



newsletter

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

SCANNING, CODING & AUTOMATION NEWSLETTER • 11 Middle Neck Road • Great Neck, N.Y. 11021 • (516) 487-6370

INCLUDING THE INTERNATIONAL EDITION



ISSN 0273-3080

Volume IX Number 11

July 1986

It began as....

....two separate stories, and became linked as one of the real milestones that will be marked by the bar code scanning industry. And we believe that when all the pieces have fallen into place it will be recognized that just a few individuals made it happen so quickly.

The first story is about the leadership role taken by Federated Stores to introduce UPC to the department store environment (SCAN Dec 84; Jan 85; Feb 85; Feb 86). It started with the Bullocks store in Los Angeles, and the dedication of one man to the belief that automation in the department store could only be achieved using UPC. Bill Sumner, Director of MIS for Bullocks (part of the Federated chain), convinced his management to try it in a few departments, and over the past 2 1/2 years his successful efforts have been documented in every trade journal in retailing.

But possibly Sumner's greatest achievement was in helping to convince Howard Goldfeder, the powerful Chairman of Federated, that there was no other way to go. Goldfeder had seen the positive results in his Ralphs Supermarket Division, and needed only to become convinced that it would work in the department stores, with their much larger number of line items.

Once exposed to the Bullocks' experience, Goldfeder moved ahead. He ordered implementation in Federated's Bloomington's and A&S units in New York; Rich's in Atlanta and Filene's in Boston. His most important commitment, however, was to the entire industry. He had no use for the foot-dragging decisions of the industry organization on this subject, and their continuing attachment to OCR-A. Even the dual symbology proposal (SCAN June 86), which was to be used as an interim solution, was no answer for him.

He took the problem directly to the executive board of the National Retail Merchants Association (NRMA). At its mid-June meeting, the NRMA board adopted Goldfeder's proposal that UPC be designated as the sole symbol of choice for the 45,000 department and specialty stores represented by its membership. The board also voted to fund studies to promote implementation. As of this writing, the NRMA still replies with a "no comment" when asked for details. We've learned that the executive board ruling is in the hands of the attorneys, who are working on the specific wording to be released. They are fearful, we understand, that a few retail chains which have bought OCR scanning equipment may not look too kindly on this decision.

Thus, within a matter of months, the NRMA had done a 180 degree about-face. But we promised you two stories....

The second one....

....comes from the Crafted with Pride in USA Council. This is the group that has given us the star-studded TV commercials with Bob Hope, Sammy Davis, Jr., Carol Channing and others proudly showing us the "Made in the USA" labels. The Crafted with Pride organization is made up of 213 major textile and apparel companies. To back up their commitment, they have provided \$45 million in working funds, exceeding the original \$30 million budget.

The Chairman of the Council is Roger Millikin, the dynamic chief executive of Millikin Co., the giant textile manufacturer. A few months ago Millikin started to explore new avenues for implementation of Quick Response, one of the major programs of the Crafted with Pride Council. (If this sounds like the automotive industry Just-in-Time program, it's because they are almost parallel in their objectives to achieve greater productivity and shorter production lead times from raw materials to consumer purchase.)

The objectives of the Quick Response program had been narrowed down to three primary areas: standardized item coding; standard communication protocol; and the ability to get point-of-sale information back through the supply chain as quickly as possible. One major incentive is to reduce the enormous costs of markdowns in the marketing of apparel. The average retail markdown of clothing in the US is 17%, partly because of too little information provided when purchasing and managing inventory.

The project prompted Millikin to talk to some of the key movers and shakers who had brought UPC to the supermarkets. He was immediately convinced that UPC was the critical first step. He called a meeting (on just two weeks notice) of the top management of the most important textile and apparel manufacturers and retailers in the country. At that meeting he offered and had passed a resolution unequivocally endorsing UPC (only Sears and Penney abstained — they were not prepared to make that commitment although everyone is aware of their interest in UPC). The June 24 statement, signed by 19 major retail, apparel and textile companies, reads in part:

"The Retail/Apparel/Textile industries have an excellent opportunity to utilize current and future technology in the areas of information capture and exchange to improve their productivity....It was agreed to support the Universal Product Code structure, as administered by the Uniform Code Council, as the voluntary method of item identification for branded merchandise at the retail level."

COMMENT

The rest will be history. We will be discussing the implications of both the NRMA and Crafted with Pride decisions in future issues: how this will place bar codes on just about every consumer product sold in the US; the numbers and types of scanners and printers that will be required; the introduction of bar code scanning to manufacturing companies whose next step will be internal systems based on this technology; the impact on the distribution and transportation industries.

The importance of this vertical market integration, which will link retail/slot scanning systems to the industrial bar code sector, will involve almost every vendor in this industry. We do not believe that our enthusiasm is overstated.

In our article last month....

