SCAN The DATA CAPTURE Report

Since 1977, the premier management & marketing newsletter of automatic data capture: Bar Coding, RF and related technologies.

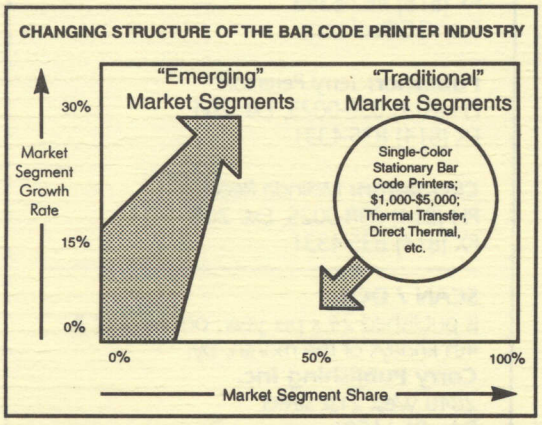
2840 West 21st Street • Erie, PA 16506 • PH (814) 838-0025 • FX (814) 835-1764 • http://www.corrypub.com

August 23, 1996

DID YOU KNOW?

CHANGING STRUCTURE OF NORTH AMERICAN BAR CODE PRINTER INDUSTRY

According to **Venture Development Corporation**, the most attractive, most profitable opportunities in the bar code printer market may be in emerging "specialty" market segments such as portable, wide web width and color bar code printer and consumable products.



With the commercialization and market acceptance of each new technology, two groups of bar code print vendors emerge: winners with significant share in the new segments, and losers with no position in the profitable new opportunities.

VDC is currently accepting sponsorships for a study of the North American Markets and Applications for Specialty Bar Code Printers and Consumables. This study proposes to provide valuable insight into emerging market segments.

For more information: **Venture Development Corporation**, Natick, MA, PH (508) 653-9000, FX (508) 653-9836, E-mail: vdc4u@aol.com. SCAN

How Is Peak Technologies Conquering A Fragmented European Market?

Even by conservative estimates, **Peak Technologies** will reach somewhere between $250 and $260 million in sales this year. Although the company is a reseller, it ranks in the top five Automatic Data Capture (ADC) companies in sales dollars. And according to Peak's chairman and CEO, Nic Toms, the company will not stop its expansion until it has sales worldwide.

Toms continues to lead his company through an aggressive expansion program and his attention for the moment is on Western Europe. Major ADC players are trying to anticipate his next move. *SCAN/DCR* talked to Toms about his company and its future plans.

SCAN/DCR: What is the most notable trend in ADC today?

Toms: We believe standardization is the big trend. Most companies are standardizing the operating systems that run their businesses. Companies want to have uniform ADC systems throughout all operations so employees do not have to be retrained if transferred to another facility. With a uniform ADC system, companies can simplify their supply base by cutting down on the number of suppliers they use. When the final decision is made to standardize an operation, purchasers want to buy from one supplier who provides a total solution and supports their various locations.

SCAN/DCR: How has that affected your company's business philosophy?

Toms: The ADC industry is very fragmented. The theory we had was to build a company that would offer customers a one-stop-shop. We tell our customers, "With your help, we can identify and define your problems, as well as design and install the solution to those problems. We'll also train your staff, support the software seven days a week, 24 hours per day, and maintain the hardware. Plus, we will upgrade the

solution as technology permits." What we are really selling to our customers are very economical and accurate means of capturing data. In turn, we enhance productivity and quality as well as reduce costs. We are selling them tools to increase profits. We want to share those profits in the form of purchases of our products.

SCAN/DCR: Peak has approximately 145 locations. Wouldn't it be less expensive to work from a centralized site?

Toms: If you go back to what I originally said, companies want to standardize systems and operate with fewer people. And they want a systems provider close to their business so they can receive timely support. That is why it is so important for us to be a national company in the U.S. And for our multi-national customers, it's equally important that we support their operations abroad. The biggest market for data capture is North America. The next largest is Europe. There's a huge cultural affinity and close business connection between Europe and the United States.

A good example is the business relationship we developed with **Rohm & Haas**. Each year we conduct a series of seminars on wireless systems in 30 North American cities for our customers. At one of these seminars, Rohm & Haas asked us to set up wireless systems in eight of their U.S. plants. One of the specified conditions was that we set up the same systems in nine European locations. That number later grew to 15. They are now talking about upgrading their whole warehouse management system. Once again, they are requesting standardization throughout. This is a very typical scenario of our customer relationships.

