Video Data Management System

Featuring GE DATANET-760 Display Terminals

NOW YOU CAN INTEGRATE ALL SEGMENTS OF YOUR BUSINESS. FROM ON-LINE DISPLAY TERMINALS LIKE THIS, YOUR KEY PEOPLE CAN BUILD, USE, AND UPDATE A COMMON DATA FILE. EVERYONE WORKS FROM THE SAME, CURRENT INFORMATION.

GENERAL ELECTRIC

General Electric's new Video Data Management System improves the effectiveness of your entire organization

The Video Data Management System is a multi-terminal, on-line, file management system with time-sharing computing ability. The key is the system's data base — a large, common file of information, or a number of smaller private files, which authorized people can use from remote locations. This common integrating factor can have a powerful effect on your organization:

* The volume of duplicate files and duplicate paperwork is reduced tremendously.

* Since there's only one source of information, little time is wasted in finding it.

* Everyone who needs the information works from the same set of facts, so coordination improves greatly.

* The data is absolutely current and secure. New information can be put in once, by one person, and everyone requiring the current information will have immediate access to it. Decisions can be made on the latest facts — not information that is days or weeks old.

* Even further, you can use the time-sharing capabilities of the Video Data Management System to access the data, then compute on it.

Until now, only the boldest pioneers could get these benefits from their computer systems. The Video Data Management System uses proved equipment: General Electric 225 or 235 computers linked to DATANET-760* display terminals. Short-cycle delivery is possible. You can easily convert your present card or tape files into this disc-oriented, on-line, common-data-base system.

As soon as your Video Data Management System is installed, you can use it for time-sharing. Then, you can begin organizing your file system. The software structure is already there for a complete management system. You'll simply need to tailor it to your own particular requirements.

TV-type terminals are easy to use.
The Video Data Management System does away with key punching. You can avoid the time and mistakes of punching a card, carrying it to the computer, and feeding it in. With the Video Data Management System, there's only one step: typing in the information at a DATANET-760 terminal.
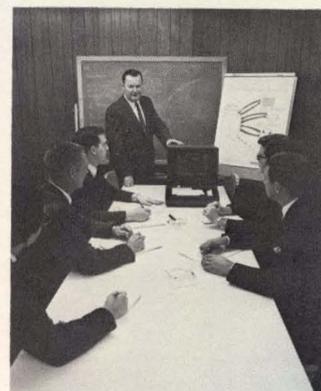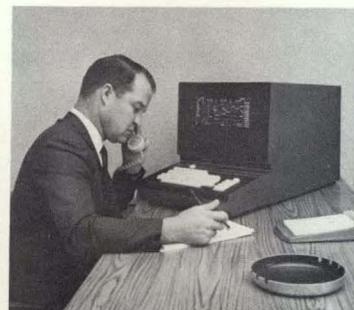
*DATANET: Reg. Trademark of the General Electric Company

These terminals transmit information at 120 characters per second — considerably faster than most other types of terminal devices. Data may be completely assembled and verified before it is sent to the computer. Record changes can be made by displaying the data on the screen and typing the changes on the keyboard.

The easy-to-read cathode ray tube can display up to 26 lines of information. Users like the ability to get information without the clutter of printed reports. If printed material is necessary, the computer can be directed to furnish a listing through its high-speed printer or a remote teletypewriter.

Terminals can go anywhere

Twelve DATANET-760 terminals and nine teletypewriters can operate simultaneously in the system. Up to 36 can be used on a party line basis. The terminals can go anywhere a telephone line can reach.

In a manufacturing business, for example, typical terminal users are Purchasing, Shipping, Incoming Inspection, Production Planning, Master Scheduling, Cost Accounting, Engineering, and General Management.

In an educational institution, the Video Data Management System provides a powerful tool for academic instruction. Simultaneously, it can handle administrative functions such as classroom scheduling, student records for counseling, statistical analysis, and registration.

A distribution company can use the Video Data Management System to make files on inventory, costs, orders, and accounts available to many locations. It can provide on-line sales reporting and analysis. It can be the key to a multiple-office, integrated data system.

