



newsletter

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

INCLUDING THE INTERNATIONAL EDITION



ISSN 0273-3080

Volume X Number 3

November 1986

The mood was positive....

....and upbeat in San Francisco at SCAN-TECH 86. The fifth annual convention and exposition, sponsored by the Automatic Identification Manufacturers (AIM/US), attracted 4,100 visitors to three days of seminars and 45,000 square feet of exhibits.

At the opening session, attended by 1,300 seminar registrants, a show of hands indicated a large majority were attending SCAN-TECH for the first time -- and almost everyone represented a company that was already scanning or about to. The 200 exhibit booths were larger and more elaborate this year -- quite a far cry from the 10' x 10' table-top displays just four years ago.

In reviewing our notes of the informal meetings, press conferences, product literature and overheard conversations, we came away with some threads which may be woven into the fabric of future developments.

- Systems and system integrators: Why sell a \$1,000 reader or printer when you can sell a \$100,000 system?
- Large company visibility: Some of the big boys are now playing in the schoolyard of automatic identification.
- The Japanese have arrived: Why did it take them so long?
- Functional integration: Adding the scanner to the computer (or the computer to the scanner) seems to be the way to go.

We will address each of these topics in the next four articles below.

Nothing, it seems, turns on....

....the top management of many companies in this business as the "systems" approach. Why devote all of that energy, they are saying, to produce and sell only a few pieces to those companies installing a bar code system, when we can sell them the entire package?

The trend was evident throughout the show. David Collins points to the complete availability of everything except printers from Computer Identics; Tee Migliori of RJS has the printers and says they are building the software and design expertise and can buy-out the rest of the hardware for a system sale; Intermec's David Allais emphasizes that his company has been building its product mix, and now its sales force, for the past few years so that it can offer total system capability; Allen-Bradley is relatively new in bar code scanning, but with acquisitions and an important VAR arrangement with MSI Data, it believes it can offer systems for shop floor applications; Ray Meyo of Telxon exhorts his sales staff to learn about the company's newest products and go out to sell systems and not just portable computers; and the roster of software houses offering turnkey systems is growing.

The concept is very attractive and probably works out beautifully on paper. We venture to say, however, that it may turn out to be too big a bite for some of the companies to swallow. It assumes larger design, installation and maintenance responsibilities that may not be fully understood or accounted for in some cost estimates.

But if the customers are seeking single source turnkey system procurements, that's what the vendors will be packaging to sell.

Gone are the days....

....when the founders of all of the small, start-up companies in bar coding could comfortably sit in one hotel room and discuss the growing technology. Many of these corporate heads now answer to Boards of Directors; and we are now witnessing the entry of some real giant companies in the industry.

Other than Hewlett Packard, this is a fairly new phenomenon. Allen-Bradley, a large company by itself, belongs to Rockwell International; Mars Electronics is a \$100 million division of the \$6 billion Mars group (M&M Candy, etc.); the powerful Exxon tiger is lurking behind the ink jet bar code printer introduced at SCAN-TECH 86. All of these companies appeared at the show in San Francisco (covered in separate articles below), and taken together, they represent an important new wave. It suggests that automatic identification is reaching a level in overall volume and potential that is attractive to the bigger players.

There most assuredly will be others and it can be viewed with mixed blessings. Larger advertising and promotional budgets, greater sales and distribution coverage, large company involvement with its imprimatur of respectability -- these will provide the opportunity for a greatly expanded manufacturing and distribution base. Although some may argue that it will slow down the quick development and turnaround of innovative technology, there should always be room for the smaller entrepreneur to provide that leadership.

There is a growing presence....

....of Japanese companies in this industry and they are now appearing in the US market. Some of them are already based in the United States with manufacturing and/or sales facilities; some of them are looking for distributors to handle their products. We visited the booths of a few:

- Tohken Company, based in Japan, does not yet have any American representation. The company has developed a moving beam laser diode scanner

which they say is competitive with the Symbol Technologies' device. The product line also includes wands, CCD scanners and a full line of peripherals.

- Tesco (Tohoku Ricoh) is also a Japanese-based company that does not have US distribution and is looking for it. Their hand-held CCD Touch Scanner TS-1 has a depth of field of 0 to 10 mm and a list price of \$653. The company was also showing a pre-production model of a fixed position laser diode scanner.
- Furuno Electric featured a hand-held terminal as well as an RF terminal. Furuno is based in Japan and is seeking an American distributor.
- Nippodenso, with an agent in California (George Marks in San Carlos), is introducing its line of LED/CCD readers, including units with the decoders integrated into the reader head or handles.

