



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 XIV Number 12

August 1991

When a company decides....

....to go public -- such as Zebra Technologies, in its current stock offering of 2,840,000 shares at about \$12 per share -- we get to feel like voyeurs, getting a first glimpse of forbidden territory. The detailed prospectus, that the Securities & Exchange Commission (SEC) requires for the protection of the investment community, bares all for the public to see.

[Zebra (Vernon Hills, IL) makes thermal transfer printers. The company made its decision to sell a portion of its Class A common stock to outsiders in order to raise some cash for both the corporation and for the current owners -- mostly the latter. About \$13 million will go directly to the selling stockholders in exchange for 1.1 million shares. The corporation will receive \$21 million for an additional 1.7 million shares. However, from its proceeds, the corporation will immediately pay \$11.8 million as a distribution of retained earnings owed to the owners. The net result is that the original stockholders will receive about \$25 million and the company will retain \$8 million for "working capital and possible acquisitions."

Significantly, in return for its \$34 million investment in the company's stock, the public investors will only obtain about 5% of the voting power in the corporation. Not a very bad deal for the current stockholders -- even though they will have to pay a large portion of their proceeds for income taxes accrued as a result of the company's substantial earnings (and its status as a Subchapter "S" corporation).

Now let's take a peek at the company's performance and outlook.]

The company was formed in 1969. In its own words from the prospectus: "Zebra Technologies provides bar code labeling solutions principally to manufacturing customers and also to service and governmental entities worldwide for use in automatic identification and data collection systems....The Company estimates that over 23,000 Zebra bar code printing systems are presently installed at approximately 5,000 user sites around the world, and that over one-half of the Fortune 100 companies use Zebra printing systems....The Company also estimates that only 15% of the potential market for automatic identification systems in the United States manufacturing sector currently uses such systems and that international penetration is even less."



ISSN 0273-3080

INCLUDING THE INTERNATIONAL EDITION

In the five year period, 1986-1990, annual sales grew from \$6 million to \$38 million -- a compound growth of well over 50%. During this same time span, earnings per share rose from \$.04 to \$.65. The company employs 191 persons: 50 in marketing and sales, 109 in manufacturing and 32 in administration. Zebra has 18 US distributors. About 35% of the company's sales are international through 44 foreign distributors operating in 35 countries.

Zebra maintains that thermal transfer will remain the method of choice for bar code printing because of its clear advantages over other technologies. There was no attempt in the company's literature, however, to forecast sales and earnings for the coming years.

The public offering of the stock is expected to be finalized some time during the next month.

While the nation's economy....

...has been languishing in a recession this past year -- with terrible results reported by the automotive and computer industries, for example -- the financial performance of companies specializing in automatic identification has ranged from excellent to fair. Consider the following companies whose financial reports are available, and note, in particular, the percentage changes in sales and earnings compared to a year ago.

<u>SYMBOL/MSI</u>	<u>6 Months Ended 6/30</u>			<u>3 Months Ended 6/30</u>	
	<u>1991</u>	<u>1990</u>	<u>% change</u>	<u>1991</u>	<u>1990</u>
Revenues (\$000)	\$148,206	\$106,290	+39.6%	\$77,628	\$55,157
Earnings (\$000)	9,845	1,621	+512.5%	5,731	1,355
Earnings/Share	.40	.07		.23	.06

Symbol/MSI (Bohemia, NY) continues to sprint ahead, opening up the gap even wider as the industry's leader in sales and profits. Chairman/CEO Jerry Swartz stated that the half-year results reflected a growth in the sale of scanner products -- reinforced by the large shipments to JC Penney and UPS -- and he seemed cautiously encouraged by the first improvement in sales of portable terminal units since the merger of Symbol and MSI almost three years ago.

In a major announcement, on August 6, Symbol reported that it will be supplying all K mart retail outlets with Spectrum One wireless spread spectrum communications network systems. The total order -- which includes three of Symbol's Laser Radio Terminals (LRT 3800) per store -- is estimated at approximately \$25 million.

