



# newsletter

Ltd.

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 XII Number 2

October 1988

## In retrospect, it may turn out....

....that the turmoil that took place during September, among three of the four top companies in this industry, was long overdue. During the past three years, the company that was at the center of this current storm had turned itself around from a loss operation, with disappointing sales, into a dynamic performer. During its most recent fiscal year, its revenues had increased almost 30%; earnings were up 268%; new products were emerging from a rejuvenated R&D effort; a strong marketing/distribution network was in place; and an aggressive management team was out seeking new growth opportunities.

The only fly in the ointment was its depressed stock price. This was probably more a reflection of the institutional investors' caution about the short-term outlook for the entire industry than it was about this company's intrinsic value -- and it was to have a bearing on what transpired.

With good prospects for probable future growth, a per share book value of over \$9.50, and a stock that could be bought in early September for as low as \$10.50 (it was quoted as high as \$19 earlier this year), all the pieces were in place. MSI Data was a plum, ripe for the picking.

On Monday, September 12, Telxon made the first overt move with a formal tender offer to purchase all of MSI's outstanding stock (5.2 million shares) at \$17 per share -- totalling approximately \$90 million. MSI immediately urged its shareholders not to tender their shares while the Board of Directors studied the offer -- a decision was promised in about 10 days.

The following week, MSI's Board rebuffed Telxon's bid as inadequate and on September 27 indicated that it was negotiating with "an unidentified third party." Telxon immediately raised its bid to \$20 to see if it could smoke out the newcomer.

The third party, as we know now, turned out to be Symbol Technologies. On September 29, MSI and Symbol jointly announced that the two companies had agreed to merge. Symbol would acquire MSI for \$23 per share. MSI had found its friendly "white knight."

[As we go to press, that's as far as the scenario has developed. Although MSI has agreed to a friendly takeover by Symbol, this move does not preclude Telxon from coming back into the fray with a higher bid to the



ISSN 0273-3080

INCLUDING THE INTERNATIONAL EDITION

stockholders -- despite the opposition of MSI's Directors. Symbol's offer has an official expiration date of November 2 -- unless extended.]

Some background on the players:

The Target:

MSI Data (Costa Mesa, CA), which was founded in 1967 by William Bowers and two partners (who have since left the company), pioneered the concept of portable data collection. Bowers, now Chairman of the Board, likes to recall, with pride, the company's first primitive "portable" unit which was designed to take inventory in a retail store. The device was mounted on a pushcart and consisted of a modified adding machine for data input, a cassette recorder for storage, and a modem with a heavy acoustic coupler -- all powered by an automobile battery. But the concept was sound, and, as the technology rapidly improved, the company grew worldwide. Charles Strauch was brought in as President/CEO in 1984 when the company's forward progress was stalled (SCAN Dec 85, Dec 87). For its last fiscal year (ended March, 1988) revenues were \$92 million and net income was \$4.9 million (\$.94 per share).

The Pursuer:

Starting in the early 1970's, Telxon (Akron, OH) took the MSI concept, which it calls portable tele-transaction computers (PTCs), and really ran with it. When MSI faltered in 1982-84, Telxon forged ahead in many markets and applications, especially in the retail area. Its aggressive management group is led by President/CEO Ray Meyo, who joined the company in 1978 and became President in 1981 and CEO in 1985. Telxon is now the world's largest manufacturer of portable data collection computers, with fiscal year 1988 (ended March, 1988) revenues at \$123.9 million and earnings of \$14.0 million (\$1.05 per share).

The White Knight:

Symbol Technologies (Bohemia, NY) was built on the single-minded belief in the potential for hand-held laser scanners -- and they were right. Bolstered by patents, state-of-the-art production facilities, and strong financial support, the company now controls about 90% of the market for laser guns. Chairman/CEO Jerome Swartz was a company founder in the early 1970's. President and Chief Operating Officer, Ray Martino, joined the company just as it started its explosive growth five years ago. At the end of its June 30, 1988 fiscal year, the company's sales, which had doubled in each of the past three years, stood at \$89.0 million -- with net earnings of \$20.2 million (\$1.07 per share). Financial analysts who follow the stock expect this year's revenues to reach about \$125 million.