SCAN/DCR: How do you compare your current European expansion to what you did in the U.S. a few years ago?

Toms: Our philosophy about Europe is much the same as our philosophy about the United States, but to an even greater degree. The European market for ADC solutions is also very fragmented. There are many multi-national companies that require standardized systems. The problem of selling ADC solutions in this market is compounded by the variety of cultures and languages across Europe. There are nearly 360 million people in Western Europe [which Toms considers to be the primary market]. We want to offer the standardization these companies need to operate and communicate efficiently.

SCAN/DCR: Can you describe what you mean by fragmented?

Toms: There are 11 countries that offer great potential for ADC sales in Europe: the United Kingdom, Scandinavia, Germany, Austria, Italy, France, Spain, Portugal, Poland, the Czech Republic, and Russia. Not only are there cultural differences, but different languages and currencies as well. Within those markets, the ADC supply base and distribution channels are very fragmented.

Germany is a good example of the fragmented supply base. In addition to the big companies like **Symbol**, **Telxon**,

SCAN The DATA CAPTURE Report

Since 1977, the premier management & marketing newsletter of automatic data capture, including:

- Bar coding, 1-D & 2-D symbologies
- Bar code printers, scanners, terminals, verification products and labels
- Wireless (RFDC & RFID)
- Magnetic stripe
- OCR products
- Voice recognition systems
- Vision systems, video scanners
- EDI
- Smart cards & optical cards
- Memory tags
- Biometrics
- Application software
- Peripherals or supplies for the above

Vol. XIX, No. 16

Editor: Rick Morgan
PH (814) 838-0025, Ext. 222
FX (814) 835-1764
rickm@corrypub.com

Copy Editor: Robert E. Lee II

Contributing Editor: George Goldberg
PH (516) 487-6375
FX (516) 487-6393
ScanGG@aol.com

Publisher: Terry Peterson
PH (814) 838-0025, Ext. 204
FX (814) 835-4331

Circulation: Melinda Reed
PH (814) 838-0025, Ext. 208
FX (814) 835-4331

SCAN / DCR
is published 24 x per year; on the 2nd & 4th Fridays of the month, by:
Corry Publishing Inc.
2840 West 21st Street
Erie, PA 16506
PH (814) 838-0025
Web Site http://www.corrypub.com

Copyright © by Corry Publishing Inc. Federal copyright law prohibits unauthorized reproduction by any means including photocopying or facsimile distribution of this copyrighted newsletter. Such copyright infringement is subject to fines of up to $25,000.
Because subscriptions are our main source of income, newsletter publishers take copyright violations seriously. Some publishers have prosecuted and won enormous settlements for infringement. To encourage you not to break this law, we make multiple-copy subscriptions available at a substantially reduced price.

Subscriptions: $497 per year (outside North America add $30 postage)

Norand, and **LXE**, there are 23 indigenous, domestic, terminal manufacturers supplying the country's resellers. In that one market there are nearly 45 manufacturers of terminals, scanners, and other data capture hardware. And that does not even take into account companies like **Sony**, **Motorola**, **IBM**, and **Apple** who have credible offerings in the mobile computing area.

Now, let's look at the distribution channels. There are close to 100 Symbol resellers in Germany today 10 of which are probably of real importance to them [Symbol]. The Symbol resellers are generally different than the resellers who market Telxon's product. It's very hard to sell Telxon and Symbol products from the same distribution center because they are too close in terms of functionality. And they are fierce competitors. The vendors do not want their resellers to offer a competitor's product line. My point is that there are literally thousands of different resellers offering hundreds of different products in Europe. We want to consolidate some of these products to offer a total standardized solution.

SCAN/DCR: Peak is one of the largest customers/resellers for Symbol Technologies, Norand and **Zebra Technologies**. Do conflicts ever occur over European sales, particularly with Symbol who also covers a large share of the Western European market?

Toms: There have really been no cases where Peak and Symbol have "fought" over the purchase of a company. There are almost 85 Symbol resellers in France. We happened to buy one of them. We don't get into bidding wars with our vendors. There's plenty of business for all of us so there is really no purpose in fighting over one company.