According to Dave Carlson, K mart's Senior VP-Corporate Information Systems, the giant retailer has been testing the LRT in 250 locations and plans to roll out into "all [2,500] K mart stores within the next 15 months."

[Initially, the system was only to be used for the ordering of merchandise. On August 6, however, within hours after the Symbol announcement, Carlson told *SCAN* that the number of units per store had just been increased from two to three in order to add the store receiving function to the Spectrum One system requirement. The order had grown 50% -- to \$25 million -- seemingly overnight.]

The Spectrum One system was introduced in January 1990 and was the first major product by Symbol which combined its laser scanning capabilities with MSI's portable terminals. The spread spectrum technology came out of the company's new research center in Cupertino, CA (SCAN Feb 90). According to a company spokesman, Symbol's management views the Spectrum One product group with enormous enthusiasm equating its importance to the LS 7000 hand-held laser scanner, which fueled the company's growth in the 1980's.

	*	*	*	*	*
<u>TELXON</u>	<u>3 Months Ended 6/30</u>				
	<u>1991</u>	<u>1990</u>	<u>% Change</u>		
Revenues (\$000)	\$49,045	\$40,224	+21.9%		
Earnings (\$000)	3,195	1,466	+113.3%		
Earnings/Share	.23	.11			

The first quarter of this (1992) fiscal year reflected the continuation of Telxon's (Akron, OH) energetic recovery of last year. (Telxon's fiscal year ends March 30.) The extraordinary financial turnaround, directed by President Ray Meyo and his new management staff, was fueled by a 29% sales increase in fiscal 1991 over 1990 (\$184 million vs. \$143 million). Much more significantly, the 1990 loss of \$14 million was converted to a \$17 million profit in 1991.

Telxon, which always refers to itself as the world's leading manufacturer of portable hand-held computer systems, has also been able to grab a large share of the spotlight away from its arch-rival Symbol/MSI by signing two major contracts. In May, Telxon won a \$3.2 million award to supply Purolator Courier Limited (Canada's largest overnight-delivery company, based in Mississauga, Ontario) with portable hand-held computers for all of its 3,400 couriers.

In a second deal, NPD/Nielsen agreed to purchase 30,000 portable units (over \$9 million) from Telxon for use as a market research tool to be placed in selected households across the country. These panelists will scan the UPC symbols on all of their purchases as they are brought home. This data will be transmitted weekly by telephone via Telxon modems to NPD/Nielsen market research centers for analysis. According to Andrew Tarshis, the research company's president: "The data collected provides a complete picture of purchasing behavior in the US marketplace."

	*	*	*	*	*
<u>PSC</u>	<u>6 Months Ended 6/30</u>			<u>3 Months Ended 6/30</u>	
	<u>1991</u>	<u>1990</u>	<u>% change</u>	<u>1991</u>	<u>1990</u>
Revenues (\$000)	\$7,910	\$7,526	+5.3%	\$3,773	\$3,339
Earnings (\$000)	279	273		100	125
Earnings/Share	.05	.05		.02	.02

Mike Hone, President/CEO of Photograph Sciences Corp. (Webster, NY), attributed the year's flat earnings to "continued investment bringing the 5300 Series scanner to market." He preferred to focus on the 13% increase in sales for

the latest quarter and optimistically predicts that investment in new product development and a quality improvement program will "provide the basis for competitive strength in the 90's."

