



newsletter

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

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We recently wrote about....

....the then upcoming National Retail Merchants Association (NRMA) Convention (SCAN Dec 86) and noted that there was only one short session offered on UPC. We quote from the January 12 issue of Women's Wear Daily, the apparel industry's major trade paper: "Fisticuffs almost broke out when latecomers could not gain entrance to an overflow session on UPC bar coding at the National Retail Merchants Association convention here Monday....The session, in the 150 seat Rendezvous Ballroom of the New York Hilton, already had 30 or so standees in the back of the room when the doors were closed." The session Chairman, Jim Siler of Federated Stores was quoted as saying, "I can think of few topics in our industry that arouse such emotion, have been debated so long and are still so misunderstood."

At the exhibits themselves, the UPC symbols were in almost every booth that had products related to checkout or merchandise marking. Very little was new or innovative. Most of what was exhibited for front-end scanning has been brought over from the supermarkets and other retail applications. Although hand held laser scanners seem to be the most popular devices now, there are indications that there will be slot scanners as well -- particularly as they come down in size and price.

The largest immediate potential for increased business to this market is for printers. More than any other retail sector, there will be an enormous need for demand printers to produce UPC-marked tags and labels for the department stores. This requirement will be for both the retailers and their vendors as they cope with many classes of merchandise with fewer items in each SKU.

The report prepared by management consultants Kurt Salmon Associates for VICS (Voluntary Inter-industry Communications Standards Committee -- SCAN Dec 86) goes right to the point, "Universal product coding will have more impact on the general merchandise retail community than any other technological development since point-of-sale...Changes will permeate the entire retail cycle, including the stores, the distribution center and the merchant."

COMMENT

You may have noticed our concentration, during the past six months on this particular window of opportunity for our industry: the potential for bar code scanning hardware and supplies for general merchandise retailing. There should have been many more automatic identification companies and

products at the NRMA show. We also hope that by next year's convention the quality and amount of information offered to the retailers will be improved over the pathetic efforts to date. We will continue to cover this marketplace until everyone gets the message.

The lead article....

....on the front page of The Wall Street Journal on January 7, 1987 analyzed the inability of US companies to reduce the trade deficit. Federal Reserve Chairman Paul Volker was quoted as warning "The great question is whether management can and will seek out and exploit the new competitive opportunities here and abroad."

On the very next day we attended a meeting called by Haggar Apparel to reveal their new Haggar Order Transmission (H.O.T.) system to the world. Haggar is one of the largest US manufacturers of men's clothing, and their interest in the trade deficit and means for reducing it are obvious: Of the estimated \$170 billion US trade deficit in 1986, 12%, or \$20 billion, was in clothing and textiles. If the current trend continues, this is expected to double by 1990 at a cost of 1.9 million American jobs. Almost half (42%) of all US purchases of clothing are for imports!

And what does all of this have to do with automatic identification -- and why are you reading about it in a trade newsletter devoted primarily to bar code scanning?

The Haggar H.O.T. system, which is designed to provide the American apparel industry with a competitive edge over the imports, is based on UPC scanning. It is an electronic interchange system that transmits sales information from the retailer to the manufacturer, on to the textile supplier and back to the manufacturer. It takes at least 8 months for foreign goods to be styled, purchased, made and shipped to the retailer. Haggar hopes to encourage retailers to purchase domestic products and to increase their return on investments by slashing turnaround to just a few days or weeks, and thus reduce inventories dramatically.

Joe Haggar, Jr., President of the company, stated that it was "the proven technology of UPC in the supermarket" that convinced him that this was the way to go. Not only is Haggar introducing their UPC-based system to their retail customers, but every Haggar supplier is also using bar code-based systems.

Although we recognize that the concept is not a new one -- it incorporates the same principles as the Uniform Communications System (UCS) developed for the supermarkets and the Just-in-Time system for the automotive industry -- it is further evidence of the far-reaching potential for automatic identification in the manufacturing, distribution and service industries, and how these applications feed upon one another.

The important market research survey....

....of the European automatic identification industry has just been published by AIM/Europe. It is based on research completed by Clarendon Reports.

Automatic Identification Systems in Western Europe (18 countries were included) covers the "hard core" of the automatic identification technologies: bar coding, radio frequency, OCR and MICR.

In the report there are 351 statistical tables, with as many as 500 data elements to a single table. Data is analyzed and reported by country, technology group, product type and functional application.

