INDUSTRIAL DATA PROCESSING APPLICATIONS REPORT

Applications	Management Information System
Type of Industry	Non-Food Service Merchandisers
Name of User	Sav-A-Stop, Inc. Jacksonville, Florida
Equipment Used	IBM System/360 Model 30 Disc Computer System at Jacksonville
	IBM 1401 card Computer System at Jacksonville, Fla. IBM 1401/1311 Computer System at Roanoke, Va.

Synopsis

Sav-A-Stop, Inc., of Jacksonville, Florida, is presently using an IBM System/360 Model 30 computer system to provide timely, detailed statistics which are needed to select items for retail sales.

Items are rated for salability based upon management analysis of computer reports. These ratings are recalculated every four weeks.

Order processing is also handled by the computer system. An automated warehouse increases the efficiency of the system. The rack jobber and operator of leased departments must achieve maximum success in a minimum amount of space.

At Sav-A-Stop, no great skill is needed to shelve the entire stock of 4,000 items for retail sales. Most often, the job is to select and display the most salable 10 percent.

Non-food merchandising pertains to the business of supplying and servicing non-food products such as: toothpaste, deodorants, razor blades, glassware, school supplies, soft-goods, toys, housewares, etc. to supermarkets and convenience drive-in stores. Merchandise is put into these types of stores on a guaranteed sale basis; that is, if the merchandise does not move off the customer's shelf, it is returned and the store is given full credit for such merchandise.

By basing selections on timely, detailed statistics, Sav-A-Stop can increase its sales volume utilizing the store space allocated. One case saw a 70 percent sales increase, and another 38 percent.

Realistically, the rack jobber has to work his way in and must show measurable returns or go out fast. The store manager will not cover for the jobber's poor performance. Availability of analytical data on leased departments helps Sav-A-Stop to achieve an increase in overall store traffic when entering a new location.

However, merchandising is only part of the picture. Due to the logistics of rack jobbing and leased departments, operating efficiency is mandatory. One must know where costs and sales are, specifically and quickly. This business has to be run with proper decisions based upon correct information.

This emphasis on consumer-oriented merchandising and tight internal cost control has helped build Sav-A-Stop, Inc., from essentially, a one-man work-force in Jacksonville, Florida, 14 years ago, to a \$38 million non-food business today. Sav-A-Stop has some 4,800 racks, 100 leased departments, and its own 48 Scottie Discount Stores. Sav-A-Stop's goals are to select the most salable merchandise with the utmost precision; get it on sale quickly at a competitive price; and, for the rack and leased discount departments, get it off sale and out of the way if it isn't moving.

Sav-A-Stop handles 100,000 line items daily, destined for nearly 5,000 points of sale in Florida, Georgia, Alabama, North and South Carolina, Virginia, Tennessee, Kentucky, West Virginia, Maryland, Mississippi, Illinois and Delaware. Thus, effective merchandising and speed of distribution require a high degree of the latest in automation, ranging from computers to conveyer. Sav-A-Stop is able to provide 24-hour turnaround for most of its semi-truck routes.

THE SYSTEM

Invoicing via computer is the key. At Jacksonville, where 60,000 lines per day are handled, new IBM System/360 Model 30 processes invoices for an entire trailer-load of merchandise in just 37 minutes, as compared to 1-1/2 hours for the older 1401 system. The 1401 has been retained as peripheral equipment to the new computer. In addition, a 1401/1311 system is used in the warehouse at Roanoke, Va., where some 40,000 line items are processed daily.

As virtual byproducts of invoicing, the System/360 produces a wide range of sales statistics and analyses. It also handles an inventory control system which will gradually evolve into IMPACT (Inventory Management Programs and Control Techniques), a scientific approach to inventory management.

The sales and merchandising information enables Sav-A-Stop to look carefully and closely at the wants of the consumer.

Items are rated for salability based upon management analysis of computer reports. For instance, in Sav-A-Stop's line of health and beauty aids, "A" rated items -- the best sellers -- are used exclusively by more than 200 sales merchandisers in setting up and servicing accounts with no more than 60 feet of shelf space for these items. "B" items are used along with "A" to ensure maximum volume from up to 84 shelf feet of health and beauty aids.

There is also an "N" rating for new items, which are occasionally for promotional purposes automatically distributed to merchandisers; an "SP" rating for items for special areas or stores serving specific ethnic groups; "S" rating for seasonal items; and "T" rating for test items. Items may also have a combination of ratings, or no rating at all. In addition to the sales rating, all items approved for racks in drive-in "convenience" stores are coded with a "D".

Every four weeks ratings are recalculated using several reports. These include a 35-week route and customer sales analysis set up by all nine departments (hair care, health and beauty aids, stationery and school supplies, light bulbs, housewares, sewing notions, pet supplies, toys, and soft goods). In addition, a cumulative inventory sales analysis is prepared which includes:

> Month Item number Description Pack price Pack cost Unit of pack Quantity shipped Average weekly quantity sold Retail amount Discount amount Profit Percent of profit to retail Percent of profit discount

Grouped by four-week periods and dating back to 1963, this analysis enables trends to be spotted so an "A" rating can be changed to a "B" or vice-versa, as items lose or gain popularity. Thus, sales are optimized.

To prevent management ratings, policies and instructions from being lost by the wayside the sales rating for each product is listed alongside the product in Sav-A-Stop's service merchandisers' customer order books. The master copy for these books is printed on the System/360 and then reproduced by a printing firm. The rating serves both as a guide and a reminder to the sales merchandiser in servicing the rack. Furthermore, each order book provides for entries over an eight-week period. This gives the merchandiser a running sales history in front of him as he reorders.

