

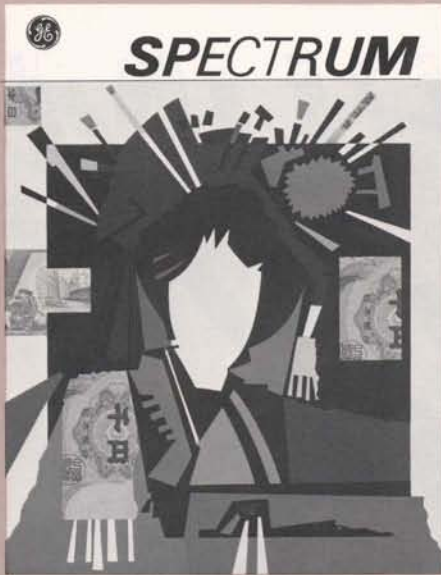


SPECTRUM

For Employees of GE Information Services Around the World

June 1989





About the cover

In Japan, age-old traditions blend with modern business practices to make Japan a powerful force in the world economy. Over the last twenty years, Japan has grown to become the absolute power in the banking and financial services markets.

SPECTRUM is published for employees of GE Information Services by Employee Communications, 401 N. Washington Street, MC07E, Rockville, MD 20850

For distribution changes, send a message via the QUIK-COMM system to Jeanne Bovenberg (BOV). For additional copies, order via OLOS, publication number 0308.34

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ISI-D's Winning Strategy

ISI-D HAS STRONGLY
POSITIONED GE
INFORMATION
SERVICES IN THE
BURGEONING
JAPANESE
FINANCIAL MARKET

All eyes may be on Europe 1992, but when looking at the world today and where the world is going, Asia Pacific, and in particular Japan, should not be overlooked. Of the markets that GE Information Services serves, Asia Pacific is growing most rapidly—at a rate twice that of North America and Europe.

What is fueling the Asian shift? Above all it is trade. Trade drives the GNP growth. Trade strengthens the exchange rate. Globalization of trade is pushing Japanese banking and securities firms to expand beyond Japan, beyond Asia. Today, Japan is the absolute power in banking and financial services. In less than 20 years, Japan has grown to dominate the banking and financial services market. In 1970, the three largest banks in the world were in the US. Today 18 of the top 25 banks are in Asia—and 17 of those banks are in Japan. The largest American bank now ranks 28th.



Top, At a meeting in Hawaii, Jim McNerney discusses future plans for worldwide banking with (left to right) Ryosaku Okada, Ken Ichiriki, and Jutaro Takinami.

Above, During a break in the meeting, GE IS and ISI-D participants enjoyed the beauty of the Hawaiian setting. Front row (left to right), Ken Ishihara, Takashi Tachikawa, Ken Ichiriki, John Sidgmore, Giuliano Venturi, and Jutaro Takinami. Back row, Ryosaku Okada, John Barber, Dan Miller, Mark Alexander, Jim McNerney, and Jim Rulmyr.

In Asia/Pacific, 58 percent of GE Information Services' revenue is attributable to international banking and financial services—70 percent of revenue in Australia, 55 percent in Hong Kong, and more than 50 percent in Japan. Through its joint venture company, Information Services International-Dentsu (ISI-Dentsu), GE Information Services has a strong presence in the Japanese banking and financial services industry—a presence that spans 20 years.

Establishing A Partnership

Relationship with Dentsu began in the late 60s, when GE IS was in the timesharing business. GE IS was looking for a distributor to market our services in Japan and selected Dentsu, the world's largest advertising company.

Several factors contributed to the selection of Dentsu. In Japan, business is conducted through *Zaibatus*, groups of companies typically comprising financial institutions, various manufacturers, and a trading company, who put high priority on trade within the group. If a company is within a *Zaibatsu*, it is more difficult to sell outside the group. GE IS believed that its interest would best be served by a company like Dentsu, which is not constricted by *Zaibatsu* membership.

Dentsu is a privately held company with most stock held by media organizations. As an advertising company, Dentsu has a strong service orientation, which is key to success in the Japanese business environment in which expectation of service is much higher than in many parts of the world.

