There are those in this industry....

....constantly looking over their shoulders at Optical Character Recognition (OCR). Does it represent a future threat to the growth of bar code scanning?

We recently investigated some aspects of the OCR industry which may shed some light on just how real these threats might be:

- We attended the National Retail Merchants Association (NRMA) Annual Convention in New York. This is our fourth or fifth such convention and our concentration has always been on learning about the growth of OCR scanning in retail and industrial applications. In previous reports (SCAN Feb 82, Mar 80), we indicated that the system was struggling and not showing any signs of success. Our impression this year was even more negative. OCR scanning was hardly in evidence at the show. The leading producers of OCR equipment, Recognition Equipment, Caere, and Siemens, did not exhibit and were nowhere to be seen. Our discussions with many of the vendors of retail systems indicate that most of them felt that OCR scanning in the department stores was a failure, and that there were practically no new installations at all this past year. Less than 10% of the merchandise arriving at the stores is source marked (although the Universal Vendor Marking -- UVM -- has been actively promoted for many years) and the best figure we could obtain was that 175 retail companies are scanning nationwide -- not an impressive number.

- We carefully read the lengthy and descriptive 1982 annual report of Recognition Equipment, Inc., the leader in OCR scanners. The company had not done well this past year and had to "restructure and resize" to bring down operating costs in line with expected revenues. There is a new management team, from the president on down, and a 30% smaller work force. Revenues were down 15% to $112 million. The company had its problems but seems to be working out of them after 6 quarters of consecutive losses. (First quarter FY 83 showed a 7¢/share profit.) The significance to the bar code scanning industry, however, is that OCR scanning at the retail/industrial level is practically not mentioned at all in the entire report. Ironically, the company is featuring the generation of bar-coded labels in a number of their systems, for subsequent scanning and sorting after the original information is read using OCR scanners.

- An industry study published by International Resource Development, Inc. on Optical Character Recognition Markets notes the advantages and capabilities of these devices, but refers almost exclusively to the OCR page and document readers. OCR readers are being used extensively to read

checks, remittances, credit card slips, tickets, subscription notices, and insurance and government reports; but they are in limited use at the front end of retail establishments and not at all in the industrial environment. (International Resource Development, Inc., 30 High Street, Norwalk, CT 06851; 203/866-6914.)

Comment

This is not to suggest that OCR will disappear as bar code scanning prospers. Quite the contrary, we believe they will both grow and probably complement each other in many areas. There will continue to be many applications which will demand human-readable information that can also be machine-read. But the greater accuracy, speed, flexibility and cost advantages of bar code scanning will support this industry's growth for many years.

Even if we discount the most optimistic forecast of an annual doubling of revenues, bar code scanning should easily overtake and surpass OCR in all applications in the next few years. The IRD Report estimates that the OCR market in 1982 was $350 million and projects it will expand to $925 million by 1992.

The lessons to be learned are to stick to those applications where there are definite advantages to bar codes; concentrate on marketing this technology to the vast commercial/industrial public not yet aware of its potential; and watch that bottom line profitability.

You have to be impressed....

....with the way UPC scanning installations have been increasing, in spite of the less than prosperous economy:

UPC Scanning Scoreboard 1982

	Total as of 12/31/81		Installed in 1982		Total as of 12/31/82	
	#	%	#	%	#	%
NCR	1865	38.1	706	31.9	2571	36.2
Datachecker	1118	22.9	625	28.2	1743	24.5
IBM	1256	25.7	340	15.3	1596	22.5
DTS	349	7.1	326	14.7	675	9.5
Sweda	283	5.8	173	7.8	456	6.4
Berkel	19	.4	19	.9	38	.5
TEC	--	--	27	1.2	27	.4
TOTALS	4890	100.0	2216	100.0	7106	100.0

Some odds and ends of interest:

- Included in the figures above were 153 new installations in Canada in in 1982, bringing the total to 361 at the end of the year.

- The top 10 US chains comprise exactly one-third (2367) of all the installations. The leaders, Winn-Dixie (482); Kroger (454); Safeway (329); and Publix (273), account for 21.6% of the total.

- Every one of the 50 states, plus the District of Columbia, has at least one scanning store (Vermont has just that: one scanning store).

- The last quarter of 1982 was the largest quarter (642 stores) since UPC started.

