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

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It has been a while....

....since we last wrote about market research applications of UPC scanning data (SCAN Nov 80). At that time not too much in the way of serious research results was available for use by the sales and marketing staffs of the product manufacturers. The attention-grabbers were the sexy technical innovations that were being introduced. For example, <u>Information Resources</u> had announced <u>Behaviorscan</u> and was saturating selected cities with store scanners actually paid for and installed by the company; panelists were then selected to have all their purchases recorded in the stores and they went home to watch television on sets doctored to control which commercials they were exposed to.

At the time, these and other types of innovative techniques were promising to totally revolutionize market research. Ad agencies were portrayed as vitally concerned about this new set of tools which would accurately and quickly measure the effectiveness of their efforts. Manufacturers were anticipating new methods for test marketing new products and saving millions by avoiding the failures, and rolling out the successes.

Have these promises been fulfilled? Yes and no!

Behaviorscan is enormously successful and growing. Their activities are being expanded to additional cities. The company is also embarked on a program to buy and install stand-alone scanning systems in the convenience and small grocery stores to make sure they capture <u>all</u> purchases in their test cities. The <u>SAMI/Adtel</u> system, similar in concept, is also aggressively pursuing this market, and has panelists in three or four cities recording in-store purchases and watching split-cable TV.

These are limited tools geared to specialized test marketing in a relatively small sampling of the population. NABSCAN, using a different approach, gathers raw scanning data from a much larger base. Weekly data is accumulated from over 500 scanning stores. But is this truly a national sample? Since scanning stores do not yet represent a cross-section of the retail outlets, this remains a major restriction of this type of service. (Started as a service of the News-paper Advertising Bureau to support advertising in that medium, NABSCAN was recently sold to an independent group of investors and functions now as a separate company.)

Other active companies in UPC-generated market research include TRIM/TeleResearch (recently sold to Harte/Hanks, San Antonio, TX) and, of course, A. C. Nielsen. Nielsen, the industry giant in market research, has been making announcements about offering scanner-based research services almost from the inception of UPC, but, surprisingly, has done very little to date. In a related area, Nielsen

has contracted with <u>Symbol Technologies</u> to develop a mini-scanner to be used by their store auditors carrying portable data entry devices. This is intended as an improved method for taking shelf inventory, and is not really a scanning-based research technique.

What is over the horizon? There will be a growth and maturity of some of the current systems. They have already proven of value on a limited basis, and as scanning stores proliferate, their significance will increase. One new system is under development by NPD Research (Floral Park, NY), the largest market research company using home diaries. It involves the use of portable scanners placed in the homes. Each selected panelist — and there could be as many as 15,000 in a national sample — would scan all purchases as they were brought home. Since the panel would be national, and since all purchases could be recorded whether or not they were bought in a scanning store, this approach offers advantages.

Scanning and market research have been referred to as the ultimate tie-in. As more stores install scanners, and as operations personnel learn to manage the data, the market research applications will grow. It's just not moving as fast as some thought it might. But then you listen to Andy Murray, VP of the Ocean Spray Company, who says "It's amazing what scanning tells us. You can track sales prior to TV and after TV. You can get information by store location, by ethnic area, or by price. You can determine how effective your display activity is, and you can track sales by shelf location." You can, Mr. Murray, and you will.

## The US Department of Defense....

....is starting to get its act together in the implementation of bar coding. The  $\underline{\text{LOGMARS}}$ ' project will require the printing of 3 of 9 codes (with OCR-A in the clear) on unit pack and outer containers on stock material purchases under most DOD contracts.

LOGMARS seminars, to educate contractors to these requirements, will be held at various locations across the country. A tentative 1982 seminar schedule has been released:

Atlanta	5/26	Los Angeles	6/2, 3, 4
Dallas	6/11	St. Louis	6/17
Philadelphia	6/29	New York	7/1
Boston	7/13	Chicago	7/15
Cleveland	7/22		

Defense Contract Administrative Service Regional offices (DCASR) can supply details to contractors. The technical data is available in MTL-STD-1189 and MTL-STD-129H (change 3). These documents are available from Naval Publications and Forms Center, 5801 Tabor Avenue, Philadelphia, PA 19120.

#### Comment

One can get a bit confused by the conflicting DOD notices. Conducting seminars in June and July is a good move. But what do contractors do when their first notice that bar code scanning even exists occurs when they receive a letter stating "The 3 of 9 bar code was selected as the DOD standard symbology and will be included as a mandatory marking requirement...effec-

tive 1 Jul 82." This letter was issued by the Defense Electronic Supply Center/Dayton, OH with little amplification. It was premature, to say the least, and caused panic among some contractors. Bar code scanning is certainly coming to the DOD after the four year effort by LOGMARS set the stage for system implementation. Let's not get carried away!