In the mid 70s, as the traditional timesharing business began to erode and GE Information Services moved into more network intensive services, GE IS and Dentsu agreed upon

a joint venture arrangement to form a closer working relationship. In 1975, ISI-Dentsu was formed, with GE IS owning 34 percent of the business and Dentsu 66 percent. The new joint venture company was the first business in Japan to offer worldwide information services.

In Japan, clients prefer to deal with a single vendor who can provide full service. As a result, ISI-D is more vertically integrated than GE IS. ISI-D is a value added reseller of IBM products and a large seller of software packages in both banking and computer aided engineering (CAE). ISI-D either builds these packages or buys software packages and adapts them for commercial use.

ISI-D's Market Position

Since 1975, ISI-D has been capitalizing on Japan's market strength and continues to grow.

"One of the things that has helped ISI-D grow is the growth of Japanese banks," says John Barber, manager, Japanese programs. "In order to move to a position of world leadership in banking, Japan needed a communications, information, and data processing infrastructure. That's not something they could develop overnight. And there was ISI-D with an international network in banking, ideally positioned to meet that need."

Today, ISI-D is a \$100 million business, employing 300 people and using several hundred outside contractors. In banking and financial services, ISI-D has a major market share, covering all the financial services segments. All 13 of Japan's large international banks are clients of ISI-D—including IBJ, Mitsui, Mitsubishi, and Fuji. Twelve of 13 long-term industrial financing institutions are clients, as are 33 of 102 regional banks and all 24 international securities houses. And the

company continues to diversify. ISI-D's largest single sale in 1988 was to an insurance company.

For ISI-D, 1988 was a banner year. In financial services, growth was 25 percent over 1987. Overall growth was around 18 percent.

ISI-D's Winning Strategy

How is ISI-D winning in the banking and financial services market? In addition to its earned reputation for application expertise and quality of service, several key factors contribute to its success.

ISI-D has built a stable organization with depth of experience. More than 90 percent of those who started the business are still with the com-

pany. ISI-D continues to strengthen its expertise by hiring talented college graduates and training them to be financial services experts. Its dedicated System Design Consultants are building software products for tomorrow's banking needs. Its marketing people, who are positioned within the sales organization, are looking toward the future as well, exploring areas like specialized consulting and artificial intelligence.

ISI-D's sharp industry focus enables it to understand their customers' needs for custom applications. In developing custom applications, ISI-D uses all available tools—SDC, packaged software, consulting, MARK III, MARK 3000, D*Net







As a sign of friendship, GE IS presented their ISI-D partners with Western cowboy hats. Shown here, enjoying their new look, are (left to right) Ryosaku Ohada, Ken Ichitaki, and Jutaro Takamami.

Japanese firms were invited. Following the seminar, five sales were closed within 30 days and another three were near closure.

"As GE IS moves toward a global operation in International Banking and Financial Services, it is important that we tighten our intercommunity relationships by sharing knowledge of markets and products, opportunities, and market trends much more closely than we have in the past," says Mark Alexander, managing director, Asia/Pacific. "Our marketing people are working with Ken Ichitaki, ISI-D's president, and his staff to develop a cooperative capability between GE IS and ISI-D for sharing knowledge and for cross development of products. This will be a key ingredient in the way we win in the IBFS markets."

As a step toward forming a closer relationship, key people from GE IS and ISI-D met in Hawaii just before Markmakers to discuss ways of working more closely together to attain our mutual goals.



Ken Ichitaki, president, ISI-D.

(ISI-D's own MARK 3000 licensed product)—to develop custom systems. They are also exploring new technologies like System 28 and Stratus products. In addition, ISI-D has 27 customizable applications in international banking and financial services. They solve information access and third party access to interbank and inter-security exchange needs. In short, ISI-D has the ability to address all a client's information services needs.

Integrated Strategy Is Key

An integrated single source strategy is one of the keys to ISI-D's success. ISI-D develops an entire family of products for a single market. This vertical application development provides one stop shopping for international securities firms.

In 1975, ISI-D developed a MARK III securities application for Nomura, called Order Execution System (OES). This system has been sold to more than 20 other securities companies with very little modification. ISI-D continued its vertical

integration of products with the development of an IBM System 38 product for back office accounting in branch offices as the globalization of Japanese firms began. These systems were also replicated for other clients.

