Our in-depth reports....

....about the general merchandise retailers in the United States, and their growing commitment to UPC, were prompted by our belief that this will develop into one of the most important markets for bar code scanning during the next 5 years. We are specifically referring to the decisions of the National Retailers Merchants Association (NRMA) (SCAN July 86, Sept 86) and the work initiated by the Voluntary Inter-Industry Communications Standard Committee (VICS), which we reported last month.

With this in mind, we turned our attention to what is happening in general merchandise retailing in other parts of the world. Basically, there has always been a much broader commitment by the EAN countries to go with the UPC/EAN symbol for all commodities rather than use any alternative method. Bar code scanning has almost always wound up as the method of choice for any automation at the front end of the retailers.

- In France, over 10% of the scanning stores are specialty outlets, handling such diverse products as DIY and auto accessories, clothing, photo and cameras and books. German department stores have been scanning for some time. Interest in development plans along these lines exist across the EAN domain from Australia and New Zealand to Yugoslavia (SCAN Nov 86).

- The latest figures from the United Kingdom Article Numbering Association (ANA) show that 45% of the UK scanning store base is represented by general merchandise outlets. This is a much higher proportion than would have been predicted a few years ago. According to Andrew Osborne, Secretary General of ANA, "The signs are that before long grocers will be in the minority in the UK scanning store list."

- The latest UK general merchandise retailer to install EAN scanning is Boots. This large variety chain (over 1,000 outlets) sells a wide assortment of items including prescribed ethical drugs, health products, cosmetics, clothing, gardening products, records, photographic goods, kitchenware, and smaller domestic electric appliances. Its Peterborough store now has 34 scanning terminals and a price look-up file of 60,000 line items. Plans exist to install scanning in 170 stores by 1990.

- The UK government sponsored National Economic Development Office recently held a meeting on article numbering with key clothing manufacturers and retailers. The meeting concluded that these products should be coded using EAN standards.

- Allders, a UK department store chain, has just installed a scanning system using interleaved 2 of 5 symbology and its own SKU numbering system. The same symbology has been used for years by the Mothercare chain. There is a tendency by some retailers who sell their own-label merchandise to use bar codes other than UPC/EAN.

COMMENT

All of this raises a secondary, but nevertheless, important issue.

In view of the fact that there is probably more general merchandise moving across national borders than food items, and with the general consensus by most countries to go with the UPC/EAN code and symbol, it would seem an excellent and propitious time for the NRMA and the VICS group to specify and promote UPC/EAN compatability for all scanners installed in their trade in the US. This has been a very sore point with all of the EAN countries and with the International Article Numbering Association/EAN headquarters group in Brussels. The excuses raised by the supermarket chains -- which cannot scan EAN symbols and show no inclination to do so -- are no longer valid for the retailers who are just getting started in the department, mass merchandise, discount and other general merchandise stores. It would not only demonstrate recognition and consideration, but it certainly makes economic sense to make that move at this time.

We have been tracking....

....the progress of Metrologic since the company emerged from its 1985 bankruptcy (SCAN Feb 86, March 86, Aug 86). As noted before, the speed with which the company reorganized and came to a working agreement with its bankers and creditors was outstanding. Now it is time to judge Metrologic on its merits as a going concern, and not as a recovered invalid. From our conversation with President Harry Knowles, the outlook is very positive.

- Current sales are running at the rate of $1 million per month. Just six months ago (SCAN Aug 86) Knowles reported to us that he was booking business at the rate of $8 million per year, which was up from $4.5 million total sales of 1985.

- Although specific profit figures are not announced (Metrologic is a private company), Knowles expects next year's earnings to approach $2 million. If we can assume the company's revenues will range between $12 and $15 million, those are more than respectable margins.

- The Mini-slot scanner, designed for the small and medium size retailers, has emerged as the major product line for the company. With a list price of $1,695 (compared, for example, to $2,700+ for Spectra Physics' most popular slot scanner), the unit is priced competitively. According

to Knowles, it is not only less expensive to buy, but the Mini-slot also saves $150 per year in power costs compared to other units, and is a very reliable, high performance device. Sales have already been made to major retail chains, with others under test, and a very important OEM is about to sign up.

