



# newsletter

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

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## Over the years....

....we may have been spoiled by the very rigid structure of the UPC and LOGMARS codes and symbols: or the fairly straightforward automotive industry (AIAG) coding scheme; or even the somewhat flexible HIBC standard which contains some limited variables. Maybe that's why we are a bit perplexed by the newly proposed Health Care Provider Applications Standard. This standard, now out for comment, is intended for the hospitals' internal transactions, as opposed to the HIBCC standard which was for products supplied to the hospitals by outside vendors. It covers bar codes and symbols which will be generated and scanned in-house.

The coding scheme attempts to specifically identify and describe each product which is used within the hospital functional areas. The summary of recommendations contains twelve separate guidelines and we quote from a few of them to make our point (the emphasis is ours and we have retained the paragraph numbers from the draft):

1. For a standard to gain widespread use, it has to be simple, easy to understand and flexible....without attempting to define every possible use.
2. All hospital internal applications should employ code 39 symbology except where other symbologies are well-established or employ features not readily duplicated by code 39 symbology.
5. ....only high density printing, using a narrow module width of no more than 10 mils shall be used....
6. Bar code reading equipment should be capable of reading code 39, UPC/EAN, interleaved 2 of 5, codabar, code 93 and code 128 without physically modifying the reader.
7. The set of application flag characters will identify....where the bar code is located....(and) what kind of data the bar code identifies.
11. ....The data fields may be variable length and uniquely defined by individual institutions to meet their own system requirements.
12. The standard allows for more than one data field to be encoded on one physical symbol. The standard also allows....for data to be split into two physical symbols.



Summarizing, this suggests that the code can be represented by either 1 or 2 high density symbols of indeterminate length and in any one of 7 symbologies. Also included are instructions on how to encode 11 different locations and 19 different product descriptions with special characters for separating codes or linking symbols.

Comment

*This is not the place for a detailed point-by-point review and analysis, but only a statement of wonder at how such a complicated standard will ever find acceptance in the hospitals. We solicited comments from a number of involved individuals. One very pertinent response was that the coding scheme concentrated on identification technology rather than transaction technology. In other words, it attempts to build all of the intelligence into the code rather than giving each item a unique number and letting the computers do the work.*

*We must admit that we know less than nothing about the internal operations and requirements of a health provider facility. We only offer our comments in view of other successful bar coding applications. Comments are due back to the HIBCC by June 15. If you expect to be involved in this market arena, from the outside or the inside, get your copy and comment now!*

HIBCC, 111 East Wacker Drive, Chicago, IL 60601; 312/644-6610

Probably the best set....

...of statistics on the US supermarket industry is published by Progressive Grocer magazine. In the April 1985 issue they featured the 52nd Annual Report of the Grocery Industry.

Here are some highlights as they relate to UPC scanning:

- There are 156,000 groceries in the U.S., of which 30,000 (19%) qualify as supermarkets (over \$2 million annual sales). There are 12,500 independently owned and 17,500 chain supermarkets. Total supermarket sales are \$200 billion per year representing 72% of all grocery store sales. (Note: We do not mean to suggest that the 43,000 convenience stores and 83,000 "other" stores are not candidates for scanning; it just happens that this report is about supermarkets.
- In 1985, 11% of the independents and 15% of the chains bought some type of UPC scanning equipment. This does not jibe directly with the FMI published figures of about 1,900 new US scanning supermarkets in 1984 (see below), because it probably includes those who have bought additional equipment, upgrades, etc.
- Overall, 25% of the independents and 38% of the chain supermarkets are scanning. There is a very clear correlation between scanning and store size: Of those larger stores doing over \$12 million annual sales, about 65% of the independents and 85% of the chains are scanning; at the low end of \$2-4 million annual sales, about 15% are scanning.



There is still lots of room in the grocery industry for scanning -- in smaller supermarkets and in the less than \$2 million units. If we look beyond the U.S. borders, to Japan in particular, there is clear evidence of the successful operation of scanners in convenience stores and smaller food stores.

If you have a product....

....to sell to the scanning retailers, there's a terrific new prospect list available. The Food Marketing Institute (FMI) has been working on their super-market scanning store listing for over a year. They have finally cleaned up the data sufficiently to offer it to the trade.

The information provided includes: company name; each store number and full address; date of installation; name of vendor of scanning equipment installed. There are over 11,000 stores in the U.S. and Canada available on this list, which is available in two different forms -- floppy disc or hard copy print-out. The prices are \$50 per thousand names for the listing with street addresses; \$100 for the total list with city and state only.