The next step in its vertical penetration of the securities market was to migrate the System 38 to a microcomputer for use by smaller securities firms. The micro Global Securities System, like System 38, is a complete back office system that uses IBM PCs for local order entry and order execution and connects to MARK III for transmission from remote locations like London and Hong Kong. The application is now running in more than 20 Japanese securities firms.

With Japanese securities houses proliferating around the world, ISI-D sees a major market opportunity to take the micro Global Securities System worldwide. The first major step was a seminar in Hong Kong, jointly sponsored by ISI-D and GE IS, to which 14

A Golden Opportunity

GE INFORMATION SERVICES IS DEVELOPING A COMPUTER RESERVATION SYSTEM THAT WILL STREAMLINE OPERATIONS FOR WORLDWIDE GOLDEN TULIP HOTELS

GE Information Services has found a golden opportunity to expand its offerings in the transportation industry. GE IS is working with Golden Tulip International BV, one of the world's largest hotel chains, to create a hotel reservation system that will connect Golden Tulip's in-house personal computers in sales offices and member hotels throughout the world via the GE IS network. Golden Tulip, based in Hilversum, the Netherlands, operates a marketing and reservations service for 350 independently owned hotels in 60 countries.

Golden Tulip, a subsidiary of KLM, the Dutch national airline, is already linked with the reservation systems used by thousands of travel agents and tour operators. However, that system is designed primarily for airlines, and the hotel consortium feels that it gives hotels too little control.

Quick Response Is Key

Also, Golden Tulip feels that the present system is too slow and inefficient. Under the current arrangement, electronic messages sent by travel agents to Golden Tulip must be taken off a queue or pulled from

a printer and rebooked into its reservation system. This means that prospective clients cannot be given an immediate confirmation.

"If a travel agent has a confirmed booking and then a day later gets a message saying, 'Sorry, the hotel is full,' it leaves a bad impression," says Robert Hooykaas, Golden Tulip's product manager for reservation systems. "Travel agents tend to book hotel companies that give the quickest response or are the most trustworthy."

GE IS System Is State Of The Art

The computer reservation system being developed for Golden Tulip will be one of the travel industry's most comprehensive systems. It will enable bookings for Golden Tulip hotels to be immediately confirmed via an X.25 packet switch or, for those hotels that are not on line, by telex. At the same time, individual hotels equipped with standalone PCs will also have a direct link to the network, so they can make bookings for guests in other hotels and draw together other areas of hotel operations.

The new computer reservation system will be able to have computer-to-computer dialog with major air-

line reservations systems, including American Airlines' Sabre, United Airlines' Apollo, Air Canada/Canadian Airlines International's Gemini, and in the near future, Galileo and Amadeus, two competing European holding companies that are setting up backbone networks for computer reservation services.

"This major investment is an important step in our history," says Golden Tulip president, Hans Lodder. "The computer reservations system will provide a powerful booking service for our hotels and will play a major role in maximizing profits for the entire group."

According to Louis Lampe, managing director of GE Information Services in the Netherlands, "The strategic cooperation with Golden Tulip is an excellent opportunity for GE IS to expand and consolidate our position as supplier of the newest value added teleprocessing services in the major growth sectors of travel and transportation. Once we have the system operational at Golden Tulip, we expect to have a valuable new service to offer other hotel chains as well."



Catherine's

THE GE IS SUPPORT TEAM DESERVES A LOT OF CREDIT

GE Information Services has broken new ground in the retail industry with the signing of a five year contract with Catherine's Inc. to provide information services management for its more than 200 stores spread across 35 states in the US. The contract entailed migrating Catherine's existing applications to MARK 3000 and developing a proprietary credit system to provide complete data processing services for Catherine's.

Catherine's is a story of identifying market opportunity, putting together a winning strategy, and assembling a technology team to tackle a complex development effort.

