



newsletter

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

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No one can accuse....

....John Blackert, President of Photographic Sciences, of being timid or moving slowly with his company. Photographic Sciences raised approximately \$2.4 million on its initial public offering in June 1981. This new public company has just announced its first acquisition.

Blackert announced that agreement has been reached for PSC to acquire the common stock of Tapecon, a public company (452 shareholders) which produces pressure-sensitive labels and decals, and markets label application equipment. The company also fabricates and laminates mylars, foils and other materials. Tapecon's sales in 1980 were approximately \$5 million. Results for the six months ended June 30, 1981 showed sales of \$3.3 million and a net profit of \$115,000.

The total purchase price is approximately \$3 million and involves a fairly complicated arrangement of cash, paper, and certain assets which are to be bought back by the original owners. Tapecon is a regional company with sales concentrated in the upstate New York area including Rochester, Syracuse and Buffalo. For the short term the marketing efforts and staffs of the two companies will remain separate, with integration a possibility later on.

According to Blackert this is one of several developments being undertaken to place the company in a position to more aggressively compete in the growing symbology systems marketplace throughout the world. Blackert states that he is looking at other possible acquisitions with a goal to enhance and expand his company's capabilities related to symbology.

In a surprising move....

....Shelley Harrison has resigned as Chairman and Chief Executive Officer of Symbol Technologies to "pursue other business interests." Jerome Swartz, President, has assumed the additional post of CEO; Matthew Tutino, a director of the company, was elected Chairman of the Board. Tutino is Chairman and President of Whiteman Enterprises, and formerly V.P. of Allen & Company and Executive V.P. of the Export/Import Bank of the U.S.

Harrison and Swartz, in personal interviews, are very circumspect about the reasons for Harrison's resignation from the company. They were the co-founders of Symbol Technologies and have worked closely together for the past eight years. Harrison stated "I intend to follow my entrepreneurial bent and put

together other high technology opportunities. The new opportunities could take the form of consulting work or a start-up business."

There were local newspaper reports that the resignation was triggered by disagreements over the strategy and direction of the company. Swartz states he does not see any immediate change in direction, and is very optimistic about the future growth of the company in this industry.

Symbol Technologies announced sales for the 9 months ended May 31, 1981 of \$2,464,000, up 46% from \$1,688,000 last year. Net income for this 9 month period was \$169,000 or \$.06/share as compared with a loss of \$118,000 last year. The increase in profitability is attributed to a sharp increase in the net interest income the company has been accumulating on the proceeds from its recent public offering.

Symbol Tech also announced the completion of a bank financing agreement for funds necessary to construct a new 40,000 square foot manufacturing and headquarters facility in Hauppauge, NY.

There are three sets....

....of standards and specifications in work related to bar coding of shipping containers. Each is coming from a different source, and all are expected to mature at about the same time.

The ANSI Subcommittee on coding and labeling of transport packages and unit loads has completed its initial work and has distributed the draft for comment to members of the parent MH 10 Committee. So far the comments seem to be positive. The expectation is that the draft will be submitted to the ANSI parent organization sometime in September, looking to a published specification early in 1982.

LOGMARS, the Department of Defense Study Group, has completed its work on the application of machine readable symbols for the automation of materiel handling, and goes out of business on September 1, 1981. Each service then takes over its own implementation responsibility. Early indications are that they are moving ahead at varying speeds, and with different plans. The most aggressive of the services seems to be the Air Force which is planning to initiate vendor source-marking on January 1, 1982. Their plan is to have cartons marked on as broad a basis as possible and then to install scanners at appropriate wholesale/receiving locations. The Army will proceed a little more cautiously, and label their own cartons with bar codes as needed, and set up trial operations. As presently planned, the code will consist of a 13-digit national stock number which will appear on each unit pack; that stock number, plus a contract number, will appear on the outer containers. In addition, each facility can add any additional code required for its internal use. Symbols will be presented in the 3 of 9 bar code format with OCR-A "in the clear." Documentation and new and revised military specifications are expected to be available by the spring of 1982.

The third specification effort is by the Uniform Product Code Council which is expected to issue its manual for UPC case coding by year-end or soon after. A draft of the specification will be circulated to STAC members shortly. A final decision has not yet been made as to the length of the code -- in spite of previous reports that the UPCC Board of Governors had decided on 14 digits

(SCAN Jul 81). Of all of the standards, this one will probably have the most immediate impact and will be closely watched by many other industries. As the only industry with solid scanning experience, supermarkets are the most logical testing ground for shipping container symbology.

The major signs....