Utility companies can handle on-line customer inquiries, service call scheduling, and reporting. They can maintain up-to-the-minute equipment status. They can use the system's engineering/scientific time-sharing capabilities for operations analysis.

Banks can use the Video Data Management System for on-line teller service, account inquiries, and to integrate a multi-branch operation.

To help you estimate the value of the Video Data Management System in your own business, here are some interesting facts about the system's features:

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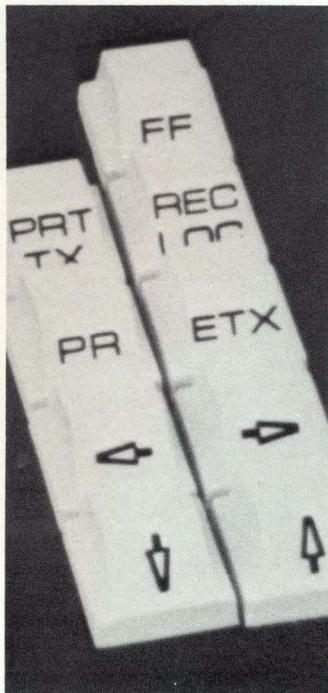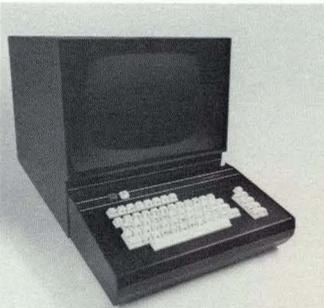
General Electric's Video Data Management System features

BASIC
a computer language anyone can learn

Like other General Electric time-sharing systems, the Video Data Management System features the BASIC language.

Unlike other BASIC languages, the BASIC used by the Video Data Management System can be linked directly to the data file. Thus, you can pull selected segments from the file and make computations on them.

BASIC was developed by Dartmouth College to make it possible for beginners to use a General Electric time-sharing computer after only a few hours of instruction. BASIC stands for Beginner's All-purpose Symbolic Instruction Code. It is a language the computer understands, yet it resembles ordinary mathematical notation. It has a simple English vocabulary and a few grammatical rules, but it permits complete and precise specification of your problems.

Your people will learn how to use the system quickly. They'll learn to write and change programs. Automatic checks within the system help guide them. When the system detects errors, it points them out in concise, self-explanatory messages such as "SQUARE ROOT OF A NEGATIVE NUMBER," meaning the program has attempted to extract the square root of a negative number.

BASIC is simple. It is also a powerful and efficient language which can be used for complex mathematical, statistical, and business calculations. A library of programs is available to assist in these computations. There are functions for exponentials, logarithms, random numbers, square roots, and trigonometric functions.

People who have used General Electric time-sharing with the BASIC language say it has improved their productivity as much as 500 percent.

SAM
gives you the ability to store and manipulate files

SAM (Store and Manipulate) is a real-time operating system which gives you the ability to create a file, update or review an existing file, or perform certain analyses and calculations on data in an existing file.

Creating a file is illustrated. As a first step the machine will ask for your user number. After reviewing the user number for security clearance, the computer will clear the screen as a security feature. SAM, TRYIT, CREATE is the command to create a new file which you have named TRYIT. When the computer announces it is READY, you type in the data. When you are through, type : END.

To access the file, type SAM, TRYIT, RUN. If you wish to limit the accessibility of the file, you can set up a security code in three levels:
1. For viewing the file contents only.
2. For viewing and updating the file contents.
3. For viewing, updating, and changing the security code if necessary.