The Market Opportunity

What began as an EDI call escalated into a major market opportunity. In January 1988, Rick Pfeiffer, account manager, now assigned to the Retail Group, visited Miller and Rhodes, a retail chain in Richmond, Virginia, to discuss EDI. Allied Stores, of which Miller and Rhodes was a part, had recently been acquired by Robert Campeau, a real estate magnate from Toronto, who had bought the 24 Allied chains to



protect his shopping mall interests in the US.

At the time of the buy out, Miller and Rhodes' Richmond Data Center (RDC) served as the data service center for seven of the Allied Stores, all of which were scheduled to be sold. Under the terms of the spin off, Allied had agreed to release to the

chains all applications currently running at the RDC, with the exception of the Allied Credit System in which Allied had invested considerable money.

Armed with this knowledge, Rick decided to pursue a larger play. As the stores were spun off, why not propose to them that GE IS become

their data services provider, running their applications on MARK 3000.

In the months that followed, Miller and Rhodes and Catherine's, a Tennessee-based chain, did their own leveraged buy outs. The remaining chains supported by RDC were bought by other chains or individuals. Miller and Rhodes then became GE IS' competitor in winning the rest of the group. In some instances, timing worked to Miller and Rhodes advantage. Under the terms of its buy out, Garfinkel's, a Washington, DC chain, had only until April to move its data processing from the Richmond Data Center. Since GE IS couldn't meet that schedule, this client was lost—at least for the short term.

Catherine's, on the other hand, had until the end of 1988 to migrate elsewhere. Despite the attractive rates offered by RDC, Catherine's elected to accept the GE IS proposal because of our reliability and more current technology and because our proposal included developing a proprietary credit system that will save Catherine's an estimated \$400,000 per year.

Designing On The Fly

Because of the tight time constraints, GE IS and Catherine's agreed that the credit system would be designed "On the fly," that is, without a formal design specification. The development effort was begun by the SDC group in Arlington, but it soon became apparent that designing the credit system required IBM expertise not available in Arlington. The project was moved to Rockville and John Summerville, manager, IBM Technical Center, assumed project management.

Two teams were formed to tackle the project. One team, headed by Glenn Uthe, was responsible for planning the migration of Catherine's



Top, John Summerville (left), project manager for Catherine's during the development stage, reviews statistics with two of his key people who supported the project, Gail Jennings and Sam Park.

Above, Key contributors to the Catherine's effort are (left to right) Rick Pfeiffer, account manager, Pat Toffling, project manager for the development of Catherine's credit system, who is now technical manager, Retail, and Ken Lisee, project manager for Catherine's.



Catherine's is a 24 hour a day, 7 days a week operation. Here, Paul Orrison, David Fimbres, a GECON contractor who has worked on the project from its inception, and Jerry Pyles, who had just worked a midnight to eight shift, check some vital data.

applications from the Richmond Data Center to MARK 3000. Glenn, Barbara Denton, and Paul Orrison made frequent trips to Richmond, VA, to analyze the requirements of Catherine's 24 applications to ensure a smooth migration.

Under the leadership of Pat Toffling, a larger team, comprising four MARK 3000 people and six GECON contractors, undertook development of the credit system. Later, Ken Lisec, who had been managing the GEM project in the UK, joined the team to lend his experience in managing large MARK 3000 projects.

During the entire project, a Configuration Management Team, comprising key people from

Catherine's and GE IS met bi-weekly to ensure that the project went smoothly and that GE IS was meeting Catherine's requirements.

"The scope of this project was far greater than any of us realized at the outset," says Pat Toffling. "For three months, we worked seven days a week to keep the project on schedule."

After running Catherine's applications in parallel with the Richmond Data Center during November, they were successfully migrated to MARK 3000 in early December. The base credit system went live on December 28.

Dedicated Effort Pays Off

"The dedicated effort of GE IS people like Sam Park, Gail Jennings,

and Aravia Holloman, who supported the project, and the close working relationship with the client were key to the success of the project," says John Summerville.

According to David Forell, Catherine's Executive Vice President and Chief Financial Officer, "We selected GE Information Services for our data processing support because we felt it had the technical resources and financial stability to meet our needs without Catherine's having to commit significant capital for equipment and staff. As we have worked with GE IS to develop and implement a new state of the art credit package, we find that our confidence in its abilities was well founded."

