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

SCANNING, CODING & AUTOMATION NEWSLETTER • 11 Middle Neck Road • Great Neck, N.Y. 11021 • (516) 487-6370

Volume VI Number 10



June 1983

Sometimes it is referred to....

...as "plastic fraud"; or described as "bandits wielding plastic." What is being alluded to is the mushrooming problem of credit card fraud. By some industry estimates, it is running as high as \$1 billion per year and growing rapidly. Visa International, which alone reported a 1982 loss of \$100 million due to fraud, is planning to issue a new "electron" card. One of its purposes is to make it more difficult for the unauthorized user.

The back of each new card will have 3 separate and independent, machine-readable codes: bar code, OCR and magnetic stripe.

The implementation plan is ambitious and is expected to take a number of years. Visa functions as an association owned by member banks, each of whom will have the option to set up its own local program. These banks issue and administer the 100 million Visa cards currently outstanding. The plan calls for the installation of card readers — using one of the 3 scanning technologies — at each merchant location. The merchants will be on-line in real-time with their member banks to verify the card and purchase, and possibly execute the necessary transfer of funds. The first cards are expected in July 1983, but Visa has not yet announced where that will be.

The bar code of choice is expected to be the UPC version D-3, 24 position symbol. This will be the first use of version D, which has been proposed for other uses in the past, but never approved by the UPC Council. Version D is an all-numeric variation of the Universal Product Code, allowing for more digits than the standard Version A. Final specifics are being worked out between Visa and the UPC Council for a test program. Visa plans to use a special colored pattern, printed behind the bar code, to prevent duplication and to improve security.

Although elimination of fraud has been a major objective in the design of this system, its benefits go well beyond. According to Thomas Honey, Senior VP Visa/USA, "This combination of technology on one payment device means that consumers can use the new card at bank automated teller machines and at any merchant who has point-of-sale terminals, electronic cash registers or UPC scanners." Honey continues, "Retailers, consumers and banks will benefit from a reduction in the cost of handling cash as well as from an increased flow of traffic. And consumers will have an easy and efficient means of making payment without going through the hassle of writing a check and/or be limited by the amount of cash they carry".

Visa has been in contact with the manufacturers of UPC scanners and expects that "For a minimum cost, most can be upgraded to read UPC version D-3 by the addition of a microchip."

Comment

This may be shaping up as the first direct competition between the 3 major machine-readable codes. It is expected that where bar code, OCR or magnetic stripe readers are already installed, the merchants will adopt that system and adapt to the Visa card. It is in those areas where no automated facilities exist that the competition will arise. The costs and efficiencies of each system should dictate the scanning methods installed. It will probably take many years before a clear picture emerges as to the preferred choices. It is not too early, however, to start designing and introducing the products that will be used in this massive potential market -- including, by the way, that inexpensive microchip that Honey expects can be readily dropped into the installed UPC scanners.

The health care industry....

....is taking a major step forward to standardize product numbering and bar code marking systems. A conference will be held in Chicago on June 28-29, with the attendees acting as an inter-industry ad hoc committee, to address these issues.

This conference was developed by a representative task force from the Health Industry Manufacturers Association (HIMA), the Health Industry Distributors Association (HIDA), the American Hospital Association (AHA) and the National Wholesale Drug Association (NWDA). Presentations will be made by representatives of supplier companies, hospitals which have installed bar code scanning systems, and hospital systems companies. A speaker, designated by the Automatic Identification Manufacturers (AIM), will present the bar code scanning industry point of view.

This marks a very significant first step to bring another major industry-group into bar code scanning. There are some who are taking a strong position to place this health care industry project under the UPC umbrella. This would permit the utilization of the existing UPC infrastructure with its numbering registry, specification supervision, and established bureaucracy. With the significant number of health care products already UPC source-marked, and the movement of drug retailing to UPC, there is a major incentive to take this route.

There are others who feel the special administrative needs and requirements of this industry will require a new design and separate administration of the bar code. It is for these reasons that the conference was called and why it represents a significant move for the health care industry. It also represents a very significant new potential market for suppliers of bar code scanning equipment and products.

Contact Debra Reynolds, American Hospital Assn., 840 North Lake Shore Drive, Chicago, IL 60611; 312/280-6137.

The hottest product....

....in the scanning industry continues to be the hand-held laser scanner. Recent introductions have included manufactured units and applications by Symbol Technolgies, Spectra Physics, Intermec, Telxon, MSI Data, and some of the POS checkout systems.