Similarly, the SAM system can be used to:

Access a specific record

Replace a record

Add a new record

Insert a record in file

Delete a record

Print a specific number of records

Delete a file

Find records and link to a pre-stored BASIC or machine-language program. This makes it possible for you to retrieve file information, store it in the terminal work area, then run a program which will use the file data.

```
HELLO

USER NO.?

1294

SYSTEM ?

SAM,TRYIT,CREATE

READY


1  LINE  ABCDE  12345
2  LINE  BCDEF  23456
3  LINE  CDEFG  34567
4  LINE  DEFGH  45678
5  LINE  EFGHI  56789

:END
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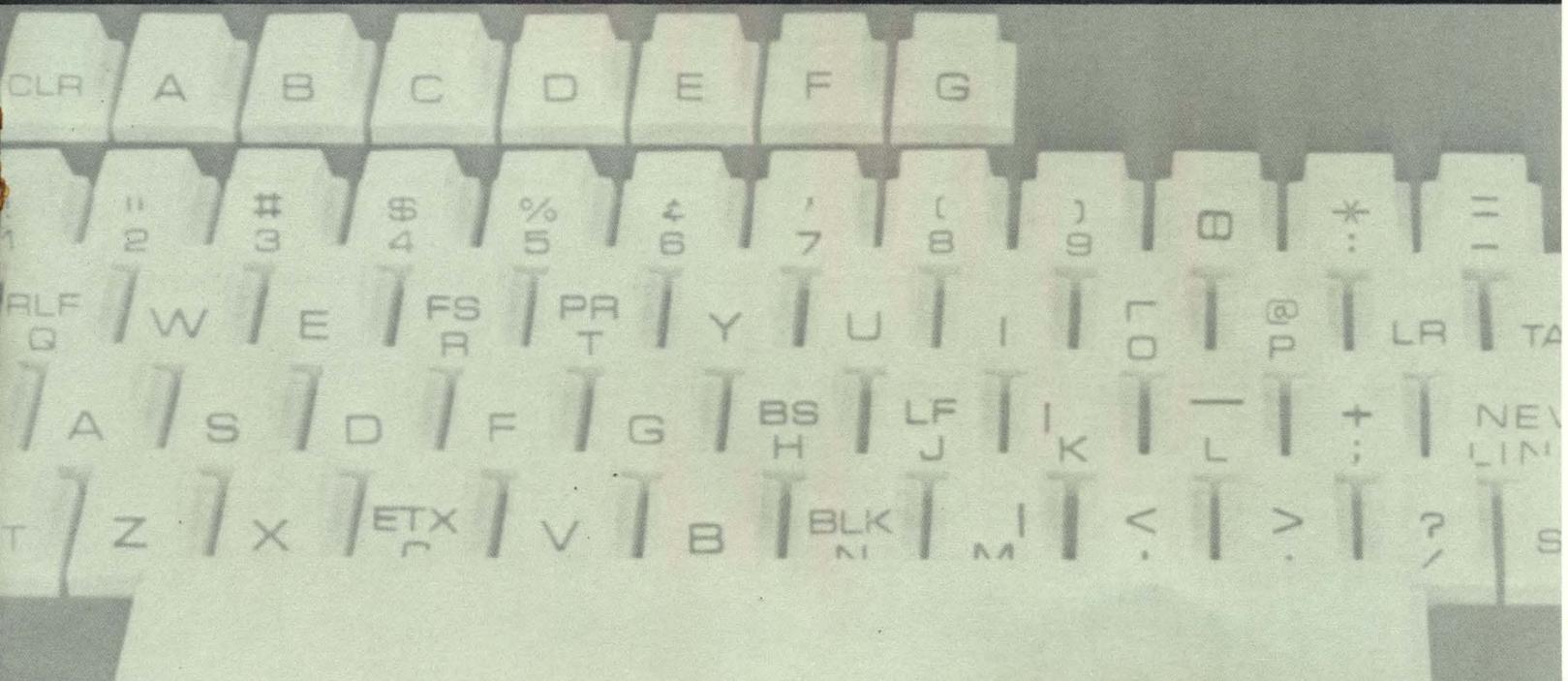
# COLLECT, RETRIEVAL, and BACKGROUND systems add flexibility

The COLLECT system gives you the capability to store, update, and display "pages" of data files on a DATA-NET-760 display terminal. A page of data can be 46 characters wide and 26 lines deep. Up to eight pages of data can be saved under a single name.

RETRIEVAL is a system by which a remote terminal user can call forth pre-assembled programs and execute them using file contents as data. The terminal can converse with the RETRIEVAL program — to enter data or search an inventory file, for example. The operating system controls program loading and execution as well as disc and terminal input/output.

The BACKGROUND system allows batch processing to be time-shared with real-time processing, thereby minimizing idle time in the central processor. BACKGROUND system programs are assigned the lowest possible priority so they will not interfere with real-time requests. With this system, files can be built for later access from remote terminals.

Video Data Management System hardware
* One 16K GE-225 or -235 central processor
* One 16K DATANET-30 communications controller
* One 100-cpm card punch
* One 900 lpm printer
* One 15KC tape handler and controller
* One dual-access disc storage control