Today, GE IS is Catherine's data processing shop, supporting data communications between its headquarters in Memphis, its distribution center, and all of its stores. In addition, GE IS has a new product to market in the retail industry.

"We provide Catherine's with a one stop shop for all its information related needs," says Rick Pfeiffer. "Our total systems solution approach, consisting of software, data processing, telecommunications, EDI, and personnel support services, demonstrates our commitment to Catherine's and our ability to service the information needs of the retail industry."

"This kind of application, and credit as a business, is becoming a more significant part of the retail industry," says Al Boynton, manager, Retail Group. "A lot of companies finance their own credit operations, and they are looking for an effective, functional system to support those operations. We now have a system of considerable functionality. We think this is going to be a significant opportunity for us."

From Zero to 60

U.S. TRAINING PROGRAM IS HELPING NEW SALES PEOPLE TO GET OFF TO A GREAT START



Sales productivity, one of GE Information Services' key objectives for 1989, is being reinforced in the US by a Sales Force Development Program (SFDP) that is proving to be quite effective. The training program is designed for relatively inexperienced sales people coming into the business and people moving into sales from some other part of the business. Participants typically have between three and five years of sales experience in the technology industry.

The six month SFDP consists of four formal training sessions, each one to two weeks long, bounded by on-the-job sales experience. Training is a combination of GE IS standard courses— Sales Force Orientation, Genesis, Selling Information Services, and Selling Application Integration—and courses developed specifically for this program.

The Mentor Concept

A key element of the program is

the use of mentors to help new sales people learn about our complex business and develop successful sales approaches. Mentors are seasoned sales people with proven track records who understand the business and know what it takes to

close a sale. They serve as role models for the new sales people and provide constructive feedback as SFDP participants move through the program.

"For me, working with a mentor was the most important part of the

Ann Simi checks her sales strategy with Paul Inserra, who encouraged her to apply to the SFDP and continues to support her career development.



training," says Christine Grossmann, one of the participants in the first SFDP, who worked with Phil Bayroff in the Lyndhurst, NJ, office. "In the early part of the program, being able to watch a real professional at work gives you a leg up, so that you learn in six months what might have taken 18 months on your own."

Christine closed her first contract while enrolled in SFDP. Following up on a lead, she sold an order entry system to National Steel. In competition with Tymnet and CompuServe, Christine persuaded the client that GE IS, with its skill in protocol conversion and strong implementation support, offered the best solution.

"Had I not been in the training program, I would have thought this close was a big deal," says Christine. "Now I look at the forest instead of the trees. I know there are much bigger contracts to be had, and I'm ready to go after them."

Christine is not the only success story to come out of the first SFDP; in fact, all five participants who had prior sales experience had closed a sale by the end of the program. All agree that participation in the program enabled them to succeed in the business much more quickly than they could have done otherwise.

Ann Salmon, who moved into sales from a technical position, feels that the program enabled her to learn what she needed to know about an opportunity, the players, their motives and justifications in order to be an effective sales person. Ann sold a sales/reporting system to Soft Sheen, a producer of hair care products sold in beauty salons and retail stores. Ann persuaded the company's top management that the system, which provides information to sales and marketing management, would help them be more effective in strategic decision making.

Consultative Sales Approach

For Roger Mitchell, the consultative selling approach is at the heart of the program. "The program helped me better understand that what we sell is not so much technology itself but our expertise in understanding how telecommunications can bridge the gap between business and technical management," says Roger. "With this understanding, I can more clearly identify profitable opportunities when they present themselves."

This is just what Roger did. He picked up the dormant NEC account and, using the techniques of consultative selling, showed the client how GE IS could help them reach their goal of becoming the world's largest electronics company.

Working with the SDC group in Dallas, Roger proposed a Business-Talk-based system, which he effectively demonstrated would improve customer service, communication, and productivity. Roger is now working with NEC to market the system, called TASCnet, to the NEC user community.

Travis Good shares both Christine's and Roger's view of SFDP.

"SFDP enables a new sales person to go from zero to 60 in six months," says Travis. "The program introduced us to GE IS and the technology we offer, stressed consultative selling skills, and provided mentors to speed growth—all the tools necessary to enable us to effectively close those small custom contracts that GE IS is so good at developing."

