

newsletter

Ltd.

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

Volume XIV Number 1

September 1990

The enormous potential power....

....of FACT (Federation of Automated Coding Technologies) is derived from its unique organizational structure. FACT is made up of over 25 sponsoring organizations and associations representing literally tens-of-thousands of US companies from the user community. It includes manufacturers, distributors and retailers (plus one government agency and one university) handling a very wide range of products and services (e.g. automotive, electrical, hardware, refrigeration, publishing, office products, health, transportation).

But, up to now, FACT has been a slumbering giant. Its only important project has been the Data Identifiers (DI), inherited from the automotive industry.

[A few years ago, one industry wag sarcastically suggested renaming the organization the "Federation of Automated Recording Technologies," because he thought that the revised acronym better suited the group's lack of purpose and effectiveness at that time.]

FACT took over the DI program, which had been narrowly conceived for the automobile manufacturers and their suppliers, and broadened its designations and definitions to become applicable to all industries. The DI concept (an up-to-four-character prefix to distinguish among the various codes and symbols identified in any environment) allows for the multiple bar coding of shipping containers among any group of trading partners. It has become an important factor in the growth of automated systems.

At its July, 1990 meeting, FACT undertook a new challenge which could transform the organization into one of the most dynamic forces in the auto ID industry. The FACT Board of Directors approved Initiative 2000 to "examine the direction industry standards should take as we approach the 21st century." At their mid-September meeting in St. Petersburg Beach, FL, an Ad Hoc Planning Committee plans to identify issues and key players, and to develop strategies and agendas for a formal organizational meeting early in 1991.

As originally conceived by Bob McQuade (this year's Percival Award winner -- see below): "The Initiative is designed to foster the development of truly global standards, allowing a supplier or manufacturer to label at point-of-manufacture with the knowledge that the information will be useful and acceptable throughout the distribution chain regardless of the industry or country of destination."



ISSN 0273-3080

INCLUDING THE INTERNATIONAL EDITION

We discussed this very ambitious program with Bert Moore, who has served as FACT's administrator almost from its inception and who was recently appointed its Executive Director. [Moore is employed by AIM/US, which handles the administration of FACT. The idea that FACT is a users' group operating under the umbrella of a vendor association has always made some industry observers a bit uncomfortable -- but that's the subject of another story.]

According to Moore, the Planning Committee will address five major areas at its September meeting:

- Industry needs for site-specific company identification codes.
- Feasibility of common product coding systems.
- Bar code symbology trends (linear and two-dimensional codes).
- Efficient integration of auto ID and EDI messages.
- Development of plans for future action.

"Some of these issues," Moore predicts, "may take years to be resolved." While Moore feels that all of these areas must be addressed eventually, he believes that the foundation for this work will be built on the first two points outlined above; i.e. the need to establish a worldwide strategy for a site-specific and item-specific coding system for every product. Unlike the UPC/EAN system of "labeler" codes, the objective of the Initiative 2000 group will be to identify each item and the plant where it was manufactured.

The FACT group is already in touch with other organizations which have existing standardized coding systems that may be adaptable to this more definitive numbering scheme. Moore believes that the code will almost certainly be alpha-numeric (and probably longer than similar codes in use today) creating a need for reconciliation with the UPC/EAN organizations -- which have always resisted such a move.

Initiative 2000 is actively supported by Moore and by FACT's current Board, led by its Chairman, Marilyn Sherry of IBM. These forward-looking executives see these FACT projects interrelating with EDI and the worldwide standardization programs of groups such as ANSI in the US and CEN in the European Community. The fallout from these efforts could affect every sector of industry.

The dual patent litigation....

...between Symbol Technologies and Photographic Sciences has quietly dropped out of sight, during the past few months, but like serene ducks moving across the water, there is active paddling going on beneath the surface.

[To recap: On May 30, after Symbol's favorable patent decision over Opticon (and with the Metrologic and NCR suits still pending), Symbol sued Photo Sciences, the only remaining manufacturer of hand-held laser scanners. PSC, in turn, cranked up its legal machinery and countersued based on the two patents it holds, which cover the "visible marker beam" (the so-called spotting patent) and the unitary structure on a printed circuit board (SCAN June 90, July 90).]

No "official word" has yet surfaced about the progress being made to settle these disputes. However, SCAN has learned (from reliable, informed sources) that the two companies have entered into "negotiations" and expect to arrive at an arrangement in "the near future." That arrangement will probably include some plan for cross-licensing of the patents held by both firms.

Everyone we've spoken with from the two organization also confirms that a quick out-of-court settlement will benefit both companies and that there is movement in that direction.

One of the most active individuals....

...on the auto ID scene, is David Collins, who formed Data Capture Institute after leaving Computer Identics three years ago. Collins, who refers to himself as the "founder of the bar code industry," was a member of the Sylvania/GTE staff, which developed and introduced the railroad car identification system in 1967 based on an early form of bar coding. He left Sylvania to form Computer Identics in 1968 and was also among the original group that established AIM, the industry's trade organization.