	<u>6 Months Ended 6/30</u>			<u>3 Months Ended 6/30</u>	
	<u>1991</u>	<u>1990</u>	<u>% change</u>	<u>1991</u>	<u>1990</u>
Revenues (\$000)	\$9,430	\$9,103	+3.3%	\$4,941	\$4,793
Earnings (Loss)(\$000)	(17)	82		173	62
Earnings/Share	.00	.01		.02	.01

Computer Identics (Canton, MA) continues to maintain small increases in revenues, but cannot seem to manage to bring profits up to respectable levels. According to management, half of the company's business is in the international market; these sales to its foreign subsidiaries are profitable but they are subject to foreign income taxes. The continuing strength of the US dollar is also expected to negatively affect future revenue and profits from these important international sources. President Frank Wezniak, however, predicts that C/I's domestic sales will improve as the US economy is strengthened.

	<u>9 Months Ended 6/30</u>			<u>3 Months Ended 6/30</u>	
	<u>1991</u>	<u>1990</u>	<u>% change</u>	<u>1991</u>	<u>1990</u>
Revenues (\$000)	\$20,131	\$17,019	+18.2%	\$7,377	\$5,532
Earnings (Loss)(\$000)	606	(143)		405	85
Earnings (Loss)/Share	.17	(.04)		.11	.02

[All Epic Data figures are in Canadian Dollars equal to US\$.87.]

Epic Data (Richmond, British Columbia, Canada) announced that the recent 9 month results were "the best in the company's 15 year history." The manufacturer of data collection systems reported sales growth in a broad range of industries and applications including textiles (Springs Industries), publishing (Ringier America), defense and electronics (General Dynamics and General Electric) and transportation (American Airlines and Yellow Freight).

	<u>12 Months Ended 3/31</u>		
	<u>1991</u>	<u>1990</u>	<u>% Change</u>
Revenues (\$000)	\$6,628	\$5,101	+29.4%
Earnings (\$000)	449	183	+145.4%

The only private company in this reporting group, Cotag (Cambridge, England), takes the unusual step of publishing its financial data each year. The company, which manufactures RFID systems for the security, health care and industrial markets, has been featuring its new "Wanderer Control System." The Cotag approach uses an RF Wrist Tag to be worn by the elderly in hospitals

and nursing homes to automatically identify wandering patients and selectively set off alarms at controlled exits. The system is especially effective in assisting health personnel in caring for patients with Alzheimers disease.

* * * * *

Finally, we attempted to get a fix on the year-end (6/30/91) results of Imtec (Bellows Falls, VT) -- but it was a bit too soon for final audited figures. At the end of their third quarter, however, sales were \$5.8 million, up 10% over last year; earnings were \$330,000, down about 14%. Management indicated that the 12-month revenues and earnings would show "approximately the same trend."

Imtec acquired the assets and manufacturing license for hot stamp printing from Nevis Imaging Systems last year, but has not yet made significant progress in penetrating that new market. Start-up costs for the new manufacturing process and the doubling of plant capacity this past year has impacted earnings -- but President Jim Williams remains optimistic. "Now," he says, "we await the economic recovery that the politicians are suggesting is imminent."

COMMENT

Is the automatic identification industry recession-proof? The financial results shown above suggest, at the least, that the industry -- at its present size and level of growth -- may indeed be recession-resistant. Alex Klopfer, Epic Data's President/CEO may have succinctly characterized the entire industry when he referred to his company's recent performance: "At a time when many computer companies are facing uncertainty and experiencing employee lay-offs, we are producing record revenues."

A major outreach effort....

....has been undertaken by the Uniform Code Council to dramatically expand the scope and coverage of its Standardized Product Identification system. Specific programs are being developed -- beyond its traditional responsibility for consumer products sold at retail -- to bring a large number of industrial/commercial applications under the UCC umbrella.

The concept is not new. Since its inception in 1973, many UCC numbers have been issued to companies other than those identified with consumer products. Certainly the idea that UPC/EAN is not just for consumer products is not new to the International Numbering Association EAN.

That Brussels-based organization -- which is working closely with the UCC in its current efforts -- has successfully sponsored EAN for many industrial/commercial groups. A number of European industries (e.g. office products, furniture, computers, paper, pressure-sensitive labels and chemicals) have either adopted EAN coding on an industry-wide basis, or, in some instances, this has been done independently by major companies within those industries.