....anticipating the adoption of the UPC code and symbol by the department stores and mass merchandisers (SCAN June 86), we noted the concern of some retailers about the potential problem of coding apparel and other general merchandise. They raised a question of the vast numbers of detailed style, size and color variations and how to fit it all into the rigid UPC format, even suggesting that the UPC-Version D be revived.

A working party of the International Article Numbering Association-EAN studied this same subject and its final report was adopted on May 10, 1985. This report was brought to our attention by Bjorn Passad (of the Sweden EAN Committee), who was Chairman of that working party. The report covered all of the possible alternatives and came to the unequivocal conclusion that the standard EAN structured code is the only way to go.

The basic problems addressed and the solutions proposed would seem to be directly applicable to UPC and US retailers.

This is one of those instances....

....where we can report to you on what has happened, but we cannot yet tell you why. In June, Computer Identics purchased the assets of Spectra Physics' hand-held laser bar code scanner product line. The price was an unstated amount of cash plus a future royalty stream.

Computer Identics has been marketing both the Spectra Physics and the Symbol Technologies lines of laser guns, and so far as we can determine will continue to market both. Spectra Physics recently acknowledged Symbol Tech's patent and agreed to pay some cash and future royalties for a license (SCAN Dec 85). We understand the lawyers have not yet determined who and how the royalties will be paid in the future based on this sale of assets.

Spectra Physics says it will continue to provide service on units it has sold and will offer its customers products manufactured by Computer Identics. It is fairly evident, however, that Spectra Physics has thrown in the towel on providing equipment for the industrial market. According to a company spokesman for Spectra Physics, "The sale of this product line allows us to refocus our attention on several exciting product opportunities in the retail point-of-sale arena."

In a separate announcement, Computer Identics signed an agreement to sell an additional 400,000 shares of its stock to NV Bekaert, the billion dollar Belgian company that has been C/I's partner in the European-based Computer Identics N.V./S.A. At about \$5 per share, this gives C/I \$2 million for working capital and for business expansion, and increases Bekaert's stake in the company to 22%.

Symbol Technologies is now in....

....production with its new LS8000 hand-held laser diode scanners (SCAN Feb 86) and will be shipping this month. This is the product that a number of companies have had under development for about five years. To our knowledge Symbol Tech is the first to hit the market with it.

VP Rich Bravman expects the LS8000 to position itself in the market based on a number of factors: the tentative price of \$1,000 to \$1,200 compared to the \$1,400 price of the LS 7000 he-ne laser; its lower power consumption and lighter weight resulting in more portability; some limitations of color range (light blue in particular) which may restrict its use in the UPC/retail environment.

Both technologies -- he-ne and laser diode -- will prosper side by side in an expanding market for other industrial applications, according to Bravman. The company seems very high on this new product. Symbol Technologies, 1101 Lakeland Avenue, Bohemia, NY 11716; 516/563-2400.

An indication of the rapid....

....growth of the industry's trade organization, the Automatic Identification Manufacturers (AIM): the 15 new members admitted at the June 17 general meeting in Pittsburgh were more than comprised the entire organization when we started publishing about nine years ago. There are now 86 member companies, and with size comes the expanded activities and responsibilities of such a trade group:

- The educational committee reported that five universities are requesting help with curriculum on automatic ID. And when word went out to other industry groups offering help with educational programs, the response was so large that the committee cannot find enough bodies to handle the requests. The just nominated slate of officers, headed by President David (Zap) Czaplicki (Intermec), will be working on industry education as one of its primary projects over the next two years. Others nominated for two year terms are Rich Bravman (Symbol Technologies) as VP Education; Jack Kindsvater (Data Specialties) VP Operations; Ivan Jeanblanc (Moore) Secretary Treasurer.
- Zap wanted to develop some estimate of the gross sales of equipment, supplies and services of the industry and took his own informal, highly unorthodox market research study of the 67 companies present at the meeting. Based on his insistence of no limits, no controls, no parameters and actually no research, the result was \$650 million. (We estimate the reliability of the figure at about $\pm 100\%$.)
- AIM International expects to have six regional affiliates within the next month or so. This includes the current members: US, Europe and UK; and the pending memberships of France, Pacific and Japan.
- The Dilling Memorial Scholarship Fund has raised \$52,000 in 12 months towards its \$60,000 goal. The first scholarship grant in automatic identification was awarded to a Georgia Tech graduate student.
- AIM may soon require its own product sections. In particular, we notice more and more activity by the RF group of companies whose emerging spokesman seems to be Ron Ames of Identification Devices.
- Although AIM's important ScanJournal is not dead, it is comatose. The technical publication could not support itself financially in the published format it used. The official word was that it is taking a breather to regroup and re-evaluate, but some members do not believe AIM can afford to continue this money losing project. The SCAN-TWO mid-year trade show is also under review.