Metrologic has now announced its latest entry, designated the MS 190 Scanhandler. The unit is tagged by the company as the "first laser bar code scanner to include scanning, decoding and communications in a single unit". All of the optics and electronics are contained in the light-weight (15 oz.) hand-held device rated at 150 scans per second with real time decoding.

The Scanhandler (catchy name!) reads all popular bar codes, incorporates RS232C and 5 volt wand interfaces, and Metrologic's exclusive steel-ceramic laser tube. According to Metrologic, their laser complies with the Bureau of Radiological Health Standards for Class I lasers and is exempted from warning label requirements. The company emphasizes that it manufactures all of the components of its systems, from laser tubes to electronics.

The list price of the MS 190 is \$1,800, with quantity and OEM discounts bringing the price to under \$1,000.

Metrologic Instruments, 143 Harding Avenue, Bellmawr, NJ 08031; 609/933-0100.

The first announcement....

....that Intermec was jointly developing a hand-held laser scanner with Spectra Physics came late last year (SCAN Dec 82). Now Intermec has introduced its Model 1600 hand-held laser scanner, and Model 9500 reader to work with it.

The scanner is characterized by the company as built for industrial applications combining "superior impact tolerance with an advanced retrodirective heliumneon scanning system". The fully sealed unit provides resistance from rain, water spray, dust and oil mist, and has a scan rate of 40 scans per second. Low density bar code can be read at a distance of up to 12 inches; higher densities up to 6 inches. The unit is light weight, compact and comes with its own fixed mount for conveyor-type application.

The 9500 reader, designed to be used with the 1600 scanner, features a 100% duty cycle, 3 industrial operation modes, and user-configurable communication protocols. The Model 1600 laser scanner sells for \$1595, and the Model 9500 reader sells for \$1095; both are single quantity prices.

Intermec, 4405 Russell Road, Box C-N, Lynnwood, WA 98036-0694; 206/743-7036.

The costs of portable....

... programmable data terminals is coming down — at least at MSI Data. The company introduced its $\underline{\text{MSI/80}}$, which is small (6" x 3.5" and weighs under a pound), battery powered, completely self-contained, and priced at \$400-\$850 depending on configuration and quantity. Memory sizes are from 4,000 to 8,000 bytes for data storage (8,000-16,000 digits).

By changing the Custom Application Module (CAM) within the MSI/80, it is possible to switch from one data collection routine to another. The data entry prompts, that appear in the terminal's 16-character liquid crystal display, specify bits of information for the operator to enter through the 33-key alphanumeric keyboard or bar code scanning wand.

Paul Tucker, VP Marketing, states "the MSI/80 has been designed for such uses as sales order entry, field service reporting, electronic ordering, and payroll reporting. It will be an important part of any data collection system that provides maximum productivity at the lowest possible costs".

Tucker also described the specifics of the new MSI portable laser scanner announced last month (SCAN May 83). It will employ a universal bar code algorithm to enable the device to identify and read UPC/EAN, 3/9 and interleaved 2/5 bar codes. The MSI scanner operates at a rate of 40 scans per second and is being manufactured for the company by Spectra Physics (as is Intermec's hand-held unit -- see above). MSI has priced the laser scanner from \$1500 to \$4000 depending on scanner/terminal configuration and quantities.

MSI Data, 340 Fischer Avenue, Costa Mesa, CA 92626; 714/549-6000.

A new family....

Allyn. In keeping with many of the newer decoders coming on the market, the unit has the capability to scan a multiplicity of bar code symbols (the company lists 10 symbologies).

What makes the HBD-E2 decoder different, according to Chett Benoit, is that the operator can "reconfigure programs in seconds by simply scanning the bar code menu". There are no external hardware switches and, it is claimed, these decoders are virtually tamper-proof. There are 3 models with display terminal and keyboard options. Verifiers and comparators are optional. Prices range from \$875 for the basic decoder; \$1345 for the decoder plus LED display; to \$1625 for the miniterminal with keyboard included.

Welch Allyn, Industrial Products Division, Skaneateles Falls, NY 13153-0187; 315/685-8351.

A new "Management Report System"....

....has been introduced by <u>Marsh Stencil Machine Company</u> for container coding, and designed to monitor, control and print out real-time data for material handling.

The LCP-1000 ink jet coder, according to the company, is the key to a simple system with hard copy printer, controlled by software for specific interval reports. Line managers can now print scannable codes, monitor and control goods at both receiving and shipping locations. Their new 16 dot head prints bar codes and logos $1\frac{1}{4}$ " (30 mm) high, directly on the container, completely eliminating labels and preprinted cartons.