As an example, all products were categorized as generators (printers), detectors (scanners/readers), and media (labels and tags). Data extracted for the bar code scanning technology for all of Western Europe, analyzed by these 3 categories, looked like this (all amounts below are in millions of US dollars):

I. BAR CODE SCANNING ONLY

<u>Product Type</u>	Installed Base - 1986 (Hardware only)	Sales - 1986 (Hardware & Media)	Projected Sales - 1992 (Hardware & Media)
Printers	\$409.5	\$117.8	\$253.8
Scanners	236.0	98.1	480.0
Media	-	<u>570.7</u>	<u>1,236.1</u>
Totals	\$645.5	\$786.6	\$1,969.9

The analyses by functional application is also very useful. We will not go into detailed definitions of these 6 applications, but the data for all technologies (bar code, RF, OCR and MICR) were as follows:

II. SUMMARY - ALL AUTO ID TECHNOLOGIES

<u>Functional Application</u>	Installed Base - 1986 (Hardware only)	Sales - 1986 (Hardware & Media)	Projected Sales - 1992 (Hardware & Media)
Transaction Processing	\$1,847.1	\$885.0	\$1,764.6
Status Control	273.8	89.9	185.9
Retrieval	42.9	32.5	144.7
Process Control	65.2	70.4	365.8
People Control	49.7	22.7	116.8
Information Capture	<u>31.1</u>	<u>26.8</u>	<u>136.9</u>
Totals	\$2,309.8	\$1,127.3	\$2,714.7

A full understanding and appreciation of the data requires detailed study of the report. For example, of the very impressive \$1.8 billion installed base of Transaction Processing Hardware (Table II), about 25% include MICR scanners used by banks. All amounts (in millions) are at current value of the US dollar and the installed base data are stated at current replacement value -- not at their original selling prices or at depreciated value.

The cost of the report is £1,200 (\$1,800) available from AIM/Europe Secretariat, The Old Vicarage, Haley Hill, Halifax, ENGLAND HX3 6DR; telephone (0422) 59161.

COMMENT

Although we are enthusiastic about the AIM/Europe report (and wish that AIM/US would undertake a similar effort) we do have some caveats. There was only limited information available as to the specific methodology used to arrive at the figures. We know that interviews were conducted with vendors and users to obtain some of the raw data; and we also know that this data was applied to a complex econometric "model" developed by Clarendon to arrive at the final figures for the installed base and the projected forecasts (some of which go out to the year 2010). Therefore when our analysis uncovered some discrepancies in the vast array of figures, we could not accurately trace the problem to the data, survey concept, or technique.

So what is our overall judgment? At this time, the AIM/Europe-Clarendon Report is the best available market survey of automatic identification in Europe. If used properly, it is a useful new tool and AIM/Europe would be well advised to consider it as a first step toward building even better data. Some time ago, Stuart Evans, Managing Director of Cotag, said, "The Clarendon Report is like drawing a map of Europe for the first time. You don't stop at the first attempt, but continue to make improvements."

Periodically we have been....

....following up on the status of the patent suit against the Uniform Code Council (UCC). This is the one instituted by Ilhan Bilgutay of Florida, based upon the patent issued to him in 1974. As you may recall, Bilgutay waited 11 years to start an action against the industry (SCAN Sep 85, Mar 86).

Initially, Bilgutay sued everyone in sight: UCC, all film master suppliers, scanning equipment manufacturers, Exxon (representing all product vendors), et al. They even included, as part of the suit, provisions under the US Racketeer Influenced & Corrupt Organization ("RICO") Act which has been used against racketeers and mobsters in recent years.

Currently only the UCC, IBM and NCR are defendants. (The RICO nonsense was dropped as were the other defendants.) We spoke with Bilgutay's attorney, Ronald Smith of Clearwater, FL, at some length. He insists that this is "not a frivolous action," which he believes the other side has been suggesting. The position of his client, he says, is that "We have proof of collusion between IBM and NCR." He thinks that UCC is in clear violation of the patent and that "Equity will not come to the relief of wrongdoers; the court's decision is a death penalty for infringers."

Smith also told us that the door is open for a negotiated settlement -- although a recent meeting he had with one of the defendants came to naught. What Bilgutay is seeking is equipment royalties, and injunction relief. As to why Bilgutay waited 11 years before suing, Smith replies that "he couldn't afford a lawyer and was not knowledgeable of patent law."

We ran all these somewhat flamboyant remarks past the UCC attorneys, who remain pretty cool and confident about the whole thing. They still maintain, quite adamantly: 1. The patent is invalid. 2. Even if the patent is valid, UPC does not infringe. 3. Even if the patent is valid, and UPC does infringe, the plaintiff has lost his right to damages by delaying too long.

Trial is scheduled for the US District Court in Tampa in September, 1987.

Our first meeting with....

