

The Time-Sharing leader

FOR GE TIME-SHARING USERS



Information Services

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In Time-Sharing
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COMPLEX PRICE QUOTATION SYSTEM EASILY MANAGED WITH MARK II

How do you manage to get fast quotations from a catalog with specifications and pricing schedules for 2000 different products? Getting quotations from catalogs is difficult, but when you consider that specifications and prices change continually — and quantity prices are different for every item — and information is needed quickly in a competitive market — you can see why the marketing administration office at GE's Large Lamp Department was faced with a data base management problem.

The huge catalog was computerized years ago, but the frequency of updating and the market's requirements for faster bids make it necessary to provide faster turnaround via time-sharing.

Using data base management techniques on the Mark II, the Large Lamp Department now gets immediate price quotes on one or a series of products. For example, terminal operators can ask the system for prices on 50 different lamp types. Each may be ordered in different quantities, thus changing the quantity rate. The system will look up the current price for each lamp considering the quantity ordered. With the order filled, the pricing desk can then ask the system such questions as "what is the profit margin on the incandescent, fluorescent, mercury, quartz, or Lucalox lamps in this order?" Large Lamp Department stays competitive by getting answers to such questions as "what if we give an additional 2% discount on quantities over 20,000? What will it do to the profit picture for that lamp?"

A large amount of catalog work has been eliminated — the manual updating and changing of items is gone. New price schedules can be produced on demand — and with accuracy. Pages printed on the time-sharing terminal are sent to the press room, where they're reproduced and sent to the field in a fraction of the time previously required.

It all began when the file handling capabilities of the Mark II were recognized. The turnaround time made such an on-line catalog feasible.

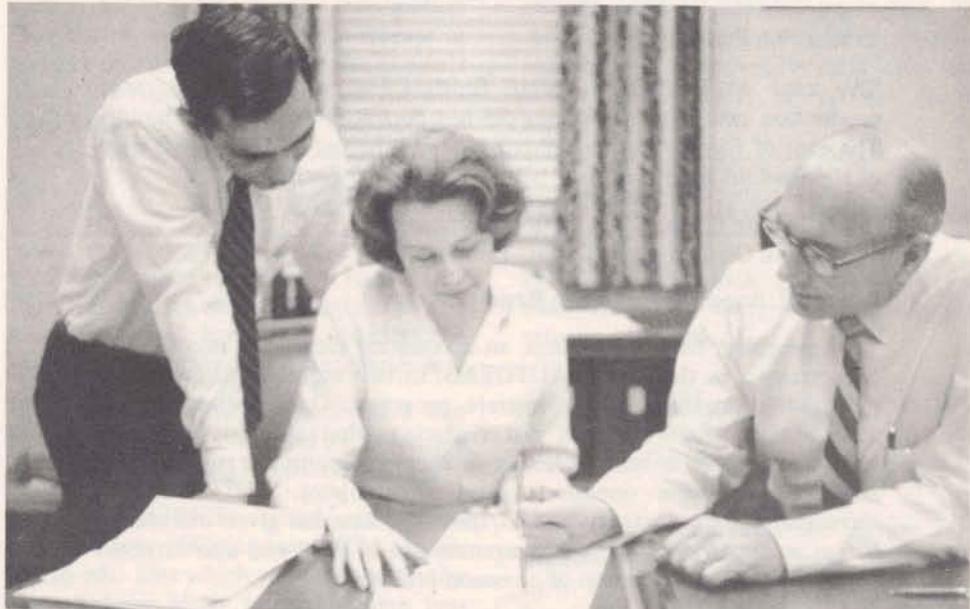
Here's a list of the specifications that marketing administration submitted —

that were met to provide the system being used today.

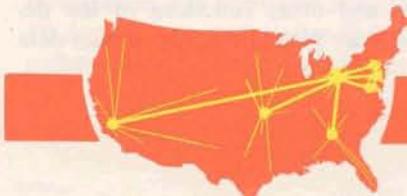
Give the marketing administration function the ability to

1. Determine the ratio of profit to dollar quantities for any or all of the products carried in the catalog.
2. Provide price and cost extensions on any or all items in the catalog.
3. Provide pricing schedules at different quantity rates for all items.
4. Print out the entire pricing list in page format on demand.