With the emphasis on technology incorporating laser diodes and CCD, the Japanese are leading from strength. Laser diodes, of course, are practically "owned" by the Japanese (they are now being produced in great quantities for the hot, new CD record players); and CCD scanners are in very wide use in retail applications in that country.

SCAN-TECH 86 was apparently a last minute decision for a few of these companies -- some of the literature was quite tentative and a few had not yet been translated into English. But there is little question that this will be a forerunner of greater activity from Japan in the future.

We choose to call it....

...."functional integration" and it is becoming the design goal of many hardware manufacturers. Why should the scanner, decoder and computer be separate components, when they can be integrated into one unit? It's not a new idea, of course. Hand Held Products, for example, has had its small pocket device (favored by Federal Express) for a few years. But now we see it in new products and we hear about it being under development by others.

It was featured as a major development by Mars Electronics when they announced their entry into the industry with the MEQ300 Laser Scan Terminal. Mars did not operate a booth on the floor of the show, but met with potential VARs and software developers -- as well as the press -- in the privacy of their hotel suite. There, Alex Beller, VP Marketing and Sales, unveiled the unit which he labeled as "revolutionary."

Mars backed into the bar code business as the manufacturer of laser guns for Symbol Technologies. Now they have taken a license from Symbol Technologies which permits them to manufacture and sell a portable hand-held terminal integrated with a moving beam laser diode scanner gracefully protruding from the top. The company has no direct sales force to sell this product and plans to market it through VARs and other distributors concentrating, initially, on the industrial/shop floor environment. They are now in production and expect to be able to ship in volume during the first quarter of 1987.

The unit comes with a standard program installed. It can also be custom programmed in the field with software written on PCs by distributors or

users, and downloaded directly into the unit. It weighs 1.7 pounds; has a scan rate of 36/second; 10 hour battery life with memory protection; and it auto-discriminates all major symbologies.

SCAN-TECH86
SAN FRANCISCO

When Beller was asked its main advantage, he replied, "Integration, and we have a lead in the marketplace." He stated that this unit, list priced at \$2,990, was the forerunner of other products for other applications, including RF somewhere down the line.

How long Mars can maintain that lead over Telxon and MSI remains to be seen. Functional integration is now a hot topic and viewed as a means for opening up important new markets. Beller estimated the 1987 market for portable terminals at 250,000 units -- and suggested that integrated scanning will enhance that market.

Mars Electronics, 801 Carpenters Crossing, Folcroft, PA 19032-2095; 215/534-4200.

It has been quite a while coming....

....but Exxon did finally unveil their ink jet bar code industrial printer (we first heard glowing reports about it 2 years ago). Using Exxon's proprietary "drop-on-demand" technology, the claims for the Accujet's performance include consistency, flexibility, built in diagnostics and the ability to produce quality high-density symbols (current capability is for a narrow bar "X" dimension of .0075"; there are claims that later models will be able to print a .005" bar).

SCAN-TECH86
SAN FRANCISCO

The company has over 100 patents in ink jet technology, much of it based on the use of oil-based inks. Exxon claims these inks can be used to print on a wide variety of materials and leave durable, non-erasable images that dry instantly and do not clog the jet nozzles.

The software for the printer was developed by KPG Inc. of Atlanta, GA. As an indication of its speed, it can produce about 9 AIAG labels per minute. List price is \$6,400. Exxon is seeking distributors and VARs to handle the printer.

Exxon Printing Systems, Inc., 1112 Federal Road, Brookfield, CT 06804; 203/775-8800.

One interesting marriage....

....is the new distributor arrangement under which Allen-Bradley's Intelligent Sensing Products Division will be marketing MSI Data's portable terminals. Allen-Bradley is particularly strong as a manufacturer and distributor of industrial products for the shop floor. MSI Data's strengths have been primarily in retail, and this was felt to be an agreement which complemented the strengths and weaknesses of each. MSI's previous efforts to reach shop floor applications with its portable terminals had not been successful. That's where A-B spends most of its time marketing, through an extensive distributor network.

