Volume XVII Number 4   December 1993

It could be head-to-head....

....confrontation -- or the <u>SCAN-TECH</u> and <u>ID Expo</u> shows could play off one another to the benefit of both.

For the next two years -- and possibly beyond -- both of these automatic data capture trade exhibitions will take place in Chicago about six months apart.

In 1994, ID Expo (May 17-19) will continue at the Rosemont Convention Center. This event will be the first outing under the new ownership of Advanstar Communications, publishers of *Auto ID News* and producers of SCAN-TECH Europe. Plans call for the exhibit floor to include a new section designated the "Mobile Data Capture and Communications Showcase (MDCC), which will feature rugged, portable and wireless systems for field and industrial applications."

SCAN-TECH 94 will be held at Chicago's premiere hall, McCormick Place (November 1-3). This SCAN-TECH will be the first effort completely under the control of its new owners, Reed Exhibition. According to Reed, reserved exhibit space already exceeds the total of the 1993 exhibit area by 10%.

Because both shows will be in the same city, and because both events changed ownership within a few months of each other (and AIM/US has withdrawn from active participation in SCAN-TECH), there has been a feeling of ambivalence among many of the exhibitors. This uncertainty was compounded by the absence of both Symbol Technologies and Intermec from SCAN-TECH 1993 and the continued hesitancy of both companies regarding commitments for next year: Intermec told *SCAN* it will definitely be an exhibitor at ID Expo, but has not yet reached a decision on SCAN-TECH; Symbol said "Yes" to SCAN-TECH and "Maybe" to ID Expo.

We called a random selection of 17 of the larger companies and asked them whether they are committed to both shows. Not one replied that it has definitely rejected either show for next year. Except for Intermec (as noted above), every company said it is going to SCAN-TECH 94 and only PSC and RJS expressed any hesitancy about their commitment to ID Expo -- although each left the definite impression that they were leaning toward a yes vote.

COMMENT

Based upon this very unscientific survey and discussions with others in

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the industry, we predict that all of the manufacturers and major VARs will exhibit at both SCAN-TECH and ID Expo in 1994 for two basic reasons:

1.   The economy is showing signs of recovery and auto ID revenues are improving -- not a propitious time to cut back on marketing efforts.

2.   With both shows under new management and both in Chicago, this will present an unprecedented opportunity to make definitive comparisons, including: facilities, show management, number and quality of attendees, number of leads, leads converted to sales, and seminar programs.

The general consensus is that ID Expo had the edge in performance and results in both 1992 and 1993, but that it is now a new ball game since Reed is such a powerful organization with extensive resources. One example cited is that Reed has other events that could be integrated with SCAN-TECH to create more traffic and higher visibility.

All of which is just fine. For now, everyone should be looking forward to two successful exhibitions this coming year which will enhance the image of the automatic data collection technologies.

Winding up our coverage....

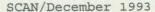....of SCAN-TECH 93 in Philadelphia (October 19-21), there were two additional topics that we found significant:

VERIFICATION

The operative word in bar code printing and verification today is "compliance." When major retailers -- notably Wal-Mart and Kmart -- instituted a program of penalizing vendors whose UPC symbols did not meet specification, compliance standards took on new meaning.

RJS (Monrovia, CA) was the first company to recognize the value of verification at the source; i.e., check the symbols automatically as they are printed. In 1989, RJS developed and marketed their Thermabar thermal transfer printer, with built-in internal verification of each label as it was produced. Last year, both RJS and Bar Code Systems (Atlanta, GA) released new models that were designed to be externally mounted on existing thermal transfer printers to test symbols as they were printed (*SCAN* June 93). So far, we have learned, these devices have met with limited success, partly because they don't seem to work too well.

At SCAN-TECH, RJS and PSC (Webster, NY) -- the world's leading producers of verifiers and active competitors in this product area for many years -- announced a joint venture to develop advanced, stand-alone, on-line verifiers for demand printers. "We have been working with RJS for about a year," PSC's President Mike Hone told *SCAN* recently, "and they use our lasers on their Inspector laser verifiers. We believe there is an opportunity for on-line verification and decided to join our respective technologies and strengths to help create a market, rather than destroy one between us."

The development will be a joint effort, but each company plans to place its own

label on the end product, and they will compete with each other in the market. The initial models will verify the output of thermal and thermal transfer printers -- such as those produced by Zebra and Fargo Datamax -- which operate at speeds of up to 8" per second. Tee Migliori (RJS' VP Marketing) foresees advanced models of such a device monitoring the output of standard printing presses running at speeds of up to 500 feet per minute. "That may require sampling every few symbols," Migliori explained, "but it would still catch non-compliance symbols at their source."

