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The quality of printed UPC symbols....

....is rapidly becoming more of an issue with supermarket operators. The reasons are varied:

● There are more scanning stores.

● With over 90% of the dry grocery products symbol-marked, the emphasis is no longer on just convincing the manufacturers to get the symbols on their packages. The operators are now looking for quality as well as quantity.

● As the installations shake down and run more smoothly, poorly printed symbols create costly system and work flow interruptions.

● The easy packages were symbol-marked first. Many of the more recent ones are problem packages with limited space, difficult substrates and non-food items from smaller, less experienced suppliers.

● Some scanners are more forgiving than others. Some have been able to scan symbols out of specification, leading to complacency by the product manufacturers. But as more equipment is installed and existing equipment grows older, not everything scans as readily.

● Many of the manufacturers' UPC coordinators or "specialists", who were assigned their tasks 5 or 6 years ago, have moved on to other jobs. Those who have replaced them may not have the time or see the need for expending too much effort on a system that is already in place and for which they have received little training.

Although there has not yet been any serious outcry by the retailers, the questions surface at industry meetings and seminars. It was raised at the last two Packaging Institute UPC Seminars (January in Chicago; June in New York) and at the Dallas FMI convention in May. The position of the Uniform Product Code Council is clear with regard to the specifications; i.e., they are not at fault and will not be changed. The UPCC does not want to get into the middle of this, and although they will answer technical questions regarding the code and symbol, they do not want to get between the retailers and manufacturers regarding printed symbol quality.

An indication of the limited concern by the manufacturers and their printer/ converters, is the relatively few good, analytical verification devices that have been sold. There are 7500 manufacturers with UPC numbers and thousands

more printers, but the number of verifiers in active use is probably less than 1,000 (not counting hand-held devices).

Some attribute the lack of concern to the sketchy information from the supermarket operators. Many complaints are heard, but they are usually of a general nature. Some chains (Safeway, for example) do check symbols and correspond directly with their suppliers, identifying the problems and requesting corrections. But not every retailer can afford such an extensive program.

Symbol Technologies was commissioned last year to analyze 120,000 packages on the supermarket shelves to determine the printing quality of the symbols. They found 3% did not meet specifications and these were broken down as to cause (bar widths, color contrast, location, etc.). The results were presented at the P/I seminars, but have not had a broad audience.

It has been interesting to watch the attitudes of the Europeans regarding quality assurance. The Germans and French, in particular, seem to be placing a great deal of emphasis on the printing of in-spec symbols, including tight control of Film Master quality and the wider use of automated verification equipment.

The stakes for all concerned will increase as more scanners are installed. For example, UPC-based market research data requires accurate recording of all item purchases, and this will be influenced by symbol quality. In this instance, the manufacturer has a vested interest to insure his product scans well, and that his sales are recorded accurately when the data are analyzed.

There is little question that the emphasis has shifted and that quality is becoming more significant. Although it is not clear as to whether a major coordinated industry effort is necessary, there is certainly a need for more information to be disseminated. It might be a suitable project for the Board of Governors of the UPCC to consider.

The Distribution Symbology Study Group....

....seems to be edging closer to its final report and recommendation. The DSSG met on May 9th in Chicago at the offices of the Fibre Box Association. They reviewed all of their progress to date and decided they were not too comfortable with some of the data. The DSSG has been studying the feasibility of printing bar codes on outer corrugated cartons for about 2 years.

The problem seems to have narrowed down to the fact that, in their printing tests, the wider bars grew more than expected. Members of the group feel they need more information to verify these results. Although the scanner manufacturers do not anticipate any difficulty with these variations, those responsible for the printing on corrugated cartons would like to be more certain.

Therefore new tests have been scheduled using an Interleaved 2 of 5 symbol with both 2:1 and 3:1 ratios in the same symbol. The narrow bar and spaces will be .044" which suggests a fairly large symbol. Various types of plates and presses will be used and runs will be made in press and cross-press directions. Ten members of the group will make five runs each which will then be measured and evaluated.

It is expected that the data will be analyzed by mid-August and that the DSSG

will meet again in late August for a final review. Hopefully, the results of that late August meeting should be definitive and a final report to industry will be issued. Indications are that the Uniform Product Code Council Board of Governors is anxiously awaiting the results and will probably adopt the recommendations of the group. There are no indications at this point as to which symbol will be recommended or adopted.