In a 1990 publication entitled, "Industrial Coding," the Article Number Association (the EAN affiliate in the UK) states: "Standard article numbering is not confined to manufacturers, distributors and retailers of consumer goods. There are enormous benefits in the industrial sector, for companies whose products never go near a high street retailer."

During the past few months, a newly organized effort to bring UPC to other industries has taken shape in the US and is now moving forward rapidly. On May 3, the UCC Board of Governors approved the formation of the Industrial Commercial Advisory Committee (ICAC).

UCC's Executive VP Hal Juckett then sent out an invitation to 20 trade associations -- from the American Supply and Machinery Manufacturers to the Wholesale Stationers -- to attend an exploratory meeting in Washington, D.C. on June 20. Representatives from AIM were also invited to attend. The announced agenda included a review of the ICAC purpose, its organization structure, and the UCC role in committee leadership. A draft of a proposed "Industrial and Commercial Guidelines Manual" was circulated for comment.

The June 20 meeting was devoted primarily to the administrative matters necessary to get such an organization off the ground. A proposed Charter for the ICAC was drafted which included a statement of purpose, membership qualifications, officers, committees, etc. [The challenge to define the somewhat nebulous term "Industrial/Commercial" was neatly sidestepped by the following suggested definition: "...those segments of industry not involved in the manufacture or distribution of products directly to retail consumers."]

Although entry qualifications have not yet been finalized, the ICAC membership will probably be based on trade associations which are committed to the UPC concept of product identification. The actual method of selecting designated voting members is expected to be worked out at the next meeting scheduled for September 20. A clearer picture should also emerge at that session about those trade organizations that will join and the specific tasks that will be undertaken by the ICAC.

COMMENT

The idea of a worldwide, standardized numbering system for all manufacturers and their products is simple, attractive, timely and crucial to the orderly growth of international commerce.

The UPC/EAN organizations are in place with the standards and structure to make it work. No other program for standardized product identification approaches the UPC/EAN community of 50 nations with 250,000 companies already registered with their manufacturer numbers. In addition, it cannot be ignored that UPC/EAN provides the required common identification critical for EDI systems to function. We hope that narrow, self-serving, parochial interests do not stand in the way of this important development.

As part of a new educational initiative....

....undertaken by the Uniform Code Council, the first UPC Users Conference has been scheduled for September 4-5 in Chicago.

The seminars will stress critical problems in retailing related to UPC print quality. This emphasis is partly a response to programs launched by several leading chain stores (e.g. Wal-Mart, K mart, Ralphs) to get their suppliers to improve the quality and accuracy of the bar codes printed on their packages.

[In the most Draconian series of directives issued by any of the chains, Wal-Mart (now the largest retailer in the US) notified its vendors in

April of its new rules in a letter titled "Merchandise Shipments with UPC Errors Subject to Penalties." Products shipped to Wal-Mart marked with incorrect or non-scannable UPC codes and symbols are now subject to fines of 10% of the item cost for the first "offense," \$50,000 for the second offense, and \$100,000 for the third offense (assuming, of course, that you are still in business).

Sam's Club (a division of Wal-Mart) has a penalty schedule ranging up to \$25,000. Ralphs, the large west coast supermarket operator, seems like almost a "piker" with what they call "recovery charges" ranging from only \$500 to \$1,000 per error.

The point, of course, is that the retailers have decided that they just aren't going to take it any more and they are insisting on correct, scannable bar codes.]

The UCC Users Conference will include sessions on coupons and case coding (including Code 128), which are considered important areas suitable for scanning automation but which have been slow starters up to now. The UCC is limiting attendance to 300 people, who will be organized into industry groups. In line with its new program to reach out beyond retailing, the UCC is specifically targeting representatives of industrial/commercial companies and associations in its efforts to expand the use of the Universal Product Code in those industries.