SCAN/DCR: You say Peak doesn't compete with its vendors. But if you are offering a standardized, consolidated package [something these vendors may not be able to do] aren't you really competing with them?

Toms: I believe our standardized solutions offer more value to customers than vendors can offer by marketing their products individually. We keep increasing our market share as a result. But we are not a threat to Symbol. They are very good at providing point-of-sale retail solutions. We don't do much in POS because we can't do a lot of value adding in that product line. Each of us [those who sell ADC products] has his own specialty.

We have the ability to focus on a few vertical markets and capitalize on them very aggressively worldwide. We have a big horizontal advantage by delivering warehouse management systems that can go into many different industries. But we also have vertically-configured warehouse management systems to address certain specific industry needs. Increasingly, we are finding we must focus on vertical markets to be successful.

SCAN/DCR: Couldn't you still sell total solutions while offering a greater choice of product lines?

"I believe our standardized solutions offer more value to customers than vendors can offer by marketing their products individually."
Nic Toms

Toms: We sell the Symbol product line because it has a very good name worldwide. That's not to say Telxon does not have a good product, but we're not interested in marketing a variety of competing products. Resellers should remember, it is costly to support multiple product lines. We'd rather do a few things well and be the "best-of-breed."

We offer Norand's products mainly because they compliment Symbol's line. And their pen-based products are very rugged for use in the commercial environment. It's important to offer the best products possible while maintaining the complimentary factor.

SCAN/DCR: Do you have future acquisitions in mind?

Toms: We will not stop our expansion until our platform in Europe is complete. We have facilities in Germany, the third largest world economy and the most important ADC market in Europe. We have locations in France and the U.K., the other two important European economies.

Two big economies where we are not present are Italy and Portugal. Once we have assimilated our acquisitions in Germany and Switzerland, we'll certainly watch for opportunities to move into those countries as well. I don't have a target date for this move at the present time. The idea is to have a Pan-European platform that covers all of that part of the continent.

We are also looking at Eastern Europe. We are doing business right now in Poland, the Czech Republic and Hungary. We are even doing business in Russia although it is out of our existing platform. After conquering the European market, we'll be taking a serious look at the Asian market, possibly next year. We want to be present worldwide.

SCAN/DCR: Do you have any final thoughts about your worldwide expansion?

Toms: The European market for ADC products is on the upswing. I'd like to have our platform in place by the end of this year or the first part of next year. Because we plan to move into Asia next year, we need to finish this expansion soon.

The Asian market may turn out to be our biggest challenge. There are drastic cultural differences among Asian countries such as China, Japan, and India. And, like the Europeans, they also have a number of currencies.

To some extent, U.S. ADC sales have leveled off around the 14% growth rate. But our backlog of orders is up and we believe the market should improve by the end of the year.

(Comment: Peak's annual growth in sales dollars has been rising steadily. But it is hard to tell whether this is from more sales or merely from increased revenues from acquisitions. Although Nic Toms states publicly that his company is not fighting over European [or for that matter, North American] business with vendors such as Symbol, Norand, and Zebra Technologies, we believe major players are watching Peak's activities closely. The jury is still out on how companies like Symbol, Telxon and Intermec will react as Peak's sales inch ever closer to their sales volume.)

For more information: **The Peak Technologies Group, Inc.**, New York, NY, PH (212) 832-2833, FX (212) 832-3151. SCAN

Avoiding Pitfalls Surrounding Acquisitions - PSC Explains Their Strategy

Acquisitions and mergers keep an industry alive and growing. There's a mixture of apprehension and excitement among major industry players about how a new blend of product lines will affect competition and the market in general. But acquisitions come with a number of inherent problems as well.

In the last issue of *SCAN/DCR* (8/9/96), we reported the completion of **PSC's** acquisition of **Spectra-Physics Scanning Systems** and the subsequent appointment of John O'Brien as president of the new organization. The article outlined some of the challenges facing O'Brien and PSC's chairman and CEO, L. Michael Hone.

In this issue, we followed up with Hone and O'Brien to learn how they view and deal with some of these quandaries. Hone believes, "You have to stay focused on the goals you have set for your company. If you have merged your company with another, it was obviously with the intent of meeting specific objectives. The potential to lose focus after a merger is great because of the 'people problems' that require your attention."