Comment

So the major questions continue to nag:

1. *What will the final recommendations look like?*

2. *When will they be published?*

3. *Most important, who will pick up the results issued by this group and translate them into specific decisions for the various industries involved?*

We believe the potential impact of these answers on the scanning industry could be as great as the UPC decision six years ago. Uniform coding systems that will cross industry lines could expand the level of hardware and system sales many-fold over the next six years.

One industry that seems anxious and ready....

....for a bar code scanning system is the meat industry. The coding of boxed beef and variable-weight meat and poultry packages, would be of great assistance to an industry that worries about spoilage, inventories, and the accurate tracking of sales. It is hoped the symbol will include codes for the manufacturer, product, date, weight and price.

Farmer Cullom of Rich Food Inc., Richmond, VA, has been at the forefront of the industry effort looking for a solution. Currently the project is bouncing back and forth between the meat industry and the Uniform Product Code Council. Everyone agrees that the optimum solution would be within the structure of the UPC code. However, since there is too much information to be confined to the standard 10-digit UPC code, the proposed Version D expandable code offers an ultimate answer. Changes in the available hardware and software must be made before any steps can be taken toward implementation using this code.

It is expected that a plan will be developed soon and then the ball will be in the court of the hardware manufacturers. The short-term solutions being sought include the temporary assignment of a separate number series for the meat and poultry products and structuring their code within the 10-digit restraints of UPC. This may require a double symbol in order to accommodate all of the information required and will take some manipulation on the part of all concerned.

This project could open up a very significant market for bar code imprinters. The most optimistic forecast is that a working system may be in limited operation by the end of this year.

Although there is a major effort....

....to introduce scanning into the record industry, there will probably be no

activity until 1980 at the earliest.

According to Joe Cohen of the National Association of Record Merchandisers, there has been a significant commitment by some of the major record producers to place the symbol on record jackets. This includes Warner Bros., Capital, A & M, Columbia and Chrysalis. These manufacturers expect to be well into the program during the latter part of this year. Their plans are to start to place the symbol on new LP releases only but not to attempt to code existing or re-releases. NARM is moving slowly, concentrating for the time being on education of the merchandisers. These include the retailers, rack-jobbers, and so-called one-stop jobbers. Until there is a sizable number of record jackets with printed symbols, the merchandisers are not likely to make significant investments in scanning equipment.

At a Los Angeles meeting in May the manufacturers did make a commitment to move ahead, but the complexities of the distribution system in the record industry will require a great deal of time before scanning becomes a reality.

The fact that this year's returns of records from the retailers is the highest in history (estimated in excess of 40%) would seem to be stimulus enough to get the system going. It is expected that back room operations (receiving, inventory, returns, etc.) will incorporate scanning systems long before point-of sale is introduced.

> *Comment*
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> *It would seem that the success of wholesaler scanning of magazines, with similar problems of handling large volumes of returns, would have energized the recording industry to move in the same direction, and more quickly. The prompt accountability of returns should be incentive enough to automate.*
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> *However, as has been noted here before, the grocery and periodical industries accomplished their task only with the combined effort of all concerned. The record manufacturers, distributors, wholesalers, rack-jobbers and retailers, with unclear industry lines of organization and responsibility, are finding it more difficult to grab hold in this instance.*
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> *The NARM has taken important steps in presenting their industry study early this year, and continuing their efforts toward a broader education for the industry. The potential rewards woould suggest that things should be moving a lot faster. An aggressive industry group, representing all elements of the trade, and charged with developing a total system and timetable, would provide the focus needed now.*

During a recent address....

....Joseph Miller of the National Retail Merchants Association discussed OCR-A and the Universal Vender Marking program. Miller was addressing the National Association of Hosiery Manufacturers and was emphasizing the UVM concept involving source marking of merchandise. UVM is moving a bit slowly and those retail stores which have installed OCR-A equipment have been labelling their merchandise in-house.

Of particular interest was Miller's reply to a question from the floor which asked, "What are the NRMA and the grocery industry doing to get together on

one code combining UVM and UPC?" The problem, of course, is a real one to those manufacturers who produce goods ultimately destined for both supermarket shelves and department/variety chains. Miller's reply indicated that the NRMA and the Uniform Product Code Council have held discussions and are about to issue guidelines for the manufacturers faced with double coding.