While Travis was going through the SFDP, he used consultative selling successfully with two clients. One of these clients, 20th Century-Fox, was using a cumbersome system from Martin Marietta to collect film attendance data from showings worldwide. The data was then transmitted to the film company's

headquarters in Century City, CA, where it was used by the marketing group to lay out its promotional strategy. Travis saw an opportunity to provide Fox with an alternative system that would provide greater efficiency. He asked his SDC group if they could build a hook into the Fox data gathering system so that by the push of a button, users could initiate a data base file exchange with MARK III—delivering data to headquarters while receiving update information from them.

Fox liked the solution and was ready to sign when CSC came onto the scene with a cheaper solution. Because Travis had done his homework and understood the client's needs, he was able to persuade the film company that the CSC solution didn't do what they wanted it to do and that GE IS had the right solution.

Understanding The Business

Kary Taylor has a somewhat different perspective. Kary came to GE IS from a competitor, where he had had a thorough sales training course. The special value Kary found in the SFDP was the understanding he gained of how GE IS sales people should position themselves to sell our services.

"Every company has its own way of approaching its marketplace," says Kary. "At GE IS, it's as business consultants. The company provides its sales people with the tools (network, processing power, and people) to be successful within any industry. It's the sales person's job to piece together the correct combination of those tools to build a successful business solution. The SFDP helps you not only to build that solution but also to identify and communicate the added value we bring to the solution, which places us a cut above our competition."

"The SFDP is also highly motiva-

tional," Kary adds. "Every training session that we participated in continually revitalized my enthusiasm and confidence to pursue the larger opportunities."

A fringe benefit of participating in SFDP is the camaraderie that evolved within the group (TOPGUN\$), who continue to communicate, sharing sales strategies, giving one another advice, and being generally supportive.

Strong Management Support

The success of SFDP can be attributed in large measure to the strong support provided by the Advisory Board, comprising leaders in NA Sales & Services, who worked closely with Lynette Demarest and Ed Wetzel in Frank Hart's training group in designing the program and structuring course content.

"We wanted to make sure that the program was relevant, that it addressed the needs of the field," says Frank. "The Advisory Board, with strong leadership by Katie Vogelheim, as well as others in NA Sales & Services took a very active role in making sure that we were on target."

Ann Simi, who entered the program from a sales support position, was impressed by the interest and support she received from people throughout the business—from Paul Inserra, who encouraged her to apply to the program, to her mentor, Gretchen Oser, to her region manager, Barbara Cresswell, and people in Rockville, like Jim Macioce and Dave Rascoe. And, she adds, their interest doesn't end at graduation.

Kary Taylor sums up the sentiment of his group. "I'm thankful for having been part of the program and am confident that it will be a major contributing factor to my future success in sales and within GE IS," he says.



While in the SFDP, Christine Grossman represented GE Information Services at the DIA Conference trade show in Canada. With Christine are (standing, left to right) Bob Hodge, account manager, Southern Region, and Mark Balawejder, SDC program manager, Philadelphia. Seated with Christine are (left to right) Phillip Poe, sr. consulting manager, Rockville, and Helge Kittelsen, manager, Trade and Industry Sales, Canada.

Building On Success

A second, equally impressive, group completed the Sales Force Development Program in March. All five participants are assigned to industry focus groups—Ray Rike, auto industry, Los Angeles; Carol Labun, retail industry, Chicago; Stacy Watson, high tech industry, Los Angeles/Palo Alto; Bill Fitzpatrick, auto industry, Detroit; and Colleen Brown, telephone industry, San Francisco. Three of the five had made closes by the end of the program.

A third group, including a participant from Canada and another from ISI-D's US operation, began the SFDP in April.

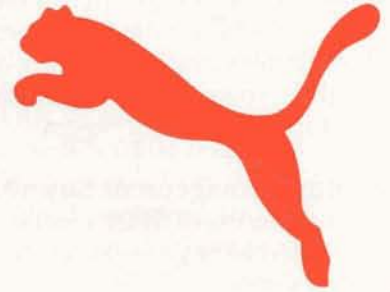
John Sidgmore feels that the time and energy expended on the program has been well spent.

