# newsletter

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

Volume XV Number 2

October 1991

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

#### The corporate marriage of ....

....two European-based auto ID companies has bred <u>UBI</u> (<u>United Barcode International</u>), a new manufacturer and worldwide marketer of bar code printers and scanners. UBI is the offspring of the merger of <u>Atech AB</u> (Sweden) and <u>Barcode Industries</u> (France).

Since the companies involved are privately-held, many of the financial details are somewhat obscure. We do know that Atech is owned by Beijer (pronounced "Bayer") Industries, a 100-year-old, \$750 million Swedish company; and that Barcode was owned primarily by its founders, Edouard David and Gilbert Warnan.

We have also learned the following:

• Although it is referred to as a merger, the transaction actually involved the purchase of Barcode by Atech AB. The Swedish company had bought 49% of Barcode more than a year ago with an option to buy the rest. It exercised that option last month and formed a new company with a new image focused on the global marketplace.

LATE BREAKING NEWS ITEM

October 7....In a major coup, <u>Accu-Sort</u> announced that it has been awarded a \$39 million contract to design and manufacture the bar code scanners, label printer/applicators, and system controllers for the <u>US Postal Service</u> Package Bar Code Systems (PBCS) program. Accu-Sort is to install the total system in 21 Bulk Mail Centers.

Although Accu-Sort has been working with the USPS for over 8 years, and \* was considered the front-runner to supply the omnidirectional scanners, \* the company had not been viewed as a serious contender to obtain the prime\* contract to include all of the PBCS system components, installation and \* maintenance (SCAN April 91). \*

The award calls for completion in 22 weeks and Accu-Sort has taken on an additional 35,000 square foot building that will be devoted to this project. More details will follow in our November issue.

\*

\*

×

×

\* \*

\*

\*

\*

\* \*

×

- Atech makes and sells printers. Its approximate annual sales (1990) are \$42 million. Barcode makes and sells scanners, and its sales last year were \$30 million. UBI claims that its combined sales of \$72 million makes it the largest European-based manufacturer of auto ID products.
- In the US, for the moment, the plan takes on a different shape. US-based Barcode Industries (Beltsville, MD) will be a wholly-owned subsidiary of UBI, but will retain its original name. The US company will continue to market its line of scanners, but will not include the Atech printers in its product line. (US-based Barcode has built its sales volumes to a significant level, but those figures are not available for publication.)
- The Atech printers will continue to be sold in the US by Atech Systems, Inc., a subsidiary of Concord Technologies (Marlboro, MA). Atech AB/Sweden owns a 19% minority interest in Concord, with an option to acquire control of that company (SCAN Jan 90). There has been no indication that Atech AB has any plans to exercise that option.

The UBI deal could be a significant and "synergistic" combination of forces. The Swedish partner, Atech AB, was founded in 1985 through the merger of printer manufacturers Antonson and Swedot. Ecupan was added to the company in 1989. Its printers are generally well-regarded and have made significant worldwide market penetration in the airline industry.

The French partners, Edouard David and Gilbert Warnan, founded Barcode Industries in 1981 and established US operations in 1984 under Jeremy Metz. Barcode's scanning products -- particularly their CCD units -- have been innovative and, from all reports, perform well in the retail area. Barcode has always offered and emphasized a wide array of interfaces for its scanners to operate with all POS systems.

The new UBI officers will be Sven Skarendahl of Atech AB, who will remain based in Sweden and will be the CEO of the UBI Group; and Edouard David, who will head up the French operations. Skarendahl and David predict that UBI will create an international global strategy, presence and product line. It should be a company to watch.

## The linkup of bar code scanning and market research ....

....has been a "natural" since UPC was first introduced 18 years ago. From the very first issue of this newsletter (SCAN Sept 77), and continuing down through the years, we have reported on the applications of UPC-captured data to consumer research analyses.

These applications started with services that simply provided the raw data from purchases recorded at the front-ends of scanning supermarkets. The next major step, in the development of these research techniques, was the issuance of bar-coded identification cards to members of specially selected consumer panels in order to analyze and report their purchases as related to their demographics (age, family size, income, etc.).