- NCR retains the overall lead in cumulative installations, but National Semi's Datachecker finished a torrid second in 1982, just a shade behind. And with the pending NSC/DTS merger, their combined totals may take over first place in 1983.

- Up to now, the number of store installations has been an excellent measurement of the size and penetration of the market. We suspect that this may change as more smaller stores, with fewer checkouts per store, install POS scanners. We have used 10 lanes per store when estimating the total number of scanning lanes. This average is certain to come down.

As we have mentioned before, we know of no other industry where the comparative results among the competitive companies, and for the total marketplace, are available in such stunning detail and on such a current basis. We find it enlightening and fun to follow.

The pending acquisition of....

....Data Terminal Systems by National Semiconductor (SCAN Feb 83) has cleared two major hurdles: the Antitrust Division of the Justice Department has announced that it found no grounds to block the merger; and as of February 25, 1983, about 2.8 million shares of DTS stock had been tendered. This exceeds the minimum amount required to obligate NSC to complete the deal.

There had been a slight delay when the Justice Department asked for more time to examine the antitrust implications, and NSC was forced to extend the closing date to March 7 (from February 24). But things seem to be ironed out and should proceed to completion. NSC is paying $8.00/share for the DTS stock.

The new Specification Manual....

....for the UPC Shipping Container Symbol arrived on our desk just as we were going to press. We have not had time to review it carefully, but the major points we described in previous editions (SCAN Feb 83) appear as expected. As with any other important industry document, it needs careful study by all concerned. We will have our comments in due time.

Copies may be obtained ($30.00 each) from the UPC Council, 7051 Corporate Way, Dayton, OH 45459; 513/435-3870. To get the total picture, by the way, you should also obtain revised UPC Guidelines #6 and #12, which reflect the usage of this new code and symbol on fixed weight and random weight shipping containers.

We really dealt....

....Microfin Ltd. a low blow in our report about the placement of the Photographic Sciences' UK subsidiaries into receivership (SCAN Feb 83). We would like to redress that situation (even though the incorrect report was not totally our fault).

1. Microfin Ltd. was never acquired, owned nor a part of Photographic Sciences.

2. Microfin was never placed into receivership.

3. Microfin is "alive and kicking", according to a company spokesman, and after a recent injection of new capital, is looking forward to increased business and a growing export market.

Microfin specializes in the design and implementation of intelligent data capture and communications systems for medical, retail and industrial applications. The announcement last year, by Photo Sciences, that agreement had been reached to acquire Microfin, was premature, to say the least. Our apologies to Mirza Sur, managing director. In the near future, we plan to cover the company's activities in our International Edition -- with greater accuracy.

News from the....

....Department of Defense LOGMARS Program:

• Conrad Kotlowski has replaced Mike Noll as Chief, Army Logistics, Symbology Group.

• Kotlowski's office is making available copies of the LOGMARS briefing covering the seminars which were presented to about 10,000 contractor representatives last year.

• The Army group has been soliciting comments to the Military Standards (129H & 1189) and welcomes contact with private industry. If you have any comments, this is a good time to get them in, because...

• The LOGMARS Coordinating Group has its next meeting scheduled for mid-March. This group has representation from all of the military services and DOD components. The standards are scheduled for review at this meeting (SCAN Jan 83).

For any of the above contact: Tobyhanna Army Depot, Tobyhanna, PA 18466; Attn: SDSTO-T.
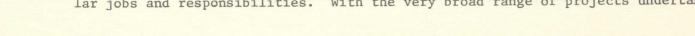
Comment

As before, the attitude of the LOGMARS Group continues to be open and positive, and constructive comments are welcome. We applaud this approach. It is up to those in industry, who have suggestions, and particularly those who have voiced complaints, to get themselves on record -- pronto! We feel certain that any suggestions will get a fair hearing.

Some very positive signs....

....are emanating from the Automotive Industry Action Group (AIAG). There are plans under way to set up independent offices and staff, and to give significant financial support to the group. Up to now the AIAG has been operating with the part-time help of middle management personnel, borrowing time from their regular jobs and responsibilities. With the very broad range of projects undertaken,

and their importance to the industry in view of recent performance, these are welcome signs.

Specifically, with regard to scanning, ==specifications will== be going out for review by the Bar Code Project Team. They reconciled the difficulties with the print contrast and reflectivity requirements by adopting the wording from the proposed ==ANSI Standard==; i.e., "as a minimum, the printed bar code symbols shall meet the contrast and reflectivity requirements for Band B633". This does not completely rule out the inclusion of Band B900 (infra-red).