Even rack layout is carefully controlled. The computer maintains an inventory of all the racks, by store location, kind of department, size, type of rack, how many shelves, number of square feet, etc. From this, each store's layout is related to a standardized, optimum design which the salesman uses in setting up an actual rack.

The printing ability of the computer system also serves to run pricing labels for many items for both Scottie Stores and those of numerous customers. In the latter case, the customer's own retail prices are used. The computer handles eight different pricing systems.

As indicated, placing the right merchandise on the shelves quickly is only part of the story; getting the wrong merchandise off equally fast is also an important facet of weekly rack evaluation and servicing by the merchandiser. Where customer policy will permit, if a return is under five dollars, the store manager is given the same amount of merchandise in retail value to minimize paperwork.

Returned goods are brought back to the warehouse, re-entered into inventory or returned to the manufacturer. Actually, Scottie Stores move a lot of returns. These stores, which average about 2,000 square feet of total area, sell primarily health and beauty aids, with limited soft goods and housewares.

This doesn't mean Scottie Stores are dumping grounds for stale merchandise. Quite the contrary. Their inventories turn every three and a half weeks. This, too, is the result of careful utilization of analytical reports. Included are a weekly sales analysis by each of the nine departments, individual inventories on each store, and individual financial statements, so it can be determined if each store is making money. For the same reason, a financial report on each group of leased departments in discount stores is obtained.

To illustrate how constant analysis to meet the needs of the consumer has paid off: sales for fiscal 1966 are up 45 percent over 1965, and profits are up 83 percent.

Yet, by maintaining an equal emphasis on operating efficiency, Sav-A-Stop had to increase personnel expenses only in sales merchandising and in the warehouses, where some increase is inevitable in the face of growth. Administrative costs, on the other hand, have dropped more than two percent in four years. These include accounting, purchasing, and data processing.

To maintain this efficiency, ordering and order-filling procedures have been substantially reduced. Some orders, for example, are keypunched in the field, and are ready for entry into the System/360 as soon as they reach Jacksonville.

Order Processing

This order entry first updates inventory records. The system produces daily exception reports, including lists of out-of-stock inventory, and a complete stock report by item. This is scheduled once a day, but sometimes is run as often as three times a day.

Next, the computer prints the following: invoices in truck route loading sequence; sequenced picking tickets; customer receipt cards; truck route sheets; and load lists set up by merchandiser's pick-up points, where orders are left by the truck drivers. The picking sheets go to the warehouse where a series of tote boxes for each order is prepared. On the end of every tote box is marked the customer number, route number, and box number. The number of the last box in each order is circled.

A large order may total 60 boxes. These move past order pickers on powered conveyors. Soon even the picking tickets will be automatically conveyed at eye-height, from picker to picker, to free both the worker's hands.

This high-speed system includes trash conveyers. Trash accumulates fast in picking areas because Sav-A-Stop doesn't sell in case quantities.

The order conveyers from the picking areas converge on a console located near the loading dock. The operator dispatches the orders by route loading sequence, down eight roller conveyers to the dock itself. Workers at the dock also have a degree of control over three lines via remote hand units.

Helping control this automated warehouse is a separate, 10-position telephone system. Ultimately, remote computer terminals will be used to tie the central warehouse in Jacksonville, Fla., with Roanoke, Va., and possibly a few sub-warehouses for bulky stock items.

Orders are hauled via vans to the small sub-warehouses or pickup points where sales merchandisers pick them up, deliver them to the stores whose racks they service, and, at the same visit, reorder for the following week in the sales book already mentioned.

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INVOICE SUMMARY CARD, WHICH GOES INTO ACCOUNTS RECEIVABLE FILE.



RECEIPT CARD, WHICH IS A DUPLICATE OF INVOICE SUMMARY CARD.

v-A-Stop, Incorporated (Georgia)	Sav-A-Stop, Incorporated (Tennessee)	Sav-A-Stop, Incorporated (South Carolina)
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INVOICE THAT, WITH RECEIPT CARD, GOES TO STORE.

INDUSTRIAL DATA PROCESSING APPLICATIONS (S19)

A copy of the invoice and receipt card go to the store. The customer signs the receipt card and it is mailed back to Sav-A-Stop for its records. The invoice copy is the customer's to keep. (Incidentally, a change to a new invoice with two copies printed side by side has saved \$15,000 a year over the cost of a four-part document formerly used.)

The receipt card is a duplicate of the invoice summary card which goes into the accounts receivable file. Weekly, an open item statement is sent to our customers, and an aged analysis is produced. Use of the computer to prepare this has cut the time lag in receivable collection 35 percent.

Other financial applications of the data processing equipment include six-month projections of sales and of every item on the profit and loss statement, six-month cash flow projections; the complete general ledger; accounts payable; a depreciation schedule for all capital equipment; a thorough vehicle reporting and cost record system; personnel records; and the company profit-sharing plan.



ROUTE SHEET, PRINTED BY COMPUTER AFTER INVENTORY RECORDS ARE UPDATED.

RESULTS AND FUTURE PLANS

By automating in many ways, Sav-A-Stop seeks to achieve peak efficiency in all ways which is profitable to them, to customers and to the ultimate consumer. With the use of the IBM System/360 Model 30 computer system Sav-A-Stop is currently able to process invoices in 37 minutes as compared to one and a half hours with the 1401 computer system.

In addition to handling the processing of invoices, the system produces a number of sales statistics and analyses which are invaluable to management in the determination of ratings.

In the future, as part of further automation in the warehouse, Sav-A-Stop will install remote computer terminals to tie the central warehouse to several sub-warehouses.