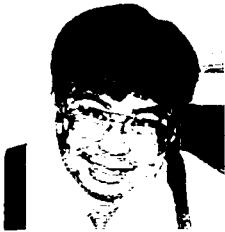


Perfect Original Quarterly

FALL 1988, VOLUME 4, NUMBER 2

Looking Back and Ahead

1988 Was A Very Good Year, But The Best Is Yet To Come



Norman Tu, President

1988 was a year of very solid growth and achievement for DisCopyLabs.

1989 should be an even better one for us and our customers.

Over the past four years in particular, the company has increased its capabilities to satisfy fast growing customer needs. Most importantly, as we've expanded to keep up with rapidly expanding market opportunities, we did so without sacrificing the outstanding quality and service upon which our growth is built.

We accomplished this in the face of factors which affected many software producers--increased competition, higher costs and shortages of some media.

How we did it is as simple to explain as it is difficult to carry out: we ran our business with the knowledge that our success -- even our existence -- depends on providing superior service, quality and innovation to customers.

In short, DisCopyLabs must, and does, provide customers with greater total value. This is reflected in the fact that we have become the preferred vendor for an increasing number of customers.

Many new customers were attracted by our solutions approach to problem solving and our turn key operations. From a single master, we'll make the perfect copies; design and produce the packaging and labeling; inventory the product; distribute it in single units or by the carton, domestically or internationally; report daily, or at any other frequency, on shipments and stock.

We utilize facsimile and electronic

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New Document Conversion Services

ImageScan Technology Division Expands DisCopyLabs' Product Line

DisCopyLabs' new division, ImageScan Technology, offers two document conversion services that utilize image scanning and optical character recognition (OCR) technologies, convert printed information text and images into computer-readable formats for electronic storage, modification and distribution. The media for the converted data can include magnetic and optical disks, data cartridge and 9-track tape, and Digital Audio Tape (DAT), and CD-ROM.

Applications for document conversion, says David Tu, Vice President for Strategic Planning, are very numerous, and are very useful in creating a centralized, easy-to-modify and maintain information base from which changes can be conveniently and quickly distributed.

ImageScan Technology converts printed or typed documents to popular word processing formats, ASCII or EBCDIC files. For instance, the typical printed manual in use today requires

that hard copies of changes be printed and distributed and somehow posted, in a timely fashion, in all existing manual copies. With the information in computer readable format, in any media preferred by the user, changes can be made much more easily, speedily, cost-effectively and safely, according to David.

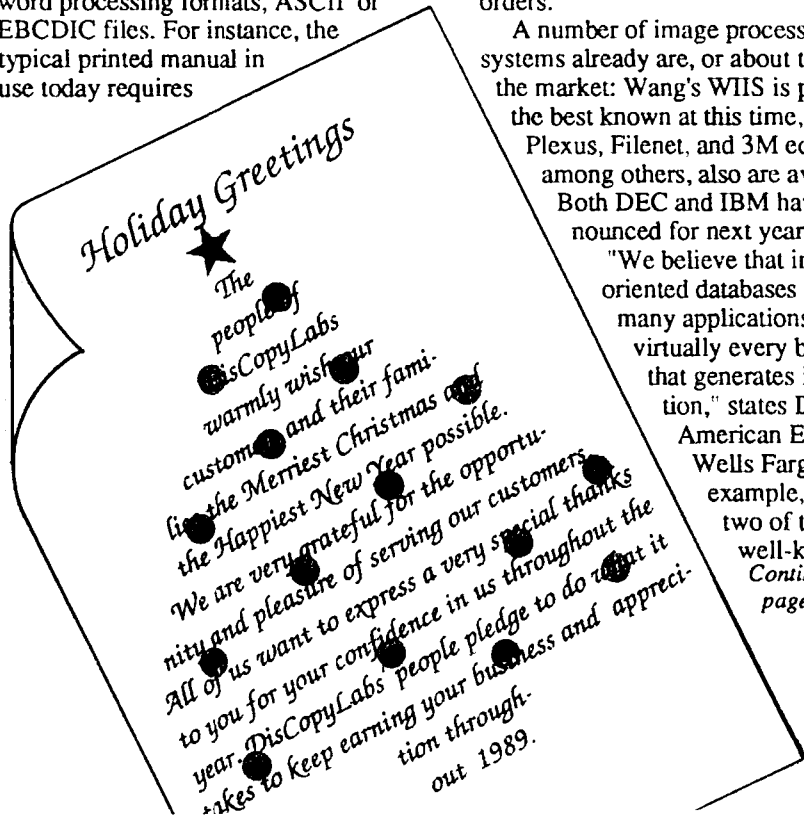
Because of these advantages, publishers and users of software manuals and, for example, operating and maintenance manuals for aircraft, ships, trucks, and other large equipment, are switching over in increasing numbers to electronic updating.