O'Brien added, "We have three major priorities at this point. We need to merge the individual marketing goals of PSC and Spectra-Physics into a combined strategy. We need to harmonize our product lines. And, we need to complete the merger of our two organizations in the lower levels of the company. We have already organized our upper-management structure."

Hone said that an acquisition is like a merging of cultures because two completely different infrastructures meld into one. When this happens, it is easy to damage egos. An individual who was once at the top of the command chain may now have to report to someone else. Decision making may become a shared function after a merger. There is often a trade-off of duties and responsibilities. "Corporations often take on a human characteristic," stated Hone.

Doing some soul baring, Hone confided, "In some ways, it's been tough for me to give up the day-to-day management of the company [since O'Brien became president]. There's some ego involved here. I loved many of the aspects that went with the president's position. But I know that I can add value in other areas now.

"John [O'Brien] has many years of experience in corporate management. He doesn't always do things the way I would, but the end result is usually the same or better. He is very strong in the area of research and development. My expertise is marketing. Our individual strengths offset each other."

Continuing, Hone stated, "The situation between John and me is exemplary of what goes on throughout the rest of the company. For the corporation to run efficiently, there must be unity and this requires mutual respect from all employees. We've been very lucky in this respect. I have always credited PSC's employees for the company's success."

Both Hone and O'Brien believe that the merger of the two companies makes PSC "a strong, powerful source in the marketplace." "We have a huge advantage over narrowly focused companies," asserted O'Brien. PSC's goal is to aggressively pursue all new markets with an emphasis on warehouse/distribution and POS [point of sale].

"As ADC solutions become more commonplace, many additional applications are available," explained Hone. "This offers a great opportunity to increase sales. Self-checkout is a huge sales opportunity for our industry." A Rochester, NY, company is experimenting with "no attendee" gas stations. All self-serve purchases are paid for by credit card at the gas pump, eliminating the need for employees.

Another interesting application is **Ford Motor Company's** [FMC] use of bar coding. FMC and some of its major dealers are using bar codes to store data about a car's history. When a customer brings a car to the dealership for repair, the technician can obtain maintenance information by reading a bar code on the automobile. The bar code may also contain information about the car's equipment, such as when and where it was produced.

Commenting on acquisitions, Hone stated, "Consolidation is a big part of the Automatic Data Capture industry. Bootstrapping [the process of growing a business with little or no borrowed capital] is hard to do in these times. To compete with the major ADC players, a company must have a diverse infrastructure. The emphasis today is on total solutions. We [PSC] will continue our policy of seeking out strategic acquisitions and alliances."

Hone would not speculate on specific, future acquisitions and mergers, but we asked if a **Telxon**/PSC merger might make sense [PSC is very strong in scanning engine technology and Telxon is a leader in radio frequency systems and peripherals]. Hone responded, "I think it would be hard to stay focused on our areas of expertise. A merger of that nature might alienate our current customer bases. It would certainly be a powerful combination, but we have no current plans for a merger of that sort."

Telxon is one of PSC's largest customers. We asked Hone if Telxon's current dilemma (*SCAN/DCR 8/9/96*) has affected his business. He told us that sales [to Telxon] remain strong and that he is confident Telxon management is on the right track to solving profitability problems.

When we asked for Hone's thoughts on the ADC industry in general, he replied, "The ADC industry as a whole is its own worst enemy. Technology provides a slim advantage in competition with other vendors. But everybody still chases this illusive, competitive edge. We are all guilty of releasing products to the market before they have been fully engineered and fine-tuned with disastrous results in terms of profits and earnings per share. However, it appears we are learning our lessons and trying to change our policies in this area."

For more information: **PSC, Inc.**, Webster, NY, PH (716) 265-1600, FX (716) 265-5453, E-mail: mktg@pscnet.com. SCAN

Will Iris Scanning Dominate The Identification And Verification Industry?

IriScan, Inc., a newcomer to the biometric identification industry, has developed an innovative technology that is capturing significant market share in security and access control. Sixty to 70 major companies and institutions have installed the new IriScan system since its release in November 1995. The federal government is also considering using iris scanning in many departments.

Iris scanning is the process of taking a "picture" of the colored part of the human eye [the iris] with a CCD [charged couple device] video scanner. Using complex computer software, iris measurements and characteristics are initially recorded forming a 256 byte IrisCode™ [hand geometry requires only nine bytes]. This original scan, or enrollment mode, takes about 20-30 seconds to complete.

