Computer Applications: Off-Line Order Entry

Presented by DOUG RICHARDSON

The author presents his company's experiences with off line order entry equipment.

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The state of the art of making up of an order at the store level and the relaying of that order to the warehouse or the data processing department or whatever, isn't a pencil and order book function any longer, or at least it shouldn't be. The economic justification for some type of semi-automated system for the writing and relaying of data has been proven — the approach has been embraced.

I'd like to talk about the two systems that we at Elm Farm/Viking are using, and also at least mention a point or two about a couple of other systems that are available to the industry. I should remind you, that I'm not "selling" anything. What I do say, is based solely on my own company's experience and may not necessarily be a valid predictor of the kind of experience you should expect.

At this point, I want us to mentally step back and try to recall some of the methods used in the past for getting orders placed.

Historically, the food industry has been slow to react to change and slow to embrace modern business techniques. Basically, our industry is a people and hands type business, characterized by high employee turnover and a generally poor image as a vocation. The work methods we have chosen, many times by necessity, have been of a non-technical and primarily manual nature.

As recently as the forties, an accepted method of grocery ordering was with and through direct contact with the wholesalers or retail sales representative. The salesman would follow a regular route, pre-armed with a list of items to push. He would "write up" the order, sell what he could, and move along, recapping his order at the end of the day and phoning it in. This type of activity was supplemented by the office phone salesman, who also "pushed" merchandise and solicited orders.

From this point, the industry approach to order placement has about covered the entire spectrum of possibilities. Some examples being: books containing tear strips, into which the order was entered; then the tear strip was separated from the remaining strips and mailed in. Another method used was having orders "talked" into a recorder via the telephone; then hand transcribed.

A currently used method of order placement and the most recently used method by our own house, is that involving IBM mark sense cards. It works something like this: the order is written at the store by a clerk who first locates an item on the shelf; then locates the item in his order book; then marks in an appropriate number for the cases desired. This book is then used as a source document, while the clerk manually goes through a deck of mark sense cards, marking in opposite the corresponding page and line number, the number of cases he wishes to order. Our in-house use of the mark sense card was accomplished by having the store clerk stand with his book in one hand, the telephone in the other, and reading his order by page and line to one of our order taking girls, who would "mark in" the order as it was spoken to her.

The problems built in to such a system should probably occur to you at this point. The potential for error, the absence of an error verification procedure, and the actual error rate, all were not acceptable. The store people made errors whenever their gaze or finger wandered from the intersecting item and week column; they sometimes enunciated poorly; our girls sometimes, in hurrying, marked in the wrong quantity block; a single page out of sequence at either end, created confusion.

Now let us discuss some of the newer methods of ordering. In 1968 we ordered six 708 Adder-Recorder Data Verta systems, a transmitter and a model 5231 Magnetic

Tape Terminal from Digitronics Corporation of Long Island, N.Y. We added to our total ordering system in 1971 with the purchase of several MSI 100 systems from Marketing Systems, Inc.

The only significant differences between the above two is in the strength of the charger, (Digy unit much stronger) and the fact that the MSI unit has a combination Recorder-Transmitter, where with the Digitronics system, the transmitter is a separate component, requiring the magnetic tape cartridge from the Recorder to the Tansmitter before an order can be placed.

A third system that is available, does away with the mobile cart and automotive type battery. The make that I have the most factual information on is the MSI 2001 series. Although we did not purchase any of these units I must admit that this style of over-the-shoulder unit is becominb very popular and has much to recommend it.

There are other systems available. The Norand Corp. of Cedarburg, Wisconsin, has a portable/console order system. Again, much like the MSI portable unit in appearance and function. I did not fiield test this unit, because thethe Norand receiver is not compatible with the Digitronics and MSI equipment that I already own. I will shortly be testing a computerized order entry system called Data-Kap, marketed by Electronic Laboratories, Inc. of Houston, Texas—and again, this is an entirely portable type as compared with the the mobile cart type I talked of at the outset.

I didn't claim I would or attempt to make a recitation of every single off line order entry device that is available. I didn't discuss key punch cards (the technology has passed that method by) and I made no mention of direct on line real time communications (for most installations, it just isn't financially practical to have dedicated machine time).