At Data Capture Institute, Collins has been crisscrossing the country conducting basic seminars for users on how to "design, install and implement a successful bar code system." The current schedule calls for seven such two-day presentations, from September through next April, in Chicago (three times), Detroit (twice), Los Angeles and Honolulu.

Another unique Collins' project is the Auto ID Finance Conference that he will present at SCAN-TECH 90 in Atlanta next month. This is the third year this conference will be held at SCAN-TECH -- but the first time it will be co-sponsored by AIM as an integral part of the program. The presentations will include appearances by the top executives of seven public companies: Recognition Equipment, Printronix, Check Point Systems, Amtech, Photographic Sciences, Intermec and a company still to be named. Attendees are primarily financial analysts who follow the auto ID industry.

The latest venture of Collins -- along with coauthor and researcher Nancy Nasuti Whipple -- is his book, "Using Bar Codes -- Why It's Taking Over." According to Collins: "This is a how-to book targeted for the broad audience of industrial managers, engineers, data processing managers and executives who are investigating, designing and implementing bar code systems." The material is based upon his experience in educating over 1,000 new users of bar coding. Collins explains: "The people we meet in our seminars want unbiased explanations and experienced advice. They need to know how to demystify the technology and the jargon in order to get the most from their vendors."

"Using Bar Codes" is organized into four parts, titled: Technology, Components, Solutions and Putting It All Together. We found the material to be complete, albeit simple (almost simplistic), in concept, language and presentation. It is written at the approximate technical level of a college freshman, which was, apparently, exactly what the authors intended.

The book will be introduced and on sale (\$29.95) at SCAN-TECH in Atlanta on October 2-4, or it can be ordered directly from Data Capture Institute, 30 Tremont Street, Duxbury, MA 02331; 617/934-7585.

There is a substantial company....

....that doesn't belong to AIM, has never exhibited at SCAN-TECH or ID Expo, has never advertised in *Auto ID News* or *Auto ID Systems* -- and probably sells more hardware for bar code scanning applications than a large number of the better-known companies in this industry.

The enigmatic company is Paul Leibinger Numbering Machine, GmbH (West Germany and Stamford, CT). Talk about bar coded currency -- Leibinger's been there; Postal Service automation -- Leibinger's involved; turnpike toll booth scanning -- Leibinger equipment printed the tickets; restaurant guest check systems -- forms houses are using Leibinger imprinters.

This privately-held, German-based company claims to control over 50% of the total worldwide market for impact numbering devices which are designed to operate on letter presses, web presses, business forms presses and collators. These units print all styles and fonts of bar coding, OCR and MICR (for checks).

According to VP Patrick Smith -- who operates out of the Stamford office -- bar coding applications are one of the fastest growing markets for his products. His company has already installed over 1,000 such bar coding imprinters in the US alone. [Our estimate, not confirmed by the company, is that Leibinger's worldwide annual sales are in the \$40-\$50 million range.]

[Note: Leibinger only sells impact devices which involve the placement of ink -- from a fountain or ribbon -- onto paper. Other competitive systems, known as direct imaging, involve technologies such as ion deposition. In the past, impact print technology could only handle "discrete" bar codes (those with inter-character gaps, such as Code 39) but improved equipment has now overcome that restraint. According to Smith, Leibinger's imprinters can produce any bar codes, including the "continuous" types such as UPC or Interleaved 2/5.]

Depending on the number of imprints required across a web of paper, there may be as many as 12 or more numbering devices placed on a single printing press. These devices can print consecutively-numbered bar codes at the rate of 225 meters per minute (about 150 ips). The most important feature, Smith maintains, is that "the quality and accuracy are extremely reliable." During a recent run, he notes, Webcraft printed 64 million Express Mail documents without a single missed number and without a single breakdown of any Leibinger numbering device.

The speed and flexibility of these numbering units has opened up many new areas for scanning applications:

- Upon entering the Maine and Wisconsin turnpikes, the driver is handed a bar-coded toll card. The card is surrendered when exiting the turnpike and is scanned to compute the exact charge. [An even more automated system in use today involves the placement of RF transponders in each car. The toll is automatically charged against the owner's credit card or advanced deposit account. There has also been some talk about modifying this same approach by scanning bar-coded window stickers which would be much less expensive than RF.]

- About 15% of all airline tickets and boarding passes issued in the US are printed with bar codes (in other countries, the percentage is as high as 60%). These documents and corresponding bar coded baggage tags are scanned as part of airport security systems to be certain that passengers are flying with their checked luggage (SCAN Dec 89).
- The use of currency bar coding is spreading. In Canada, each denomination has an assigned bar code which is used for automated sorting and counting operations. In Holland, a recently installed system involves bar coding each bill with a unique symbol. Although neither Canada nor Holland are Leibinger projects, according to Smith, his company is now working with at least two other countries to perform similar functions. [There has been no new word out of Senator John Kerry's office, or the US Treasury, as to how the bar-coded currency project is progressing in this country (SCAN Oct 89, Nov 89)].
- Corporate purchase orders and invoices, courier documents, bills of lading and many other types of operational documents are being bar coded for automated systems. One success story involves Pepperidge Farms, one of the largest commercial bakers in the country. As told to Leibinger's Smith by Dick Shea, president of the baking company, Pepperidge's billing department had 25 employees and took 3 days to process an invoice, with an average error rate running about 14%. Now, after the company has adopted a bar coding system, bills go out the same day, errors are non-existent, and it's all done with 6 people.