In 1988, the <u>A. C. Nielsen Company</u> (the world's largest market research company, now owned by Dun & Bradstreet) teamed up with <u>NPD Research</u>

(specialists in home diaries maintained by consumer panelists) to form the  $\underline{\text{NPD/Nielsen}}$  Company (SCAN Sept 88). It was the first major experiment to place portable scanning computers in the homes and hands of untrained consumers.

For this initial undertaking, NPD/Nielsen purchased 15,000 Microwand IIs from Hand Held Products. Each scanner/computer/modem was placed in the hands of a consumer to record <u>all</u> purchases by scanning the UPC symbol and transmitting the data to the company's host computer on a weekly basis. This system was approaching the ultimate in consumer research.

According to Andy Tarshis, President of NPD/Nielsen, the HHP units have been operating extremely well and the system has been very successful. In 1991, the research company's annual revenues will exceed \$25 million with hundreds of product manufacturers subscribing to the service.

The next plateau for NPD/Nielsen was to expand the consumer panel to 40,000 US homes. This would enable even more detailed analyses of consumer purchases by geographic areas, product groups and demographics. This past summer, in order to fulfill this requirement, NPD/Nielsen placed a \$9 million order with Telxon for 30,000 portable tele-transaction computers or PTCs (SCAN Aug 91).

[Tarshis describes why his company switched to Telxon from HHP: "Telxon worked very closely with us," he explains, "to design a new user-friendly device with additional features that were more attractive to the consumer and ergonomically designed for easier use in the home."]

Following right on the heels of that purchase, Telxon announced, in mid-September, that the A. C. Nielsen Company had purchased an additional 30,000 units for installation in the <u>European</u> market. This procurement -- estimated at \$19 million -- is intended for consumer homes in Germany, France and other countries on the continent.

[Note the major cost difference between the 30,000 units purchased for the US market (\$9 million) and the same quantity for Europe (\$19 million). The European models will include 2-way modem communications, which explains some of that difference, but we have not been able to find anyone at Telxon or Nielsen who can fully explain away the \$10 million upcharge.]

Including the 10,000 additional PTCs which had been sold for similar market research use in the UK about two years ago, that totals a whopping 70,000 scanning units that Telxon has sold to Nielsen for this application. In addition to its success as a market research tool, this has become a major proving ground for the in-home use of scanning.

While we may not be able to predict the next such ventures, the Nielsen successes put to rest any reluctance to place scanners into the hands of consumers. This could open up a vast potential for in-home bar code scanning.

#### A new reporting system....

....based on UPC bar coding has shaken up the recorded music business.

The widely quoted weekly charts -- that reflect sales "rankings" of albums, CDs, tapes and music videos -- have been published by *Billboard Magazine* for 30 years. Prior to the new system, *Billboard* had traditionally gathered its

statistics from reports sent in by the employees of the retail stores selling recorded music. *Billboard's* charts were the major source of industry data and had always significantly influenced selections promoted and featured by radio DJs and retail stores. In addition, tour bookings and TV appearances by the artists were usually based on these reports.

Until now, however, it was difficult to vouch for the accuracy of this important commercial information. For instance, it had been a well-known practice in the record business for record companies to offer "special efforts" (i.e. contests and gifts) in order to influence those preparing the reports. The reporting system also relied on antiquated methods for gathering the data, which was often sent to the magazine on handwritten sheets, prepared by store clerks who were, sometimes, high school students working part-time.

In May, Billboard switched their reporting methods to a computerized system that was developed by an independent research company and is based on in-store UPC scanning systems. Overnight, one country music album, that had been languishing around the number 26 spot for about 9 months (even though sales had reached 3 million albums) zoomed to number 4 on the charts. At the same time, pop albums by new artists who were being heavily promoted by the record companies plummeted in their chart positions. The entire industry sat up and took notice. Some record company executives reacted with a great deal of alarm.