Uniform Code Council, 8163 Old Yankee Road, Dayton, OH 45458; 513/435-3870.

Frustrations are becoming more apparent....

...whenever proponents of EDI refer to the speed with which the technology is being implemented. We recently reported the resistance, among many retailers and their trading partners, to the establishment of new Quick Response systems, which incorporate EDI, UPC and shipping container symbols (SCAN Mar 91).

New evidence continues to surface which signals that EDI is running up against this same type of resistance in various other industries and environments. Witness the titles and content of articles that have appeared in recent issues of *EDI World*: "EDI, Why Does It Take So Long?" (Bob Garbowitz, July 91); "The Eight Obstacles of EDI in the Transportation Industry" (Harold Lavery, July 91); "EDI is not a Spectator Sport" (David Hough, March 91); "Why not EDI?" (Sue Chapin-Strike, March 91); "EDI Expectations" (James Pitts, March 91).

While we do not disagree with most of the autor's premises or facts, we suggest that they may actually be excuses and not reasons. In every case, the authors present the arguments and then systematically refute them, point-by-point, concluding, as Lavery stated in his piece: "EDI has been around since the 1970's and every year since then its usage was expected to explode."

Why, then, have the prognosticators been so wrong? As Garbowitz points out: "One can go back and read all the predictions of how by the 1990's the entire business community would be paperless, exchanging billions of bits and bytes of information at lightning speed. Well, 1991 is here and although many companies are EDI capable, there are still thousands of companies not yet doing EDI. Of the companies with the capability, many are only processing a fraction of their transactions via EDI."

Hough, in his piece, lamented: "Only about 5% of business is carried out via EDI. You would think, in this age of rapidly changing technology, that the growth of EDI would be much greater."

COMMENT

We suggest that one reason for this slow development is that the EDI gospel is being preached to the converted. It is relatively easy to convince the MIS chiefs and their staffs, or the systems coordinators, or the accountants and traffic managers, of the merits of EDI. Even though they may be wary of change, they recognize the advantages and can get it done when given the direction and tools to move ahead. Most seminars, trade shows and magazine articles are targeted at these middle-management technocrats who believe in EDI, but who don't have the authority to make the decisions.

By its very nature, EDI requires the kind of inter-company and inter-industry coordination that can only be made by top management. When the heads of a major textile manufacturer (Roger Milliken) and a leading clothing producer (Joe Hagggar, Jr.) wanted to make UPC and Quick Response an industry standard, they became personally involved with the challenge. They called a meeting of corporate chiefs and they sat up front and explained what they wanted and why and when (SCAN July 86).

Wal-Mart and K mart leaped into the number one and number two positions in retailing in the nation by bold implementation of merchandising coupled with systems policies directed from above. Sears, on the other hand, seemed to be bogged down in committees struggling to reach a consensus -- like adopting a Code 39 product identification system while the rest of the world went UPC/EAN.

Find a way to transmit the EDI message into the executive suites. The rest will follow.

For those in the auto ID industry....

....who have a pretty good idea of how EDI works, but may be hard put to understand the specifics of what it does, we recommend a recent book by Margaret A. Emmelhainz, titled: "Electronic Data Interchange -- A Total Management Guide" (published by Van Nostrand Reinhold).

Dr. Emmelhainz is on the marketing faculty at the University of Dayton (OH) and is also an instructor with the EDI Group Ltd. The book is intended for functional managers in such areas as purchasing, accounting, marketing, sales and transportation, as well as for systems and MIS managers. Emmelhainz provides explanations of EDI terminology and structure, examples of EDI usage, case histories of implementation efforts and predictions of EDI's future.

If you want to be taken by the hand and carefully led through the labyrinth of EDI to learn how it is being used in specific industries and how to go about setting up your own program, this is a good place to start.

Van Nostrand Reinhold, 7625 Empire Drive, Florence, KY 41042

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 SHARETG • FAX: 44-285-68859