The entire field of document processing has been only surface-scratched by bar coding. The ability to accurately and reliably print the codes at press speeds is an important link to setting up the appropriate systems and Leibinger seems to be positioned at the forefront of this technology.

Paul Leibinger, GmbH and Company, Postfach 40, 7202 Muhleim-Donau-Stetten, West Germany; 7463/8390. Paul Leibinger Numbering Machine, 280 Railroad Avenue, Greenwich, CT 06830; 203/661-8811; FAX 203/661-1519.

This year's recipient....

....of the Don Percival Award will be Robert McQuade of Bell Communications Research (Bellcore).

The Percival Award, sponsored, since 1982, by *SCAN Newsletter* and AIM/US, honors individuals or organizations who are part of the user community and who have made special contributions to the advancement of auto ID technology. The winners comprise an impressive and diverse list of users who have made a significant difference in the way that bar code scanning has developed:

- 1982 - Mike Noll, Department of Defense.
- 1983 - William Maginnis, Hunt-Wesson Foods.
- 1984 - The Uniform Code Council.
- 1985 - Eric Brodheim, New York Blood Center.
- 1986 - Allan Gilligan, AT&T Bell Laboratories.
- 1987 - The Voluntary Interindustry Communications Standards (VICS) Committee.
- 1988 - Jack Loeffler, Ford Motor Co.
- 1989 - Karen Longe, American Hospital Association (AHA).

McQuade, the 1990 winner, is a Distinguished Member of the Technical Staff (an honorary company designation) at Bellcore. During his involvement with auto ID, he has promoted widespread use of bar codes throughout his own company and the Bell affiliates, and he has helped to establish industry-wide guidelines through his leadership in the Telecommunications Industry Forum (TCIF). He chaired the TCIF Bar Code Committee from June, 1986 to January, 1988 and was then elected overall TCIF Chairman, a position he still holds.

McQuade has also taken a very active role in FACT (the Federation of Automated Coding Technologies). As Chairman of this organization in 1988 and 1989, he was an early champion of the FACT Data Identifiers. In addition to being a Member-at-Large on the FACT Board, he now chairs the FACT Generic Label Task Force and the important new FACT Initiative 2000 (see above).

It is particularly appropriate to recognize Bob McQuade's outstanding record and to add his name to the distinguished roster of Percival Award winners. He is an excellent example of the basic principles for which the award was founded, i.e. individuals make the real difference in the success or failure of any project. Those who move outside the confines of their "job descriptions," to undertake tasks others cannot or would not attempt, are the ones that move the world ahead -- politically, socially and economically.

The official presentation of the Percival Award will be made at 8:30 a.m. on October 2 in Atlanta at SCAN-TECH 90, just prior to the keynote address by Caspar Weinberger.

The homogeneous European....

...has yet to emerge -- notwithstanding the amazing developments over the past 12 months and the imminent arrival of the European Community on January 1, 1993. Although significant changes are certain to be adopted by that date, many Europeans feel that fundamental differences remain that must still be accommodated by anyone planning to do business within the 12-nation community.

Consider the following examples of these disparities:

- There are 11 different currencies, all of which will remain intact.
- There are 9 official languages in the EC, not including many regional languages and dialects.
- There are 44 days on which at least one EC country has a public holiday -- and only 14 of them are common to at least half of the EC members.
- There are strong indications that individuals within the EC still view other nationals within the community as "foreigners." A recent public opinion poll asked: "How much trust do you have in [named country]?" Among the Dutch, only 3.1% expressed distrust of the Danes, but 34.3% said they do not trust the Italians. The Italians, in turn, expressed a very high level of distrust (47.2%) of the British...and so it went.

These few examples illustrate the deep-rooted diversity that remains among the nations of the European community and suggest that the people are still a long way from being comfortable doing business with strangers across national

borders. In particular -- where one-on-one contacts are made between salesman and customer -- regional marketing offices will best be staffed with nationals of that country who are tuned in to the local mores.

What will be the effect of these non-unifying factors on the structure of the auto ID industry? Since auto ID products enjoy the significant advantage of being engineered and produced to virtually common international standards, there should be minimum impact on manufacturing operations.

Marketing, however, will certainly be affected by strong national differences such as language, ethnicity and cultural mores. It is for this reason that most auto ID companies will be able to operate out of centralized administrative and manufacturing facilities, but will continue to need regional and local sales and marketing operations. These requirements for localized sales efforts are being recognized more and more by the European auto ID companies.

