The management Newsletter for all industries involved with bar-code scanning and related technologies.

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To Our Subscribers:

There are too many events on too many fronts to single out any one major news item with which to grab your attention and lead off this Charter Issue.

The really important story to tell about bar-code scanning and symbology is that it is happening all around us. Systems are operational in manufacturing, warehousing, distribution, retailing, hospitals, libraries, research and government operations. We will try to cover it all for you as best we can to give you an insight into what is happening and why, and an opportunity to factor these events into your future plans.

SCAN will report on the active companies and personalities in this growing industry; what the Trade Associations and Professional Groups are doing; how the requirements of various government agencies will affect the way we have to do business; the latest developments from the hardware manufacturers. Wherever possible, we will identify our editorial comments as distinct from factual reporting.

As with any emerging industry, the lines of communications are still unformed and incomplete. We welcome, therefore, all comments, information and exchange of ideas with our subscribers and their associates. SCAN can become a natural and much needed forum to keep all of us abreast of the latest developments in our field. Our newsletter format provides the ability to be current, objective and immediate in our response to events.

Welcome Medical

George Goldberg, Publisher

The U.S. Government's major effort in scanning....

....is called LOGMARS, an acronym for the Joint Steering Group for Logistics Applications of Automated Marking and Reading Symbols. It was organized as a Department of Defense activity in order to expedite automation of logistics data processing, and to avoid duplication by the individual services. LOGMARS is now in its testing phase with systems being installed in New Cumberland Depot (Pa) and Fort Bragg (NC).

There are 3 separate testing projects:

- 1. Automatic printing and affixing of man-readable labels prepared from information read off scannable bar-codes on the containers.
- 2. Small parcel sortation based on bar-code scanning.
- 3. Receipts processing based on bar-code scanning.

Tests 1 and 2 are scheduled for completion by April 1978; test 3 by the end of this year. Awards have been made to AccuSort to supply the portable/pen scanners, and to Markem for the imprinters. As of press time, awards have not yet been made for the remote scanners — both fixed and moving beam types. The symbology adopted for the tests is Code 39 principally because it is alpha/numeric, expandable and can be imprinted on labels in-house with available hardware. The Distribution Symbol seems to have been turned down because it is limited to an 11 digit all-numeric code. (This, of course, will not help DCI's goal to establish the Distribution Symbol as a standard, uniform symbology to be used industry-wide. See this month's SCAN feature story on the Distribution Symbol, starting on page 4.)

Ultimately, the government's plan is to have the bar-codes source-printed or labelled directly on the containers by the DOD contracters and suppliers. The Army alone has 800,000 different line items in their depots. The total will run into the millions when the other Armed Services, and ultimately General Services Administration and other government agencies, are included. The potential impact on industry, here and abroad, is enormous. The government buys from thousands of suppliers and distributes through hundreds of depots throughout the world, and the decisions made by LOGMARS should be watched closely.

Comment

The LOGMARS group has been very open with the industrial sector and receptive to information from any responsible sources in these early stages. So far, the decisions made have only affected internal DOD test operations. Ultimately, however, these decisions will become a way of life for all suppliers of materiel to the government, and this will include the printers, converters and manufacturers of all types of packaging. We think it would be advisable to consider the establishment of an industry coordinating group to work with LOGMARS to review proposed requirements before they become regulations. Representatives from the manufacturers of scanner equipment, material handling equipment, computers, box-makers, printers, as well as the materiel suppliers themselves, should be represented in this group. It could be handled through the corresponding Trade Associations for each industry. There is no dominant single factor in this new technology that can be

the source for the broad-based information that is required (as there was in computers, for example). We invite comments and suggestions which we will be happy to pass along to LOGMARS. SCAN will be covering their progress regularly.

Identicon is alive and well and living with....

....Ferranti-Packard in Franklin, Mass. F-P (\$40 million sales), the Toronto based subsidiary of Ferranti Ltd. (U.K.), acquired control of Identicon early this year. Identicon had filed for bankruptcy (Chapter 11) in July 1976 after coming close to merging with a different electronics firm. The financially troubled scanner manufacturer, one of the oldest in the business, has had a complete change in management. Harvey White, the founder and President, is out, along with most of the marketing and production executives. Ferranti-Packard has imported their own team, headed up by VP/General Manager Barry Hercus who splits his time between Toronto and Franklin. Identicon is marketing their same line of scanners with the exception of the portable/pen unit which has been withdrawn. All manufacturing is still done in Franklin and sales are handled by manufacturer's reps covering most of the U.S. They report that sales are not yet at previous levels, but that they are increasing.

