



newsletter

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

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If we hear one more industry spokesman....

...use the "chicken and egg" analogy, to explain the slow implementation of bar code scanning, we are going to have a cholesterol attack!

It started back in the mid-1970's when supermarkets were slow to install scanning and reported that they were waiting until the product manufacturers put UPC symbols on their packages. The manufacturers, as expected, replied that since it was the retailers that started all this, "We'll source-mark when they start scanning." Everyone pointed to the chicken-and-egg problem. Since then it's been chicken-and-egg for the automotive industry, the book publishers and now we're hearing it from the health industry.

When the Health Industry Bar Code (HIBC) first came on the scene a few years ago, everyone was quite enthusiastic and the trade press coverage was very positive. Then, for awhile, there was very little reported, as the industry was supposedly preparing for implementation. But it didn't happen as expected, and now almost all of the health industry "leaders" are lamenting the lack of progress, and pointing to -- you guessed it -- the chicken-and-egg problem.

We interviewed Robert Hankin, the new (since early 1987) Executive Director of the HIBC Council, to get his thoughts on how things were going. One significant step taken recently was to rename the organization from the Health Industry Bar Code Council to the Health Industry Business Communications Council. This was done, according to Hankin, "to position the Council as the focal point for electronic/computer-based information, while retaining bar coding as our central focus."

Under its new charter, the HIBCC will take on the additional tasks to develop guidelines for Electronic Data Interchange (EDI) and Health Industry Numbers (HIN). The HIN is a new standardized system for assigning code numbers to all health industry "customers;" i.e. institutions (primarily hospitals), departments within institutions, and distributors. The assignment of the HINs is expected to facilitate the use of EDI, which would be virtually impossible without a standardized addressing protocol.

Although Hankin readily agreed that the progress of HIBC has not been a smooth one, he pointed out a number of positive signs that suggest that implementation is starting to take hold. Of particular significance, he believes, is the announcement by Baxter Health Care, the giant manufacturer/distributor of

health industry products, that it intends to bar code all newly repackaged items. Since Baxter expects to redesign all of the packages for its estimated 120,000 products (following the merger of Baxter Travenol and American Hospital Supply), this is expected to provide a major example and signal to the industry. The program should take about 3 years to complete.

The second positive indicator, according to Hankin, is that a number of the large hospital chains are inserting language in all of their vendor bids requesting that all packages be bar coded, and offering "preferred status" to those that do. The Group Purchasing Group, an association of purchasing agents from the hospital chains, is now studying appropriate standard language to be incorporated into vendor contracts and proposals.

Another plus factor, Hankin says, is that the ability of all new bar code scanners to autodiscriminate removes any potential problems that may have been perceived as a result of utilizing different symbologies. The HIBCC recommended Code 39 as the primary symbol while recognizing and accepting UPC as an alternate. Hankin believes that the door is now open to include other symbologies as they may be needed for special applications. He noted, in particular, that the special size problems inherent in source-marking unit dose packaging might lead to the use of higher-density symbologies such as the new code 49 (SCAN Nov 87).

But Hankin still foresees some major obstacles before significant system implementation is accomplished by the hospitals. "It isn't bar coding that's the problem," he stated. "It is that very few hospitals have the resources to invest in projects of this kind while they are being pressured by the current budget squeeze and trying to keep operating costs under control. It may be short-sighted," he continued, "but a \$40,000 to \$60,000 investment in bar coding equipment and systems is not high on the priority list, even though studies suggest significant savings and a short-term return on investment."

Hankin recognizes that one of the major problems has been to educate hospital management. He feels that no one has taken the lead to inform the institutional decision-makers of the benefits to be derived from this new technology. "The HIBCC was never chartered nor funded to do this," Hankin commented, "and has always concentrated its efforts on the technical side, without addressing the promotion or marketing issues." He does not believe that the American Hospital Association has done an adequate job in taking a leadership role in this area. He suggests that the AHA membership is primarily caught up in cost management, government relations, advertising policy, and what it perceives as more immediate, short-term programs.

