

At Dayton Tire Sales, the HP computer system has paid for itself in less than three months.



When Thomas Cummings and Frank Farrar bought Dayton Tire Sales Company in Portland, Oregon in 1976, the company was fifteen years old. Cummings had decided to acquire his own business after being in investment banking for a number of years, and found that this firm was a good candidate for the type of investment he was seeking. The main charter then was wholesale distribution of Dayton tires in southwest Washington, Oregon and northern California.

Now employing 45 people in the Portland headquarters, Dayton has eight distribution centers, which are also dealerships, and 192 independent dealers. The lines now handled include Yokohama and Ceat, an Italian tire, as well as Dayton. With six wholesale salesmen traveling the territory, Cummings estimates 1978 sales will gross about \$5,000,000.

Growth Brings Complications

The acquisition of eight outlets, compared to one retail store in 1976, together with servicing all 192 dealers, drastically changed Dayton's situation. Previously all the paper work such as invoicing, inventory control and payroll could be done satisfactorily using manual methods, even in peak load periods. But by January, 1977, business had increased enough so even normal workloads called for all employees to occupy themselves doing the arithmetic and checking figures involved in the paperwork. This meant the credit manager had to spend much of his time doing addition and multiplication, to the point where he could not spend enough time on his primary functions. It became increasingly difficult for him to be sure all credit levels were checked and overdue accounts detected. Further, clerical errors still occurred, usually in favor of the customer.



Other Dayton executives besides the credit manager were in the same situation, doing manual computations and paper work instead of being able to fulfill their main responsibilities.

A distributor like Dayton Tire Sales has two main assets: inventory and receivables. Although Tom Cummings says he had concerns about receivables, inventory control was a more serious problem to him. Each order had to be hand posted, priced, each item researched, and the entries hand posted on the inventory records. Processing an order and doing the required postings took three or four days; and, depending on the workload, entries might be ten days behind. This meant that a dealer could telephone to check on a certain item, such as 50 L70 steel-belted radial tires and be told they were in stock, only to arrive at Dayton headquarters a few hours later to find that the item was depleted because postings were not up to date.

Another inventory concern was how to maintain a reasonable quantity of each item. "We used to order by a gut feeling," says Cummings, "which led me to believe inventory levels were too high, and we didn't really know

what was there without taking a complete physical inventory."

Due to the number of items needing posting, the number of postings, and the number of people involved in the many manual operations involved, Tom Cummings found errors were impossible to eliminate, and people were entangled in mathematics instead of other productive work. Something had to be changed.

Dayton Decides To Computerize

From previous experience, Cummings knew how much a computer can save a company in processing paperwork in terms of time and error reduction. He knew there must be a computer available somewhere that would handle the company's accounting problems, so he started searching for it. While he was looking for a system with the capability to handle inventory, payroll, and receivables, he found service bureau costs were too high. He investigated four computer manufacturers, evaluating what systems were available, with the help of some computer-experienced friends.

Hewlett-Packard and one other company had systems that would do the Dayton Tire Sales job. Tom Cummings found that by leasing a system from HP with standard software for inventory control, receivables, payables, general ledger and payroll, and contracting a single entry order processing program module from a software consultant, the cost would be \$8,000 lower than the competitor's price.

"Another question in my mind concerned service", says Tom Cummings. "It was a big thing to me, and it's helpful to know that HP service is right here." Gary Douglas, controller at Dayton Tire Sales, had some experience with computerized business system operation and service, so he was able to help with system evaluations. He was also available to act as supervisor for the computerized operation, once a system was selected.

Choosing The HP 9896A

Based on a cost advantage, excellent HP services, and the capabilities of HP's standard programs for control of inventory and accounts receivable, Tom Cummings, with the aid of his computer-experienced friends, decided to install the HP 9896 Computation System. Dayton Tire placed the order in February, 1977, and the system was delivered in April.

How The System Is Used

Inventory control was the greatest concern and the highest priority in putting the 9896 system to work. It was working within a month after the system arrived. Payroll was another priority, and it was implemented shortly after inventory control. The single-entry order entry application software was contracted with a local software consultant for delivery during the summer.

Benefits

The first and most valuable benefit Dayton received from having the HP 9896 came 30 days after its delivery — the discovery of about \$50,000 worth of discontinued and

blemished inventory items. This one disclosure paid for the system, because Dayton was able to turn these items into cash, reducing the inventory and improving cash flow. Tom Cummings says the more up-to-date and accurate inventory records provided by the computer allow ordering reasonable quantities and keeping total inventory about \$100,000 lower than previous noncomputerized levels. Customers and salesmen are more confident now when they inquire about inventory availability, because the records are updated each day. If one of the 700 inventory items is shown to be "in stock now", it is there.

Another important benefit of the inventory control system is the reports it generates. Each sale is costed, so the profit on each item is shown on the sales document. Profit below target, pinpointing an error, is spotted immediately, and the error is corrected before the invoice leaves the office.

Running payroll on the 9896 saves about half the time spent on this function earlier, and assures better accuracy.

The single-entry order processing system contracted through a software consultant is designed to handle about 75 orders daily, and takes an estimated 25% of the time it took to do the previous five or six postings for each order. The single-entry order processing system, combined with HP's standard software, allows the 9896 System to tell the operator whether the customer is above his credit limit, or if he is past due on his account. If these factors are satisfactory, the items are entered, and the computer produces a packing slip that goes to the warehouse. The computer verifies whether each item is in stock. When the order is filled, the invoice is priced and costed. The computer does the following:

- Deletes the items and quantities shipped from inventory,
- Posts accounts receivable,
- Updates the invoice control ledger,
- Credits the salesman's commission.

All these operations can be done the same day, compared to as long as 10 days to finish postings before the HP 9896 was available.

One other significant benefit of the 9896 is its performance of all the required arithmetic. This means that employees at all levels are now freed from time-consuming manual paperwork details, so they can concentrate on their primary responsibilities. As a result, the business is run smoothly and efficiently, without personnel work overloads even in peak periods. Because Dayton's employees are free to do their assigned jobs, overall management is improved as well as the daily paperwork flow and accuracy.

Future Plans

Tom Cummings remarks that when control of the Portland warehouse by the 9896 is fully implemented, the system will be set up to control the eight outlying distribution points, without the need for any additional hardware.

Summary

The HP 9896 was able to bring Dayton Tire Sales Company's accounting functions under control, eliminating or pinpointing errors so they could be corrected before it was too late; it freed the company's executives of tedious work that used to keep them from doing their primary jobs; it has made reports available that increase operating efficiency; and it has allowed lowering inventory levels and eased cash flow problems.

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