## While Bruce Smith....

....writes of: <u>Bar Code</u>: The Data Entry Alternative in <u>Bar Code News</u> (March '82), <u>Computer Decisions</u> almost completely ignores bar codes in their in-depth article on <u>Data Entry</u> (April '82). Smith, Manager of Markem's Scanmark Division, states "Bar code scanning offers a fast and accurate method to input data and the speed and accuracy over conventional keyboard entry cannot be overlooked."

But it was overlooked, and this is the second time in two years (SCAN Jun 81). To review data entry systems such as voice entry and OMR/OCR, and to ignore bar codes is no longer annoying — it's irresponsible. Martin Lasden wrote both Computer Decisions articles and we suggest a few letters to the editor of the magazine to point out the deficiency.

By the way, the publisher of Bar Code News is planning to publish a directory of Bar Code Manufacturers and Services. For more information contact Laura Hansen, North American Technology, 174 Concord Street, Peterborough, NH 03458; 603/924-6048.

### Now available....

....from the <u>Automatic Identification Manufacturers</u> (<u>AIM</u>) is a new paper <u>Moving Beam Scanners</u>. This is Part I of a series on <u>Scanning Products on the Move</u>, which will deal with all types of scanners. Additional parts will be available soon.

This publication introduces the reader to types of scanners and their use, describes installation techniques, and offers a checklist to assist in specifying a scanner configuration. The paper is complete with common terms used in this technology, formulas to determine the various scanner capabilities, tables to calculate bar length versus line speed, and performance characteristics of moving beam scanners. Figures offered show external and internal views of the devices, the signals generated by various bar codes, scanner setup, and typical ladder-type, picket-fence type, and omni-directional format bar codes.

The AIM paper is available for \$5.00/each from Literature Department, MHI, 1326 Freeport Road, Pittsburgh, PA 15238; 412/782-1624.

# With the very laudable intent....

....to "provide solid factual information on a level that is meaningful and understandable" <u>Interface Mechanisms</u> has published a position paper: <u>Bar Code</u> Symbology/Some Observations On Theory and Practice.

Written by David Allais, President of Intermec, the paper covers a broad spectrum of bar code theory and applications including such chapter headings as:

Historical perspective....Applications....Why bar code?....Symbology -- a description of most known bar code symbols including "the Upstarts, newer symbologies developed during the past 12 months"....Bar code quality specifications....Printing bar codes....Bar code scanning.

#### Comment

Although informational, and a worthwhile source document, we did not find this to be an unbiased report. The material leans heavily toward the Intermec sponsored codes, i.e., 39 and 93, and tends to relegate other symbologies, particularly Telepen, as also-rans.

For a copy of the paper, plus a copy of the new Code 93 specifications: Interface Mechanisms, 4405 Russell Road, PO Box N, Lynnwood, WA 98036; 203/743-7036.

## We noted last month....

....that  $\underline{\text{MRC}}$  does not seem to be too active these days (SCAN Feb 82). The reason was not too hard to find.

Scope, which acquired MRC in 1968, has decided to withdraw from "MRC's historical markets." The MRC operations reflected cost overruns on fixed-price programs which impacted the 1981 income of Scope. The company feels they are unable to reverse MRC's loss trend without a major investment, which they are unwilling to make. According to William Schaub, Chairman, however, "The laser bar code scanner manufactured by MRC, a primary product line, will be produced by the Scope Electronics subsidiary."

The company believes that economic uncertainty has caused delay in implementing many programs that include scanners, but they are still committed to the technology -- although, not under the MRC banner.

# Feeding the item-pricing/scanning....

....controversy, a West Coast survey on item-pricing concluded that many customers do not appreciate the use of scanners in food stores and resent the loss of item pricing. The survey was conducted by three students of the Southern California School of Business in Los Angeles and was awarded first prize in a contest sponsored by Supermarket News. The study Scanners: Are We Ignoring the Consumer? points out that customers perceive the lack of item pricing as a convenient, quiet way for stores to save (and keep) money, and they see the new technology as an inconvenience they are powerless to stop.

California seems to be the focal point for item pricing debate. On another front, Consumer Action, a consumer group, surveyed 19 stores operated by 9 companies and found most were not complying with the state's item-pricing law. The organization proceeded to file complaints with the district attorneys in Alameda, Contra Costa, San Francisco and San Mateo counties.

# In a well-documented story....

....a recent issue of <u>Retail Automation</u> presents the picture of the very highly competitive retail scanning market in the UK and Europe. Although IBM is cur-

rently dominating the UK scene (6 out of 8 scanning stores) there are currently 9 companies gearing up for an all-out battle to gain a share of the future market.