Computer Identics announces a new product....

....the Fixed Code Processor II. Priced at \$2535, the FCP II is a stationary bar code entry terminal which includes a hand held pen scanner, 16 digit LED message display, 16 key manual keyboard, audio visual acknowledgement of transactions, and a serial data interface. The unit will decode Interleaved 2/5 and conventional 2/5 codes with other codes optional.

A newcomer to scanner hardware....

....has emerged in Los Angeles. Informer, Inc. (what's in a name?) is in business 5 years, used to be Car-Mel Electronics, and has just announced an optical bar-code reader terminal. It is described as "a Miniature computer terminal with an attached bar code reading optical wand which presents a written description of coded items on a mini-CRT." Its first application has been as integrated into a library system to inventory and check books in and out. Both the books and the borrowers' cards are imprinted with bar-codes.

Informer informs SCAN that, although they are basically a custom shop, they are now looking to expand their markets by supplying off-the-shelf components to OEM system manufacturers.

If you are interested in UPC and marketing....

....the August issue of <u>Grey Matter</u> provides a good, hard-nosed overview of UPC from the advertising/marketing perspective. Grey Matter is a publication of Grey Advertising, 777 Third Avenue, New York, N. Y. 10017 and free copies are available by writing to Ms. Peggy Boomer, Editor.

The Distribution Symbol:

The dilemma of the Distribution Symbol....

....continues to surface in many ways. Almost noone disagrees with the potential advantages of a uniform scannable bar-code for all shipping containers. There is strong opposition to the D/S in particular, however, and the arguments boil down to two major points:

- 1. A standard code or symbology, such as the D/S, does not recognize the wide disparity of requirements among various industries, systems and companies. Although many can accommodate to the limitations of a ll-digit all-numeric code, some may need a 30 character alpha/numeric with bells and whistles.
- 2. A uniform code system cannot be adopted before a full study is made to determine the compatibility between what the scanners can scan and what the printers can print.

One of the major attributes of the D/S is that it is compatible with UPC, and that should not be ignored. UPC seems to be working fine for the supermarkets and will probably do equally well in almost all other retail outlets.

Distribution Codes, Inc. (DCI), the sponsors of the D/S, have been actively promoting this code and symbol in seminars and the trade press, but their targets for adoption by some key industry groups seem to be constantly delayed.

SCAN believes the fate of Distribution Symbol is important to the industry and should be covered carefully. The extended coverage in this Charter Issue will attempt to bring everyone up-to-date.

The Distribution Symbol was introduced....

....in June 1976 with a specification Manual, interviews in trade magazines, scheduled seminars and high hopes. DCI had a Patent Pending and was issuing licenses to Film Master manufacturers who were to be required to pay an initial fee plus an ongoing royalty for the privilege of making and selling the D/S masters. That lasted until February 1977 at which time DCI, under considerable pressure from many sources, gave up its plans to control the symbol in that manner. They now continue as administrators of the Code and symbol, issuing specifications, and providing consulting services.

The D/S is intended to provide a standard, uniform 11-digit code to be printed on shipping containers. The code is compatible with the UPC coding system, but the symbols are not interchangeable insofar as scanning. The hope was that with the expertise of DCI and the clout of its "parents," the National Association of Wholesaler-Distributors, the Distribution Symbol would be adopted as a uniform coding system for all industries. This would simplify and standardize the installation of hardware and software systems and avoid the nightmare of having to print multiple codes on each package to accommodate various destinations.

There is no industry group that has officially adopted the Distribution Symbol as yet. The grocery retailers are a prime candidate because of the compatibility between the D/S and UPC, but the lack of enthusiasm by the manufacturers of scanner hardware and shipping containers has held everyone off. The feeling among many is that if the supermarkets go with the D/S, others will follow because of the attractiveness of a standard code. It may take a while for all of this to sort out.

Meanwhile, enter the Users' Conference....