When a user requires access to a building or a location, another scan of the iris determines the user's ID [identification] and compares it to the original scan. The video scanners operate at a distance up to 12 inches. The access procedure, called the recognition mode, takes 2-3 seconds.

With over 400 identifyable characteristics, the iris offers one of the most accurate forms of Biometric Identification in the Auto ID industry. Shown here is the IriScan System 2000EAC.

The iris is a veritable bank of statistical information with over 400 measurable characteristics. In contrast, a fingerprint only has about 60 characteristics. The statistical probability that two irises could produce the same IrisCode is *1 in 10 to the 60th power*. According to IriScan director of business development, Jill Allison, "It is the most accurate form of identification, comparable to DNA [the most accurate genetic test available] with respect to user-confidence levels."

Iris scanning is often confused with the more intrusive biometric system of retinal scanning. In the retinal scanning process, an infrared beam scans blood-vessel patterns on the retina located in the back of the eye. The user must sit very still and close to the beam while the scanning is performed. It has typically not been popular with the public.

The **Defense Nuclear Agency** [DNA - a division of the **U.S. Dept. of Defense**] has tested iris scanning over a five-year period under a variety of conditions. [See DNA Test Results Summary.]

Two ophthalmologists, Leonard Flom, M.D. and Aran Safir, M.D. originated the idea for iris scanning in 1984 and have since patented the concept. John G. Daugman, Ph.D. holds the patent on the mathematical and statistical process of iris scanning, as well as the software involved. In the mid-80s, Flom and Safir approached John Siedlarz with their idea for iris recognition. Siedlarz, currently president and CEO of IriScan, was then a systems integrator in the security and access control market. He was impressed with their idea, but felt customers might be skeptical of such innovative technology. Siedlarz recommended the two doctors patent their idea and come back with a business plan.

Defense Nuclear Agency Test Results Summary

Total of 565 files
Identifications - 1,900
Verifications - 50
Average time for all I/V transactions: 2.44 seconds
Zero false accepts based on 812 attempts
Zero false rejects (one reject due to dirty glasses)
Average enrollment time: 25 Seconds
System made 3,100,000 code comparisons without error (NOTE: Each comparison exposed the system to a chance of error)

In 1990, Flom and Safir returned to Siedlarz with both the patent and business plan. Programs to develop the new product resulted in laboratory models and proof of concept in 1992. Advanced software and prototype models were achieved with successful field testing of the Beta system in 1994 at government, institutional and medical facilities. Commercial production of IriScan's first product - the **2000EAC** - began in June 1995. Units became available for sale in November of that year.

Allison stated that sales of iris scanning systems have mainly been to OEMs [original equipment manufacturers], systems integrators and government agencies. The company offers end-users a free, 30-day trial and leasing agreements for continued use. She also said this trial offer practice is typical within the biometric ID industry, and makes prospective customers more comfortable with the product during the sales or leasing process.

A complete IriScan System 2000EAC costs approximately $5,000 and includes a PC, scanners and database. However, IriScan's software is designed to operate with a variety of hardware systems. If a customer has a PC and CCD scanning system already in place, the cost may drop to $2,500. Allison said the company plans to develop a computer chip or board to allow easy installation of the IriScan system.

Forty-five private shareholders own IriScan. It recently issued its first license to **Sensar Inc.**, a subsidiary of the **David Sarnoff Research Center** in Princeton, NJ. Sensar will embed the technology in equipment designed to conduct financial transactions. The iris will serve as the means of identification rather than personal identification numbers and signatures.

Oki Electric Industry Ltd. of Tokyo, a large supplier of automated teller machines has agreed to use Sensar's iris recognition technology in Japan. "The $25.8 million deal represents the largest commitment made to biometric identification to date," Siedlarz said. "So that tells you we're moving in the right direction."

There seems to be no limit to the applications for this product. **Garney - Sicherheitstechnik**, a German banking firm, offers 24-hour per day, unmanned, safety deposit box access. When the IriScan system identifies the user, a robotic arm retrieves the safety deposit box. **CeBIT**, one of Europe's largest trade shows for the banking industry, featured the IriScan system this past March.