....of a maturing industry include: an active, aggressive trade organization; industry standards and specifications; and substantive technical articles published in technical journals and presented at symposiums. This last item involves the exchange of ideas among research, development, and application scientists and engineers, and is important to the growth of any new technology. There was some of this a few years ago in Code and Symbol, published by the Distribution Codes organization (DCI). It has largely disappeared since that publication went out of business about five years ago.

We were therefore pleased to read a paper accepted for presentation to the International Society for Optical Engineering at their 25th Annual International Technical Symposium. Titled "Depth Of Modulation and Spot Size Selection in Bar Code Laser Scanners", it was prepared by Eric Barkan and Jerome Swartz of Symbol Technologies. We quote from portions of the abstract and introduction:

"Many optical and electronic considerations enter into the selection of optical spot size in flying spot laser scanners of the type used in modern industrial and commercial environments. These include: the scale of the symbols to be read, optical background noise present in the symbol substrate, and factors relating to the characteristics of the signal processor.

Laser scanner system performance is being challenged by increased demands in the rapidly growing bar code scanning industry. In this paper we present a unified transfer function approach to the design of laser scanner acquisition hardware. The effects of printing errors and various substrate materials are also briefly discussed."

To obtain a copy of this paper contact Jerome Swartz, President and CEO, Symbol Technologies, Inc., 90 Plant Avenue, Hauppauge, NY 11787; 516/231-5252.

One of this industry's....

....most successful companies is Quality Micro Systems. QMS calls itself, "an industry leader in computer printed labeling and bar coding systems." The company produces an intelligent printer controller that transforms the Printronix Printer/Plotter into a labeling and bar coding system.

QMS, in its fourth year of operation, has had dramatic growth, and anticipates even greater expansion. Sales for 1980 were \$2 million; 1981 revenue projections are \$5 million; and for 1982 they are forecasting \$10-12 million. Of the 3,019 Controllers sold in 1981, 70% will be used to produce bar codes. (All figures are for fiscal years ending September.)

Starting October 1981, QMS and Printronix will be conducting training seminars throughout the U.S. These seminars are directed toward bar code users. Jack Myers, National Sales Manager of QMS, responded to our complaint in last

month's issue about some suppliers treating bar codes as if they were a disease. Myers thinks "the bar code industry is alive and well." His company is a good example of that health. QMS; Box 81250, Mobile, AL 36689; 205/343-2767.

Xerox is featuring....

....the bar code printing capability of their electronic printing systems, the 9700 and 5700 products. The Xerox systems look upon bar codes "as a series of dots" which can be printed anywhere in any format. Several of their customers, such as service bureaus, drug chains and grocery chains, are using this capability to produce labels and order blanks. Thrifty Drug and Von's Grocery have Xerox systems they are using to generate shelf labels and price books, all with scannable bar codes.

The 5700 has a rated print speed of up to 43 pages per minute with a resolution of 300 x 300 dots per inch, and costs \$57,300 plus options. The faster (120 pages per minute) and more versatile 9700 costs \$290,000 plus options. Xerox Corporation, Printing Systems Division, 880 Apollo Street, El Segundo, CA 90245; 213/615-6139; contact: Steve Myles.

A new low-cost stand-alone....

....bar code imprinting system has been announced by Varimark. The system is reported by the company to be capable of printing all of the popular bar code formats, including UPC, 3 of 9, interleaved 2 of 5, Codabar and others. Jumbo numbers and incrementing and decrementing serialization are available on all models, and include mixed sizes on each label and reverse copy. Label formats are stored on PROMS and the system includes ASCII keyboard for data entry. Off-line or on-line data entry can be selected with RS-232 interface.

Prices vary, depending on model selected, from \$4,350 to \$13,150 for quantity of one, with substantial discounts available for larger quantities, distributors and dealers. Varimark Systems Corp., 990 Marshallton Thorndale Road, West Chester, PA 19380; 215/873-0151; contact: Ron Malkan.

The list of additional benefits....

....derived from the UPC source-marked products, continues to grow. Market research, coupons, proof-of-purchase, in-store operations control, are all benefits that could be reasonably foreseen when the program was first developed.

The exciting part is to watch for the innovative applications. Recently, a U.S. patent was granted for what the inventors call a "reverse vending machine." Deposit your empty beverage containers -- glass and plastic bottles or cans -- and the machine will:

1. Read the UPC code.
2. Issue a receipt to a customer.
3. Generate a computer reimbursement report for the beverage companies.
4. Sort the glass bottles, crush the cans and shred the plastic bottles.