[Four non-UK companies, for example -- APOG (France), ASI (Switzerland), IKA (France) and Opticon Sensors (Holland) -- exhibited at the recently concluded SCAN-TECH UK 90 in Birmingham. Two of these companies are already moving aggressively to position themselves beyond their local home bases: French-based APOG, whose product line includes Symbol Technologies bar code scanners, printers and decoders, currently has sales offices in Belgium and Portugal and plans to open similar facilities in the UK, Italy, Germany and Poland; ASI, a Swiss systems integrator with Welch-Allyn scanners and Fargo printers in its product line, has already established offices in Germany and the UK.]

Auto ID vendors are also coming to recognize that what seem to be similar markets and common applications actually differ between countries. Even international standards, such as the automobile industry's ODETTE (the European equivalent of the AIAG), are being implemented at varying speeds and with local variations in different nations. Another example is the health sector, where there is no clear solution, especially for pharmaceutical packaging. Established national bar coding systems for drugs would have to be put aside, in France and Italy, if either the EAN or HIBC standards were to be adopted.

COMMENT

As the European Community emerges, in the next decade, it may be viewed by the rest of the world as a major unified trading coalition. Within the bloc, however, there will continue to be fundamental distinctions among the individuals of each nation that will have to be accommodated by the business community.

The EC, particularly as a marketplace, is likely to remain fragmented by national, ethnic and regional differences. What may develop, therefore, are strong, independently owned regional distributors -- offering a mixture of branded products -- with local organizations which are staffed with individuals who understand and cater to their customers' needs, whether real or perceived.

At the same time, we expect that the integration of technical services (e.g. engineering, software development) will readily address applications across national borders with few of the restrictions that will affect sales and marketing.

A unique opportunity for auto ID vendors....

....to reach the French market will be taking place in Grenoble on October 17-19. AIM/France has joined with the Grenoble Chamber of Commerce and Industry to present TEC 90, a joint conference and exposition featuring 12 related technologies which will cover subjects such as advanced materials, electronics, optics and expert systems.

The total TEC 90 conference will present 700 exhibitors and is expected to draw 40,000 visitors. The auto ID section, called SCANTEC 90, will include 60 exhibitors. The concept opens up the show to a potential audience of many more delegates than could be attracted by any one technology on its own. [It will be important to learn whether this approach, utilizing multiple attractions to increase attendance, will provide a better assortment of qualified inquiries.] TEC 90, 1 Place Andre-Malraux BP 297, 38016 Grenoble Cedex, FRANCE; Phone 76-87-59-27; FAX 76-46-06-78.

In London, the eleventh EPOS/EFTPOS Retail Systems & Exhibition Conference will be held September 18-21. This event has become the most important European showcase for retail automation. This year, 150 exhibitors are expected and preliminary information suggests many new products will be introduced. RMDP Ltd., 61-63 Ship Street, Brighton, East Sussex BN1 1AE, ENGLAND; Phone 273/722-687; FAX 273/821-463.

The largest and most important European auto ID conference, SCAN-TECH Europe, has moved back to Germany -- this year in Frankfurt, on November 6-8. (It was in The Hague last year and in Dusseldorf in 1988.) The schedule calls for 24 seminar sessions to be spread over three days. The keynote speaker will be Helmut Schmidt, the former Chancellor of the Federal Republic of Germany.

The expanded exhibition in Frankfurt will include "AIM Wonderland," a special feature of auto ID applications which are demonstrated in realistic settings. This practical, hands-on presentation is similar to the "Identiville" display, shown at SCAN TECH UK this past month, which proved to be a great success. AIM/Europe, the Old Vicarage, Haley Hill, Halifax HX3 6DR ENGLAND; telephone 422/359-161; FAX 422/355-604.

"We didn't really mean it"....

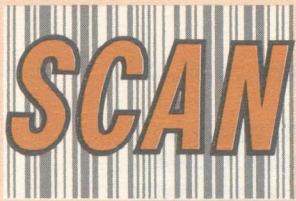
....was the recent message from Symbol/MSI to its suppliers. This dispatch superseded the note, sent out two months ago, which had bluntly stated that the company was unilaterally extending its payment terms and would pay all bills in 50 days (SCAN July 90).

On August 6, the second letter signed by Edward Wade, Symbol's VP Materials, corrected the situation by explaining that the first note "regarding the revision of payment terms...was unwarranted." According to Wade: "Symbol Technologies, Inc. will pay its suppliers in accordance with negotiated terms and conditions of purchase agreements and contracts."

That first letter must have raised an awful lot of flak.

SCAN NEWSLETTER LTD. • 11 Middle Neck Road, Great Neck, N.Y. 11021 • Phone: 516/487-6370 • FAX: 516/487-6449
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SPECIAL SHOW EDITION

This is a special issue of *SCAN Newsletter* compiled for attendees at SCAN-TECH 90.

The following pages include a sampling of articles from the last few months. They have been edited to provide an overview of the unique coverage that this publication provides to the vendors and users in the auto ID industry.

The material covered by *SCAN* is not available in any other magazine, newsletter or journal. We provide special insight and perspective on the technology and on the companies and individuals who are making it move.