On another verifier-related topic, while at SCAN-TECH we caught wind of an impending deal between Symbol Technologies and Fargo Datamax that involves Symbol's line of Laserchek verifiers. On November 4, the companies officially announced that Datamax had purchased that symbology verification product line from Symbol. Under the terms of the agreement, Datamax will manufacture and supply Symbol and its customers with bar code verification products while expanding the distribution of the products to the global Datamax distribution network. Datamax will also develop new products, including integrated printer verifiers, based on verification technology and patents licensed from Symbol.

> [There may be other ramifications to this new Symbol/Datamax arrangement, particularly as it may apply to their distributors. Many of the dealers handling the Datamax/Fargo printers now carry competitive verifiers made by PSC, RJS or others; and a number of European distributors carry Zebra printers along with the Symbol scanners and verifiers. This may present problems -- in cross-marketing the products of the two companies -- that will have to be worked out.]

CCDs

Both Opticon (Orangeburg, NY) and UBI (Beltsville, MD) featured CCD scanners, at SCAN-TECH, which did not require contact with the surface to read the symbols. In a demonstration, Opticon's high-speed unit was able to scan at up to three inches away from the bar code. This development has been a long time coming and did not attract too much attention in view of the other advances in performance and price already announced in CCD and laser scanning technologies.

At the show, Alex Roustaei, President of ScanQuest (San Diego, CA), clarified his statement, made a month earlier, that his company "will be shipping 1,000 of our CCD long distance scanners by the end of this year" (*SCAN* Oct 93). He told *SCAN* that the company's current marketing plan will focus on establishing foreign distributors; these 1,000 units, therefore, will be going to a group of the "stocking distributors, mostly in Europe." "Our current LaserKiller strategy," Roustaei explained, "is not to confront Symbol Technologies directly in the US, but to go after existing CCD markets [in Europe and Japan] that are already inclined to use that type of scanner."

There was a noticeable rumble....

....on the floor of SCAN-TECH Philadelphia caused by the mutterings and grumblings of many individuals who were upset over an incident involving Welch Allyn, Symbol Technologies and the PDF 417 symbology.

No one involved would talk to *SCAN* for attribution, but the story went something

like this:

> *Welch Allyn has developed a new CCD scanner capable of scanning PDF 417, the two-dimensional symbology which Symbol invented. Symbol was caught off guard by this development and was surprised that PDF 417 could be effectively decoded using a CCD scanner. Symbol was also taken aback that anyone would have invested the considerable resources necessary to bring such a scanner to the market. Welch Allyn's plans to exhibit the new unit at the show were then stopped by Symbol on some issue related to patent protection of the symbology.*

Spokesmen for both Symbol and Welch Allyn insist that there is no animosity between the companies and that negotiations are currently under way to resolve any outstanding issues.

A particularly relevant comment was made to SCAN by one interested individual. "You would think," he said, "that Symbol would welcome Welch Allyn as an open competitor. There are many potential users that are holding back commitment to PDF 417 because they are waiting for multiple vendor support."

The larger issue then arose as to whether Symbol was violating its agreement with AIM to place PDF 417 in the public domain. Was Symbol publicly agreeing to open up this symbology for all to use, but, in fact, narrowing down its definition of "public domain" to effectively restrict competition?

After the show, we confronted Rich Bravman, Symbol's VP Marketing, who emphatically denied any change in Symbol's position. "When we released PDF 417 earlier this year," he explained, "we clearly stated that we were giving up all rights to the use of the symbology. We also stated -- and this situation has been accepted and confirmed by AIM/US -- the following: 'Symbol represents that the PDF 417 symbology presented in the specification is entirely in the public domain and free from all use restrictions, licenses and fees. No implied license is granted to any hardware or system.' I would also note that we will continue to protect Symbol's large and growing portfolio of patents.

> [An analogy to this situation, it is pointed out, would be UPC. The symbol has been in the public domain since its adoption in 1973. This unrestricted usage, however, has not interfered with any number of patents -- which have been issued and successfully defended -- that cover the hardware and software necessary to scan and decode the symbol.]

Bravman went on to emphasize that AIM's Technical Symbology Committee is "proceeding ahead at full pace" with its procedure to approve PDF 417 as a Uniform Symbology Standard. "At the same time," he continued, "we are in discussions with representatives of AIM/US to clear up any misunderstandings."

One final question: How good is the Welch Allyn CCD scanner? *SCAN* has been told it is somewhat slower than a laser scanner and that it requires some training and a little practice to increase operator efficiency. But it consumes less power than a laser and is less expensive to manufacture. Unofficially, Welch Allyn is said to be able to ship units within a month if all other matters are resolved.

In mid-November....

....Spectra Physics (Eugene, OR) quietly announced a 10% reduction in its
worldwide work force. According to a company statement, 46 individuals were
released, mostly from the "management and professional ranks with minimal impact
to our production group."