The unit can be set up outside the supermarket and can simplify everyone's life involved in handling returns. The three inventors are Fremont Thompson (former V.P. Borman's Supermarket); L. P. Vogel (supermarket engineer); and E. Wagner (President, Target International, a coin machine company).

Chalk up one more, made possible by the UPC bar code.

We had previously described....

....the activities of Information Resources and their Behaviorscan testing program (SCAN Nov 79). The company purchased and installed front-end scanning systems for all of the supermarkets in selected cities, in exchange for the accurate recording and submission of all checkout data. In each city, Information Resources established consumer panels of about 2,000 families whose purchases are identified and recorded as they check out of the markets. Another special feature of this program is a "split-cable" system. Sections of the consumer panels are fed separate TV commercials over cable networks, and their subsequent purchases are recorded and analyzed.

The two-year old company, which had been operating their systems in Marion, IN, and Pittsfield, MA, recently announced the opening of two more markets in Eau Claire, WI, and Midland, TX. Of particular interest is the company's latest expansion into drugstores. There are sufficient UPC source-marked items in these outlets to enable the company to supply front-end scanning equipment to drug chains and to record the purchases by their panelists. This is another positive indicator of the feasibility of the extension of the UPC system to the drug chains. As the supermarkets broaden their lines of merchandise to include more and more non-food items, the advantages of UPC source-marked products can be realized by different types of retail outlets. Drugstores are a natural.

There is a great deal of movement....

...in the meat and poultry industry to arrive at a code and symbol for the marking of outer cases of fresh and frozen random-weight products. The use of scanning and bar code labeling has long been advocated. Tracking of cases of random-weight meat products from the packer through distribution and retailing is under very active study by many of the industry's trade groups and leading companies.

In the August 1981 issue of Supermarket Business, Richard Shulman, Technology Editor, presents a fully detailed application report of a system installed by Western Grocers in Denver and based on scannable bar codes. Called OMNI 1 System, it includes all meat activities: warehousing, buying and retail support. Each box is identified at the time it arrives in the warehouse with a label preprinted with a bar coded serial number. All other information relating to that case is then key entered into the central computer system, always tied back to the same bar coded serial number. From that point on, any time the label is scanned, information as to its source, date, weight, etc., are immediately available.

The system has reduced cost of operations and shrinkage, and is readily adaptable to case code source-marking when that system develops.

The Uniform Communication System....

....is now in draft form and out for comment by industry. UCS is the proposed system that will permit the computers of the supermarkets and their suppliers to talk to one another, placing orders, issuing invoices and making payments. It is based to a great extent on the UPC code (SCAN Nov 80).

The goal is to make the system available to large supermarket chains as well as mom and pop stores, and to increase productivity in all of them. The UCS principle has been tried in other industries, including banking, insurance and airline ticketing with limited success. The supermarket industry, however, has functioned under a common set of standards (UPC) and is therefore considered much more adaptable to a system such as UCS. The program timetable seems to be right on schedule with test implementation scheduled for early next year.

We received our ZIP+4....

....notification from the U.S. Postal Service along with 15 million other businesses. We are now 11021-2393, but the USPS is careful to note that it is strictly "voluntary."

Congress is not supporting this move and although the USPS is preparing its customers for the new system, it has been restricted for two years from final implementation. An obscure passage in the Reagan tax bill prohibits implementation prior to October 1, 1983 but allows preparation. It also prohibits any government agency from making any changes to ZIP+4 before December 31, 1982. Congress is monitoring this aggressively and has instructed the GAO to investigate the program.

Meanwhile, as a matter of general interest, but not connected to scanning, the USPS is instituting electronic mail and has awarded a \$31 million contract to RCA Government Communications Systems. Called E-Com, it will offer mailers high speed (?) delivery within two business days at the rate of about \$.26 per page. Testing is to be during the months of November and December with the system to go operational by January 1982 at 25 E-Com post offices.

The combined efforts....

....of the London Branch of the Institute of Packaging and the British Fibre-board Packaging Association have resulted in a scheduled seminar on "Article Numbering In Transit Packaging and Distribution." The goal of the conference is to provide members of the association with up-to-date information on the use of bar codes for transport cases. Speakers include representatives from every related industry and technology. The conference is intended to make attendees aware of the latest developments so they can anticipate the requirements this will place on their packaging and distribution plans and program.

The all day session is scheduled for November 3, 1981 at the London Tara Hotel. For further information: Institute of Packaging, Fountain House, 1a Elm Park, Stanmore, Middlesex, HA7 4BZ England.