There are no fancy graphics or "desktop publishing" gimmicks. Some of our articles are timely -- some are timeless. We rely on straight reporting on events and developments from around the world -- US, Europe, Japan, South America and the Pacific Rim.

SCAN has just begun its 14th year of uninterrupted monthly publication. We have covered every SCAN-TECH conference since the first one in 1982.

Each year, we make two of the industry's most prestigious awards: The Percival Award in the US; and the SCAN Industry Achievement Award in Europe. The winners comprise a group of the most influential members of this industry.

We now have subscribers in 22 countries. If you have a vital interest in auto ID, you should be reading *SCAN Newsletter* on a regular basis. Your customers, your suppliers and your competitors are already readers and they are taking advantage of that extra margin of information that we consistently provide.

* * * **SCAN-TECH 90** * * *

Enclosed with this SCAN-TECH 90 Special Issue is an order form which entitles you to a special discount for your first year's subscription. If you complete it and mail it now, you are guaranteed immediate response -- including our truly inside coverage of this year's show.

Meanwhile, you can be browsing through the next seven pages to get some idea of what you have been missing by not being a regular subscriber. [Keep in mind that much of the detail and special comments have been edited in order to include as broad a spectrum of coverage as we could fit in this limited space.]

We are looking forward to hearing from you.



ISSN 0273-3080

INCLUDING THE INTERNATIONAL EDITION

The issues were clearly set forth....

....in the long-running Symbol Technologies patent suit against Opticon. Symbol (the plaintiff) alleged that Opticon (the defendant) infringed three of its patents relating to laser scanners; Opticon denied infringing and counterclaimed that the three patents were "invalid and unenforceable."

The Court's final decision, handed down in New York on May 3, 1990, was unequivocal and left no room for any doubts: "The Court finds that defendants infringed plaintiff's patents. The Court further finds that defendants have failed to prove by clear and convincing evidence that the contested patents are invalid as obvious or were obtained through fraud."

These claims of the parties involved and the ultimate ruling by the judge were stated on pages 1 and 2 of the Court's decision. But the balance of the 57-page document contained some fascinating passages detailing how Judge Kimba M. Wood reached her verdict. Several experts who have read the document also believe that the judge's findings may have future implications beyond the Opticon case itself.

Based on the evidence presented, the wording of the decision was so absolute in favor of Symbol's position as to leave no opening for others to step through. The Court did not credit any single position of Opticon as being credible or with foundation, and it reinforced the majority of the claims on all three patents in question.

The consensus of those industry-watchers we have spoken with is that Symbol's position in the industry will be further strengthened by the court's patent decision: customers will be reluctant to purchase equipment from sources which may be subject to litigation for patent infringement; the recent price pressure on laser guns -- which has tended to reduce Symbol's margins -- may be relieved; and Symbol can turn more of its creative and management attention from the courts to the laboratory and the marketplace. [SCAN June 1990]

Ciba-Geigy has found a new home....

....for Spectra Physics after a much-publicized effort to sell the division (SCAN Jan 90). The buyer is Pharos, listed on the Stockholm exchange and 75% owned by the Swedish-based conglomerate, Nobel Industries (1989 sales of \$4.3 billion). Although the terms of the acquisition were not disclosed, the *Wall Street Journal* estimated the purchase price to be \$325 million.

Spectra, based in San Jose, CA, the leading producer of lasers, laser systems and chromatography instrumentation, is the world's largest supplier of the slot-type, bar code laser scanners for retailers -- mostly supermarkets. Sales in 1989 were \$324 million (no earnings figures have been made available).

Ciba conducted, in effect, an international auction for Spectra. An offering memorandum was prepared and 30 to 50 companies were reported to have expressed initial interest. Respondents willing to sign a nondisclosure agreement received the memorandum, and the group was whittled down to a short list. We are not privy to the final selection process, but the decision went to an aggressive, prestigious, fast-growing company. [SCAN June 1990]

To hear one market analyst describe it....

....Intermec may be committing the crime of the century. "The company is hiding from the Street," remarked this financial guru, in an interview with SCAN near the end of May, "and until we have our calls returned, explaining their disappointing earnings, I'm telling my people to stay away from the stock."

So what was the problem? We interviewed three financial analysts who follow the stock and their stories were consistent. Management had recently "endorsed" fourth quarter earnings forecasts of \$.48 to \$.53 per share. No one from the company ever called, however, to warn these analysts that profits would come in lower than anticipated (at \$.43) or to explain why it happened.

COMMENT

If our readers are waiting for an explanation from us, it will not be forthcoming. We do not tout any stock nor do we render any investment advice. We only lament the constant myopia of the US investment community which watches quarterly reports and spins and trades for short-term gain.
[SCAN June 1990]

The apparent economic opportunities....

....for US companies in Europe should not be viewed as ready-made opportunities for amateurs -- despite Mr. Gorbachev's blandishments. The imminent emergence of the European Community and the spectacular demise of communism in Eastern Europe cannot be taken as a signal to rush into these markets without careful and informed preparation.