The next annual health industry conference (HIBCC 88) is scheduled for Chicago on May 24-26. Hankin hopes that that meeting will usher in a new era emphasizing the ways in which hospitals and health care providers can communicate, using computers and high technology. A major effort at the conference will be to create separate educational tracks, to address the needs of the various professional groups and, in particular, to attract institutional executives from all levels and disciplines.

During our conversation, Hankin couldn't resist alluding to the well-worn chicken-and-egg analogy which he thinks has held back the movement of the hospitals into bar coding. "However," he concluded, "although systems for patient management are still in the future, we have turned the corner. The technology will not explode overnight, but we will be seeing a slow and steady

implementation of automation in areas such as inventory control, product management, radiology, libraries and pharmacies."

The stormy tenure of one of....

....the pioneers of the bar code industry has come to an end. John Blackert, founder, Chairman and CEO of Photographic Sciences, has retired from the company.

Blackert founded Photographic Sciences in 1970 as a maker of precision artwork and form slides. After the introduction of UPC in 1973, the company adapted its talents for generating accurate reproducible art and became one of the earliest producers of bar code film masters. Over the next few years the firm expanded rapidly, adding bar code verification devices to its product line, and opening up additional sales offices and production facilities throughout the US and Europe. By the late 1970's, Photographic Sciences was probably the world's leading supplier of film masters and verifiers.

But in the 1980's the company's fortunes turned very erratic: In 1980, Photographic Sciences severed its relationship with Harry Palmer, in a well-publicized dispute, which resulted in Blackert's loss of the successful and lucrative line of verification devices which Palmer had been making for the company (Palmer later formed RJS Enterprises); Blackert took the company public in 1981; in October 1982, the company announced it was acquiring Identicon, and within a few weeks that deal was called off; in 1983, as a result of very substantial operating losses, Photo Sciences sold off its European and West Coast operations and retrenched back to its upstate New York origins. By 1984, sales had been cut in half, when compared to its peak years, and profits had disappeared. (SCAN Oct 80; Sep 81; Nov 82; Feb 83; Aug 83)

For the past few years, there has been some effort by the company to reorganize its management team and strengthen its product line. Mike Hone had been promoted from regional sales manager to president of the Webster operation handling symbology products. Optel, with its line of laser scanners, was acquired in 1985. The Quick Check verifiers -- manufactured for Photo Sciences by Welch Allyn -- have grown to be the largest selling bar code verification devices in the industry.

Now Blackert has decided to step aside. Succeeding him as Chairman and Chief Executive Officer, on an interim basis, will be Robert Ehrlich, principal partner of Ehrlich and Company, a New York investment and merchant banking firm. Ehrlich has a large stock position (300,000 shares) in Photographic Sciences and has been active as a director and consultant to the company for a number of years. Hone was elected President and Chief Operating Officer of the entire company and, unofficially, the word is that he is being groomed to take over as CEO in about two years, when Erlich will step down.

During Blackert's years at Photographic Sciences, he managed to survive a number of internal management battles and challenges to his leadership. This time there are indications that some major stockholders and the banks were dissatisfied with the firm's continuing operating losses and wanted a change at the helm. The new management team plans to restructure the company and sell off some miscellaneous and peripheral product lines that were acquired along the way. Bar code products are expected to remain as the core business upon which the company plans to build for the future.

The very extensive international....

....travels just completed by David (Zap) Czaplicki provide an excellent insight into the worldwide status of automatic identification. During the past few months Zap attended and participated in AIM organization meetings and SCAN-TECH conferences and exhibitions in the US, Japan, Germany and Australia.

Given his long experience as an active executive in the bar coding scanning industry, and his current positions as President of AIM/US and Vice President of Intermec, Zap's outlook and perspectives are particularly significant. As always, he is very bullish on the future of automatic identification.

[An interesting sidelight: For the past few years, Zap has been taking his own "Zap Market Research Studies" by gathering informal data from AIM/US members who attend the major association meetings. Based on this admittedly unorthodox and non-scientific methodology, he projects that 1988 auto ID sales will be up 34% for the industry. We choose not to publish the absolute dollar amounts that he has arrived at because we're having lots of trouble believing the survey to start with.]

