

The Electronic Revolution

By John Hammond
Editor

The hardware industry stands at the brink of an electronic revolution, not in the midst of one as might seem the case upon first inspection.

Despite the widespread use of point-of-sale terminals, the virtual adoption of electronic order entry systems and the acceptance of computerized accounts receivable, computer technology has been applied in only a most basic manner.

In fact, its potential and needed disciplines are little understood by most retailers and there is little standardization or consensus at wholesale on just what path will be pursued.

There is overwhelming agreement, however, that hardware stores, home centers and lumber dealers need a management information system which allows them to analyze and control their businesses and to plan for the future.

For a revolutionary change to sweep an industry, the right sets of conditions must exist at a given point in time and then some catalyst must be added to set the reaction in motion.

Electronic data processing (EDP) has been widespread in this industry for over a decade. **HARDWARE RETAILING** published a 64-page state-of-the-art report called, "The Computer Age in Merchandising" in 1968. It helped sow the seeds of this revolution.



The Electronic Revolution

However, it is only now, at the beginning of the 1980s that all conditions are right for the more rapid development of computer usage at retail!

The Conditions of Revolution

Computer technology today far outstrips the dealer's ability to handle it. That has been the case for some time. A more recent development is that most million dollar hardware, home center and lumber/building material dealers are now able to pay for more computer technology than they can handle. Many would agree that figure should be lowered to include \$500,000 retailers.

As one systems analyst explained it: "If the rolling equipment in a retail lumberyard followed the same technological computer advances as the back office accounting system, a flat bed truck would cost \$1,000, weigh about 200 pounds, get 100 miles to a gallon of gas and load enough material to build an entire shopping center on one trip."

Finally, there's the matter of industry support and leadership.

Wholesalers have spent a decade or more developing and refining their own computer programs and are now in a position to play a strong supporting role by providing direct computer services to dealers using their giant mainframe units or by helping them develop their own in-store systems.

Hardware associations have likewise been offering direct services to dealers for nearly a decade and some are now in a position to put in-store systems to work in member stores or to assist dealers in making the right equipment decisions.

What's Been Done?

With all that available technology and support at an affordable price, what has been done with it to date at retail? The answer . . . not as much as you might think.

In an industry survey of 379 retailers, it was found that half had no inventory classification system at all. They track everything by one department . . . the store.

Of the remaining half, 90% receive departmental data, but only 17% break inventory data down to the

general merchandise product classification level and 18% track inventory at item level. A detailed report of the level of retail automation in use today is presented in the following article. Clearly, computer technology has not revolutionized the manner in which this industry controls its inventory . . . yet!

It should be no cause for alarm, however. K mart, the nation's second largest retailer, is still struggling with the matter and has yet to adopt a computerized inventory control system.

However, the seeds are in place. Major wholesalers committed to retail computer services report that over 60% of their dealers are using at least one wholesaler-provided computer service.

HR's survey supports this. Its results indicate that 41% of all dealers surveyed used their wholesaler for at least one data processing function. They also use service bureaus, in-house computers and trade associations as sources for EDP.

Automated electronic order entry has become a way of life in many retailer-wholesaler relationships with some distributors reporting as much as 90% of their out-of-warehouse, non-show orders coming in electronically.

A number of wholesalers have agreements in place with outside computer firms to provide complete in-store hardware and software packages for the handful of dealers now ready to consider their own computer system.

The net result is a retail industry that is widely exposed to computer applications and using them very selectively on an across-the-board basis, with accounts receivable, some type of sales analysis and payroll being the most popular applications, according to survey results.

Nevertheless, it has been the initiative and expertise of the dealer's wholesaler and hardware association that have been responsible for the bulk of what has been accomplished. With a handful of notable exceptions, retailers have played a passive role.

With cost-justifiable technology available now, why isn't this industry further down the road and how fast is it likely to automate?

An Economic Catalyst

Computer systems of any type require internal disciplines, and inventory control systems, either manual or computer-driven, require tremendous discipline and commitment. Most dealers haven't had sufficient motivation to undertake the arduous task . . . at least not until recently.