[In 1990, according to a report by the Recording Industry Association of America, US manufacturers shipped 865 million albums, CDs, tapes and music videos worth over \$7.5 billion (at the manufacturers' prices). It was clear that marketing plans and decisions for an industry of this size needed a better statistical base than was afforded by the earlier Billboard methods.]

The new computerized system was developed and is administered by <u>SoundScan</u> (Hartsdale, NY) which was founded specifically to gather and report information for the recording industry. The company not only provides this information to <code>Billboard</code>, but sells its detailed data to the record companies.

We spoke with Mike Fine, SoundScan's CEO, about how his system works and how it has impacted the record industry. "We now have about 2,800 record shops and 5,500 discount/department stores [e.g. K mart, Walmart, Caldor] reporting to us," Fine explains, "and they represent about 65% of all music sales. All of these stores have installed UPC scanners."

In order to pick up the balance of the 35% that is not being reported -- which Fine characterizes as the smaller "Mom and Pop" record shops -- SoundScan will be buying and installing complete POS scanning systems in 300 "strategically placed" locations. The plan is for those 300 stores to comprise a representative sample of that portion of the market that is not currently reporting. "We are now in the process of evaluating equipment," Fine advises, "and we are down to two vendors. The complete POS system will include a CPU, scanner, cash drawer, receipt printer, report printer and software." Fine would not reveal the names of the two vendors on his short list.

According to Fine, SoundScan has sold their reporting and statistical services to 3 of the 6 major record distributors: Sony, Polygram and BMG (RCA and Arista). Not yet committed are UNI (MCA and Geffen), CEMA (Capitol, EMI, SBK) and WEA (Warner, Electra and Atlantic).

"We provide a management information system," Fine explains, "which allows the distributors to see sales in the top 99 markets across the US. The published <code>Billboard</code> charts are only a small part of that system. Sales information by markets and size of store -- that's the heart of the system which allows manufacturers to get a better feel and control of their inventory. This will also enable them to evaluate the effectiveness of special marketing efforts -- such as promotions, radio air play, music video air play and touring -- on sales in that market segment."

The potential value of the SoundScan service is reflected in the record industry's return policy. SoundScan estimates that 21% of all recorded music that is shipped to the retailers is returned for full credit -- at an annual profit loss of \$200 million to the recording companies. Fine maintains that accurate data will enable the distributors to run their companies more efficiently. SoundScan collects their data weekly, for sales weeks which end either Saturday or Sunday. On Sunday and Monday, all sales data are transmitted -- via modem -- directly to SoundScan's host computer. Complete data are available to the company's subscribers on Wednesday morning.

SoundScan's CEO Fine indicates that his company is exploring other markets into which they can expand. "We have no intention of going into the grocery business, but," he speculates, "we may go into other entertainment areas."

#### Among the most rewarding activities ....

....we complete each year -- as publishers of this newsletter -- is the selection of the recipient of the two SCAN Newsletter awards: the <u>Percival Award</u> (co-sponsored by AIM/US), which is given to an individual or organization from the US user community; and the European Industry Achievement Award, which is presented for outstanding service to the auto ID industry in Europe.

This is the tenth annual  $\underline{Percival}$   $\underline{Award}$ . Inaugurated in Dallas, the presentation has been made at each SCAN-TECH show since 1982. We maintain that this industry would not have grown and prospered as it did were it not for the special contributions of these individuals and organizations:

- 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
- 1990 Robert McQuade, Bell Communications Research

Joining that distinguished roster, this year's recipient is <u>Gary Ahlquist</u>, Senior Engineer at the Eastman Kodak Company. Ahlquist is currently the Chairman of the ANSI Subcommittee on Coding and Labeling Unit Loads (MH10 SBC8). We have been following the activities of this important group as it works to revise this major standard (*SCAN* Jan 91).

At Kodak, where he has been employed for 21 years, Ahlquist serves as the technical expert on the Corporate Bar Code Coordination Committee and he has provided outstanding leadership to projects integrating the use of auto ID into manufacturing and distribution production facilities.