Contact: FMI, 1700 K Street, N.W., Washington, D.C. 20006; 202/452-8444. Ask for Birgit Schock on Extension 297.

Talking about the....

....scanning store lists, FMI released the final cleaned up figures for year-end 1984. There were about 1,925 new installations during the year, bringing the US (10,584) plus Canada (591) total to 11,175.

Comparing the 1984 vendor share of market statistics with year-end 1983 shows little significant change:

UPC SCANNING SCOREBOARD  
Total Installations as of 12/31

<u>Vendor</u>	<u>1984</u>		<u>1983</u>	
	<u>Number</u>	<u>% Total</u>	<u>Number</u>	<u>% Total</u>
NCR	4,102	36.7	3,357	36.8
Datachecker/DTS	3,705	33.2	2,988	32.8
IBM	2,476	22.1	2,122	23.3
Sweda	714	6.4	559	6.1
TEC America	144	1.3	57	.6
Berkel	34	.3	34	.4
Total	11,175	100.0	9,117	100.0

Although FMI still treats Datachecker and DTS as separate companies (they merged about two years ago), we have combined their figures for this analysis. Notice that Berkel numbers have not changed indicating their inactivity in this market.



You have to be impressed....

....with the speed and scope with which Intermec continues to expand their line of products to include almost every type of bar code scanning and printing product.

The latest additions to the line include the Model 1420 Infrared Laser Scanner. This hand-held device made for Intermec by Optel, projects a concentrated spot of infrared light which must be manually moved across a bar code label. It can be held up to 8 inches from the bar code, weighs 7 oz. and is well-suited for portable use since it draws little power. The 1420 can be used with any one of Intermec's 10 readers including on-line, on-line display and portable readers. The list price is \$795 for single units.

Also introduced by the company is a new 9165 System Control Unit designed exclusively for IBM mainframes. This bar code control unit lets IBM users implement Intermec bar code equipment and ASCII CRT terminals and printers without any IBM host software changes. It has 16 ports to handle readers, printers and terminals, and port configurations may be changed by the user to their specific need. The list price is \$9800.

A new high density impact bar code printer, Model 8404 is designed especially for small label applications such as PCB and PROM labels. The device is targeted for in-house production of code 39 labels at 9.4 CPI, printing bar code and text on variable length labels, from 1/4" to 1/2" in height in four print formats. The 8404 has a list price of \$7,995.

Intermec's 2700 SC series of 4 models of Industrial Moving Beam Laser Scanners are in-tended for bar code data collection on high speed conveyer lines. At 700 scans per second one unit can handle bar coded material moving at 8 feet per second. Other models operate at 400 scans per second with raster scanning, allowing for poorly aligned labels. Prices range from \$5,000 to \$7,000 depending on models and options.

Intermec, Box 360602, Lynnwood, WA 98046-9702; 206/743-7036

In its continuing program....

....to provide the largest possible number of interfaces for its bar code readers, Barcode Industries has announced new versions of the MindReader 200 Series. The readers will now operate with the Decision Data 3761 and 3791 display terminals, with the IBM System 34, 36 or 38, and with the IBM PC, PC/XT and PC/AT. The reader connects between keyboard and computer, working as a companion to the keyboard which remains in use. For the IBM PC line, the reader incorporates CMOS technology, draws its power directly from the keyboard line, and does not require its own power supply. MR 200 Series Mindreaders also interface with a number of other IBM terminals, as well as those for Memorex, ITT and I/O Marketing. Prices range from \$595 to \$740, with quantity reseller discounts available.

In a separate announcement, the company is now offering its MindReader series with hand-held laser scanners. Base price for the unit with the laser gun is \$2,095; a wand reader may be added for an additional \$120.

Barcode Industries, 17 Barstow Road, Great Neck, NY 11021; 516/466-5770



The joining of marketing forces....

....by Accu-Sort and Lord Label presents some interesting possibilities for both. Lord is a well-established label printer with 9 manufacturing facilities and a broad-based line of labels and thermal printers. Accu-Sort is one of the oldest of the scanning equipment manufacturers with a full line of scanners and systems for commercial/industrial applications. Both are privately held companies and each saw an appropriate product "fit" in the marketplace.

We discussed the implications of this move with Al Wurz, President of Accu-Sort. He specifically denied any plans for a corporate merger of the two companies. The plans are to maximize the marketing overlap so that prospective customers planning to install scanning systems can deal with one sales group for both scanning equipment and label supplies. Wurz recognizes that the larger Lord marketing staff (about 30 in field sales) will not be completely knowledgeable in the more technical areas of scanning equipment. Accu-Sort plans to retain their smaller, dedicated sales staff to provide the back-up necessary to close the sales. Plans for the future include the training of sales and service personnel to familiarize them with both product lines; possible joint product research; and cooperative sales promotion and advertising.