"Over the past few years," said President John O'Brien, "our infrastructure and
employment grew significantly as we invested in several new business areas,
particularly a direct distribution channel. Even though we have experienced
some success in these ventures, we have been unable to grow to the levels
required to obviate the need for some resizing of our basic organization.
Certainly the worldwide economic situation, the continued softness in the retail
segment, and strong competitive pressures have dampened our revenue outlook."

Just six months ago, Spectra announced that it was establishing a direct sales
force to market its laser scanners directly to the 75 largest US supermarket
chains rather than through its established dealer network (*SCAN* June 93). This
move -- which was questioned by many industry observers -- obviously did not pan
out and contributed to the need for this layoff.

After a long, drawn out....

....and, at times, unpleasant affair, Symbol Technologies settled its five-year
suit against Metrologic for infringement of Symbol's patents for hand-held laser
scanners and other related technologies (*SCAN* March 88; June 90; July 90).

Following a preliminary injunction by the court in September 1990, Metrologic
withdrew its Series 90 laser guns from the market. In 1992, Metrologic brought
action against Symbol for infringement of Metrologic's patent relating to
circuitry for interface controllers.

The companies settled their dispute in mid-November. Although both sides
agreed not to release the specifics of the settlement, a little-noticed item in
Symbol's quarterly SEC filing revealed some of the details. Metrologic affirmed
the validity of Symbol's basic hand-held laser scanner patents and accepted a
permanent injunction against the sale of its Series 90 laser scanners.
Metrologic will make periodic payments to Symbol over a multi-year period based
on the level of Metrologic's revenues (up to aggregate maximum payments of $7.5
million). Finally, both companies will continue to sell their current product
lines under immunity from any patent infringement suit by the other party.

We recently caught up ....

....with Richard Close, the new President/CEO of Computer Identics, who
succeeded Frank Wezniak earlier this year (*SCAN* May 93).

With refreshing candor -- for the Chief Executive of a public company -- Close
zeroed in C/I's shortcomings and his prescription to overcome them. "When I
came aboard," he said, "I discovered that the company's major problem was that
its marketing objectives were unfocused. My first job was to define our
designated market and to refocus the company."

Close wants Computer Identics to concentrate its efforts on creating products for "open systems" for manufacturing, warehouse and distribution applications. "In the past," he explained, "the company's proprietary systems approach restricted our market. Users today want to install systems which allow them to purchase components from any source. Eventually, even though you sell an open system, it winds up that you supply all of the components anyway, and in that way, you have accomplished your goal while satisfying your customers' needs."

Close looks upon AccuSort as his primary competition -- and admits that C/I has not been nearly as successful in its growth and profitability. "One of our problems," he stated, "was that we have been producing over-engineered products at a price that is too high, rather than products which are geared to satisfy the customers' needs directly."

Close expressed a great deal of confidence in John Shoemaker, his new VP Sales and Marketing, who joined the company on June 1. He is looking to Shoemaker to help carry out his restructured marketing plans.

During the first half of this year, Computer Identics lost about $1.3 million -- including $600,000 that was paid to Wezniak as severance. Close expects the last two quarters to be profitable (net income for the third quarter was $183,000), but not profitable enough to make up for the first half losses. He expects that 1993 sales will be in the $21 million range (at the end of nine months, sales to date were $15.5 million).

About half of the company's revenues come from overseas markets and he expects that rate to continue. Most significantly, Close predicts that the company will remain profitable, and he sets his 1994 sales target at $25 to $26 million.

The published books....

....on bar coding typically describe a variety of symbologies that have been developed over the years. For example, "The Bar Code Book" (Roger Palmer - Helmers Publishing), "Automating Management Information Systems" (Harry Burke - Van Nostrand Reinhold), and "Using Bar Codes" (David Collins/Nancy Wipple - Data Capture Institute), each survey a range of up to 20 of the more popular, active symbologies and allude to the fact that there are many more specialized bar codes that have been developed over the years.

Ben Nelson (Markem), one of the industry's stalwarts, known for his untamed curiosity and strong sense of history, decided that these previous compilations weren't good enough. Nelson has undertaken a project to gather information from all over the world for an "Encyclopedia of Machine-Readable Codes."

He has already compiled a list of 146 symbologies, with actual samples of more than half of them. As Nelson explains: "I have been writing to many of the pioneers in our industry for additional data. The acknowledgements alone will be a history of our industry."

If you know about an obscure or long-forgotten code, send a sample to Nelson with as much information as to its origins and use as you can muster. Markem, 150 Congress Street, Keene, NH 03431; 603/352-1130; Fax 603/357-5871.

A new study....

....of market research data related to the bar code industry promises to deliver timely information that specifically targets service sector applications.