Marsh Stencil, Belleville, IL 62222; 618/234-1122.

Not everyone finds....

....the "going public" route to be the best way to raise new capital to finance growth -- even in an industry as hot as bar code scanning and in a financial market as upbeat as the current one.

Computer Identics is just completing a \$3 million private placement to take care of its needs for the immediate future. The company's last financing was in late 1980 (SCAN Oct 80). David Collins, president, does not rule out the possibility that Computer Identics will one day be a public company, but does not think this is the right time.

The company is now settled in its new 60,000 sq. ft. facility in Canton, MA, and is quite optimistic about current and future business. There are some significant new programs under way, but the specifics are not available for publication. We hope to have the details soon.

Because of the closing....

....of its foreign subsidiaries in the UK and Germany, Photographic Sciences' latest quarterly financials reflect some operating changes. For the third quarter ended March 31, 1983:

- Sales were \$959,000, down from \$1,107,000 a year ago.
- There was an operating profit of \$51,000 compared to last year's loss of \$372,000.
- One-time charges, resulting from closing the German operation and equipment reevaluation, amounted to \$525,000. This is reflected in a reported overall net loss of \$474,000 for the quarter.
- There was an improvement in the deficit working capital that now stands at \$1.7 million.

Although no statements or predictions have been made, the net operating profit is one of the first glimmers of good news coming out of the Webster, NY, company in a long while.

Scope reported....

....a disappointing first quarter (ended March 31, 1983) with sales down 25%, compared to a year ago, and a loss of \$179,000. But the company indicated that bar code scanning orders have been encouraging. There has been good acceptance of the Scopescan 8200, being purchased for a variety of applications in manufacturing control and distribution, and a new bar code scanner, the Scopescan 8600, was recently introduced.

Scope

	3 Months Ended March 31	
	1983	1982
Revenues (\$000)	\$1998	\$2647
Net (Loss) (\$000)	(179)	(390)
Net (Loss) per share	(.15)	(.32)

The company expects improved results in the second quarter, and a return to profitability in the second half of 1983.

AIM has some very significant plans in the works....

....for growth and expanded activities. The <u>Automatic Identification Manufacturers</u> has grown to 30 companies directly involved in the supply of equipment and products for bar code scanning. The potential exists to probably double that number.

At the present time, AIM is a product section of the Material Handling Institute. It is probably the largest such section under the MHI umbrella. Current plans under consideration include incorporation as a separate organization, still affiliated with MHI, but giving AIM more independence of movement and decision. There is no intent to lose the close relationship and administrative backup of the MHI organization which has been associated with AIM from its inception.

One other very significant program, which is in its early stages of development, is the publication of a technical journal. There are now requests for proposal out to a number of publishers to see whether outside help can be enlisted. Such a publication would provide an excellent forum for many of the articles that are now being published in the specialized journals of other industries and technologies. The format of this journal is under discussion, i.e., should it have advertising; should it be controlled or paid circulation, who will review submitted articles?

We heartily endorse both of these activities and encourage the strongest possible trade organization and technological environment to support the rapid growth of the bar code scanning industry.

Just a quick reminder

....that Scan Tech 83 is scheduled for September 25-28 in San Diego. With hardly any advertising or promotion, half the booths have been taken. There are about 50 spots still available — and we count about 150-200 potential exhibitors in the industry. Our advice: get your reservation in now. Next month we will be telling you more about the final arrangements for the show, including the complete speaker program, entry fees, hotel arrangements, and registration logistics. We may also give you some hints as to where Scan Tech 84 will be held and some of the innovations planned. Automatic Identification Manufacturers, 1326 Freeport Road, Pittsburgh, PA 15238; 412/782-1624.

A new publication....

also

....specifically written for converters of pressure-sensitive labels, and presented as a primer on machine-readable technology, has been released by Fasson. The intention of the report "is to provide roll label converters with basic understanding and overview of the symbology market".

The Code Book, written by Theresa Gaglione, briefly describes a long list of symbologies (including OCR-A) with their architecture and applications. As a reference piece for a newcomer to the printing of machine-readable codes, this booklet can be helpful. Fasson Roll Materials Division, 250 Chester Street, Painesville, OH 44077; 216/352-4444.

SCANNING, CODING & AUTOMATION NEWSLETTER. 11 Middle Neck Road • Great Neck, N. Y. 11021 • 516/487-6370 Published monthly. PUBLISHER/EDITOR: George Goldberg; CIRCULATION DIRECTOR: Teddy Allen. Reproduction without written permission is completely forbidden.