....probably the best thing that could have happened to the Distribution Symbol. Spearheaded by Bill Maginnis of Hunt-Wesson, and actively supported by Ted Schultze, Chairman of the Symbol Masters Association, this informal group of about 20 has representation from every major industry group concerned with the implementation of the D/S. Their first meeting was held March 15, 1977 followed by one on July 19, at which time they changed their name to the Distribution Symbology Study Group (DSSG).

The March meeting was devoted to a review of progress to date and discussions of test programs based on exchanges of ideas. It provided a necessary forum for the complaints and objections of many groups, but adopted a basically favorable and positive attitude toward the D/S and an ultimate solution of the problems.

At the July meeting, test programs were assigned to resolve the most nagging problem of all: what is the practical range of print contrast that the corrugated industry will produce, and how will the scanning equipment cope with that range? The timetable will be:

By 9/15/77, samples of corrugated boards, including the darkest substrates, will be printed with the most suitable inks to provide the broadest range of contrasts to be expected. These samples will be sent to the scanner manufacturers.

By 10/15/77, the scanner manufacturers will complete their tests.

By 10/30/77, the results will be distributed to the members of DSSG for evaluation.

 $\underline{\text{On }11/10/77}$, the DSSG is tentatively scheduling their third meeting.

The July meeting covered many other topics including:

- 1. Ladder vs Picket Fence format (decided to stay with the Picket Fence).
- 2. Need for Supplemental Codes (OK if for internal use and so long as they don't interfere with the standard 11 digit symbol).
- Control of print gain (emphasis to be on consistent gain on all bars with some possible changes needed in the durometer rubber used in the rubber plates).

"The scanner equipment tests of the D/S....

....will require the establishment of some basic parameters," according to Chuck Mara of Computer Identics. Speaking as a member of the Automatic Identification Manufacturers (AIM), Mara wants to be sure that the test results from all manufacturers are comparable, particularly when evaluating the various types of fixed-beam remote readers and rotating-beam remote readers. One of his suggestions is that tests be run over a range of distances -- 2" to 20" for example -- in 2" increments.

Computer Identics is scheduled to be one of the scanner equipment manufacturers to test the sample printed boards for the DSSG.

One of the most careful observers of the progress of the D/S....

....is the Fibre Box Association. The FBA is doing just what it is paid to do; i.e. protect the interests of its members, the corrugated carton manufacturers. FBA members produce 88% of all the corrugated shipping containers produced in the U.S. -- some 17.6 billion cartons.

Al Hoffman, Technical Director is an active participant on the DSSG, and commends its "planned approach to an analysis of the problems." His opinion of the Distribution Symbol? "If the parameters are as announced by DCI, then it is impossible — a definite No! If modified, it may be feasible." Hoffman states the FBA supports any tests which will be looking for the "perfect marriage between the substrate, ink and scanner."

Let's hope this perfect marriage doesn't have to be made in heaven.

The cooperation by individual companies....

....is one of the most gratifying and encouraging aspects of the ongoing evaluations of the various Distribution Symbologies. Bill Maginnis of Hunt-Wesson and John Membrino of Scott Paper, for example, represent significant corporate efforts and budgets which will be of benefit to the entire industry.

Scott Paper has been conducting printing and scanning tests of 3 Symbologies: the Distribution Symbol, the Edge Code and Scott's own "Selective Eye Mark." Membrino has arranged for AccuSort and MRC to lend them scanning equipment for the test (with the proviso that the published results will not indicate an evaluation of the scanners, but only of the codes.)

Membrino has pledged to release the results only to the Distribution Symbology Study Group for evaluation. So far, the results are inconclusive and loaded with problems. They are now debugging the scanner installations and only have partial results. Membrino hopes to be able to present his findings to the next meeting of the DSSG in November.

The DCI/Paperboard Packaging brou-ha-ha....

....is not laughable, according to John Langan of Distribution Codes, Inc. In the May, 1977 issue, Editor Joel Shulman of Paperboard Packaging Magazine took DCI to task over the way in which the Distribution Symbol was introduced and the lack of industry coordination. Speaking for the converters, Shulman felt everyone's life could have been made much simpler if DCI had moved a little more carefully and taken into account the requirements of certain segments of industry which will be severely constrained.