- The Technical Symbology Committee reports that the symbol testing program at the State University of New York is going forward as planned. Pre-testing is now under way and the final report is due by October, 1986.

We share in the general optimism....

....about the automatic identification industry regarding its potential for growth over the next five years. But there are some sobering thoughts to consider, even as we prepare for prosperity. We did much of this considering while attending the AIM annual general meeting in Pittsburgh on June 16-17 and chatting with various members of that organization.

- As the industry matures, and bar code scanning becomes an accepted technology, we can no longer expect our transgressions to be casually overlooked. Vendors will be expected to deliver as promised. The Wall Street Journal stated it very well in an article on June 17 when reviewing the National Computer Conference: "The computer industry now blames itself for losing touch with customers and focusing on machines instead of problem solving. The industry needs to shift emphasis away from technical efforts and towards solutions...Computer makers have lost sight of customers' problems...Today every computer company is very product oriented. They come at us with boxes and expect us to come up with our own solutions." This last statement from a major user of computer hardware.
- The two most visible companies in our industry which have set out to provide a total systems approach both reported poor results over the past 12 months or so. Intermec and Computer Identics have had limited growth and much-reduced profits of late. We don't know if there is a direct connection.
- We believe that inaccurate statistical data is more misleading than no data at all. There are acceptable ways to find out how large the industry is including some reasonable short-term forecast data. Everyone should stop trying to extrapolate inadequate base data to the entire industry universe. (We've got prime examples of this type of nonsense sitting on our desk right now.) And even if the data does not include every dollar of actual sales, a carefully constructed statistical base could provide year-to-year benchmarks that could be worthwhile.

The first conference....

....of Cobatech-AIM France (June 11-12) was considered a success by the organizers. It attracted nearly 200 paying delegates and Michel Grolee, President of AIM/France, told us his group would have been pleased if only 100 had registered. The front cover of the conference brochure had a bar coded flying saucer being scanned. The impression of transport system efficiency, however, was somewhat diluted by a Paris metro strike which kept some delegates away on the first day.

This year, the conference was restricted to those who registered for the seminars and there were small table top exhibits. Seminar attendees came from many sectors: electronics, other industrial, health, nuclear energy and the

book industries were notable. The last two groups were attracted by case studies from within their industry. Next year it is planned to expand the exhibits and to allow separate show delegates. Cobatech-AIM France had decided to sub-contract the conference to professional organizers for five years starting with the 1986 event. AIM/France will incur none of the risks and administrative hassle, but will not benefit financially if subsequent conferences are a breakaway success.

While we are on the subject of Cobatech-AIM France, there are a couple of corrections to last month's article about this soon-to-be AIM International affiliate. The officers of the new organization are Michel Grolee (ID Systemes), President; Alain Macaigne (Intermec Systemes), Treasurer. Also note that AIM/France's membership of 20 companies covers both retail and industrial bar code scanning. Gencod (the French EAN affiliate) was the only user member and it graciously withdrew to allow AIM/France to comply with the AIM International by-laws. Grolee says a realistic goal for the organization is 40 members.

By now you've probably heard about....

....the People Meters, the latest buzz word in market research. A People Meter is a gadget placed in the homes of a panel of selected consumers to monitor what they watch on TV, how much "zapping" and "zipping" they do, VCR recording and viewing, and eventually what consumer products are purchased. (For the uninitiated, zapping is constantly changing channels using a hand-held remote control -- usually when commercials appear; zipping is bypassing commercials when viewing VCR-recorded programs.)

The basic People Meter concept isn't entirely new. The A.C. Nielsen Co. has been placing black boxes supplemented by handwritten diaries, in the homes of panelists to record TV watching for many years. The resulting reports strike fear in the hearts of all TV networks and production companies whose futures are made or broken by the infamous Nielsen ratings -- even though the accuracy of the reports has always been questioned.

Now comes the People Meter to provide detailed viewing data plus family product purchases based on UPC scanning. One of the most sophisticated of the new systems is under development by ScanAmerica, a Chicago-based joint venture company backed by Time Inc. and Control Data. The ScanAmerica system works like this: a black box will record which channel each TV is tuned to; using a remote control device, each person in the house will log on when in the room and watching; each viewer will be identified and typecast as to sex, age and family relationship so that those buying TV commercial time can better target their best audiences; and the newest innovation of all, all family purchases will be UPC-recorded using a hand-held bar code scanner!

After each use, the scanner wand is inserted into the master black box and the data downloaded into memory. Every night, between 2:00 a.m. and 6:00 a.m., a silent call is made to every panelist's home and the accumulated viewing and purchasing data is swept up into the host computer. Results will be available in days rather than the weeks or months necessary for current methods.