Accu-Sort Systems, 511 Schoolhouse Road, Telford, PA 18969; 215/723-0981  
Lord Label Systems, 1200 Avenue H East, Arlington, TX 76011; 214/647-2504

When we reported....

....that Swedot has established their own sales organization in the US market (SCAN Apr 85), we omitted the fact that this will not disturb their exclusive distribution arrangement with Matthews International. Matthews will continue to be the sole distributor of the Swedot ink jet printers under their Jet-A-Mark label.

With record sales....

....and profitable quarters, Symbol Technologies' 9 months' financials continue to fulfill management's forecast that FY 1985 will be profitable. The company will need a banner fourth quarter, however, to meet its sales forecast for the year of \$14-18 million (SCAN Feb 85):

<u>SYMBOLS TECHNOLOGIES</u>	<u>3 Months Ended 3/31</u>		<u>9 Months Ended 3/31</u>	
	<u>1985</u>	<u>1984</u>	<u>1985</u>	<u>1984</u>
Revenues	3,702	2,439	9,869	6,025
Net Income (Loss) (\$000)	154	(583)	267	(1,242)
Net Income (Loss) (Share)	.03	(.19)	.07	(.42)

Change your records....

....from Federation of Bar Code Users (SCAN Jan 85) to now read Federation of Automated Coding Technology (FACT). FACT traces its origins to the August 1984 Summit meeting sponsored by AIM/US and held in Baltimore (SCAN Sep 84). In December the group met at ScanTech 84 to establish general objectives. Additional meetings were held in January and March and now there are some serious plans.



FACT is proceeding as a "federation of associations and individuals with the primary goal of promoting the best and largest...use for automatic identification." Current industry groups represented include retail (UPC Council); automotive (AIAG); health industry (HIBCC); government (LOGMARS Coordinating Group); electrical (NEMA); aluminum (Aluminum Association). The bar coding suppliers will be represented by AIM/US, which will be a voting member. Individual companies which are not affiliated with any industry group may be eligible for associate membership. (Note: Any company eligible for regular membership in AIM/US will be automatically excluded from FACT membership. This insures that suppliers wind up with only one vote in FACT, avoiding any undue influence by vendors.)

As presently conceived by the Organizational Task Force, under Chairman Don Dubuc, FACT will be an affiliate of AIM, but retain its own rules and regulations. AIM is to underwrite the first year's administrative costs.

All of these subjects will be reviewed and the organization established on a solid footing at the next FACT meeting scheduled for June 7 at the William Penn Hotel in Pittsburgh. All interested organizations and eligible companies are invited and urged to attend. Contact: Bill Hakanson, AIM/US, 1326 Freeport Road, Pittsburgh, PA 15238; 412/782-1624.

One last point: The Bar Code Users Group, with similar objectives to FACT, is still alive and striving to get off the ground (SCAN, Jan 85). Craig Harmon, the chief shaker and mover of that group has a new budget and proposal out to his prospective board members. We will cover the activities of the BCUG in more detail in a later issue.

#### As companies grow in size....

....in the bar code industry, there are increasing moves to integrate the sales and distribution functions. This is happening nationally and internationally, as witness the Intermec program (SCAN Mar 85, Jul 84, Jun 84), Bar Code Industries/France (SCAN Aug 84), Datalogic/Italy (SCAN Apr 85), and Swedot (SCAN Apr 85).

Two additional companies have announced similar plans. Computer Identics NV owned 40% by CI/USA and 60% by Bakaert/Belgium (SCAN Dec 84) has established Computer Identics Ltd. Frank Waterworth has been appointed to head the UK operation as General Manager. Tony Berry, the key person with Sandvik, CI's previous UK distributor, is transferring to CI Ltd. The parting with Sandvik is by mutual consent and friendly, and Sandvik will retain its OEM agreements with CI. All service and support transfers to CI Ltd. Computer Identics Ltd, Lygon Court, Hereward Rise, Halesowen, West Midlands, England.

Matthews International (Pittsburgh, PA) has been marketing bar codes and label printers internationally for many years, mainly through licensees, distributors and agents. A new subsidiary known as Matthews International Trading Company Ltd. (MITCO) has been established, headquartered in Pittsburgh. For the Pacific market, an Australian subsidiary has been formed and is headed by Lester Nichol. For the European market, MITCO has established a joint venture company with Richard Niescher, who heads the operation based in Germany. Matthews International Pty. Ltd., 16 Duffy Street, Burwood, Victoria 3125 Australia; (61) 3 2887133. Matthews Niescher GmbH, Postfach 2170, Kuhleschutte 35, D-4150 Krefeld 1, West Germany; (02151) 54 10 24.