Document image processing, will be initiated early in 1989. This service converts physical documents into images, creating, in effect, an electronic file cabinet for copies of such large volume materials as checks, invoices, and orders.

A number of image processing systems already are, or about to be, on the market: Wang's WIIS is probably the best known at this time, and Plexus, Filenet, and 3M equipment, among others, also are available. Both DEC and IBM have announced for next year.

"We believe that image oriented databases will have many applications in virtually every business that generates information," states David.

American Express and Wells Fargo Bank, for example, are just two of the many well-known or
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Fighting The Virus

Two Aspirin And Good Night's Sleep Not As Effective As Strong Q.A.

The computer virus infection is developing into the biggest threat to information system integrity since the personal computer took data processing out of the safe environment of the MIS center.

Recent revelations about a virus that got away from the control of its creator and interfered with the operations of Internet and Arpanet, two defense-related information networks with 6,000 computers, are scary. So threatening were the possibilities that the story continues to receive major treatment by most of the nation's electronic and print press, weeks after the incident.

Concern about the potential for damage by infected programs extends far outside the professional DP or national security communities. Even general interest publications, such as Time and Newsweek, and evening network television news, have considered the story important enough to give it heavy play. Consequently, computer viruses and "worms", and the mischief they can do, are now familiar concepts to people of all levels of computer literacy.

At DisCopyLabs, protecting the integrity of programs that have been entrusted to us to copy has been a routine but very serious responsibility, and is an integral part of our quality assurance system, according to Patty Doherty, Accounts Manager.

Long before the current spotlight on software security, we have had procedures in place to protect duplicated programs. For example, only certain people at DisCopyLabs are designated to handle an incoming master. The master is also protected by being physically secured at all times while in the company.

At the time a master program is received at DisCopyLabs from the customer, a check sum is run and compared against the second copy. Any variation



in the sums can indicate a problem has been discovered.

Another Q.A. technique is to check the sum amounts of produced copies against the master copy. Again, variations indicate a likely problem.

"In fact, we manage our entire manufacturing process, from incoming inspection to final inspection and shipment with great attention to detail to assure the integrity of

our products," Patty said.

There are many common-sense steps that customer organizations can follow to resist computer infections. These include:

- Making backup copies of the original master and storing them securely against non-authorized access.
- New software should be quarantined on an isolated computer until proven "pure".
- Programs should be regularly examined for differences in check sums. If there's a change from the master or the copy as originally produced, something probably has been added or deleted from the program.
- Computer systems and networks should be restricted to those with a legitimate need to use them. This advice also applies to software development systems.
- Extra precautions should be taken with "shareware" and "freeware," the most common infectious carriers of viruses.

• Organization should have well known plans in place to quickly remove all copies of suspect programs and to make back-ups of related data.

"As a virus is a man-made problem, a man-made defense can be built against it. Exercising control and caution while programs are being developed, copied and utilized can be an effective barrier against the possibility of virus infection," Patty said.

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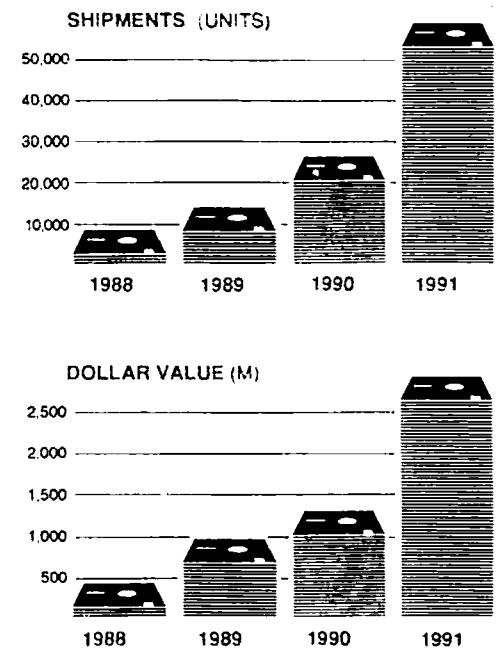
ImageScan Technology

organizations that use image processing for their operations, and many more, in and out of the financial area, are following.