Ahlquist has also made significant contributions to other facets of automatic identification over the past 10 years. For instance, he was involved with the development and implementation of the LOGMARS specification for the US Department of Defense and contributed to the supplier standard for the Health Industry Bar Code (HIBC). The Graphics Communication Association also called upon him and he was a major contributor to the development of the Graphics Industry Bar Code. The results of his special efforts and talents will have an impact on automatic data capture throughout the world.

The Percival Award will be made at SCAN-TECH 91 on Monday, November 4, just prior to the keynote address at 5:30 p.m.

#### At SCAN-TECH Europe....

....the <u>European Industry Achievement Award</u> will be made to <u>Etienne Boonet</u>, the Secretary General of the International Article Numbering Association EAN. Boonet has guided the EAN movement forward since the formation of its ad-hoc committee in 1974.

Unlike the Percival Award, this citation is open to all members of the auto ID community and is not confined to users. The list of previous recipients represents the "movers and shakers" of this industry in that part of the world:

1984 - Albert Heijn, Ahold

1985 - Paul Berge, Symbol Technologies, International

1986 - Mark Marriott, Numeric Arts

1987 - ODETTE, European Automotive Industry

1988 - Brent Jones, Hudson Bay Company

1989 - Peter Glattfelder, Hungarian Board/Materials & Prices

1990 - John Cribb, Telxon Ltd.

Among Boonet's special achievements was his foresight in visualizing the global significance of EAN and presiding over its worldwide expansion. The award citation summarizes it best when it describes Boonet's accomplishments as having taken EAN: "Beyond Europe -- to be truly international; Beyond retailing -- to be suitable for all standard products; Beyond article numbering -- to be a comprehensive coding system."

The award presentation will be made at SCAN-TECH in Dusseldorf (October 15-17).

# The difficulties of implementing....

.... <u>Electronic Data Interchange</u> were addressed directly in several industry publications recently.

In a thoughtful essay in the August 1991 issue of the *EDI Executive Newsletter*, Editor Mike Witter commented: "All over the world, small businesses are bending to the pressure of their large customers and purchasing PCs and EDI management software to conduct business electronically. But that's <u>all</u>

they're doing -- receiving and sending Purchase Orders, Invoices, Ship Notices, etc. via EDI. Once translated, the documents are printed and sent through a routine, paper-based fulfillment procedure." Putting it succinctly, Witter stated that companies without an integrated system wind up with an "expensive FAX machine."

Publisher Jack Shaw focused on this same subject in his editorial column in that same issue. "For some time," Shaw wrote, "software providers have touted 'integrated EDI' while providing nothing more than batch updates allowing for EDI interfaces."

Shaw maintains that these interfaces are only the lowest of three levels of EDI integration. Batch updates, the first step, must be followed by data base compatibility, i.e. "you must have fields for every EDI data element you might ever receive." The third level of integration, Shaw believes, is the most important element that must be designed into the EDI software. He describes this third level as "the ability to make intelligent decisions about how to manage incoming information (e.g. how to handle an invalid part number)."

Every publication covering Electronic Data Interchange is chock full of case histories which illustrate EDI's successful installation in many industries. Accompanying these stories, however, there is often an undertone of frustration: incomplete systems, inadequate management commitment, lack of follow-through, uncooperative trading partners, and so on.

In an article in the August 1991 issue of *Production & Inventory Management*, David Waller, VP at Cleveland Consulting Associates, looks this problem squarely in the eye. "Over the past year," he writes, "this column has noted many successful applications of EDI in the manufacturing environment...and yet, away from these glossy pages, we often hear of applications that seem like overkill, where the cost and travail of implementing EDI has not been justified in increased productivity....Why is it that some companies use it so well and others so ineffectively?"

Waller believes that those companies who do not realize the full benefits of EDI lack "vision" and that they must approach the challenge by recognizing "that many of the ways we currently do business are based on historical conditions that no longer exist."

According to the new edition of *EDI Yellow Pages* (published by EDI, spread the word!) the number of companies "going paperless" has grown 68% during the past year to a total of 20,500, up from 12,200, worldwide. It is apparent, from the comments of industry-watchers such as Witter, Shaw and Waller, that a listing in the *EDI Yellow Pages* may be far from a total commitment to the electronic transmission of all documents. Nevertheless, the numbers are significant.