The important points to note are the real movement by AIAG in many areas. Unofficial comments by AIAG members point to standardized codes, symbols and labels in use by the end of 1983.

Comment

Up to now we had been a bit disappointed by the lack of management support of AIAG by the major auto companies. There was even some question about the real level of interest in the goals and objectives of the group. A little of the "don't rock the boat" attitude, and possibly a lot of the PYA syndrome, were becoming evident.

Industries which have accomplished major operating changes have needed the active support of top management. Recent examples, which affected the bar code scanning industry, include the UPC Council, on which the chairmen of major supermarket chains and suppliers occupied policy-making positions; and LOGMARS, which had the full support of the Office of the Secretary of Defense, with DOD personnel assigned full time to the project. Other industries have at least had the total involvement of the related trade organizations.

The automotive industry seems to have had little of these, and was functioning because of the hard work and dedication of a small group of operating managers. We are reminded of Dr. W. Edwards Deming, the American guru of the Japanese productivity revolution, who constantly refers in his lectures to the total up-front commitment by the management of the Japanese companies. Non-interest and less than total commitment by management will doom any project, according to Deming.

The heightened interest by the higher echelons of the automobile companies, and the imminent appointment of full-time staff to be assigned by these companies, is exactly what was needed to demonstrate real commitment and to move things along. The automotive industry wants to realize the enormous benefits proposed by the AIAG, and they are starting to put their money where their mouth was.

The Detroit area may become....

....one of the most knowledgeable in bar code scanning during the next few months. Two important ==seminar== programs are scheduled:

- On April 14 the ==Automatic Data Capture and Scanning Seminar== will be held at the Hyatt Regency Dearborn. The speakers include Arthur Chester/Itek; Robert Baird/National Electrical Manufacturers Association; Lawrence Higgason/Ford Motor Company and Executive Chairman of AIAG; Jack Loeffler/ Ford Motor Company and Chairman of the Bar Coding Project Team of AIAG;

also conferences

Clair Bohren/American Motors; Edward Shadd/Symscan; and Dennis Nystrom/
Hansford Data Systems. The topics covered during the busy day will run
the full gamut of bar code applications, with particular emphasis on
what is happening in the automotive industry. The one day session costs
$150 and includes exhibits by 20 vendors of scanners and printers. Con-
tact: The Meeting Company, 186 North Water Street, Rochester, NY 14604;
800/448-1414 (in New York: 716/232-5677).

A few weeks later, at the Sheraton Southfield Hotel, Thomas Sobczak,
director of the Little People's Productivity Center, will conduct a
two-day seminar (May 4-5) on the Practical Applications of Bar Coding.
Some of the equipment companies will be there to display their products.
The program is sponsored by the Computer and Automated System Associa-
tion of the Society of Manufacturing Engineers. The fee ranges from
$295 to $405 depending on early registration and SME membership. Con-
tact SME, Box 930, Dearborn, MI 48128; 313/271-0039.

And not too far....

....from the Detroit seminars, the Material Handling Institute will be launch-
ing its major convention effort, the National Material Handling Show. This
annual event will be held at McCormick Place in Chicago on April 25-28, 1983.

We count about 20 exhibitors who will be featuring bar code applications and
equipment, and we are sure there will be many more examples at the show. Con-
tact MHI, 1326 Freeport Road, Pittsburgh, PA 15238; 412/782-1624.

Intermec continues....

....to post record sales and earnings. The company reports that the third
quarter F/Y 83 was the highest in its history:

	3 months ended 12/31		9 months ended 12/31	
	1982	1981	1982	1981
Revenues ($000)	6,024	3,322	15,159	10,819
Net Income ($000)	628	90	1,466	502
Net Income/Share	.27	.04	.64	.23

According to President David Allais, the demand for Intermec S35 printer, for
LOGMARS bar coded symbols "has been gratifying". He maintains "The S35 is the
only widely available military standard serial impact printer. It produces a
more uniform, readable and accurate bar code than the dot matrix printers sup-
plied by our competitors."

In a move that reflects the rapid growth of the company, and the very sub-
stantial increase in the demand for its stock ($37 at the end of February
1983, as quoted on NASDAQ) Intermec's Board of Directors has declared a 2 for
1 stock split. The new shares will be paid on March 8 to shareholders of
record on February 17.