The solution, as we understand it, is not a very radical one. The guidelines will suggest that the OCR-A numbers be printed immediately below the UPC code and symbol. No attempt will be made to merge the two codes or to effect any means for common scanning of the two "symbols".

Comment

It is probably a little late to raise this question, but many of the reasons that existed in 1973 which caused the grocery industry and soft goods retailers to opt for different systems no longer exist. In the not-too-distant future there will be an expandable UPC code (Version D) which could readily accommodate the longer code required for NRMA retailers. Most of the evidence indicates that bar codes scan more efficiently, scanning equipment is less expensive and the codes are printed in man-readable characters beneath the symbol. At this late date we can do little more than lament the fact that a common symbol wasn't adopted in the first place.

During the month of May....

....there were 64 new UPC supermarket installations bringing the total to 865. IBM installed 25, NCR 22, Datachecker 12 and Sweda 3.

Winn-Dixie announced the installation of UPC scanning in its 100th store during the month of June. These scanning stores are located in 13 states and comprise 900 scanners. The chain, which has a total of 1178 supermarkets, is planning to install 400 more by 1982. All of them are NCR and the great majority are upgraded stores with the electronic point-of-sale equipment already in and operating.

And at just about the time you will be reading this, Giant Food will have become the first major chain to be 100% scanning -- all of their stores (approximately 100) will be up and running with front-end scanners. Winn-Dixie has assumed leadership in the number of stores, but Giant's total commitment to the new technology is worth noting.

NCR also announced a sale to Tengelmann, one of Germany's largest chain of supermarket operators. It will be a 14 lane installation in a hypermarket.

An advance look....

....at "Grocery Retailing in the '80's" was published by Progressive Grocer in the June 1979 issue. This article was the first in a series by the magazine and reports the thinking of store designers and engineers. Scanning does occupy a major part of their plans for the next decade.

Some designers think the industry will move away from the giant 50,000 to 60,000 square footers because they are too large to be geared to neighborhood needs. "Conventional supermarkets will establish themselves as the dominant

format", according to one.

Countering this, Farm Fresh, a 17-store Norfolk chain states, "To grab a greater market share, Farm Fresh is planning new stores 50,000 to 80,000 square feet." Farm Fresh management states their future weapon is scanner information and every store being built has a computer connected machine. Future operations are planned to revolve around the scanner and computer information.

Publix, a 224 store Florida chain, expects their margins to be growing during the early 80's and part of that optimism derives from the fact that Publix will have all stores scanning by 1982. "Management based on the computer will be the main difference between stores of the 70's and supermarkets of the 80's. In the early 80's consumers will accept the removal of pricing from individual items."

Just to keep things in perspective, however, King Kullen, the 50-store New York chain, states "Scanning has a long way to develop before acceptance by Long Island consumers. The industry is entering the electronic 80's but metropolitan New York may enter them slower than other parts of the country."

As an indication....

....of the increased availability of venture capital, and of the favorable attitude toward emerging companies in this industry, Symbol Technologies, Inc., has just gone public.

The company sold 415,000 shares of stock at an opening price of 3 3/8 which netted the company about $1.25 million. We understand that the stock was oversubscribed at the time of issue and the price has held firm, and even increased somewhat, during the few weeks after the offering date.

The Hauppauge, NY company, which manufactures laser scanners, and verifiers for UPC symbols, plans to use a significant portion of its new capital to expand its marketing, advertising and other sales promotional activities and staff.

A new set of guidelines....

....has been issued by the Council for Periodical Distributors Associations covering "Magazine and Paperback Title and Issue Coding -- UPC Symbol Location". The guidelines were revised and reprinted in June 1979 and are available from CPDA, 488 Madison Avenue, New York NY 10022.

These guidelines clarify some issues that have been raised during the past two years during implementation of the supplemental code for magazines and paperbacks, but contain no significant changes from the previous guidelines. The code and symbol are the same and location recommendations have not changed. There are sections explaining UPC compatible codes for magazines published in parts of the world other than North America and a new leap year UPC issue calendar for use in 1980.