Getting back to Zap's report on the status of the industry around the world:

Japan:

At the November SCAN-TECH in Tokyo, which was sponsored by AIM/Japan, there were 51 exhibitors and 21,000 visitors -- a staggering number that testifies to the enormous attention generated by auto ID in that country. The total size of the Japanese bar coding market is estimated at 8.2 billion yen per year (about \$55 to \$65 million, depending on where the fast-moving dollar/yen exchange rate is pegged). According to Zap's information, 70% of that market is now dedicated to retail applications. The non-retail sector (30%) is not yet very strong, but it is believed to hold great potential. The manufacturing area is starting to grow and there is some limited activity in the health industry. As expected, almost all products exhibited at the show were of Japanese origin with the notable exceptions of Intermec, Symbol Technologies and Metrologic from the US; and Nedap from Holland. Zap speculated on why the great majority of Japanese retailers use handheld CCD devices rather than slot scanners or handheld lasers: "CCD's are cheaper than lasers, and there is no space in the retail stores for slot scanners, in a country where real estate prices are astronomical and every inch of space is carefully allocated."

[Peter Hicks of Microplotters Engineering (UK) was also at SCAN-TECH/Japan and returned with this interesting comment: "Though we see and hear about scanning in Japan in the 7-Eleven stores, there are many other even smaller stores using scanning systems. The store opposite my hotel could not have been much more than 450 square feet -- selling records, fashion goods, non-foods, as well as foods -- and everything was being scanned. The checkout staff were even using bar coded badges for entering their personal code into the till."]

Zap found that one of the primary objectives of AIM/Japan is to develop as many standards as possible. The organization is expected to utilize the US standards as a starting point and go on to publish their own versions as the industry develops.

Australia/New Zealand:

Zap reported that at the Scanning Technology show in Sydney in September, about 2,000 attendees ogled products on 30 stands. This was the first auto ID show run by the AIM organization itself, with no government support or sponsorship, and it was rated a success. (Financially, it just about broke even.) There were both retail and non-retail applications featured, and Zap came back with an interesting reaction to his industry contacts down-under: "The Australians have the mentality that enables them to take existing technology, to adapt it directly and immediately, and to make quick buy-decisions. This is in contrast to the Europeans who want to analyze the technology thoroughly -- and sometimes interminably -- before deciding on what to buy and how to install it." He also pointed out that, "Most of the products in Australia are of US origin but there are strong indications that the Japanese are coming into the market."

Europe:

In Dusseldorf, Germany, the fourth SCAN-TECH/Europe exposition was judged to be the most successful European automatic identification show to date. Zap found it significant that the European manufacturers seem to be ahead of the US in the development of RF products, although still lagging behind in bar code applications. (See article below for additional details reported by our staff from Dusseldorf.)

AIM International:

The importance of the AIM organization as the focal point for the industry's growth is becoming more and more apparent. The various national and regional groups that have been sponsoring the SCAN-TECH shows are bringing greater visibility to automatic identification. Zap sees the technology broadening from just bar code scanning to other technologies including RF and vision systems. He reports that at its 1987 annual meeting in Florida last month, AIM/US accepted 12 new members (total membership is now 112 companies) and the organization established Magnetic Stripe as a separate technology group.

Zap marvels at the cooperative effort of all of the AIM organizations from around the world, and he feels that it is a "unique phenomenon." "These are independent groups of competitive companies," he exclaims, "working together to expand their knowledge and their markets." The latest movement to come under the AIM International umbrella is the establishment of a regional AIM/Asia, similar in concept to AIM/Europe. This would not only encompass the Japanese and Australian/New Zealand organizations, but would also open up the benefits of membership to companies in Korea, Singapore, Hong Kong and other countries in the region which do not have national associations. The growth of these international groups is expected to support the worldwide growth of the industry.

The concept of a truly international world marketplace, with common standards and guidelines established by a multi-national trade federation, may not be an unachievable goal. David (Zap) Czaplicki has taken some important steps to focus attention on the possibilities and potential rewards.