The study is sponsored by the <u>T</u>homas <u>M</u>arketing <u>I</u>nformation <u>C</u>enter (TMIC), the industrial market research arm of Thomas Publishing Company (*Thomas Register* and two magazines -- *Managing Automation* and *Industrial Equipment News*).

TMIC has retained Joe Marzano and Bert Moore as consultants on this project. Both men are recent alumni of AIM/US: Marzano was Senior Director of Marketing; Moore was Director of Technical Communications. (Earlier, Moore was Executive Director of FACT before that organization was cut loose by AIM/US.)

The title of the multi-client study is: "*Bar Code Tracking Applications in Key Service Industry Sectors -- User Attitudes, Needs, Buying Trends and Emerging Markets*." TMIC will focus on four specific industry segments: Warehousing and distribution; Professional services (including law, insurance, design and engineering); Utilities (including power, telecommunications, cable and public works); and Museums, archives and similar institutions.

According to Moore: "The study focuses first on applications, then on industry sectors and, finally, on user perceptions, needs and trends. For niche markets, the study offers applications or industry-based sponsorship -- you don't have to sponsor the whole study....All sponsors receive the database files of the demographics and responses for the...segments they sponsor."

The sliding scale of fees starts at $10,500 for the complete study. (Members of AIM, AIMI or UCC qualify for 15% discount.)

TMIC, 5 Penn Plaza, New York, NY 10001; 212/629-1111; Fax 212/629-1584.

Could it be....

.....that the major fuss made by the media about the lack of coordination between prices posted on the shelves and those in the database (incorrectly referred to as "scanner errors") has had some positive effect on supermarket chains (<u>SCAN</u> April 93, Sept 93)?

> [On April 8 and again on August 15, 1993, *ABC's Prime Time Live* ran feature stories with the same message: "Scanners are not accurate! "Consumers are being ripped off!" (*SCAN* April 93; Sept 93).
>
> Not to be outdone in reporting on such an "important" story, the September 20 *CBS Evening News* (Dan Rather and Connie Chung) devoted four minutes of their valuable time to "<u>scanner</u> errors." CBS correspondent Frank Courier's crew took an undercover camera into ten supermarkets to report on the "rip-off at the check-out" rather than focussing on the actual culprits -- sloppy store management and human errors.]

A front-page article in the October 18, 1993 issue of *Supermarket News* described one example of a solution to this problem -- the installation in 26 Vons Stores of an electronic shelf-pricing system. The 345-store supermarket chain (based

in Arcadia, CA) had been testing <u>electronic</u> <u>shelf</u> <u>labels</u> (ESL) for 3 years in 6 stores and the expansion to 26 stores -- to be completed in 1994 -- is believed to represent the largest roll-out to date of an electronic shelf labeling program at a supermarket chain.

Vons will spend about $125,000 per location to install an estimated 15,000 ESLs in each store. The retailer chose ERS International (Wilton, CT) over its only competitor Telepanel (Markham, Ontario, Canada). Each vendor is now testing its system in about 10 chains. The ERS system uses spread spectrum RF/DC to update the ESLs. This method automatically ties the shelf markers and the front-end scanners to the same database, guaranteeing that the shelf and check-out prices are always the same. (ERS estimates full return on investment should be realized in about one year.)

In a follow-up article, on November 15, *Supermarket News* reported that "several chains that had previously adopted a 'wait-and-see' attitude [about installing ESLs]...have decided to take the plunge and test new systems." The additional retailers include Kroger, A&P, Giant Food, Jewel Food, First National, Stop 'N Shop and Sam's Club.

Kroger reportedly is set to test a new electronic shelf labelling system within a few months in its Nashville, TN division. A&P plans to give the technology a first-ever tryout in one of its Connecticut stores. According to a Giant Food executive, his company will be testing the two competing systems (Telepanel and ERS) in two of its stores in suburban Washington, DC; Giant will make a decision in six months about whether "this is a viable technology for us or not."

The retailers cite a number of factors which are responsible for the increased interest in the ESL systems:

• Prices have dropped for system components • Labor costs -- to maintain shelf labels -- have risen • A few states have revised their laws to provide retailers using ESLs with exemptions from item-pricing regulations • Competitive price-cutting strategies require the capability to make immediate changes in shelf prices • And finally, and not coincidentally, we believe this past year's media focus on shelf-price integrity has raised consumer distrust of scanning.

A recent study by Consumers Union on pricing errors in supermarkets concluded there were a few "nickel and dime mistakes, sometimes for the shopper, sometimes against." (*SCAN* Sep 93). In December, *the Consumer Reports* Letters section included this reality check from a reader:

> "Regarding 'Can you trust a scanner?' in the September issue: We don't think so. Here is a recent sales receipt showing a gallon of milk that was scanned at $2,622.59! We resigned ourselves to the fact that we have to check every item that's scanned."

We would anticipate a major move by grocery retailers to install electronic shelf labels during the next few years.