The five well-established US companies selling scanning systems are all in Europe: IBM, NCR, Sweda, DTS and National Semiconductor (NCS's Datachecker will be marketed under agreement with Hugin). The four other companies in the market are RTC, Amron, ADS and TEC. (We don't have room to decode all of these alphabet-soup company designations.) Other than IBM and Sweda, all other companies currently incorporate a Spectra/Physics model F scanner in their systems.

One of the more interesting aspects of the UK experience is the aggressive testing of smaller stores (fewer than eight lanes). TEC is currently operating in a two-lane Mace Store; DTS has a test system in a six-lane Wraggs (Spar) unit. These smaller, less expensive systems, hold a great deal of interest in the UK and other countries of Europe because of the large proportion of smaller retailers. In the US, about half of DTS' installations are fewer than six lanes, which puts them in the lead for systems of that size, with little competition so far (TEC has announced they will be here soon).

It is the aggressive approach to retailers of all sizes that has opened the European market to so many suppliers. They are betting on a higher level of interest from the two to eight lane stores than has been evidenced so far in the North American market. There is likely to be a shakeout during the next two years. It is doubtful the market can support that many contenders.

# Another company whose activities....

....are based solely on supermarket scanning operations is ALH & Associates. Operating as the Scan Research Group, Lanny Hernandez, and other members of his firm, have been working with a number of national EAN groups and affiliated organizations. They recently drafted a scanning Code of Practice for the Australian Retailers Association, and are working with Marketindex of Finland. In April they conducted seminars in Japan under the sponsorship of the Japanese Distribution Economics Institute.

The focus of the company is to create an understanding of the demonstrable benefits of scanning-based data, and to help in the design of scan-oriented information systems. They focus on the needs of the food retailers and manufacturers to understand the full range of benefits available.

The company has published an extensive report The Development and Application of Scan Data Systems which has been distributed to the EAN member countries and companies. Price and availability can be obtained from: ALH & Associates, 3400 Maple Avenue, Manhattan Beach, CA 90266; 213/545-4439.

# With the introduction....

....of a new EAN/UPC bar code verifier, Ergi GmbH of West Germany is seeking distribution arrangements. The LC 2000 verifier is a helium neon laser device, including a screen monitor and printer. The monitor displays a graphic representation of bar width variations in the form of a histogram. The LC 2000 measures reflectance, using a stationary beam, and bar space widths with a scanning beam. Measurements can be made on irregular shaped packages up to a distance of 15 mm (.6").

Ergi is seeking a distributor for the US market for this product. The company is also interested in American products, related to bar code scanning, for exclusive distribution in the European market. Horst Ott, Managing Director, Ergi GmbH, Otto Rohm Strasse 81, Postfach 4218, 6100 Darmstadt, West Germany; (06151)81695; Telex 04197 110 Ergi D.

# Two new products have been added....

.... to the Vidac line of bar code label printers:

- The hand-held Mark II Code Printer is available for in-store use and produces UPC/EAN symbols with or without price marking. The Mark II is available in LAC, UPC-A/EAN-13 and EAN-8 models. The manufacturer claims this unit is lighter in weight than previous models. The code required can be dialed in and a magnified read-out is used to view the code being printed. The price of the unit runs from \$895 to \$995 depending on model and features.
- The AUTO-CODE, an automatic desk top unit, is designed for a variety of applications in manufacturing operations and supermarkets. The AUTO-CODE will generate from 1 to 3,000 bar coded labels at the press of a print button. It calculates the check digit and will print all versions of EAN/UPC with or without printed prices. The AUTO-CODE is priced at \$5600-\$5900 depending on model and features. Vidac, 1054 Shary Circle, Concord, CA 94518; 415/676-4900.

# A computer software package....

....tailored to support a data collection system using bar code scanners, is now being offered by <u>Wakefield Software Systems</u>. Designed to function on the IBM Series/1, the system interacts with an operator at a data entry station and collects the data entered. The Wand 2S can be personalized by Wakefield or the user, and the visible prompts or audible tone will indicate whether a correct action and sequence have been performed. Applications suggested by the manufacturer include libraries, health centers, financial institutions, educational centers and gambling (?) facilities.

The package costs \$3600 and is available either as a paid-up license fee or monthly lease/purchase license. Complete turnkey systems can be customized to fit particular data collection needs. Wakefield Software Systems, 28D Vernon Street, Wakefield, MA 01880; 617/246-2200.

#### Hewlett Packard has introduced....

....its first high resolution hand-held bar code wand scanner. The model HEDS-3200 is designed to read high density bar codes with a narrow bar width of .0075" (0.19mm). The unit is available with straight or coiled cord. It can be purchased as the HEDS-3200/3201 with a push-to-read switch for battery operated applications at \$120; or the HEDS-3250/3251 non-switched for on-line AC powered systems at \$125 (prices are in quantity of 50). Contact your local Hewlett Packard sales office for further information.

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