Certainly Telxon's interest in MSI makes a great deal of sense: A merger of the two largest companies in portable data collection devices has the potential for significant cost savings in management and operations; their strengths in a number of industries and worldwide markets complement each other; and their combined sales, which would represent almost 60% of the estimated worldwide market for portable computers, would dominate that industry segment.

But Telxon and MSI are competitors, and not very friendly ones at that. They not only compete head-to-head in the marketplace, but they are also busy suing each other in the courts. MSI accuses Telxon of violating its patent; Telxon claims MSI stole confidential information through a former employee. Both suits have been dragging on for over three years and the legal costs, which are

already substantial, promise to increase as the trial dates approach.

On two separate occasions -- in February, 1986 and again in December, 1987 -- MSI and Telxon top executives met to discuss a possible settlement of these lawsuits. At both meetings, Telxon proposed that MSI consider the merger of the two companies. MSI declined these suggestions. The last such conversation took place just a few weeks ago, on September 8, 1988, when Telxon's President Meyo met with MSI's President Strauch in New York. At this meeting, Meyo made a specific offer of \$17 per share for a "friendly" negotiated merger of the two companies. Strauch again refused. A few days later Telxon went over the head of MSI's Board, and took its bid of \$17 per share directly to the stockholders.

There may have been a great deal of logic on the side of a Telxon-MSI merger, and chances are that a negotiated settlement between them could have been at least as good for MSI's shareholders as the one finalized with Symbol Technologies. But mergers between competitors are often the most difficult to bring off. This is particularly true when the management of the company to be acquired has taken some lumps from the proposed buyer in the marketplace, and where they have been trading strong words in and out of the courts.

[How's this for an example: On October 3, in the midst of all of these merger negotiations, and just as we go to press, MSI sent a letter to Telxon offering to settle their two lawsuits, "in the best interests" of both companies; if Telxon were to make "an immediate cash payment of \$20 million." That's *Chutzpah!*]

As for the MSI-Symbol Technologies combination, the possible synergism is not yet clear. It provides Symbol -- essentially a component supplier of one type of product -- with the opportunity to expand into much broader applications involving systems sales. Many of Symbol's customers, who purchase scanners for front-end automation, are ultimately in the market for systems based on MSI-type portable computers. The portable data collection technology, which has been successfully introduced into the retail, distribution, warehousing and transportation industries, will be entering significant additional markets in manufacturing, health care and other service industries which a combined Symbol and MSI may be able to profitably pursue.

What cannot be determined as yet is whether the companies will be able to sell more products and earn more money as a single entity, when compared to their performances as individual organizations. Since neither firm is prepared to comment on whether there will be any merging of management, marketing or manufacturing staffs or facilities, it becomes virtually impossible to accurately estimate the potential savings that will result from the marriage. It will take a while to sort things out.

There are indications that Symbol Technologies may have been positioning itself to make an offer for MSI even before the Telxon move. Symbol, which has made no secret of its desire to seek acquisitions, has accumulated \$60 million in cash, plus strong investment banking backup, to make new deals. At the time Symbol and MSI announced their merger, Symbol already owned 234,000 or 4.5% of MSI's outstanding stock. It is doubtful that that stock purchase was made for investment purposes only.

One of the surprises in all of this -- to us, anyway -- is that there has not been a bidder for MSI from outside the automatic identification industry. MSI, which claims to have the largest installed base of portable data collection

terminals (650,000 units worldwide), currently ships over 60% of its computers with bar code scanners. Almost half of the company's revenues come from outside the US, and MSI has established the strongest European marketing, sales, and service operation of any US company in the industry. MSI, it would seem, could have provided an excellent entry point for one of the larger computer companies to gain a foothold in the portable computer/auto ID business.

#### We recently followed up....

....on the four bar code-related patents which were issued to Jerome Lemelson and assigned to Refac Technology Development Corp. as exclusive licensor (SCAN Aug 87, Oct 87). Last year Refac sent out letters notifying many bar coding companies that their products "infringe the claims of one or more of the .... patents." These companies were invited to enter into licensing agreements under the Lemelson patents, which had been issued between 1970-75.