"DisCopyLabs is ideally suited to handle this service, which is both labor intensive and dependent on specialized equipment, two components most customer companies would prefer not to have to invest in.

"When we consider that approximately 95 per cent of the world's information is still on paper, the prospects for document conversion and other innovative information handling processes are huge. We plan to share in this large opportunity," David said.

Document Storage And Retrieval Systems US Market Forecast



Source: International Data Corp.

These figures reflect complete end-user installation, including scanners, work stations, optical storage devices and laser printers.

Beginning January 1st, DisCopyLabs will open a gateway to the entire world of MCI Mail users. MCI Mail equipped with the existing Network Courier (The Network Courier-MCI Mail Link) will allow DisCopyLabs' LAN users and post offices to exchange messages and files with any MCI mail user across the country or around the world.

Continued from page 1

The Best Is Yet To Come

mail to keep in instant contact with customers for such communications as orders, shipping and fulfillment instructions, inventory levels, work-in-progress. Frequent and fast communications leads to clear understanding of order details, fast turnarounds - done right the first time-, and satisfactory relations.

Also much appreciated by customers is our perspective of the complex software market, particularly our understanding of user considerations. For example, from our nearly seven years of software industry experience, we've developed into a good source of objective information about such relevant areas as new market opportunities, new operating systems coming to market, the benefits of programs in multiple formats, the demographic popularity of media types, and vertical markets' preference in formats and function.

Perhaps DisCopyLabs' most significant accomplishment in 1988 is its positioning as the industry's most customer-oriented software manufacturer. We made a number of moves to make us an even more responsive organization.

We strengthened our middle management with good new people and professional training, and generally staffed up for ongoing growth. Unlike most duplicators, 80% of our people are full-time employees, and only 20% are contract or part-time. That ratio is reversed for most of the industry.

Consequently, many more DisCopyLabs people have a strong vested interest in their company's success. They know that their careers are directly affected by how well they perform individually and as a team. In contrast, the contract employee typically doesn't have the same long-term interest and involvement about the job. Often, the work produced reflects this difference in outlook.

In 1988, we became less vulnerable to rapid market changes by enlarging our product line to encompass almost every kind of media type in use. In addition to diskettes, we've diversified into other market niches including nine-track tape for the mainframe segment; the Bernoulli cartridges for the micro-computer portion; data cartridges for work stations; and TK50 cartridge duplication for the DEC market.

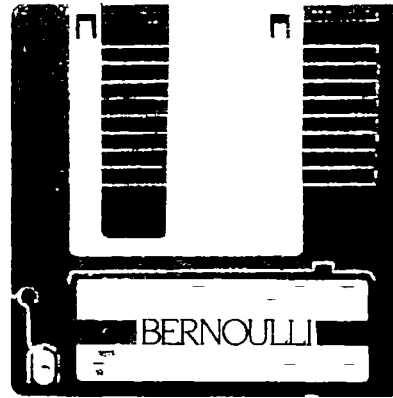
A more specific step preparing for the

Duplication Of Bernoulli Cartridges Offered

DisCopyLabs' newest service, the duplication of Bernoulli cartridges, reflects the growing popularity of this technology as a replacement, in many applications, for floppy disks and tapes.

Though not a brand new technology, recent capability enhancements to Bernoulli systems have made it an increasingly accepted substitute for other PC storage techniques, according to Norman Tu, President.

"Bernoulli cartridges, for example, offers users greater capacity than a 5-1/4 inch floppy--up to 21 MB--with fast data access speeds similar to hard disk systems. And at the same time, they provide the convenience of flexibility and portability of floppies and



*Technology Provides
Best Features of
Other Media*

tape cartridges users want for many processing jobs," said Norman.

Other features of Bernoulli storage include back-up functions that's typically four times faster than tape, ruggedness and resistance to shock, unlimited capacity, and lower cost per byte stored versus standard hard disk systems.

"With the introduction of Bernoulli copying services, DisCopyLabs offers one of the broadest

product lines of any software manufacturer in Silicon Valley, and probably in the country," Norman stated.