The economic vacuum left by the deposed Communist regimes in Poland, Hungary, Czechoslovakia, Rumania, Bulgaria and East Germany cannot be readily filled by investments of western capital and know-how. At a recent series of workshops, some leading East European economic reformers posed the following questions which express their fears during this period of transition:

- How do we develop a free market system without returning to the excesses of 19th century capitalism?
- How do we transfer ownership of government-owned facilities to private hands?
- Since there was no unemployment with Communism -- and, by and large, people accumulated no savings or resources -- how do we now help those who may be forced out of their jobs under the new competitive systems?
- How do we deal with people going hungry -- no one actually starved under Communism?

As for automatic identification, it may appear to be a sexy technology to the East Europeans, and it may attract a great deal of attention -- but it cannot compete with the essential requirements for food, fuel, transportation and a totally neglected infrastructure. Except for a few special situations, we expect that any significant return on investment from Eastern Europe will require deep pockets, patience and extended staying power.

We were able to gain additional insight into the Eastern European market for automatic identification technology when we attended SCAN-HUNGARY on April 23-24. [At the previous scanning conference in Budapest two years ago, MacDonald's had not yet opened and shopping queues were in evidence at most

shops. This year, Big Macs and fries have become part of the culture and the only line of shoppers we saw were waiting to buy a new shipment of Adidas sneakers.]

Overall, we came away with the impression that there is solid interest in bar coding and other auto ID technologies in Eastern Europe. It would be dangerous, however, to translate these signs of activity into a market projection based on a comparable stage of development in the West in the mid-1970's. There are many economic and political problems to be resolved before any such forecasts could be justified. [SCAN June 1990]

The first time we ever heard

....of Bud Albers was at an industry conference (in Arlington, VA in February, 1989). The meeting had been called by the National Wholesale Druggists' Association (NWDA) to tell the pharmaceutical manufacturers to bar code their products -- and to get it done by the end of that year (SCAN Mar 89).

[Albers is President of Albers Inc. (Knoxville, TN), an independent drug wholesaler, supplying medical goods and services to 3,000 health care providers in 30 states. He stood up at that meeting and told the assembled pharmaceutical manufacturers that he was tired of outdated inventories and out-of-stocks on critical items. He was the wit who described the four inventory procedures used by drug wholesalers: the traditional FIFO and LIFO, plus the two special versions unique to his industry, "FISH (First In, Still Here) and ASWO (Aw S--t, We're Out)."

Albers, it turns out, was ready to put his money where his mouth was. By the end of the summer, 1989, his company had installed a comprehensive bar code system for ordering, inventory control, distribution and payment procedures. As a result of this demonstration of wholesaler commitment, the major manufacturers of prescription drugs and pharmaceuticals agreed to move quickly to bar code their products (including inner packs and shipping cases).

The situation facing the so-called health care providers (hospitals, nursing homes, health maintenance organizations and others) is still far from clear. According to Robert Hankin, President of the HIBCC: "Six years [after the founding of the Health Industry Bar Code Council], surprisingly few hospitals have yet to become involved in bar coding. Unfortunately, some may never be." [SCAN July 1990]

Completing the cycle of litigation....

....on the hand-held laser scanner patents, Photographic Sciences issued the following terse statement on July 2: "PSC announced today that it has filed a complaint of patent infringement against Symbol Technologies, Inc. for infringement of PSC patents #4,603,262 and #4,652,750, related to bar code scanners."

This counter-action had been expected following Symbol's legal move against PSC on May 30 (SCAN June 90). Now that these legalities are out of the way, there are unofficial indications from a number of sources that the principals of both companies will meet soon to settle the matter through direct negotiations (with no need for courtroom involvement). [SCAN July 1990]

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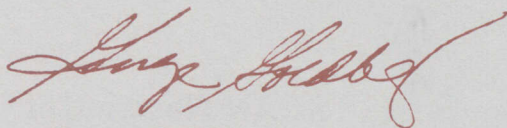
It's a unique opportunity. In the year ahead we'll be covering:

- The development of new *code and symbol standards*, and how they will affect both vendors and users—internationally.
- The growth of the *systems integrators*, and how bar code scanning is becoming the key operating factor.
- The emergence of a whole new group of aggressive and innovative *European manufacturers* who will be competing with the US companies, which have dominated the market up to now.
- The spread of bar code scanning to all sizes and types of retailers: from *department stores to the corner Mom & Pop groceries; from hardware stores to software suppliers; from drug chains to book shops.*
- The explosion of *printing technology* with new print engines, faster output, better (and sometimes lesser) quality, reduced prices, more flexibility.
- The first *major shakeout* of the industry—and which companies will be strong enough to survive.
- Greater involvement in the industry by the *computer and communications giants* who, like IBM and AT&T, are currently handling bar code equipment as VARs.

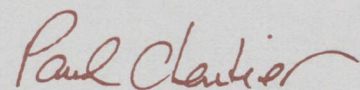
And so much more! It's timely (as only a newsletter can be); independent (we take no ads and are beholden to no one); irreverent (a little humor now and then makes serious subjects more palatable).