The selection of Dusseldorf, Germany....

....for the 1987 SCAN-TECH/Europe (Dec 7-10) turned out to be a good choice. The improved location (in a large industrial region), and better advance promotion, served to attract more attendees than to any of the three previous SCAN-TECH/Europe shows -- which had been held in Holland and Switzerland.

Some of the highlights of this year's conference and exhibition:

- Auto ID has clearly become international in scope. The products exhibited in Dusseldorf were manufactured by companies in the US, Europe and Japan, and are being sold by a wide range of marketing organizations throughout the world. Because SCAN-TECH/Europe was preceded by similar shows in the US and Japan, the 83 exhibitors had few really new products to debut at the Dusseldorf show. To the 3,000 visitors, however, there were many exhibits of equipment, supplies and services that were unique and very well received. All of the conference speakers were European, which was an indication of the growing maturity of the industry in that part of the world -- just a few years ago, almost all of the SCAN-TECH/Europe speakers were American.
- The SCAN Newsletter Industry Achievement Award was presented, this year, to the ODETTE Group 8. (The previous recipients were Albert Heijn, Founder-Chairman of the EAN Group; Paul Berge, for his pioneering work with AIM/Europe and SCAN-TECH/Europe; and Mark Marriott, Founder-Chairman of AIM/UK.) ODETTE Group 8 is the European equivalent of the Automotive Industry Action Group (AIAG) and, like the AIAG's work in the US, the group is responsible for defining and producing standards for the European automotive industry. The association was formed in 1984 when representatives from Belgium, France, Germany, Italy, the Netherlands, Portugal, Spain and the UK met to investigate and recommend procedures to implement the Organization for Data Exchange by Tele-Transmission in Europe (thus ODETTE). In 1987 the first set of standards was published. In accepting the award for ODETTE Beyron Sigvardsson, Chairman of ODETTE Group 8, stated that the auto companies and their suppliers in Europe have moved quickly to formulate plans for the implementation of bar coding systems.
- The internal administrative system installed at SCAN-TECH/Europe to enable the exhibitors to record visitor interest was a demonstration of the efficacy of automatic identification technology. Based on a system designed and provided by Bar Code Systems Ltd. (BCS) and Coventry Data Services Ltd., all conference and exhibition visitors wore bar coded badges. Using MSI Datawands, the badges and pre-designed menu cards were scanned at the booths and conference hall to provide a detailed data base about each visitor. This allowed for informed sales follow-ups, as well as access control to the seminars. At various times, exhibitors could take their Datawands to a central facility to be downloaded and to receive, within minutes, a printout of their visitors with a full analysis of their requirements. BCS and Coventry were reported to have developed this into a marketable system that was utilized in 10 European trade shows in 1987.

Overall, there seemed to be general satisfaction and praise for the event as a successful showcase for the technology to the European community. It is a fact, however, that, wherever the venue, the people that attend are drawn primarily from the immediate surrounding area. This tends to support those Europeans who continue to promote regional shows. The high cost of travel, coupled with national pride, has resulted in a growing proliferation of European auto ID trade shows.

The 1988 schedule, for example, includes four regional SCAN-TECH conferences and expositions during the first 6 months of the new year:

SCAN-Italia (Milan - March 3)
SCAN-TECH/France (June 7-9)

SCAN-Hungaria (Budapest - April 25-28)
SCAN-TECH/UK (Birmingham - June 23-25).

Next year's SCAN-TECH/Europe is scheduled to be held in Brussels on November 21-24. When it comes to trade shows, it seems, the concept of the European Economic Community (Common Market) does not seem to have taken hold as yet.

One of the special challenges....

....facing the marketing gurus of companies in the automatic identification industry, is to be able to identify new "niche" markets.

Our working definition of a niche market: an identifiable, homogenous cluster of potential customers with a common system requirement for automatic identification that can be reasonably satisfied by off-the-shelf components (hardware/software/supplies).