The **Lancaster County Prison** in Lancaster, Pennsylvania is the first corrections facility in the USA to incorporate iris recognition technology into its security protocol for inmate identification. Warden Vincent A. Guarini commented, "This innovative identification process provides us with absolute assurance that the inmate being released - whether leaving to go to court or being freed after completing his or her sentence - is the right person. It eliminates the risk of human error in manually matching a face with a photograph on an ID card." Inmates cannot circumvent the system, create counterfeit identity documents or steal IDs from fellow prisoners - the iris itself is the ID document.

Vince Sciotti, coordinator of internal department affairs for the prison, added, "The system is very user friendly. After using the iris scanning system for only a month, we've already noticed improved time

efficiency. Our office has received many calls asking about the new product so I believe more prisons will incorporate this technology into their ID systems."

Allison told *SCAN/DCR* the next step for IriScan is to develop portable, hand-held, image-capture devices and networking capabilities. The company is also targeting the credit card ID market. To capture this market, scanning or reading devices will need to operate at distances of 36" rather than the current 12" limit [36" is the approximate length of a human arm which inserts the card into an ATM]. Allison believes IriScan will have to sell the units in the $150 price range to compete with other forms of ID recognition systems.

According to Siedlarz, the company plans an initial public offering next year. The proceeds will provide capital reserves if IriScan needs quick access to funding for expansion.

For more information: **IriScan, Inc.**, Mount Laurel, NJ, PH (609) 234-7977, FX (609) 234-4768, E-Mail: iriscan@aol.com. SCAN

ID EXPO & MDCC To Stay In East?

It appears that **Advanstar Expositions'** decision to move **ID EXPO & MDCC** to Philadelphia, PA in 1997 is more than a temporary change of venue. In a recent interview, Anthony Scalisi, sales manager for Advanstar, told us his employers are committed to keeping the annual trade show in the East [at least for several years].

Scalisi said there have been discussions about Atlantic City, NJ, as another possible eastern site for ID EXPO. Advanstar will use the popular trade show to cover the eastern portion of the U.S. and will shift its ID INFO conferences to western sites. "ID EXPO & MDCC: Philadelphia will serve the Eastern Seaboard," said Scalisi. "In 1997, we will move the Boston and Atlanta ID INFO shows to Kansas City and Dallas. ID INFO: L.A. will remain a part of the conference series."

On September 10-11, 1996 Advanstar Expositions will present ID INFO: Atlanta, The Automatic Data Capture Conference & Technology Showcase. It will be the third and final year for the Atlanta, Georgia show site. The event will be held at the Georgia International Convention Center.

According to Scalisi, 95 exhibitors will showcase their products to approximately 2,000 attendees. However, the main focus of the event will be the conference programs, patterned after the seminar series held each year at ID EXPO & MDCC [mobile data capture communication]. Scalisi stated that the conference programs are the main draw for many attendees.

New for this year will be a four-hour "Power Course" titled: "*Mastering the Essentials of Systems Integration.*" The new seminar will be held from 1:00 pm to 5:00 pm on Monday (Sept. 9) prior to Tuesday's formal opening of ID INFO. Rick Duris, president of **Business Technology Group**, will present the seminar. The "Power Course" requires separate registration with a cost of $295 to interested attendees.

ID INFO: Boston is a near sell-out and Advanstar had to add extra booth space due to high, exhibitor interest. Scalisi stated that ID INFO: L.A. - the first INFO in L.A. - is nearing a sell-out as well.

For more information: **Advanstar Expositions**, Duluth, MN, PH (800) 331-5706, FX (218) 723- 9122, E-mail: tscalisi@advanstar-expos.com. SCAN

Has RFID Discovered The Road To Success?

by George Goldberg

Has RFID (radio frequency identification) finally found the key application that will open the gates to more widespread uses of this ADC technology? Will the electronic collection of tolls on highways, bridges and tunnels energize this industry segment the way UPC/EAN did for bar coding? There can be little argument that the introduction of the Universal Product Code in 1973 laid the foundation for all future bar coding applications.

First, UPC scanning worked almost from day one. In billions of transactions every week, identification and processing has proven to be fast, accurate and economical far beyond any system available then — or now.

Second, UPC scanning was highly visible to almost everyone. Not only were corporate executives and systems engineers exposed to its efficiency, but so were their wives, families and friends. It was all over the consumer press and constantly analyzed on TV.