A lack of cash and an inability to pay one's bills is an excellent motivator.

While inflation was with the hardware industry in the 70s, it wasn't until the tail end of the decade that the double-digit variety began putting cash pressures on large numbers of retailers.

The world began moving too rapidly. Price increases came more quickly than retailers were able to process them and get goods repriced. The result was a constant erosion of cash as dealers had to replace goods at constantly higher prices.

Those who had never had to borrow found themselves at the bank. Upon arriving, they discovered the price of money had gone up. A merchant couldn't afford to pay interest for inventory that was earning a lower rate of return than the price of the borrowed money.

Retailers faced with prolonged high rates of inflation, high money costs and declining productivity for the first time in their business careers suddenly began taking a new interest in inventory control, accounts receivable control, pricing systems and other computer-driven systems that could be used to generate cash.

It is to the computer that many are turning for a quick cure-all answer to their problems.

As one wholesaler EDP executive explains it, "So many of the calls we get are from dealers who are in a cash crisis and want to go on a full computer system now. Why don't they call before they are in cash trouble?"

The cash crunch has been brought on by prolonged high rates of inflation and inventory tracking and pricing systems that are either nonexistent or far too slow and unwieldy to function effectively in the present economic environment. It is a situation which provides the catalyst for The Electronic Revolution.

Unrelenting Pressures

The initial reaction has been a bit

Levels of Inventory Control

Percent Mentions By Type Of Outlet

Use Of An Inventory Classification System	Percent Mentions By Type Of Outlet			
	Total All Outlets	Hardware Stores	Home Centers	L/BM Outlets
Responding Dealers	(362)	(178)	(122)	(62)
Yes	50.3%	41.0%	70.5%	37.1%
No	49.7	59.0	29.5	62.9
TOTAL	100.0%	100.0%	100.0%	100.0%

Level Of Classification

Percent Of Mentions By Type Of Outlet*

Level Of Classification	Percent Of Mentions By Type Of Outlet*			
Responding Dealers	(181)	(75)	(84)	(22)
By Department	90.1%	93.3%	86.9%	90.9%
By General Merchandise Product Classification	17.7	16.0	22.6	4.5
By Individual Item Control or SKU	18.2	16.0	21.4	13.6
By Vendor	9.4	9.3	9.5	9.1

*Totals may exceed 100.0 percent due to multiple responses.

TABLE EXPLANATION: 50.3 percent of the respondents used an inventory classification system of some sort. Of the 181 who reported using a system, 90.1 percent classified their inventory at the department level.

Dealer Education

The only barrier holding back the full flood of revolutionary change is the dealers' ability to assimilate it.

Every one of the over 20 wholesalers interviewed in the process of preparing this section stressed dealer education as the great need.

Wholesalers and hardware associations with more sophisticated systems for retailers agree without reservation that dealer education is the first need.

The need is intense and the technology exists to meet the need. Dealers must learn how to realize the full potential of this powerful tool.

It is to that purpose this issue is devoted.

Action Workbook

Throughout these 24 pages, HR offers dealers a report on the state of the industry . . . what's available today. It provides a recommended step-by-step, common sense approach to putting computer

technology to work in your store. Finally, it offers a glimpse into the future. Not the kind of future that begins . . . "Someday . . ." but rather a realistic look at what is likely to happen within the next 5 years.

It's true that "Someday . . ." telecommunications directly between wholesalers and retailers through the use of fiber optics and satellite communications technologies may be available. "Someday . . ." a low-cost, in-store display tube with bubble memory and linked to a wholesaler's computer will be possible. A computer network linking manufacturers and retailers with wholesalers may also come to pass within this decade. The technology is not blue sky and will surely come.

However, we must first deal with the reality that half the retailers in this industry still track inventory by one department . . . the store, and that over 80% are unable to track it beyond basic department level.

It is from that base we shall move forward in this section. □