It has been called the ultimate research tool: Who is watching which programs (and, not incidentally, the commercials) and how that is translated into

purchasing decisions. The real key to the new system, as explained to us by Bill McKenna, President of ScanAmerica, is the recording of consumer purchases using UPC bar code scanning. (ScanAmerica has selected the MSI Datawand as its scanning device.)

The stakes are enormous. McKenna expects ScanAmerica will be up and running by 1989 after investing \$50 million in development costs. By that time the company expects to have People Meters installed in 5,000 homes. Nielsen (now owned by Dun & Bradstreet) is already into a few test markets, and AGB (a market research firm based in England) is attempting to gain a foothold.

Sales and earnings figures....

....for MSI Data for its fiscal year ended 3/29/86, indicate an important earnings turnaround for the company.

<u>MSI DATA</u>	<u>3 Months ended 3/30</u>		<u>Fiscal Year ended 3/30</u>	
	<u>1986</u>	<u>1985</u>	<u>1986</u>	<u>1985</u>
Revenues (\$000)	\$16,491	\$14,750	\$62,545	\$56,159
Net Income (Loss)(\$000)	288	(2,139)	172	(1,487)
Net Income (Loss)/Share	.11	(.85)	.07	(.59)

President Charles Strauch says he is pleased that the programs put in place a year ago are showing results. He adds: "Our primary challenge continues to be the execution of a very aggressive new product introduction schedule.... aimed at producing sustained long-term earnings."

Under the EAN system....

....two symbologies can be used for outer cases (a/k/a transport cases, outers, shipping containers, etc.): the standard EAN 13 symbol, or the ITF-14 (interleaved 2/5 - 14 characters). Different member countries have been opting for either one or both. ITF-14 is identical to the UPC Shipping Container Symbol, the only symbol specified under the UPC system.

American retailers and wholesalers have a relatively easy scanning task because of the single symbology and the undemanding range of sizes and bar widths to be scanned. Given the allowable ranges of the two symbologies under EAN, however, and because goods move freely about the EAN community, back door scanning systems will have to cope with two symbologies and a very wide range of sizes. The X dimension could range -- in theory at least -- from 10 to 48 mils (25 to 122 microns where 1 micron = .001 mm). So, not only do the EAN solutions require the use of autodiscrimination, they also require scanners to cope with what is, in effect, a wide band of symbol densities.

We are not sure whether scanning equipment manufacturers have fully addressed this problem. It has only recently been brought to the attention of AIM/UK's Technical Committee which solicits your comments. AIM/UK, The Old Vicarage, Haley Hill, Halifax, ENGLAND HX3 6DR; telephone (0422) 59161.

Few private companies....

....release data about their sales and profit performance. Image Data Systems, which produces computer-generated bar code labels and other high-tech printing in Beverley England, is a notable exception. For the past three years IDS has shown above average growth, and 1985 sales and earnings were up 39% and 17% over last year.

<u>IMAGE DATA SYSTEMS</u>	<u>Fiscal Year</u> <u>12/31/85</u>	<u>Fiscal Year</u> <u>12/31/84</u>	<u>9 Months</u> <u>12/31/83</u>
Sales (£000)	£1,788	£1,283	£625
Pre-tax Profit (£000)	225	192	44

During 1985, more than £250,000 (\$375,000) was invested in new equipment and facilities, including expanded premises, a second computer-drive text and bar code imaging system and a second laser printing unit. Staff levels are now up to 48. A major contract awarded to IDS in 1985 was the production of 30 million bar code labels for the UK's DHSS claims Project (SCAN Feb 86). IDS states that it is now "Britain's leader in the specialized computer-aided production of print media for electronic data capture, information retrieval and information processing systems."

Computype Inc. (US) has made....

....some changes to its UK operation which further close the links between parent and subsidiary. Last year's management changes seemed to restrict the UK business from operating too independently (SCAN July 85). Recently, Tim Lydell, who was Director of Finance for the parent company, was appointed Managing Director, European Operations. The Hull-based manufacturing facility, now supplies the entire European market. The previous name Compu Inc. (UK) Ltd. has been dropped for all but legal purposes and the business now officially trades as Computype. Computype GmbH has been set up as the German sales operation.

Computype GmbH, Nurnbergerstr 23, 6450 Hanu/Main, WEST GERMANY; telephone 61 81 24013.

A new high-speed....

....on-demand laser printer is available from Aedex. The manufacturer claims it produces high quality bar codes at speeds previously unavailable from in-house/on-demand printers. The LaserBar-608 outputs 8 sheets of 11" x 8 1/2" paper, vinyl or mylar per minute in all of the current bar codes. Special formats for AIAG, HIBCC and others are predefined in the firmware. The unit uses the Ricoh print engine. The LaserBar-608 is list priced from \$4,995 to \$5,895 depending on memory size.

Aedex Corp., 181 West Orangethorpe, Placentia, CA 92670; 714/528-4700.