SCAN-TECH86
SAN FRANCISCO

Allen-Bradley acquired the laser scanning products of Scope, and also recently completed its acquisition of Identronix where it had held a minority position. Dave Fuchs, VP of A-B's Sensing Products Division, talked ecstatically about "hundreds of millions of dollars -- near term -- in the sale of automatic identification hardware in the industrial environment."

Allen-Bradley Company, 1201 South Second Street, Milwaukee, WI 53204; 414/382-2000.

That about wraps up....

....our immediate coverage of SCAN-TECH 86. We will be reporting on additional items during the next few months as they relate to new events and company activities.

Those who did not attend the seminars will find a great deal of worthwhile background and information on the technology and applications in the printed proceedings available from AIM/US. They cost \$15/session; \$125 for the complete set of 11 seminars. AIM/US, 1326 Freeport Road, Pittsburgh, PA 15238; 412/963-8588.

Next month we will highlight the important SCAN-TECH/Europe conference and exposition from Basle, Switzerland (Nov. 11-13).

When we published....

....our late report on the US Army's LOGMARS-T (for tactical) \$100 million award last month, we noted that Symbol Technologies expects to receive a \$20 million subcontract from Syscon, the successful bidder. We have since learned that MSI Data anticipates their share of that award, for their portable terminals, will run as high as \$50 million.

We also learned that the runner-up, and not very far behind in the schedule of bidders, was IBIS, another system integrator specializing in government contracts. IBIS has petitioned for review of the award to make sure the final results are correct. We understand this is a fairly routine ploy, involves an audit of the award procedures by the General Accounting Office (GAO), and rarely results in an upset of the original decision.

In the unlikely event IBIS is successful, however, the implications could be significant; i.e., the portable terminal portion of the IBIS bid would go to Telxon replacing MSI. Since Symbol Technologies is the designated supplier of hand-held laser scanners for both, they couldn't care less about the outcome.

Computer Identics, by the way, bid their own hardware and software. Indications are that their bid was much too high to be in serious contention.

A new trend....

....in the industry, while not original, seems to have become the "in" thing to do: company founders and chief executive officers are relinquishing their titles of President and Chief Operating Officer to professional managers. They find that either they cannot cope with day to day operating decisions, or they have lost interest in them.

Over the past couple of years this has occurred with almost every major player in the bar code scanning industry. In every case the President/CEO promotes himself to Chairman of the Board/CEO. Witness:

- Jerry Swartz of Symbol Technologies moved aside to make room for Ray Martino, so that he could devote more time to research and development.
- David Allais of Intermec brought in John Paxton.
- Chuck Strauch took over the Presidency and operating responsibilities from Bill Bowers at MSI.
- Metrologic's founder, Harry Knowles, tried it with Mike

Sanyour, but severed that relationship when the company ran into trouble. • At Photographic Sciences, Mike Hone is now President and has assumed many of the operating responsibilities from Jack Blackert. • After the Signode acquisition, and a few reorganization attempts, Harry Palmer, founder of RJS, quietly appointed Tee Migliori as President/COO.

We may have missed others, but the trend is apparent, and it's about to happen again. At Computer Identics, David Collins is actively seeking a new President, Chief Operating Officer. He feels he can best serve the company's long-term objectives if he were to concentrate his efforts and talents opening up new markets and consummating strategic marketing deals. He denies emphatically that this relates to the recent loss of the government LOGMARS-T contract on which the company bet a very significant investment in bid preparation. Nor has the recent poor sales and earnings reports precipitated the action, he says. He points to the positive growth potential of his company and the need for strengthened operating management.

While he is actively seeking someone from outside the company to fill the position, Collins does not rule out promotion from within.

The news from the....

....international EAN community is very positive, indicating rapid growth of automated checkouts in many countries.

NUMBER OF EAN SCANNING STORES

	Jul 85	Jun 86	Percent Increase
Japan	5,206	7,290	40.0
France	793	1,319	66.3
Germany	550	719	30.7
United Kingdom	312	615	97.1
Sweden	299	425	42.1
Australia	170	320	88.2
Netherlands	189	286	51.3
Belgium	168	228	35.7
Norway	70	226	222.9
New Zealand	59	123	108.5
Spain	59	123	108.5
Austria	66	116	75.8
Other countries	<u>172</u>	<u>401</u>	<u>133.1</u>
Total	8,113	12,191	50.3
Total Excluding Japan	2,907	4,901	68.6

The Eastern Bloc countries are becoming more and more involved in EAN and that's interesting news:

ITEM: Russia formally became a member in June, and although there is no sign of a rush to start source-marking and scanning, the mood is serious. At the most recent EAN Executive Committee meeting (September 26 at Dubrovnik, Yugoslavia), there was active participation by the representative of the USSR Chamber of Commerce and Industry.