Your attendance at **SCAN-TECH** is evidence of your interest in bar code scanning. If you will spend 30 minutes a month with SCAN Newsletter, you will be able to sustain that interest and expand your understanding of the latest developments.

We are looking forward to having you as a valued subscriber.



George Goldberg
Publisher/Editor



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International Editor



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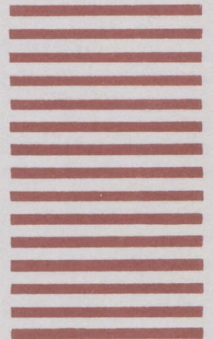
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A brief item....

....to be added to the "Justice will [sometimes] prevail" file.

In a recent issue (SCAN Apr 90) we wrote about Refac Technology Development Corp. -- which, according to *The New York Times*, is a company that "acquires obscure patents that have little real value and do not hold up in Court and uses them as weapons to create enough fear and confusion to force settlements."

Refac has started legal actions against a number of companies in the automatic identification business based on patents (that are presumably related to bar code scanning) issued to Jerome Lemelson. A number of companies have signed up with Refac to pay what they see as relatively painless license fees, when compared to the costs of fighting these cases in Court. The *Times* characterized this type of action as "patent blackmail."

In a decision against Refac, just a few weeks ago, US District Judge Michael Mukasey ruled that it is illegal under New York law to buy interest in a patent solely to pursue patent-infringement lawsuits. According to the judge, such arrangements amount to "nothing but a hunting license." [SCAN July 1990]

After five years of intense study....

....the important, and very controversial, ANSI Guideline for Bar Code Print Quality (X3.182-1990) has been approved by the ANSI Board of Standards Review.

In our review of the progress of the Committee in the Fall of 1986, we forecast that the final standard would take three more years to complete. A 10-member Work Group was formed, recommendations were submitted for consideration by the full Committee and, finally, the draft of July 25, 1988 was put out for review and comment. The standard's most significant new feature is a "Scan Reflectance Profile Grading" scheme, with assigned grades of A, B, C, D and F, which recognizes relative levels of print quality, as opposed to the previous pass/fail criteria. [SCAN July 1990]

The special efforts underway....

....to make this year's SCAN-TECH a memorable event are shaping up quickly. The keynote speaker to open the event on Tuesday morning will be *Forbes* Publisher (former U.S. Secretary of Defense) Caspar Weinberger.

[Immediately preceding Weinberger's address, *SCAN Newsletter* and AIM will present the ninth annual Percival Award to an individual or organization from the user community who has made an outstanding contribution to the auto ID industry.]

What has all of the above got to do with this year's silly theme: "Both went to Harvard...which one went to SCAN-TECH!" We knew we didn't like it when we first saw it, but we did not realize why until an associate of ours remarked at a meeting recently: "It almost seems to advocate the use of steroids." She went on: "In this time of struggling feminism, this is sending the wrong message to women." She was upset with the illustration on the front page of

the show's promotional material which pictures two young men side by side; one a scrawny 90-pound weakling -- the other, a brawny muscular Adonis. It's neither funny nor memorable. [SCAN July 1990]

The unfortunate image....

....that was projected by Telxon, during the latter half of 1989 and the beginning of 1990, was of a company that was temporarily off-balance, defensive and somewhat unfocused. During an interview with *SCAN Newsletter* last January, President Ray Meyo spoke of his company as seemingly out of control and plagued with such problems as "sloppy procedures, inflated accounts receivable, lack of enforced discipline, and bad decision making."

[In a much-talked-about *Wall Street Journal* article (5/10/90), the attention was shifted from the company to Meyo himself, with the headline: "Should a CEO bet his job on an upturn?" Meyo was quoted as having made himself the "fall guy," at the company's 1989 annual meeting, when he reportedly pledged that he would "quit if Telxon's performance didn't improve within a year." One management expert was quoted in the article as characterizing that statement as "the final act of a desperate leader."]

In a follow-up interview with *SCAN*, in mid-July, Meyo vehemently denied that he ever stated those attributed words in that way. "I have always assumed personal responsibility for the company's performance," he explained to *SCAN*, "but I never said I would quit if we didn't turn around in one year."

Meyo described what he sees as the vastly changed company he now heads up:

- Of the top 10 corporate executives who were running the company 12 months ago, only one remains -- and that's Meyo himself!
- For the first quarter of FY '91 (6/30/90), sales were \$40.2 million (up 14%) and net earnings (after extraordinary items) were \$1.5 million (vs. \$0.5 million last year).
- R & D is expanding with new products scheduled to emerge later this year.
- The company has entered into an agreement with an unnamed vendor, reported to be a specialist in RF systems, to re-engineer Telxon's radio communications package.

For the current fiscal year, Meyo predicts that Telxon will post \$160-\$165 million in sales (up from last year's \$143 million) with earnings of \$.49 to \$.54 after extraordinary items.