....Terry van der Tuuk (we had spoken with him many times before by phone) was at his booth at the recent NRMA show in New York. We were immediately impressed with his enthusiasm for the future of bar code scanning and for his company, Graphic Technologies Inc. GTI specializes in the printing of quality bar-coded shelf labels for supermarkets, mass merchandisers and other retailers. Although about half of the company's current sales are in continuous form (non-bar code) labels, GTI sees its future growth tied to bar coded labels.

The aggressive, effervescent van der Tuuk is very conscious of the power of publicity, and, as he recently told us, "I'll do anything to promote bar codes." He was selected by the magazine Corporate Report/Kansas City as the 1986 Executive of the Year; this followed the selection of GTI as number 1 on the Forbes List of 200 best small companies in America; number 18 on Financial World's list of fastest growing small companies; and number 28 on Business Week's similar listing. The company drew this kind of attention when sales grew 10 times and earnings 30 times from 1980 through 1985.

President van der Tuuk owns 40% of his company which went public in 1983. Sales have been increasing at a healthy annual rate since then (about 25-30%) but earnings took a downturn and have only recently recovered in fiscal year 86-87. In its latest financial report, both sales and earnings were up.

<u>GRAPHIC TECHNOLOGIES</u>	<u>3 Months ended 12/31</u>		<u>6 Months ended 12/31</u>	
	<u>1986</u>	<u>1985</u>	<u>1986</u>	<u>1985</u>
Revenues (\$000)	\$5,704	\$4,376	\$10,994	\$9,195
Net Income (\$000)	318	284	729	657
Net Income/Share	.17	.15	.38	.35

We caught up with this unpredictable Chief Executive at the NRMA show in New York early in January. Although his booth was prominently featuring bar code shelf labels, and his marketing team was diligently attempting to sell them to the visiting retailers, van der Tuuk only wanted us to see his new, more exciting products.

Like Scan 'N Win. This is a promotional game that uses bar coded cards printed by GTI and distributed by retailers or manufacturers to potential customers. Only instead of rubbing off a wax coating, or matching numbers, the consumer must bring the Scan 'N Win card to the store to be decoded on a special scanner. The device is programmed to "talk" to the cardholder, describing the prizes won or urging another try.

GTI also plans to market an in-house printer of shelf labels to those retailers who can justify the volume and need the fast turnaround. It costs \$20,000 and, of course, van der Tuuk expects to sell the unprinted label stock as a follow-on to the equipment sale.

And finally, there was one more he described to us, but which we are pledged not to talk about -- yet. He pulled a prototype out of his briefcase in the Hilton Hotel Ballroom during NRMA -- and whispered that he really thinks this one is going to be a winner.

And he may be right!

There are those....

....who believe that Intermec's position as the largest company totally dedicated to bar code scanning makes it the bellweather of the industry: As the fortunes of Intermec go, so goes the industry. Although there may be some kernel of truth in that, it is obvious that Intermec is not yet to bar code scanning what IBM is to computers.

Nevertheless, the problems experienced by Intermec in 1986 (SCAN April 86; Aug 86) were watched and examined with some trepidation. Happily, the company seems to have emerged from those initial troubles -- problems with two of their distributors and a management shake-up -- and the first two quarters of 1987 showed improved results. However, as can be noted from the most recent quarter's financials, there is still some distance to go. (This is also reflected in the price of the stock which has been hovering at its 12-month low, while the market has been skyrocketing.)

<u>INTERMEC</u>	<u>3 Months ended 12/31</u>		<u>9 Months ended 12/31</u>	
	<u>1986</u>	<u>1985</u>	<u>1986</u>	<u>1985</u>
Revenues (\$000)	\$15,920	\$13,267	\$44,755	\$34,794
Net Income (\$000)	886	884	2,658	1,221
Net Income/Share	.16	.16	.47	.22

There are two interesting marketing programs being pursued by the company, with varying degrees of success, which may bear on future results.

The most important is the plan devised by Intermec a few years ago to create separate entities within each of their distributor organizations which would carry the Intermec name and products only. These were to be designated as Intermec Technical Centers (ITC's). Although they could market complementary products, such as terminals and modems, all bar code scanning products were to carry the Intermec logo. The plan was for Intermec to take an initial equity position in each ITC with an agreement that Intermec would eventually buy them out as owned and operating units.

We spoke with VP Marketing, Roger Palmer, about how this critical program was progressing. There are now 13 ITC's: 12 in the US and 1 in Canada. Of these, 8 are already dedicated Intermec organizations, in which Intermec holds some equity interest (including wholly-owned Intermec-Tema in New England). Negotiations are expected to be completed within six months to bring the additional five companies in under similar arrangements. Palmer expressed high optimism as to the ultimate success of this ITC program. He feels it will give the company a dedicated sales force in a product area where sales may have long lead-times and cannot be made as off-the-shelf commodities.