* Two disc storage units, DSF 204
* Up to 12 DATANET-760 video display terminals
* Up to three DATANET-760 controllers
* Up to nine teletypewriters
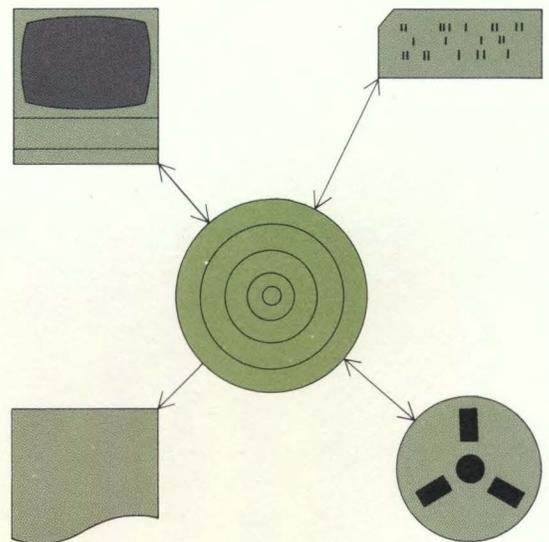
Utility programs enhance background capabilities
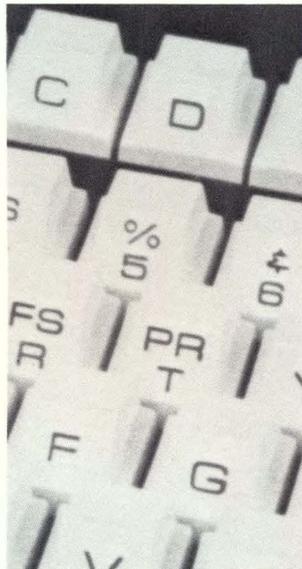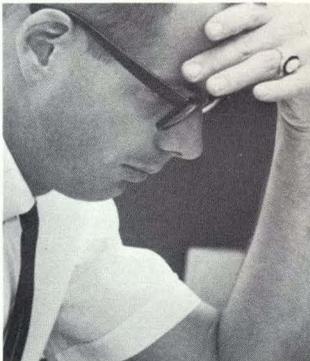
SAM load — to build a SAM file on disc from card or tape input, or reformat an existing SAM file.

SAM to tape — to dump a SAM file onto magnetic tape without a format change.

SAM to printer — to list a SAM file on the printer without reformatting.

SAM to card — to punch a SAM file onto cards without a format change.

Parameter print — allows the computer to simulate the list capabilities of a 407.

Parameter punch — to simulate the capabilities of a 519 reproducer.

Octal to binary — to convert octal correction cards to binary format for program loading.

Magnetic tape to printer — to dump tape onto the printer in octal format.

Disc to printer — to dump disc onto the printer in octal format.

Card to printer — to list cards 80/80 on the printer.

Card to card — to reproduce cards 80/80.

In addition to these operating systems, the Video Data Management System includes three miscellaneous systems to further enhance the system's utility:

Load — allows RETRIEVAL or BACKGROUND programs to be loaded onto disc during time-share operations.

Patch — allows the programmer to make octal changes to disc-resident RETRIEVAL or BACKGROUND programs during time-share operations.

Dial — allows system users to exchange messages with each other and communicate with the system operator for initiating certain tasks, such as BACKGROUND.

DATANET® 760

*Ask your General Electric Information Systems
Sales Representative about the Video Data
Management System. He'll show you how these
computation and file abilities can reduce costs
and improve efficiency in your business.*

INFORMATION SYSTEMS

GENERAL ⊛ ELECTRIC