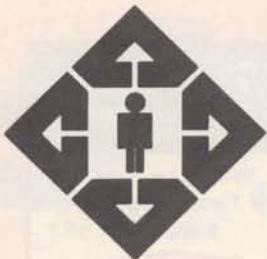
(Cont. on p. 2)



At a mid-point evaluation meeting, Don Ina, Time-Sharing Representative; Marcella Geiczi, Analyst, and E.W. Schoenherr, Marketing Administrator, both of Large Lamp Dept., check a recent updating to the file.



GENERAL ELECTRIC



Financial Analysis and Control with AUTOTAB

AUTOTAB, a financial planning and control system producing tabular reports, has been receiving great customer acceptance. Available in the General Electric Mark II Datasnet Software Services Library (DSSL)*, AUTOTAB applies time-sharing to the task of preparing reports and graphs for you.

In minutes, reports, such as budgets, cash flows, pro forma statements, etc. are printed out. It's being used a number of ways by General Electric time-sharing subscribers. Here's what several AUTOTAB users are saying:

Tabulates Complex Financial Statements

"The AUTOTAB system gives Western Pacific Railroad the capability to compute and tabulate highly complex profit centered financial statements on a timely, accurate and inexpensive basis. AUTOTAB is a powerful assist for our professional, but 'non-programmer' personnel in computing and tabulating data for financial models."

- G.R. Green, Director, Economics
Western Pacific Railroad, San Francisco, California

Analyzing Real Estate

"AUTOTAB is extremely useful for non-routine but somewhat repetitive applications. Its greatest use to our company has been in analyzing real estate proposals. Once AUTOTAB is programmed for a special case, an analysis can be run in 30 minutes vs. an 8 hour operation by hand."

- John L. Orahood, Manager, Special Projects Corp.
General Portland Cement, Dallas, Texas

Production Planning

"We used AUTOTAB to output finished results of our long range production plan when deadlines did not permit in-house programming. The ease of format and data input change inherent in AUTOTAB were of tremendous benefit in maintaining our planning schedules"

- Charles T. Kurn, Production Economics
Sunn Oil Company, Dallas, Texas

Secretary, Supervisors Prepare Reports

"My secretary, four supervisors, an accounting clerk, and myself have been trained in the use of AUTOTAB. In two months this group has prepared approximately 50 separate programs. One of these is run daily, taking four minutes, but replacing what formerly took 30 minutes at the desk calculator. Six of these programs are run monthly and the rest were one-time analytical problems. AUTOTAB has increased our productivity and at the same time has given our staff a better understanding of how computers can be used and also involved them jointly in the solution of common problems."

- E.H. MacKay, Executive Vice-President and Controller
Western States Bankcard Association, San Francisco, California

To see how this business-oriented system can also work for you, contact your General Electric Time-Sharing Service representative.

*DSSL programs on Mark II may be accessed by typing DSSL: (program name).

(Price Quotation System Cont.)

In addition to these "end result" specifications, they had to have full edit capabilities into the data base to:

1. Change any description of an item in the catalog.
2. Delete discontinued items.
3. Insert any number of new items and their schedules between any two items currently in the catalog.
4. Replace any old pricing schedules with new ones.

Control and bookkeeping functions were required too. The system had to

1. Provide a positive check that the price inquiry currently being made is on the most recently updated version.
2. Provide absolute control of user access through executive program control, recognizing passwords.
3. Provide a bookkeeping function on the usage of this particular application — available on demand.

Working with the time-sharing account representative from the Cleveland office, a six-phase approach to the problem was agreed upon. It could be implemented in convenient modules.

There were specific functions to perform in each phase, with meetings planned to examine specific progress and objectives at midpoint. For example, in Phase I, paper tapes for the incandescent lamp data base had to be generated. This was done concurrently with the editing programs for additions, deletions, etc. The end of the first phase was considered completed successfully when the editing programs operated on the incandescent lamp data base.

Phase 2 involved generating tapes for fluorescent, high-intensity, Lupalox lamps, and developing four main programs in the pricing system. This phase was evaluated at mid-point to make sure the pricing programs being developed were what the customer expected. Each phase had to prove operational before moving to the next, and the job was completed on schedule.

Other sections within the department are "beginning to see the benefits derived from the data base management approach, and other functions of the department are planning to use similar data base in their work.

U.S. DRILL HEAD CO. RESPONDS FASTER TO QUOTES, ALTERNATIVES WITH JOB COST/LABOR DISTRIBUTION DATA MANAGEMENT SYSTEM

"What I like about the Mark II system is the way it lets us serve our customers better" says William A. Mangold, Vice President of Sales and Engineering for United States Drill Head Company in Cincinnati. "With our new data base management system, we can give more accurate bids and quotations. We can determine how alternate solutions will impact on cost. Customer order status is provided almost instantaneously. We've reduced some costs, and that's important, but what really counts is we're reacting faster to our customers' needs."

