reference services policy?

- Should the library provide reference services via fax?

- Where should the facsimile machine be placed for optimal security?

- Will the facsimile service be made available to the public for a fee? How much?

- Will library employees be allowed to use the fax machine to send and receive personal messages? If so, will there be a fee? How much?

- Who will operate the fax machine?
INTERLIBRARY LOAN USAGE:

- What should a standard request contain and what format should it take?

- Will there be a fee associated with document delivery? Will the fee be passed along to the user?

- What turnaround time will be expected with the use of terms such as "rush" or "urgent" on a request?

Libraries seeking support for decision-making may consult the "Guidelines and Procedures for Telefacsimile Transmission of Interlibrary Loan Requests" prepared by the Interlibrary Loan Committee, Reference and Adult Services Division, American Library Association (see note below). These guidelines, adopted by the Reference and Adult Services Division Board of Directors in June 1990, are intended to establish uniformity and supplement local policies. Implementation efforts and examples of various forms are also detailed by Jensen, Sabatine, Shorey, & Williams (1990) and Brander (1988).

PURCHASE OPTIONS

The cost of a facsimile machine depends on its features and whether it uses thermal or plain paper. Low-end machines cost approximately $500, while high-end machines may cost more than $4,000. Machines that use thermal paper are less expensive, but they present some disadvantages. Thermal paper may be difficult to handle due to its tendency to curl, and it has limited storage life. Also, it comes in rolls, so the pages must be cut apart (for which a built-in paper cutter feature is highly recommended). Plain paper machines are currently more expensive, but plain paper is easier to handle and offers improved storage life.

Some features that libraries might consider include:

- Activity Reports: Provides a printed report of fax machine usage including the date and time of transaction, telephone number of receiving machine, number of pages, and time required to complete the transaction.
-Automatic document feeder: Eliminates the need for an operator to feed in each sheet of a multi-page document.

- Automatic redial: Redials the number of the receiving machine after a period of time if the unit was unable to transmit due to a busy signal.

-Gray scales: Allows the transmission of half-tones representing different colors. This is particularly useful if photographic information must often be sent. The higher the gray scale number, the greater the reproduction ability.

-Out of paper reception: Enables the storage of fax transmissions in memory if the machine runs out of paper.

-Platen: Allows a book to be placed flat on the scanner. This is a useful feature for those who will be faxing from books since it eliminates the need to make a photocopy of the book pages on a copier prior to faxing.

-Polling: Enables the fax machine to dial up a series of other fax machines to collect faxes that have been left waiting in those machines' document feeders.

-Speed dialing: Allows the storage of the most frequently called fax numbers in memory for one or two key dialing.

NOTE: A copy of "Guidelines and Procedures for Telefacsimile Transmission of Interlibrary Loan Requests" may be obtained by sending $1.00 and a self-addressed, stamped envelope to: American Library Association, Reference and Adult Services Division, 50 East Huron St., Chicago, IL 60611.

REFERENCES AND ADDITIONAL READINGS:

American Library Association.


Jensen, Jan; Sabatine, Alicia; Shorey, Denise; & Williams, Catherine. (1990). GETTING THE FACTS AS SOON AS POSSIBLE THROUGH FAX. ED 328 272.


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