A feature article in the financial section of the *New York Times* (8/12/96) suggested that these two criteria - high efficiency and high visibility - may be just over the horizon for RFID. The story, titled "*High Technology Dog Tags For More Than Just*

Dogs," described the many uses of RFID, including: tracking the flow of mail by the **US Postal Service**; keeping tabs on railroad freight cars as they move from one company's tracks to another; identifying the contents of military cargo containers (based on lessons learned by the **Department of Defense** during the Gulf War); and automated electronic toll collection.

It is this last application that has been attracting attention in the New York metropolitan area, suggesting that automated toll collection could be the broad-based, highly-visible application that promotes wider use of RFID. Many of the region's bridges and tunnels have been equipped recently with the "**E-Z Pass**" system. Interested motorists sign up, receive an identifying transponder to place in their cars and cruise through the toll gates without stopping to pay. The toll is automatically charged to a standard credit card.

So far, so good. In order to encourage drivers to sign up for the system, however, about one-third of the toll booths were assigned to E-Z Pass users only — and, as a result of fewer old-fashioned toll-takers and relatively few cars equipped with transponders, traffic has often been backed up for miles. Even the E-Z Pass participants cannot get through the logjam to access their assigned lanes. The resulting publicity has not been favorable.

Not to worry, says the *Times*. Based on "falling prices and more sophisticated technology, toll booths may eventually be able to scan dozens of cars' tags simultaneously."

This prediction stems from statements made by the licensees of **Supertag** - the **CSIR** (South Africa) invention that was introduced in January 1994 - including claims that all items in a full grocery cart can be scanned without unloading. Earlier this year, when we interviewed Cliff Horowitz, president of **Samsys**, the Canadian Supertag licensee, he was concerned that Supertag had been "oversold and overhyped" to the extent that he felt that it actually would be better "to rename the product" (*SCAN/DCR* 6/14/96).

When interviewed for the *Times* article, however, Horowitz was not able to resist the Supertag- hype. "There is not a single data collection environment where this particular technology could not be used," he maintained. He added that tag prices would have to "come down to fractions of a cent before the grocery-cart application would become feasible." (It is worthwhile noting that no responsible person in the RFID industry has ever supported the possibility that transponders will ever be made that cheaply.)

Comment: Which brings us back to our original premise. If RFID can be demonstrated to work efficiently and economically in a high-profile environment - with executives breezing through the toll gates on the way to and from their offices - will this broaden the scope of the technology and encourage wider use? (Will it also force the scanner and transponder manufacturers to finally cooperate and establish industry standards so that everyone's reader can access everyone's tag?)

The answer is a strong "maybe." The first steps should be to learn from the UPC experience; i.e., reduce the hype; concentrate on increasing performance for all to see and appreciate; and create a standardized, friendly environment for the technology to expand and prosper. SCAN

SCAN The DATA CAPTURE Report

Subscription Order Form

2840 West 21st Street • Erie, PA 16506 • PH (814) 838-0025 • FX (814) 835-1764 • http://www.corrypub.com

I prefer to receive my subscription by:
❑ Mail ❑ Fax ❑ E-Mail ❑ Web Access

I am a: (Check Only One)
❑ Systems/Software Integrator, VAR, Dealer, Reseller
❑ Product/Software Vendor
❑ Distributor/Wholesaler
❑ End User
❑ OEM
❑ Consultant
❑ Other _____

Name _____ Title _____
Company _____
Street _____
City _____ State _____ Zip _____
Phone (_____) _____ FAX (_____) _____
E-Mail _____

Please ❑ **enter;** ❑ **renew** the following subscription
❑ **1 yr 24 Issues @ $397** (outside N. America + $30)
❑ **2 yr @ $697** (saves over 20%)
Pricing for multiple copies to same company:
2nd - 4th subs $197 ea.; 5th & more subs $97 ea.

❑ **Payment Enclosed**
(make payable to Corry Publishing)

❑ **Charge my credit card**
___AmEx ___Visa ___MC
_____
card number exp. date
(charges will appear as Corry Publishing)

❑ **Bill My Organization**
(P.O. number, optional) _____

Your guarantee: If you are not completely satisfied, we will refund your ENTIRE subscription fee, even if you are in your last month.