### The bar coding expositions....

....in Europe, such as Scan/Tech Europe and the recently completed AIM/UK conference, are helping to break down the resistance to more open communication in the industry. Competitors are meeting head to head; prospective users are becoming more aware of the broader choices that are available; education in the technology is bringing greater product awareness. Put simply, the mystique is being removed and the important factors and criteria are being better understood in a marketplace that has been prone to secrecy. We heard of some installations and systems for the first time from speakers at the ScanTech/Europe and AIM/UK 85 conferences and by talking to the delegates.

Certainly on this point alone, the AIM/UK 85 conference and exhibition (April 17-19) was a success and has set standards to follow for future events. The 250 conference delegates, 450 exhibit-only registrants, and 35 exhibitors found the effort rewarding. Delegates commented that the conference had the right blend of industry presentations of bar code technology (symbologies, printing, scanning, quality and so on) and short cameo presentations from users. They indicated they had gained a better understanding of the technology from the industry speakers -- reinforcing or broadening the impressions gained from their vendors -- and that the variety of case studies suggested new opportunities. Most important for the industry, the exhibitors felt that business was good with serious discussions taking place with real decision makers about real issues and applications.

Whatever happens with ScanTech/Europe this year (see next month's issue), it is very likely that the AIM/UK show will be repeated next year. This was certainly the plea from a number of delegates. The realized results will probably influence decisions of other future AIM groups as to whether they will sponsor national/regional expositions in addition to Scan Tech/Europe.

### The year-end financial results....

....published by Image Data Systems (IDS) are good and justify the optimism expressed a year ago by IDS Managing Director, Roger Birkin. IDS (Beverley, England) is among those privately owned European businesses that makes its financial results available. The company manufactures computer generated bar code labels and other computer generated material and has just published the results for year end December 84 compared to its first nine months of operations in 1983.

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

With pre-tax profits at 15% of sales, IDS has established its own identity in two years and emerged from its checkered history (SCAN/IE May 84, May 83 and earlier articles). IDS now boasts a client list of 800 companies. Expansion of its technical and production facilities during the last year include: doubling the capacity of the specialized offset printing plant; installation of a laser printing facility; and inauguration of a new computer driven information processing and imaging system.



We haven't seen....

....the full report (at \$3,000 a copy, we thought we'd wait for the paperback version) but from the material available to us, the research survey published by Thomas Marketing Information Center (division of Thomas Register) raises some interesting questions.

It was originally designed as a multi-client study. According to the company, two thousand questionnaires were mailed to a "broad cross-section of U.S. manufacturing establishments" (based on representative SIC numbers). There were 288 replies, of which 30 companies had bar code scanning systems installed. Based on this information, Thomas published The Industrial Market For Bar Code Equipment and Systems study.

The questionnaires consisted of 15 questions which profiled each company and identified those factors which would affect the purchase and use of bar code equipment. The questions seemed slanted toward those factors which would influence the buying decisions of the surveyed companies. The answers, therefore, could be useful as a marketing tool for vendor companies.

A followup study is now under way to analyze the industrial market for bar code labels and printers. The survey technique and questionnaire approach are similar to the ones employed for the bar coding equipment study. The results provided to the participating clients include a list of potential prospects -- based, we assume, on the answers to the questionnaires.

Comment

*Since we have not seen the substance of the report which was sold to 7 clients, we certainly cannot comment on the validity of the data. We would speculate, however, that based on the small sample, even the best statistical sampling and analysis techniques would not provide any useful data that could be extrapolated to any reasonable universe. We suspect that the real intention of this thinly veiled market research study is to generate some viable salesleads.*

Contact: Tom Gallagher, Thomas Marketing Information Center, One Penn Plaza, New York, NY 10019; 212/290-7306.

To those retailers....

....who are installing super-sophisticated front-end scanning systems with all the bells and whistles and expecting overnight magic; and to those same retailers who have ignored the advice of all the experts and consultants who have cautioned about the need for updated management planning to make the system work to their advantage; we dedicate this anecdote lifted from the NY Times Metropolitan Diary 4/17/85:

Sign seen at the checkout counter of the Road Runner  
Market in Quartzsite, Arizona:

Your patience is appreciated  
New electronic cash register  
Same old ladies

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