U.S. Drill Head Co. is a 55-year-old firm located in Cincinnati, Ohio. They manufacture precision multiple spindle heads, special automatic turning and cutting machines for the metal cutting industry, descalers and core knockout machines primarily for the foundry industry. They began using time sharing as a problem solving tool in the Engineering Department for such things as gear train design, horsepower and thrust, deflection calculations, etc.

With an appreciation of Mark II's versatility, John Keiser, Manager of data Processing asked the General Electric representative to find some Mark II applications that would impact on their ability to serve their customers better. A system study revealed that the area of job cost and labor distribution would be a logical place, since the system could be implemented in small increments and not cause drastic changeovers.

Building individual units for many different customers at the same time, U.S. Drill Head has to separate and collect cost information for each of the jobs in their plant. Previously, a machine operator would talk into a tape recorder via telephone, describing the job number, part numbers, operations to be performed, start/finish times, etc. Several people then manually posted the data to records after listening to the tapes. Cost information was often not available until 10 days or two weeks after the customer order was completed and shipped.



William A. Mangold, Vice President Sales & Engineering, and John R. Keiser, Data Processing Manager, review a customer quotation from the job cost/labor distribution system on time-sharing.

The system study revealed that a few modern data collection devices strategically located on the factory floor, reading badges and punched cards, could gather the data more efficiently, and have it prepared for processing.

The date base management system uses the binary file features of the Mark II system to 1) pack numeric information into binary words for low cost storage of massive amounts of on-line data. 2) direct access to current job numbers for edit checking of incoming transactions.

3) direct access to random binary file of employees to find current wage rates. 4) quick access, and inexpensive storage of standard cost information, and stock parts. 5) access to status of jobs in production.

John Keiser, Manager of data processing at U.S. Drill Head Co. says, "Binary features and packing techniques let us cut storage costs by approximately 50%. We have implemented a total labor distribution system, including the data collection devices and Mark II service for a moderate cost.

New Edit Commands on Mark II

New edit commands designed to give you more facility for managing data files and stored programs have been added to the Mark II system. Four new commands are:

EDIT \$DELETE, which permits deletion of entire lines from a file based on the content of the lines.

EDIT SEQUENCE, which adds line numbers to a file — convenient in preparing to edit files which were created in the Data Storage Mode or which were previously "desequenced".

Both of these commands are Line Edit functions. They operate only on ASCII sequential files, and have a number of user-oriented options.

EDIT \$ADD, which permits a user to insert lines of text, including carriage returns, into a file.

EDIT \$SEQUENCE, which adds line numbers to a file — convenient in preparing to edit files which were created in the Data Storage Mode or which were previously "desequenced".

These two commands are String Edit functions and were designed to complement the use of the existing \$FIND string command.

New reference manual, EDITING COMMANDS 911374B, will describe how to use these new Line Edit and String Edit functions.

Mark I

FRIENDLY POWER



Mark I Is Friendly In 19 Countries

Opportunities are increasing for GE Mark I subscribers worldwide to reduce costs by multinational use of their programs as more licensees are added.

GE's Mark I Time-Sharing makes it possible for subscribers to send programs developed in one country to its affiliates or subsidiaries in other countries. The programs can be put to work on the Mark I system without change or modification of any kind.

For example, one major automobile manufacturer exchanges programs among its locations in the United States, United Kingdom, Germany and Australia. This is

possible through the Mark I system which is uniform throughout the world.

Another example is a petroleum refiner which sends programs from its plant in the United Kingdom to affiliates in Denmark and the Benelux countries. An advertising agency uses the same media analysis program in offices in the United States, United Kingdom, Germany and South Africa.

These are only a few examples of the international utility of programs — and lower programming costs — made possible by the worldwide uniformity of General Electric's Mark I system.

During the past year, agreements for new time-sharing operations have been signed in three more countries. Already Mark I systems are in operation or are scheduled to be in operation there in the near future.

The new licensees bring to 19 the number of countries where GE time-sharing is offered. Service is now available to more than 50 major metropolitan areas of the world outside the United States. Mark I access overseas requires a contract with General Electric Co. licensees.

For the worldwide "LIST OF LOCATIONS", ask your GE representative for Publication 108047E.

The Time-Sharing LEADER

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