- The balance of the product line, including hand-held and fixed position laser scanners for the industrial market, is doing well with significant sales increases. The component laser business, which dates back to Metrologic's early days, is also contributing significantly to revenues.

- Knowles looks at his organization and staffing as lean and mean. Most of the core management group has been with him for a number of years and new salesmen are being added in the field.

From all indications, Metrologic is a company on the move.

An interesting and significant...

....discussion has been going on among some of the automatic identification vendors regarding the marketing philosophy behind their advertising and promotional budgets these days. The key words we hear bandied about are horizontal or vertical. We believe it has wide implications that will affect the ultimate growth of the industry.

In the past, much of the efforts have been horizontal; i.e. shows and media based on auto ID technology structured to attract as many companies as possible from all trades. The prime examples are the auto ID trade shows like SCAN TECH and ID Expo; periodicals like Bar Code News and Automatic ID News. The advertiser tends to be talking to a pre-conditioned, somewhat select group -- those who have expressed some level of past interest in automatic identific-ation systems.

The vertical approach is one that concentrates on the full spectrum of all com-panies in a potential user-industry: retail, automotive, health, government vendors, etc. In these efforts it is acknowledged that only a small portion of the show attendees or periodical readers may actually turn out to be potential customers. The universe is much larger, however, and the material presented must be geared down to attract the less knowledgeable individuals who may not have been previously exposed to the technology. It makes the assumption that there is still a lot of education to be done and the reach of the ad/promotion dollar must go well beyond the limited number of companies who are already in the fold, or almost there.

We discussed this with some of the exhibitors at the SCAN TECH/US and Europe shows a few months ago. We were surprised to learn how many of these companies were already into the vertical approach and the large number of shows they were involved in. Symbol Technologies, for example, is in about 15 shows each year; one of the smaller companies, with a widely used speciality product, told us they participated in 30 such events in 1986.

It is an out-reaching effort that may be more costly on a per inquiry basis initially, but which may bring in a much broader customer base. It takes the technology to the marketplace to a greater extent.

Typically, high technology businesses have been able to promote on a vertical basis when there are larger companies in the industry able to provide the budget and leadership for the broader promotional efforts (viz., computers, communications). The investment necessary for such promotional efforts, however, is beyond the means of most companies in automatic identification -- an industry still comprised of smaller companies (or small divisions of larger companies).

It's all part of the total education effort needed to spread the word: <u>Bar Codes Are Coming; Bar Codes Are Coming</u>.

The <u>recent</u> <u>troubles</u> <u>experienced</u>....

....by Computer Identics have spawned a new company founded and staffed by three ex-C/I employees from among the more than 30 let go this past year. <u>Concord</u> <u>Technologies</u> characterizes itself as a distributor, systems integrator and manufacturers' representative organization. The three principals -- Ed Sullivan, Scott Arnold and Don Way -- were all regional sales managers for Computer Identics and collectively they had covered most of the United States during the past 5 years.

The company now represents, among its 14 product lines, CIE, Symbol Technologies, Swedot, Caere, Data Composition, Compsee and Data Net. Concord Technologies now has offices in Marlboro, MA and Groton, CT., with 5 salesmen covering New England. Sales in 1986 were about $600,000, with very optimistic growth projections for the next 5 years.

Concord Technologies, 33 Boston Post Road, Marlboro, MA 01752; 617/460-9795.

New <u>and</u> <u>revised</u>....

....<u>standards</u> <u>and</u> <u>specifications</u> for specific industries and government applications are being generated at a significant rate. Some are currently out for review and comment.

Many of them are designed for very specific industry requirements. They tend to reinforce the use of the more popular symbologies: UPC/EAN for retail; Code 39 for most other uses. Although the symbologies are generally standardized, there is a continuing movement to assign unique <u>coding</u> schemes for companies and products in each industry. We believe this proliferation of codes will eventually become an added burden and expense, particularly to those companies with a broad range of products which are distributed to many markets.

The following are just a few examples of some of the documents either out for review or recently published:

- The US Department of Defense has three separate specifications out for comment: <u>Labels</u>, <u>Bar Coded</u>, <u>Pressure Sensitive Adhesive</u>, a new document covering both blank stock and pre-printed bar coded labels; <u>Military standard 1189B</u>, the key document for the LOGMARS bar coding program, which now includes the addition of a check character when data security and accuracy are extremely important; revised <u>Appendix H to MIL STD 129J</u>, which describes the location of bar code symbols on containers. Written comments should be directed to Stuart Crouse at: Director, AMCPSCC, Attention: SDSTO-TA(Crouse), Tobyhanna, PA 18466-5097; 717/894-7146.