[The four patent titles and their coverages are: (1) "Light Projecting and Sensing Device and Target Practice Apparatus," which covers apparatus for bouncing light off a reflective surface and detecting the reflected light in order to generate a signal, such as in a bar code scanner; (2) "Coding and Routing Apparatus and Method," which covers the use of a code, such as a bar code, in conjunction with a type of warehousing and distribution system; (3) "Code Scanning Apparatus" and (4) "Scanning System and Method," both of which cover the reading of bar code legends.]

In September, 1987, the Automatic Identification Manufacturers (AIM) asked its patent attorney, Tom Wettach, to study the patents and their potential impact on the industry. At the same time, a number of companies that produce bar code scanning equipment decided to jointly sponsor a research project -- under Wettach's supervision -- to uncover the "prior art" which could be used to refute the Lemelson patents. David Collins and his firm, Data Capture Institute, were retained to search for the earliest available hard evidence of the commercial use of bar code scanning. The assignment included research into products, systems, promotional literature and published articles.

In a recent interview with *SCAN*, Wettach was optimistic about the results of his research. "Information is the key to prior art," he explained, "and the industry mobilized to share information rather than panic at the possibility of a patent suit." Based on the information now available to him, Wettach concluded: "There is no exposure or liability."

He has not recommended, however, that any companies move to challenge the patents in the courts. His strategy is to wait for Refac to make the next move. If Refac does sue, as threatened, Wettach expects that a strong defense can be sustained. Understandably, he would not furnish any additional details as to the nature of that defense.

As expected, the picture painted by Phil Sperber, VP of Refac, is quite different. Sperber told *SCAN*: "Licensing agreements have already been signed with some companies and we are in negotiations with others who are about to sign" (which, according to Sperber, are in addition to the IBM and Hewlett-Packard licenses which Lemelson had negotiated a number of years ago before assigning the patents to Refac). He added, "We are also about to start suit against a number of companies."

Sperber would not elaborate. He refused to name the firms who have signed agreements or who are in active negotiations. Nor would he divulge any details about those he is about to sue. He promised that all of this information about the licenses and lawsuits would be available "by the end of October."

Patent disputes of this type can drag on for years. Although you might assume that the facts should be readily apparent (is there prior art or isn't there?), we're entering the complex, arcane world of patent law where the facts aren't always what they appear to be. In any case, the next move is up to Refac.

#### We were all set....

...last month to report a settlement of the patent suit by Ilhan Bilgutay against the Uniform Code Council (UCC). But we decided to hold off because Bilgutay decided, at the last minute, that he didn't like the settlement he had already signed, and he wanted to reopen negotiations. His ploy didn't work; the situation has now cleared up; and the lawsuit has been disposed of.

This case began more than three years ago. In August, 1985, scanning equipment manufacturers and film master suppliers opened their mail to discover that an 11-year-old patent was the basis for a class action lawsuit against everyone using the UPC symbol (SCAN Sep 85, March 86, Feb 87). The legal action had even been stretched to include provisions based on the US Racketeer Influenced and Corrupt Organization Act (the so-called "RICO" statute).

By early 1987, the RICO nonsense had been dropped and the defendants had been narrowed down to just the UCC, IBM and NCR. Meanwhile, Bilgutay's attorney was sounding off to the press about "collusion" and "clear violation of the patent". (There was one memorable remark: "Equity will not come to the relief of wrongdoers; the Court's decision is a death penalty for infringers.")

Initially, the UCC stuck by its policy of neither acknowledging the validity of such claims nor negotiating with the plaintiffs. However, with IBM and NCR also involved in this case, it was considered best to dispose of the lawsuit as expeditiously as possible. An agreement seemed to have been reached months ago, but the deal fell out of bed when Bilgutay balked before it was finalized.

Finally, on September 15, we learned that Bilgutay had exhausted of his all legal appeals and that the final papers had been filed with the Courts. [As is usual in settlements of this type, the terms are to remain confidential.]

The final word we received from the UCC attorney, Steve Brown, was quite specific: "No one in the industry need fear a lawsuit from Mr. Bilgutay resulting from the use of the UPC symbol."

#### The timing was almost perfect....

...for a major introduction of automatic identification into the Soviet Union. SCAN-Moscow, the two-day conference and exposition held on September 20-21, came at a time when the Soviet economy is opening up to new ideas and when the country's needs for operating efficiencies are gaining widespread recognition.