The second unique marketing effort of the company involved the establishment of Systems Associates. This was a program started about 18 months ago. It was an attempt to bring into Intermec's marketing arsenal the expertise of outside companies specializing in total systems integration. The companies appointed entered into agreements with Intermec that they would only use or recommend Intermec products for those system sales requiring bar code scanning equipment; and in turn Intermec would feed them leads for systems projects churned up by their sales force.

Although more than 10 companies were signed up for this program, it was not too successful. It went too far too fast, according to Palmer, and there are now only two remaining Systems Associates: Integrated Automation in California and Microbar in Seattle, WA. Palmer was cautiously optimistic about how far Intermec might go to expand and bring in more companies under this program.

As for 1987, Palmer sees continued growth in revenues and earnings over the next four quarters. "Intermec," he says, "is back on the growth track with the right products and marketing organization."

When we reported....

....Telxon's first quarter results (SCAN Aug 86), we speculated that the company might break \$100 million in sales this fiscal year. It's going to be close:

<u>TELXON</u>	<u>3 Months Ended 12/31</u>		<u>9 Months Ended 12/31</u>	
	<u>1986</u>	<u>1985</u>	<u>1986</u>	<u>1985</u>
Revenues (\$000)	\$25,185	\$20,654	\$72,314	\$57,931
Net Income (\$000)	3,127	2,298	8,944	5,108
Net Income/Share	.23	.17	.66	.41

The company's extraordinary record of sales and earnings gains continues. For the 9 month period, sales are up 25% and net income has jumped 75%.

President/CEO Ray Meyo expects "revenue growth to remain in the 25-30% range in the short-term as we focus marketing efforts toward high potential market segments." He cited Telxon's recently announced \$3.5 million contract with Emery Worldwide, as an example of Telxon's system direction.

For a company....

....with annual sales of \$3.2 million (FY 86 ended 6/30/86), a single contract worth about \$6 million is BIG news.

Although we cannot publish all of the details -- it has not yet been cleared with the government, and we can't even tell you which agency it is with -- Jim Williams, President of Imtec, did tell us that his company just received a \$5.9 million subcontract from the Severn Companies of Annapolis, MD. Severn is the prime contractor on a government award, which includes 750 of the Imtec Model 2413E printer/laminators. Shipments are scheduled over a 5 year period with possibilities that there will be acceleration.

The 6 month financials for Imtec (ended 12/31/86) were not yet available at press time, but Williams forecasts that his company will increase sales about 20% and profits over 50% for the current fiscal year.

A new bar code wand scanner....

....from Welch Allyn features: ● rugged stainless steel construction ● ability to read 7 mil bars at 3 to 50" per second ● depth of field of .065" permitting scanning through heavy laminates ● sealed optics, replacable tip

and new cord with strain relief construction • LED light source in 880 nm range • availability in high, medium and low resolution optics • quantity-one price of \$137.

Welch Allyn Industrial Products Division, Skaneateles Falls, NY 13153-0187;
315/685-8945.

For some time....

....the French telephone service has been gradually replacing its customers' printed phone directories with the Minitel. This is basically a screen and keyboard terminal, tied to the telephone network, which allows users to make on-line inquiries as needed. (On February 2, the U.S. Justice Department asked the courts to allow the regional phone companies to offer similar services to their customers.)

In the business sector, 200,000 units have already been installed in France which are not used for telephone inquiries, but as a communication terminal to allow order transactions and other information to be transmitted.

This opportunity, afforded by the existence of a large, low cost base of communicating terminals, has been seized upon by Barcode Industries. The French company has developed the MR TEL Bar Code Reader. It provides local memory and screen formatting facilities, which allows data to be manipulated between the scanner, the keyboard and the screen without any cost of communication. Barcode Industries has gained a major order for 3,000 MR TEL units from Casino, the French retailer of frozen foods for use in order processing.

Barcode International, Bureaux de la Jonchere, 64 rue Yvan Tourgueniev, 78380 Bougival, FRANCE; telephone (1) 39 69 04 52.

Data Specialties Inc.....

....has changed its name and its product mix. The company sold its name, logo and its paper tape distribution division to GN Telematic as of January, 1987.

What remains is the ZEBRA Demand Bar Code Printer Line of products which the company has made and sold since 1982. And to reflect that change, it has adopted the new name of ZEBRA Technologies Corp. According to the company, "This move is only one in the plans of ZEBRA Technologies to further strengthen its role as an important worldwide supplier of high quality on-demand bar code label printers and supplies.

Zebra Technologies, 3455 Commercial Avenue, Northbrook, IL 60062; 312/564-1800.