- The <u>Motor and Equipment Manufacturers Association</u> (MEMA) issued its Automotive Aftermarket Individual Part Bar Coding Guidelines and has taken on the task of assigning standard company identifiers to automotive part suppliers for use with their product bar codes. MEMA represents over 700 automotive parts manufacturers which supply both the original equipment and replacement markets. MEMA, 222 Cedar Lane, Teaneck, NJ 07666.

- The <u>Automotive Industry Action Group</u> (AIAG), which has already issued about half a dozen standards, has just sent out its <u>Standard for Bar Code Data Identifiers</u>. The bar code data identifier is a character (or set of characters) within a bar code symbol that defines the general category or specific use of the data that is encoded. The AIAG has taken the lead worldwide in establishing these data identifiers which may become key elements in future systems in many industries. AIAG, 17117 West Nine Mile Road, Southfield, MI 48075; 313/569-6262.

- And finally, the <u>Graphic Communications Association</u> (GCA), acknowledging its use of the HIBCC standard as a guide, published its <u>Bar Code Labeling Specification</u> for the graphics industry. GCA was organized in 1966 to advance the application of new technologies in the graphic communications industry. Its membership includes printers, publishers, newspapers, suppliers and government organizations. The primary code format follows the HIBCC format and includes a Labeler Identification Code (LIC); a Product or Catalog Number (PCN); and a Unit of Measure Identifier (U/M). GCA will act as the secretariat to issue the LIC codes for this industry. Copies of the document cost $48 to non-members and can be obtained from GCA, 1730 North Lynn Street, Arlington, VA 22209-2085; 703/841-8160.

<u>The voracious appetite</u>....

....for bar code labels by the UK's Department of Health and Social Security (DHSS) has resulted in a contract awarded to <u>Image Data Systems</u> (IDS) for 60 million labels over a 5 year period. The bar coded labels for the DHSS will be used to identify supplementary benefit case files in the 442 local offices throughout the country. The DHSS operation is probably the largest UK scanning system (SCAN Feb 86) with equipment supplied by Zengrange, Hewlett Packard and MSI Data.

Until recently, IDS was well known for its bureau operation as a supplier of bar coded labels to the UK and to mainland Europe. Now it will design and market equipment for its customers to produce these labels in-house. The new unit, called the Image Builder, links typesetter, proprietary software, control computer and laser printer in one package. The image processer -- an Autologic APS-55 -- is a scaled down version of the phototypesetter used by IDS for their bureau operation. Driving the Autologic is proprietary software developed by Data Document Systems, the US-based company. Bar code formats, which can be scaled to various sizes and fonts -- up to 1,000 are available -- are held on ROM plug-in cartridges.

The cleverness of the system lies in the use of resolutions. The IBM PC monitor screen has too low a resolution, so all formatting is done prior to laser printing. The Autologic resolution is 3,000 dots per inch, about 10 times that of the laser printer. Therefore, as print engine technology develops, the system will be able to print to higher resolutions of bar code than is possible on current printers. Because of this design, the throughput of the system is governed by the speed of the printer. Any type of printer can be used -- from dot matrix to laser -- depending on the needs of the user. The price of the Image Builder in the UK runs around £12,000.

Data Document Systems will market the system in North America. DDS is not yet ready with the entire package and has not released any pricing or other details for this market. According to Marketing Manager Jim Ramsey, this will take another 30-60 days.

Image Data Systems, 23 Flemingate, Beverley, East Yorkshire, ENGLAND HU17 ONT; telephone (0482) 860408.

Data Document Systems, 301 Gardiner Drive, Industrial Airport, KS 66031, USA. 913/764-5550.

Now that he has completed....

....his work establishing the Secretariat of the New Zealand Product Numbering Association (the EAN affiliate) on a sound footing, Brian Smith is leaving to become the Executive Director of the Australian Product Numbering Association (APNA). This is an interesting and unique transfer of experience between one coding authority and another.