This first-time event was co-sponsored by AIM Europe and the USSR Chamber of Commerce and Industry. The venue was a modern hotel/conference center with excellent facilities for the seminars and exhibitors. Simultaneous Russian-English translations were provided for the 250 delegates who attended the seminars each day. There was plenty of time available for the vendors to answer questions and explore opportunities with those delegates and also with the additional visitors to the exhibit floor.

There were a total of 22 exhibitors from 11 countries: West Germany(5), UK(4), Hungary(4), Netherlands(2) and 1 each from Sweden, Italy, Switzerland, Yugoslavia, Belgium, Finland and Austria. Many of these exhibiting companies were European distributors who displayed equipment and supplies from manufacturing sources in the US, Japan and Europe. Five American-based manufacturers -- Avery/Soabar, Computype, Intermec, Symbol Technologies and Welch Allyn -- had booths manned by personnel from their European marketing offices.

We questioned a number of visitors and exhibitors in an attempt to assess the value of the exposition and the market potential in the USSR:

- There was almost uniform agreement among the suppliers that the Soviet engineers and managers in attendance were surprisingly knowledgeable about the basic technology of bar code scanning. Most vendors had thought they would have to concentrate their presentations on the methodology and advantages of scanning -- as had been done in the early US and European SCAN-TECH shows. They soon found that the visitors had progressed beyond that point and that they wanted specific information about applications and the available hardware, software and supplies.
- It also became apparent that current opportunities for auto ID procurements would probably originate within individual operating factories and organizations. This market approach is in contrast to the US and Western European experiences, where industry-wide standards and specifications provided the leverage for systems installations: e.g. UPC/EAN for retail; AIAG/ODETTE for automotive; HIBCC for health industry; LOGMARS for US government operations. At the moment, the Soviets are seeking in-house, closed-loop systems to satisfy their need for improved efficiencies on a local level. The potential danger of this approach is that these separate fragmented operations may not lend themselves to subsequent integration into broader-based industry systems. [The surprising element here is that many of us from the West would have expected exactly the opposite in a controlled economy with state-owned facilities.]
- One question, which was not easily answered, was the level at which decisions would be made to acquire and install systems. A Westerner might anticipate that there would be fewer decision-makers in the structured bureaucracy of a state-owned economy than in a capitalist country, but that was not readily apparent. Many Soviet visitors seemed ready to talk specifics and spoke as if they could make the necessary purchase decisions when needed.
- The shadow hanging over all the discussions was the Soviet's lack of foreign currency with which to purchase foreign-made equipment and supplies. The USSR is just not exporting enough goods to the West to build any trade balances. Vendors were looking at all types of approaches to deal with this imbalance -- including barter, joint

ventures, licensing, consortiums or possibly trading through Finland (which buys oil from the Soviet Union).

As a result of arrangements made by Ian Smith, General Secretary of AIM Europe, we were fortunate to be able to meet with Viatcheslav I. Teleguin, Head of Department, USSR Chamber of Commerce and Industry. Teleguin had been the driving force behind scheduling SCAN-Moscow this year. In January, 1988, Ian Smith and Paul Berge, President of AIM Europe, attended a planning meeting in Moscow with Teleguin to discuss the possibilities for a SCAN-Moscow in 1989. But Teleguin couldn't wait that long to introduce this technology into his country. He convinced the AIM Europe Board of Directors to push the date forward to September of this year.

An urbane and knowledgeable businessman, who has often visited the West, Teleguin answered our questions in a wide-ranging one-hour interview.

[Although Teleguin spoke English fluently, he insisted on an interpreter, because, he said: "I have been previously misquoted in the American press when I conducted interviews in English." In an ironic twist, which gives rise to optimism that *perestroika* is for real, Teleguin chose Mark Krichever to serve as his interpreter. Krichever is a physicist who works for Symbol Technologies in Bohemia, New York as manager of their optics department. He was at SCAN-Moscow as part of the Symbol team that managed their exhibit booth. Thirteen years ago, Krichever left the Soviet Union as a Jewish "refusenik." Up until just recently, his opportunity to return to the Soviet Union -- much less to be singled out as the interpreter for a top Soviet official -- would have been nil.]