COMMENT

This was a much-chastened Ray Meyo that we spoke with two weeks ago. Although he may not be quite as sure-footed and hard-driving as we remember him during past outings, however, he still remains confident about the successful future of his company. [SCAN August 1990]

There are strong indications....

....that NCR is not currently prepared to market their Model 7860 hand-held omnidirectional scanner. The company had introduced this unit at the Quick Response '90 Conference in March and it was to be targeted for both the retail

and industrial markets (SCAN March 90).

SCAN has learned that no 7860 hand-held scanners have been sold so far, and that the product is now on hold. According to a company spokesman, units are still out on field tests, including some at customers' sites to "validate the process." The NCR representative added: "NCR has not yet decided on how to reply to Symbol Technologies' suit on patent infringement. We are still waiting for our lawyers' blessing -- it's tough to get straight answers."

While that response may not seem to be too clear or forthcoming, it probably accurately reflects the confusion regarding the status of this product within the company. If the legal situation does clear up, the marketing people say that they expect to roll out the product this fall. [SCAN August 1990]

An interesting new book on auto ID....

...published last month by Van Nostrand Reinhold, asks the question: "How can a small business person [or the production manager for a larger company] decide whether the new technologies are profitable or just a new business toy?"

In the fresh approach taken in his book, *Automatic Identification -- Making it Pay*, author Kevin Sharp (Technical Editor of *ID Systems* magazine) has set out to present the material so as to "allow the average reader to get the information required for a specific application by reading less than 150 pages." The book is consciously and deliberately written in non-technical language "to assure thorough comprehension."

This is a good effort and deserves a place in the growing library of texts available for auto ID. Technically, the book does not break any new ground, but it makes no claims in that direction. Instead, it consolidates enough information in one place for a layman to understand the principles, speak the language and make a more informed decision about automatic identification. [SCAN August 1990]

The enormous potential power....

...of FACT (Federation of Automated Coding Technologies) is derived from its unique organizational structure. FACT is made up of over 25 sponsoring organizations and associations representing literally tens-of-thousands of US companies from the user community. But, up to now, FACT has been a slumbering giant. Its only important project has been the Data Identifiers (DI), inherited from the automotive industry.

[A few years ago, one industry wag sarcastically suggested renaming the organization the "Federation of Automated Recording Technologies," because he thought that the revised acronym better suited the group's lack of purpose and effectiveness at that time.]

At its July meeting, FACT undertook a new challenge which could transform the organization into one of the most dynamic forces in the auto ID industry. The FACT Board of Directors approved Initiative 2000 to "examine the direction industry standards should take as we approach the 21st century." [SCAN Sept 1990]

There is a substantial company....

...that doesn't belong to AIM, has never exhibited at SCAN-TECH or ID Expo, has never advertised in *Auto ID News* or *Auto ID Systems* -- and probably sells more hardware for bar code scanning applications than a large number of the better-known companies in this industry.

The enigmatic company is Paul Leibinger Numbering Machine, GmbH (West Germany and Stamford, CT). Talk about bar coded currency -- Leibinger's been there; Postal Service automation -- Leibinger's involved; turnpike toll booth scanning -- Leibinger equipment printed the tickets; restaurant guest check systems -- forms houses are using Leibinger imprinters.

This privately-held, German-based company claims to control over 50% of the total worldwide market for impact numbering devices which are designed to operate on letter presses, web presses, business forms presses and collators. These units print all styles of bar coding, OCR and MICR (for checks).

According to VP Patrick Smith -- who operates out of the Stamford office -- bar coding applications are one of the fastest growing markets for his products. The speed and flexibility of these numbering units has opened up many new areas for scanning applications. [SCAN September 1990]

This year's recipient....

....of the Don Percival Award will be Robert McQuade of Bell Communications Research (Bellcore).

The Percival Award, sponsored, since 1982, by *SCAN Newsletter* and AIM/US, honors individuals or organizations who are part of the user community and who have made special contributions to the advancement of auto ID technology. The winners comprise an impressive and diverse list of users who have made a significant difference in the way that bar code scanning has developed:

- 1982 - Mike Noll, Department of Defense.
- 1983 - William Maginnis, Hunt-Wesson Foods.
- 1984 - The Uniform Code Council.
- 1985 - Eric Brodheim, New York Blood Center.
- 1986 - Allan Gilligan, AT&T Bell Laboratories.
- 1987 - The Voluntary Interindustry Communications Standards (VICS) Committee.
- 1988 - Jack Loeffler, Ford Motor Co.
- 1989 - Karen Longe, American Hospital Association (AHA).

McQuade, the 1990 winner, is a Distinguished Member of the Technical Staff (an honorary company designation) at Bellcore. During his involvement with auto ID, he has promoted widespread use of bar codes throughout his own company and the Bell affiliates, and he has helped to establish industry-wide guidelines through his leadership in the Telecommunications Industry Forum (TCIF). McQuade has also taken a very active role in FACT (the Federation of Automated Coding Technologies). [SCAN September 1990]

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