Friden talle machines for integrated data processing

For years punched paper tape has been an everyday tool in communications work, providing an accurate, automatic means of transmitting typewritten data. Why, then, do we refer to it as a miracle?

First, consider the simplicity of the idea behind punched tape – five unseen rows (channels) along a strip of paper offer 32 code possibilities at each regular interval where a combination of holes is punched. This is enough for the alphabet, and with a shift code, numbers, punctuation marks, and special codes for instructing machines. Eight-channel tape provides 256 possibilities at each position along the tape. Here is a simple mechanical means of recording, storing, and transmitting data, which for practical purposes has unlimited capacity.

Clearly, even without indicating some of the machines illustrated in this booklet, punched tape is not the only practical approach to integrated data processing, but it has become the *highroad* to IDP because it possesses an overwhelming advantage. It can be used for more purposes with fewer modifications than any other method of automatic communication yet devised.

The five-channel tape described above, for example, may be punched as an automatic by-product of typing, adding and subtracting, calculating, order writing, billing, or other common operations. Then the punched data may be transmitted and reproduced automatically by local, long-range, or even international communications equipment. Finally, the same data may be handled automatically by any office machine equipped for tape input, or punched into tabulating cards by any of the automatic tape-to-card converters now on the market.

Office automation has been on our doorstep for a long time. Its basic tools – complex calculators, automatic writing machines, bookkeeping equipment, automatic accounting machines, and many others – have been in our offices for years, and we've learned to accept their efficient processing of data. To usher in the present era of *integrated* data processing, only a means of automatic communication for the equipment was lacking. Now the machines have been adapted to use tape for the purpose, to read it or to punch it as a byproduct of their primary function.

the advantages of PUNCHED TAPE

TAPE

the miracle

PUNCHED