It might be as broad-based as the UPC system for supermarkets and other retailers; or as narrow as the tuxedo rental business. Some are mature successes (blood banks, libraries); a number are showing good potential (hospital pharmacies, video rentals, tool crib maintenance); and others are in various stages of Beta testing (laundries, TV listings). We think the concept being developed by Proscan of West Palm Beach, Florida has the potential to become a successful niche market.

We met with Proscan's Executive VP, Dale Briere, and his associate, Ann Hill, at SCAN-TECH 87. The system they described is based on bar code scanning, and is designed to enable manufacturing companies to place purchase orders for parts and supplies for fulfillment directly by the producers of those products -- in effect, bypassing the traditional wholesaler/distributor channels. It works like this:

- First, Proscan contracts with the manufacturers of industrial parts and supplies to support the Proscan distribution network.
- Next, Proscan prints detailed catalogues of all of the parts and supplies available from these producers. Each product listing is coded with a machine readable bar code.
- Operating as a franchising agency, Proscan then appoints regional franchisee-wholesalers. The wholesaler's job is to sign up user-customers (primarily industrial firms) to participate in the program as purchasers. Each user-customer is given a bar coded catalogue and a Telxon hand-held scanner/terminal. As parts and supplies are needed, the appropriate listing is scanned into the terminal. The order data is transmitted via modem, daily or weekly, into the Proscan system.
- The franchisee-wholesaler who receives the orders breaks them down and electronically transmits them each night to the individual manufacturers/suppliers. Within 48 hours, orders are shipped directly by the suppliers to the user-customers -- the franchisee-wholesaler does not maintain any inventory or handle any merchandise.

- Based on the orders shipped, the manufacturer bills the franchisee-wholesaler, who, in turn, issues consolidated invoices to his user-customers.

Presumably, everyone will be happy: The manufacturers expand their market coverage; the franchisee-wholesalers perform an essential middleman-administrative function; and the users are able to buy a wide range of products, at better prices, in a more convenient manner, from a single source, without having to wait for a salesman to call.

By the way, for user-customers with a reasonable volume of business, the Telxon scanners will be placed in their plants at no charge. For others, who elect to use the system but do not generate much volume, the scanners will be leased for about a dollar-a-day. Telxon has stepped up its search for additional niche markets which require large numbers of its hand-held terminals and, of course, is actively supporting Proscan's efforts.

Proscan, 12788 West Forest Boulevard, West Palm Beach, FL 33414; 305/798-6200.

The latest edition....

...of the Automatic Identification Manufacturers and Services Directory (1987-88) is now available from the editors of ID Systems magazine. The record 410 listings (up from 352 last year) includes firms offering products and services related to: bar code scanning, RF, voice recognition and vision systems. The basic format and layout this year are very similar to last year's directory. The 175 page book costs \$49.95 and is an important resource for anyone needing current information on auto ID.

Helmerts Publishing Inc., the parent company responsible for both ID Systems magazine and the Automatic Identification Directory, has also published "The Black and White Solution: Bar Code and the IBM PC" by Russ Adams and Joyce Lane. The book explains why bar code is the most cost-effective addition to personal computer systems, and describes equipment available for use with the IBM PC. Adams is the editor of ID Systems magazine; Lane is a freelance writer.

The first four chapters of the book comprise an excellent primer on bar code scanning: 1. What is a bar code; 2. Bar code symbology; 3. Printing systems; 4. Reader basics. It is written in a language that can be readily understood by a non-technical beginner, but would not insult a professional engineer. Chapters 5, 6 and 7 cover the hardware and software required to operate a bar code system using an IBM PC. The balance of the book -- Chapters 8 through 16 -- is a series of application stories similar to those regularly featured in ID Systems magazine.

We would recommend the Black and White Solution -- particularly the first 7 chapters -- as a good source book for anyone needing a basic learning tool to be able to handle the ideas and concepts of scanning (a glossary and index help when using it as a reference). The book costs \$19.95.

For both the Directory and the book: ID Systems/Helmerts Publishing, 174 Concord Street, Peterborough, NH 03458; 603/924-9631.

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