ITEM: Russia joins three established EAN members from the Bloc: Czechoslovakia (959 member companies); Hungary (207); Yugoslavia (103). Although each country only has one or two scanning stores, the Yugoslav department store chain Robne Duce Beograd installed its first store in July and optimistically plans to have 40 stores scanning by year end.

ITEM: In a recent interview with Etienne Boonet, Secretary General of the International Article Numbering Association, we learned that other Eastern Bloc countries will possibly join in a year or two.

Not all of EAN's developments are looking eastward. Also waiting in the wings for full membership are organizations from Turkey and Mexico.

AIM/Europe, functions....

....as the regional umbrella group for all companies which do not have their own national organization to join. AIM/Europe has just announced its first regional show -- not to be confused with the shows of national AIM bodies such as those in France and the United Kingdom. Regional shows will be targeted for markets where no national AIM body is available. The first will be in Spain with others planned for Benelux, Italy and Scandinavia.

SCAN Espana, designed as a single day seminar and table-top exhibition, is scheduled for January 29, 1987 in Barcelona. Great credit is due to Francisco Carrio of Codebar S.A., AIM/Europe's only Spanish member, for his effort in helping to set up the event.

AIM/Europe Secretariat, The Old Vicarage, Haley Hill, Halifax HX3 6DR ENGLAND; UK phone (0422) 59161.

The second quarter....

....financials from Intermec reflect continuing improvement over last year's results.

<u>INTERMEC</u>	<u>3 Months Ended 9/30</u>		<u>6 Months Ended 9/30</u>	
	<u>1986</u>	<u>1985</u>	<u>1986</u>	<u>1985</u>
Revenues (\$000)	\$15,342	\$9,896	\$28,835	\$21,527
Net Income (Loss)(\$000)	1,034	(223)	1,772	336
Net Income/Share	.18	(.04)	.31	.06

Although part of the improved revenue and earnings reflect the July 1, 1986 acquisition of Intermec/TEMA (SCAN Dec 85), David Allais, the company's Chairman, states "Intermec's revenues would have been a record \$14.4 million in the second quarter even without TEMA's contribution. The company is doing very well. We see Intermec tracking back towards its historic growth pattern."

The first quarter....

....results of Symbol Technologies for fiscal year 1987 indicate the company is on target to achieve its forecast of over \$35 million in annual sales this year (SCAN Oct 86).

SYMBOL TECHNOLOGIES

3 Months Ended 9/30

	<u>1986</u>	<u>1985</u>
Revenues (\$000)	\$8,223	\$4,372
Net Income (\$000)	1,409	221
Net Income/Share	.24	.04

We do want to correct our error in our last month's report of management's forecast of earnings. "We are doing well," says President Ray Martino, referring to our erroneous report that fiscal '87 earnings will be \$12 million on \$35 million in sales, "but not that well. Net income is expected to run at about 12% to 15% of sales or about \$4 to \$5 million."

(The fact that our report did not cause a flurry in the company's stock may be an indication of the intelligence and perspicacity of our readers.)

Citing significant improvement....

....in its overseas markets, Telxon posted a 26% increase in sales and 98% increase in income for its second quarter.

TELXON

3 Months Ended 9/30

6 Months Ended 9/30

	<u>1986</u>	<u>1985</u>	<u>1986</u>	<u>1985</u>
Revenues (\$000)	\$24,520	\$19,519	\$47,129	\$37,277
Net Income (\$000)	3,181	1,606	5,817	2,810
Net Income/Share	.24	.13	.43	.23

For the first half of its fiscal year international business accounted for over half of the company's sales increase, and now represents 24% of total current sales. President Ray Meyo attributes these important gains in the international market to "significantly enhanced sales and service staffing and a weakening US dollar." There were large gains posted in France, Germany, England and Canada.

Telxon portable computers with laser scanners are now installed in freight and parcel tracking system for the French railroad network.