In its December, 1986 newsletter, the APNA acknowledges that "in some respects, New Zealand is ahead of Australia in its product numbering." New Zealand has achieved a scanning level of 30% of all grocery products, established a national scanning data service, and laid the foundations for the electronic communication of trading information.

In leaving the New Zealand operation and moving to Australia, Smith faces a number of challenges: a concerted move to get case marking under way; setting up a scan data service; moving into the technical level of electronic communications. A new panel, the Systems Technical Advisory Committee, has been established by the Australian group to deal with everything from procedural rules, symbologies and special industry sector guides.

After a number of years of service with the APNA (Australia), Dr. Robin Shaw is reducing his role to a part-time consultancy for at least the next year. The Australian offices have been relocated to APNA, 3 Hampshire Road, Glen Waverley, Victoria 3150, AUSTRALIA; telephone (03) 560 1055.

Last spring we reported....

....about the largest known installations of scanning retailers. The record at that time was held by the Pick 'n Pay hypermarket in Brisbane, Australia with 75 scanners; and the Carrefour hypermarket outside of Paris with 76.

Pick 'n Pay is back in the lead. Their new store in Ottery, South Africa has a total of 82 scanners located at 69 check-outs and other specialty departments throughout the store. Some have dual slot and hand-held scanners. The commitment to bar code scanning is so complete that items ordered in the restaurant are scanned from pre-printed menus.

For those companies....

....considering the installation of a new bar code system, a new "how-to" guide book is available. Published by Cutter Information Corp. and written by Rick Bushnell (Controls for Automation and Management) the book is titled Getting Started with Bar Codes: A Systematic Guide.

The intent of the book is stated in the introduction: "Before you go charging off to buy equipment or to investigate the technology, you must do the homework required to determine where they fit into your operation."

The nine sections are well laid out and developed with a logical and definitive progression for the reader:

1. Overview

2. Developing the team

3. Understanding your current system

4. Determining your needs

5. Developing your system

6. Fundamentals of bar code equipment

7. Putting your equipment specification together

8. Installing the system

9. Auditing your system

At the end of each section there are worksheets or summaries. The book covers the fundamentals of the technology along with the practical details required for systems installations. It provides a basic hands-on tutorial needed by many companies contemplating automatic identification.

Copies cost $85 from Cutter Information, 1100 Massachusetts Ave., Arlington, MA 02174-9990.

The monthly publication....

....Automatic ID News is currently in the process of expanding its circulation
from 12,000 to 30,000. This will be done through the available lists and
facilities of its parent, the publishing giant, Harcourt Brace Jovanovich.
Advertising rates are expected to increase about 33% based on the increased
distribution. This promises to provide significantly expanded coverage for
the dissemination of automatic identification information to a larger
marketplace.

By the way, it's relatively painless to offer other people's merchandise for
free -- even when there is a cost attached to it. That's what we mistakenly did
last month when we reported that the Auto ID News 1986 Reference Guide and
Directory could be obtained gratis from the publisher. In fact, it was
distributed free to subscribers, but costs $49.95 to everyone else.

Automatic ID News, 7500 Old Oak Boulevard, Cleveland, OH 44130; 800/225-4569

In an effort....

....to upgrade their seminar programs on bar code scanning, the American
Management Association (AMA) has teamed up with the Automatic Identification
Manufacturers (AIM) for a new series.

Last year's AMA program on this subject (SCAN Aug 86) was held up and down the
East Coast in September, October and November. Although they were billed as
intended for managers, we recall that we were not very impressed with the
announced programs or presenters.

The new seminars will present overviews of the technology but, according to
the AMA, they will include "more technical information and address specific
applications. With input from AIM, we will be able to provide excellent
training and information programs."

The sessions are scheduled for New York City (April 23-24); Chicago (May 18-
19); and Atlanta (June 8-9).

AMA, Box 319, Saronac Lake, NY 12983; 518/891-0065.

The major market research....

....survey, Automatic Identification Systems in Western Europe (SCAN June 86),
commissioned by AIM Europe and compiled by Clarendon Reports, is to be published
this month. In our next issue, we shall be carrying the first detailed review
of the final report.

We have access to the entire survey, and we shall be able to provide our
subscribers with the survey findings and projections, together with our own
independent and pithy views.