Teleguin strongly maintained that we should not conclude that automatic identification is a totally new technology in the Soviet Union. He described OCR applications in the postal system; RF in the medical and hospital services; some bar codes in retail, warehouse and distribution installations. The purpose of SCAN-Moscow, he felt, was to broaden the base of information and to expose many more engineers, researchers and ministers to the technologies. He views automatic identification as a progressive system that will result in operating economies in Soviet industry.

Teleguin does not expect EAN retail automation to come soon. He recognizes that 80% of the packaged goods must be source-marked before significant efficiencies can be realized at the store level. With the economic reform currently underway in his country, he anticipates that manufacturing installations will lead the way as the operations managers become more and more aware of the benefits of bar code scanning.

Teleguin did not directly answer the question about the shortage of "hard" currency with which to purchase foreign goods. Instead, he said that he envisions joint ventures, consortiums and licensing arrangements with European, Japanese and American companies. He cites similar arrangements that have been made in other industries, one of the most recent being in advertising [of all things!] -- involving a joint venture with the giant US ad agency Young & Rubicam. "We are open for proposals," Teleguin asserted, "although it is too early to define the specific nature of these arrangements." (In this regard, he also felt that it may be too soon to consider the formation of an AIM/Comecon trade organization.)

In conclusion, Teleguin agreed with Ian Smith that the next SCAN-Moscow should be held in 1990.

COMMENT

*This industry cannot ignore a country of 285 million people which is striving to improve its efficiency and which recognizes the potential economies afforded by automatic identification. But keyless data entry is dependent upon a broad-based universe of installed computers. That does not yet exist in the Soviet Union and, with the enormous problems faced by their economy, it is still many years away. It may be too much to expect a sudden leap from the abacus (which is still used in many shops, even in Moscow and Leningrad) to bar code scanning.*

*Having said that, however, for those vendors who expect to be around 5 to 10 years from now, it is not too early to start making plans, laying the groundwork and establishing contacts in the USSR. As Viatcheslav Teleguin told us: "The Soviet Union represents a huge market."*

*It may turn out that Moscow will be even more interesting in 1990.*

A few highlights ....

...from the SCAN-TECH expositions in Melbourne (Aug 30-31) and Tokyo (Sept 7-10) were reported by Bill Hakanson, Executive Director of AIM. (Hakanson addressed both events as AIM International's Representative.) His general impression from both countries was that automatic identification was firmly established in the retail sector, and is starting its move into transportation and distribution, and onto the factory floor.

This year it was Melbourne's turn to host the country's second exposition. The 50 exhibiting companies seemed pleased with the turnout of 300 people and Hakanson believes that auto ID is doing well "down-under." One important recent sale of POS scanning systems was to the Myer Department Store chain, a major Australian retailer, which purchased 4,000 Symbol Tech laser guns.

In Japan, there were 2,000 attendees for each of the three days of the show. [This healthy attendance was important to the show's sponsors because, last year, the SCAN-TECH Japan Exposition was held in conjunction with another popular trade show and there was a question as to how many people the SCAN-TECH show would draw on its own.] Hakanson was impressed with the investments made by the Japanese manufacturers in new products for the factory automation markets and he also noted the dominance of CCD scanners over lasers.

From the international expositions in Europe, Japan and Australia, the industry now moves on to the granddaddy of them all: SCAN-TECH 88 in Chicago. This largest-ever auto ID show and seminar will be held November 1-3, with seminar sessions starting on October 31. We will be covering all that's new and will provide our own perspectives on the directions in which the industry is moving. AIM Inc., 1326 Freeport Road, Pittsburgh, PA 15238; 412/963-8588.

---

SCAN NEWSLETTER LTD. • 11 Middle Neck Road, Great Neck, N.Y. 11021 • Phone: 516/487-6370 • FAX: 516/487-6449  
PUBLISHER/EDITOR: George Goldberg • ASSOCIATE EDITOR: Jeff Goldberg • CIRCULATION DIRECTOR: Teddy Allen

INTERNATIONAL EDITOR: Paul Chartier • United Kingdom Office P.O. Box 7 • Cirencester GL7-1HY England  
Phone: 44-285-3011 • Telex: 437269 SHARET G • FAX: 44-285-68859