FACSIMILE

Facsimile (fax) is a technology used to distribute documents such as photographs, drawings, blueprints, handwritten documents, and drafts from one location to another using telephone communications.

The facsimile process was developed in 1842 to move photographs long distance for publication in newspapers. While that makes it one of the oldest technologies in the field of paperless communication, it has achieved great popularity only recently. Current popularity is due primarily to the great strides being made in improving the facsimile technology.

Computers and word processors are grouped by major changes in operational technology into "generations." Fax development is referred to in terms of "groups." Group I machines, for example, can transmit a page in about six minutes with a resolution of 95 x 96 lines per inch (1pi). At that resolution, the quality of received copy might be compared to a smudged fingerprint. This class of machines is relatively inexpensive and is a good choice in an office environment with low volume needs.

Group II fax machines can transmit a page of text in three minutes, and Group III machines in less than a minute--both with a resolution of at least 100 x 200 1pi. Some Group III digital facsimile machines can transmit a page in as little as eighteen seconds. Groups I, II, and III are all designed for use with voice-grade telephone lines.

Much of the popularity and excitement over Group III facsimile devices is due to the technology that makes possible faster, more accurate transmissions. Standard features on this equipment include polling, broadcasting, programmable dialing and distribution, automatic document feeding, and contrast control. Laser devices can print on standard 20-pound bond paper and can transmit a page in twelve seconds. This is significant since 40 percent of facsimile cost is in the long distance expenses.

Group IV facsimile has arrived. Office Technology Update reports:

> Group IV units, the newest facsimile generation, can transmit a page of text in less than six seconds with copy quality up to 400 x 400 1pi.

But this class, unlike Groups I, II, and III, does not use standard telephone communications. Group IV requires a high-speed data network, so its use is limited to businesses with digital networks. Costs for Group IV units are high but should stabilize by the early 1990s.

Facsimile is developing into one of the best ways of moving documents between locations for business. While there are many good reasons to install facsimile, the key determining criterion for deciding on facsimile is having material or documents that need to be viewed in their original format, FAST!