In the August issue DCI replies with a point by point rebuttal which attempts to answer many of the criticisms of DCI and the D/S by pointing out that the D/S has more than enough capacity to handle all manufacturers and their product codes; that tests indicate the symbol is printable and workable; and that DCI is not exercising undue control over all users of the D/S.

Fortunately, both Langan and Shulman maintain their affection and respect for each other and seem to be continuing their dialogue -- if not their dispute.

Comment

We believe this airing of the problem has been worthwhile. There is merit on both sides: Shulman shot from the hip just a bit in his published comments, and although his basic position may have been valid, his facts were not completely accurate. On the other hand, DCI did not complete all their homework before adopting and introducing the D/S. Many of the industry groups feel they were ignored when the D/S was developed. DCI may now be paying for this oversight.

MORE ON THE DISTRIBUTION SYMBOL AS EVENTS BREAK IN THE COMING MONTHS

UPC is finally gathering momentum....

....and the number of scanning stores is increasing at the fastest monthly rate since its inception. The 200th installation will be up and running during September 1977. Of particular significance is the fact that it is the medium size, regional grocery chains (under \$1 billion sales) who have been the most aggressive in coverting to scanners. The big 3 -- Safeway, A & P and Kroger -- are lagging behind. Giant Foods has 23 scanning stores and Pat Collins, President of Ralphs (Los Angeles) just announced he expects to have 50 markets equipped by 1980. They now have 7.

All of the chains with scanning stores are running careful tests of their hard dollar savings. Only a few seem to be actively exploring and using the potential of the less tangible or soft savings. Store-controlled variables such as shelf-positioning, price changes, in-store promotions, advertising, couponing and other marketing tools can now be measured accurately and with daily feedback. Many of these measurements are also available to the manufacturers, and their value will increase as more stores are equipped.

UPC as a marketing tool

....is the basis for at least 3 industry studies. The Newspaper Advertising Bureau project is the oldest and its reports are geared to newspaper ad responses. The newest SAMI study is sponsored by the Advertising Research Foun-

dation. (More on these two studies in later issues.)

Tele-Research Inc. (Los Angeles) has been working on its program for about a year and seems to be the only independent for-profit project around. TRIM (Tele-Research Item Movement) started with the 7 Ralph's markets in the Los Angeles area. These scanning locations were selected as representative of the broadest possible demographic cross-section of the area serviced by Ralphs. The inital studies were internal only, to provide Ralphs with data on price sensitivity and shelf management. From the results gathered from these studies, Mike O'Brien, President of Tele-Research, states that "those supermarkets with scanners and the ability to use and interpret test results have a marketing advantage and will be more successful than those who do not use this tool."

Early in 1977 TRIM signed up 7 manufacturer clients to provide them with data on item movement as a measured response to advertising and marketing programs. Since then they have begun work with Wegman's (15 scanning stores in Upstate New York) and have added 8 additional manufacturers.

It will be interesting to watch the ad agencies' response to this market research tool. The effect of ads and promotions will be measured to a degree never before attainable on such a broad scale.

THE UP\$ second effort

....is approaching decision time. After the failure of the very expensive California test of the Universal Product Dollars on-pack label promotion, the company refinanced, shuffled personnel, and came up with the "Media Delivered -- Match UP\$" campaign. Launched in June, in Sunday Supplements with 37 million circulation, the results have been trickling in. The ads contain coupons worth over \$6.00 to those consumers who purchase and send in corresponding product labels. Product participants in the program include Kraft, Campbells, Dixie Cup, McCormick, Fantastic and others.

Allen Rudder, VP of UP\$ says the results are running behind expectations, but they are hoping that a late September surge in returns, when the offers expire, will make the program a success. They were planning for a 2-3% response (about l million replies) but will settle for something less. When Rudder was asked what's next if this fails, his response indicated that UP\$ may still be around, but in some other business.

UP\$ is a most interesting marketing effort to utilize bar code technology — the UPC symbol + supplements. It may be a little before its time. Their market tests show that raising consumer awareness to the symbol and the UP\$ concept represents the largest and most costly problem. SCAN will track the UP\$ results during the next few months.

SCAN Charter Subscription offer....

 \dots is still available through September 30, 1977. Take advantage of 20% off regular rates.

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