For information about this new DisCopyLabs service, or about any of our products, please call Patty Doherty or Sandra Woodrow, Accounts Managers, at (408) 433-0900.

future was the creation of a formal Strategic Planning function, managed by Vice President David Tu. He will identify those market opportunities we can effectively respond to with our capabilities, especially our philosophy of competing on the basis of service and quality. The new document conversion services (see separate story) are the first of a

reliability. At the same time it will lessen production labor content and contain or decrease costs.

These and other investments demonstrate our confidence in the future of software manufacturing, now at the level of \$400 million to \$500 million a year worldwide, and growing at approximately a 30% rate. At this size, the stakes to

Perhaps DisCopyLabs' most significant accomplishment in 1988 is its positioning as the industry's most customer-oriented software manufacturer. We made a number of moves to make us an even more responsive organization

number of prospective products under study.

In the first quarter of 1989, we'll add 10,000 square feet to our existing 43,000 square feet, significantly increasing our production and warehousing capacities. That will give us the space to handle more production and warehousing, especially the last minute crunch of end-of-quarter orders.

In preparing for expansion, we also will be investing in new automated equipment. This state-of-the-art machinery will lead to a number of benefits, including speeding up the duplication process for higher density media of the future and will assure consistent high

play in the market are also rising. As competition is becoming tougher, the market is increasingly sophisticated and demanding.

More that ever, our challenge is to maintain and enhance those high performance standards that made our growth possible.

The "secret" of our success has been running the business on the foundations of service, quality and innovation -- of always doing what we say we will do. Guided by these principles, and supported by the continuing excellent efforts and attitude of DisCopyLabs people, 1989 also should be a very good year for our customers and our company.

David Tu Named VP-Strategic Planning; Will Head Two New Product Offerings

David Tu, a co-founder of DisCopyLabs, has been appointed Vice President for Strategic Planning, a new position with a critical role in the company's ambitious growth plans.

In this position, he will analyze and recommend new opportunities that will contribute to DisCopyLabs' expansion program.

Previously, David had been Vice President of Milton Meyer & Company, a multi-billion dollar real estate development company based in San Francisco. There, he had been responsible for all accounting, MIS, construction and property management functions for a company with more than 13 million square feet of property located nationwide.

David, who holds masters' degrees in both business administration and civil engineering, also will head up new service offerings in the evolving technology and market area known as document conversion.

"David's 15 years experience in large



company operations and information technology, coupled with his knowledge of DisCopyLabs and its markets, adds a valuable management strength that will be very important to our long-term growth plans," said Norman Tu, President.

"DisCopyLabs has enjoyed rapid, substantial growth in a relatively short time by providing

services of extra value to the very competitive software manufacturing market. And we will continue enhancing and expanding our line of replication services as we drive to become that market's preferred supplier.

"At the same time, we intend to develop additional service offerings such as document conversion, that meet our standards for new product introductions. These standards include providing high customer value; serving markets which are large, growing and have long-term growth potential; and a basic compatibility to our successful core business," David said. Call David Tu for more details, (408)433-0900.

Season's Greetings No Price Hike for 3.5 inch Media

Merry Christmas. There will not be a price increase in the cost of 3.5 inch diskettes, at least not to DisCopyLabs' customers.

Most duplicators probably will pass along a price hike resulting from the findings by the International Trade Commission that Japanese media manufacturers were "dumping" diskettes in the U.S. for less than fair market value. As a consequence, tariffs ranging from 26 percent to 54 percent will be levied on various Japanese made media.

This expected increase, coupled with the 10% to 15% increase that hit in September because of the dollar devaluation and the rise in raw media materials cost, is likely to be significant.

Because of operating efficiencies and long-term, high-volume purchase commitments for Japanese-manufactured 3.5 inch media, DisCopyLabs has maintained the price of these diskettes at the same level throughout 1988 and does not plan to change as a consequence of these developments.

DISCOPYLABS

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FIRST CLASS MAIL

Service Directory

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- | | |
|---|---------------------|
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| • Orders-Diskettes | Sandra Woodrow |
| | Mildred Low |
| | Cindy Leon Guerrero |
| | Mary Hand |
| | Selah Sherlock |
| | Tony Bandith |
| • Order placement-Tape & Data Cartridge | |
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