The newspaper does its best to make every square acre of land and sea give an account of itself at your breakfast table.

Ralph Waldo Emerson
Like railroading and the circus, there's a romance about newspapers. Think "newspaper" and the images tumble by: Clark Kent fighting for Truth, Justice, and the American Way (with the help of Lois Lane, Perry White, and Jimmy Olson, of course); the late show's "Dispatch from Reuters"; early TV's "The Big Story"; Clark Gable in "It Happened One Night" casting the stereotype of the brash, young, adventurous newspaperman; the classic "Citizen Kane"; a young Ernest Hemingway telling how it was.

Newspapers date from the "Acta Diurna" (Daily Events) published by hand and posted in public places of the Roman Empire in 60 B.C. The newspaper as we know it first appeared in Germany in 1609, following the invention of movable type. Colonial newspapers, quickly established in this country, encouraged discussion of public issues and led to the growth of opinion which resulted in the American Revolution.

Newspapers today are battling two enemies: electronic competition and rising production costs. They can lose the fight for timeliness to TV and radio because newspapers retain a unique ability to analyze, comment and report behind the news; they carry political clout in their ability to inform and persuade; they offer some tangible permanency to the news and a chance to relax with favorite features; they share an intimacy with the reader, a feeling of rainy Sundays, sleeping cats and crackling bacon; and you can always wrap the garbage in them.
To help newspapers solve the economic problems, Digital Equipment Corporation is offering TYPESET-10. We’re the world’s second largest manufacturer of computers, and while TYPESET-10 is new, the computer system on which it’s based is well established.

TYPESET-10 runs on our DECSYSTEM-10 computer system, and more than 220 of these are installed and operating in universities, timesharing service bureaus, production plants, and corporate data processing facilities. TYPESET-10 makes use of the hardware and software of these proven systems as well as the experience behind them. TYPESET-10 also draws upon our background in smaller DIGITAL graphic composition systems, TYPESET-8 and TYPESET-11. Over 400 of these systems are now at work in newspapers, publishing houses, and trade shops. But TYPESET-10 is the biggest, the fastest, and the most inclusive. It can totally automate your newspaper.

It will simplify production; it will handle accounting, circulation, news, advertising, and promotion and do it faster, more efficiently than you might think possible. And, you can use the associated DECSYSTEM-10 hardware and software to handle other computer-related tasks, like organizing management information and reports.

Here’s how. Terminals are connected to the central computer. These terminals use standard typewriter keyboards and may include a CRT/video screen or hard copy printout. Users interact with the computer through their terminal keyboards and, because of the system’s unique timesharing monitor, each user appears to have the system dedicated to his particular task.

Terminals can be allocated where they’re needed: 50 in the newsroom, 10 in composing, a couple in the pressroom, and whatever’s needed to support advertising, circulation, and accounting. Any number of terminals up to 127 can be connected at one time. The terminals link the different departments to the computer and allow users to edit copy, call forth camera-ready galley, modify distribution, handle the payroll, keep track of classified and display ads. For example...
A story breaks. Reporters gather the facts and enter their reports through TYPESET-10 terminals. Alerted by the city editor, the rewrite men go to work. Each has a terminal which displays the latest rework; the familiarity of the standard typewriter keyboard helps them quickly develop the story.

The lead article takes shape, then assumes greater substance as last-minute details are sorted out and facts clarified. Sidebars are written. TYPESET-10 helps make the who-what-where-when-why-how of journalism fall into place.

The copy entered by the rewrite men is recorded electronically as retrievable files on such mass storage devices as disk packs and magnetic tapes. Each story file is called forth by the managing editor on his video terminal. As he reviews it, high-speed line printers furnish paper copies for proofreading and editing. Typo corrections and changes are entered through any terminal. TYPESET-10 does the rest.

Once edited and approved, the story file is automatically justified and hyphenated. Typesetting instructions—type face, point size, column width, and leading—are specified and the file is output to any one of a variety of hot metal or photocomposition machines. File transfer can be through on-line interface, paper tape, magnetic tape, or over communication lines.
On the business side, TYPESET-10 brings order to the chaos of the Advertising Department. Classified ads are entered into the system just as news stories. The ad can always be retrieved, edited, modified, and redeposited in the data base. Once proofed and corrected, the ads enter the sort queue where, at intervals during the day, they are updated into the master file. From the master file, TYPESET-10 produces full galleys ready for pasteup. There are no curled and yellowing scraps of repro to lose or misalign.

Up to 300 unique ad classifications are accessed through a TYPESET-10 terminal using a 6-digit number identification system. Ad coding makes possible the automatic processing of start, kill, and skip dates; expired ads are held inactive for a predetermined period, giving ample time for renewal. Bad credit risks are listed by telephone number in system memory; any correspondence automatically rejects an ad and notifies the operator.

Elsewhere in Advertising, lists of seasonal advertisers are being called up from memory. Later, TYPESET-10 will be programmed to solicit each with a personal letter. The Promotion Department is busy tabulating results of the weekly contest; Accounting comes on line to process the payroll; Special Features and Sunday Sections is running a check on garden articles published during the past five years, while upstairs, the publisher contemplates plans for implementing a fully computerized morgue.

Outside, rain has begun. The Circulation Department breaks off modifying suburban carrier routes long enough to punch up an order deleting 6000 copies of the evening edition slated for the ball park. They'll be distributed instead among the city's subway hawkers.
Right now, TYPESET-10 has the capability to handle the kind of jobs we've mentioned. Soon, we hope to add more attractive features. One of these is page dummying.

With a newspaper dummy subsystem, TYPESET-10 could quickly and automatically lay out an entire paper or sections of a paper. Display ad insertion orders and change orders would be the basic inputs to the dummy subsystem. The schedule of display ads on file would be maintained by an accounts receivable system which would accept insertion orders as received from advertising customers, direct from the client's office if desired. TYPESET-10 would then calculate the newshole versus the display and classified advertising percentage. It would specify the total number of pages in the newspaper, the number of pages per section, and the placement of individual ads on pages within the sections. It could handle space reservation for double-back ads, ensure that certain ads appear in appropriate sections, and prevent competing ads from occupying adjoining pages—all tasks which are now done by hand.

If you're planning a move, investing in new equipment, or just thinking of ways to get more from your production dollar, consider TYPESET-10. You might add a system to your present facilities or completely reorganize. Editorial and business offices could be located in neighborhood fashion around the city, linked to the production plant through remote communication facilities.

Why not call or write your nearest DIGITAL office; talk to a Graphics Arts Specialist and listen to his ideas. He'll show you some new ways to roll the presses.
At a Glance...

- On-line entry of classified ad copy and control data into computer storage by paper tape, magnetic tape, CRT or keyboard terminals, with plans for an optical character reader.
- On-line proofing and correction of the entered copy and control data at available terminals.
- Creation of a data base of classified ad and labor accounting information and statistics.
- Output to phototypesetting devices by means of direct on-line interfaces, or off-line via paper tape or magnetic tape, or through communications lines to satellite facilities.
- Generation of various reports that show the status of ads and accounts currently on the system.
- Uninterrupted operation even in the event of failure of principal hardware components (based on the existence of completely redundant system configurations).
- Processing time for straight matter hyphenation and justification (8-point, 11-pica lines) on the order of 800 characters per second.
- A modular, open-ended structure adaptable to additional composition commands and user-developed programs. Documentation of software is sufficiently detailed to enable the user to make such additions without vendor assistance.