EDI is clearly a tough business that requires its participants to keep up-to-date on the changing technology. On October 16-18, The EDI Group Limited will conduct its 6th annual advanced EDI Strategies Conference in Chicago. The plenary sessions and workshops will feature more than 20 faculty members presenting a broad range of papers. The conference is sponsored by AT&T, IBM Canada, Royal Bank of Canada and Unisys.

The EDI Group has also published a 112-page report, "Trends in EDI in North America," which is based on interviews with over 13,000 business managers from 1988-90. The objective of this study is to provide the corporate manager with

information on EDI trends and usage in the US and Canada. The report -- which sells for \$15,000 -- contains 50 tables and charts, coverage of the important issues, and analyses of 15 key trends in the EDI market. (The EDI Group has many other research reports available, at prices ranging up to \$25,000.)

The latest survey by The EDI Group is the "U.S. EDI Market in 1992 -- The Fifth Annual Survey of the State of Electronic Data Interchange Within the Fortune 1000 and Their Major Customers and Suppliers." A prospectus is available.

EDI Executive Newsletter, 1639 Desford Court, Marietta, GA 30064; 404/499-8296.

EDI Yellow Pages, Box 811366, Dallas, TX 75381; 214/243-3456.

EDI Group Ltd., Box 710, Oak Park, IL 60303-0710; 708/848-0135.

### With the publication of its fourth issue . . . .

.... <u>Data Capture Case Studies and Technology</u> has matured into an important journal for the auto ID industry. Each bimonthly edition is comprised of a single monograph addressing one topic in depth. Started this year, the subjects have been:

Jan/Feb: Case History -- Lotus Development Corp.

Mar/Apr: Bar Code Print Quality -- Superstition or Science (by David Allais)

May/Jun: Bar Code & Software -- A Vital Partnership (by Nancy Whipple)

Jul/Aug: UCC & EAN Adopt New Label Standards

[The next issue will present an overview of bar code scanning by Al Wurz, President of Accu-Sort, followed by a case history study on JC Penney.]

The journal is published by the wife and husband team of Joan Hacker (Publisher) and David Collins (Editor), with Associate Editor Nancy Whipple. Collins, the founder and president of Computer Identics, left C/I in 1987 to form Data Capture Institute. In addition to the journal, he has been very active conducting seminars, writing books (Using Bar Code -- Why It's Taking Over) and organizing the annual Auto ID Finance Conferences which were held at the past three SCAN-TECH shows. [The Finance Conference will not be held at this year's SCAN-TECH, but is expected to return in 1992.]

Case Histories and Technology is a welcome addition to the industry's literature. We were more impressed with the three "technology" essays than with the Lotus case history. Although these essays have not broken any new ground -- they are not intended as research papers -- they are excellent, in-depth presentations of the history and current status of their topics. [It would be interesting to see this journal expand into more technical areas and become a forum for more advanced monographs which do break new ground. The auto ID industry sorely lacks such a publication, since the demise of AIM's ScanJournal five years ago.]

Data Capture Press, Box 1625, Duxbury, MA 02331; 617/934-7585.

[An added note about industry publications. The final issue of Ed Andersson's *Inside Auto ID* newsletter was its July 1991 edition. Since it first began in April 1990, *Inside Auto ID* had presented an alternative point-of-view of the data capture industry, with emphasis on marketing and distribution issues. Andersson is now with BRT.]

SCAN NEWSLETTER, LTD. • 11 Middle Neck Road, Great Neck, N.Y. 11021 • Phone: 516/487-6370 • FAX: 516/487-6449 PUBLISHER/EDITOR: George Goldberg • ASSOCIATE EDITOR: Jeff Goldberg • CIRCULATION DIRECTOR: Teddy Allen

INTERNATIONAL EDITOR: Paul Chartier • United Kingdom Office P.O. Box 7 • Cirencester GL7-1HY England Phone: Int + 44-285-653011 • Fax: Int + 44-285-640401