"On the last day of each program,

participants present their activities to me, and I have been impressed with their enthusiasm, their professionalism, and their progress," says John. "Going into the program, I would have been happy with one close by the end of the year with \$20K to \$30K billing. These people are outdistancing themselves. Nearly all have closed contracts or are near doing so. This is phenomenal success. But even more important is their level of confidence and commitment to the business. It's a credit to the Advisory Board who guided development of the program, the mentors who devoted time and energy to helping participants learn the business, the training group who developed new courses and conducted the training—and, of course, to the caliber of the participants themselves."

PUMA

WITH ITS NEW UNIVERSAL SALES AND SERVICES INFORMATION SYSTEM, PUMA IS EMULATING THE QUALITIES OF ITS TRADEMARK.



Adapted for SPECTRUM from a story by Rudolf Beyenburg, which appeared in the German client magazine, MARK III Nachrichten (News).

Speed, flexibility, endurance, and elegance are the qualities that fascinate us about the puma, the tawny mountain lion of the American continent. These same qualities are what brings medals to sports people—both professional and amateur. Since 1948, PUMA has been the trademark of a shoe factory in the little city of Herzogenaurach, near Nuremberg, Germany, which has earned a worldwide reputation for the quality of its sports equipment.

The shoe factory, owned by the Dassler brothers, began as a mom and pop undertaking in 1924. Grandma cut out the leather uppers, grandpa put on the soles, one of the brothers finished putting the shoes together, and the other brother han-

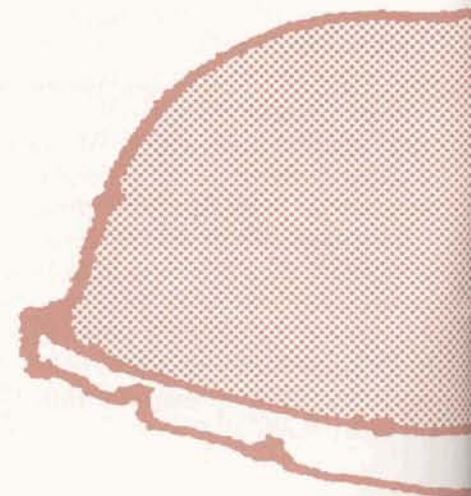
dled sales. During the course of two decades the firm expanded its offerings, but it still retained the character of a family owned cottage industry.

Since the early sixties, with the increasing popularity of the sports shoe, the Puma Shoe Factory has experienced incredibly rapid growth, which forced the company to break out of its straitjacket of specialty products and take on the qualities of a more strategically oriented, diversified concern.

Today Puma produces about 1,500 products worldwide. Taking into account all the different sizes, colors, and styles, this amounts to an inventory of between ten and twenty thousand articles. Under the Puma trademark of a springing mountain lion, there is much more than shoes. The range of products includes sports clothes, leisure wear, and sports equipment—from tennis racquets to sports wallets. But, in spite of stiff competition, the sport shoe is still the backbone of the business.

Puma's Market Strategy

Even though Puma sells ten of thousands of articles and makes more than 500 million deutschmark a year in Germany alone, the company does not rest on its laurels, merely relying on tried and true formulas. Puma's economic success today depends directly on its ability to communicate instantly with its



business partners and sister companies. Anticipating market trends over the next few years, Puma has identified its market strategy and laid the groundwork for change.

According to Hans Peter Rudolph, manager, Public Relations, "The magical year of 1992, which will herald the beginnings of a united European market without internal trade barriers, was taken into account by Puma management as early as November 1987, when Puma contracted with GE IS to develop a system for the efficient management and direction of the sales force, with the option to expand the system worldwide.

Puma chose GE Information Services to develop its sales and services information system because the company viewed GE IS as a competent partner who could handle its

worldwide needs. The high quality and high processing rates of the GE IS network as well as network reliability and international availability also were decisive reasons for choosing GE IS to support project planning and the short term realization of the system.

Before the system went on-line in September 1988, all 60 sales reps and branch employees were given an extensive training course of two and a half days within a five week period. As a result, they were able to use the system at once when it was implemented.

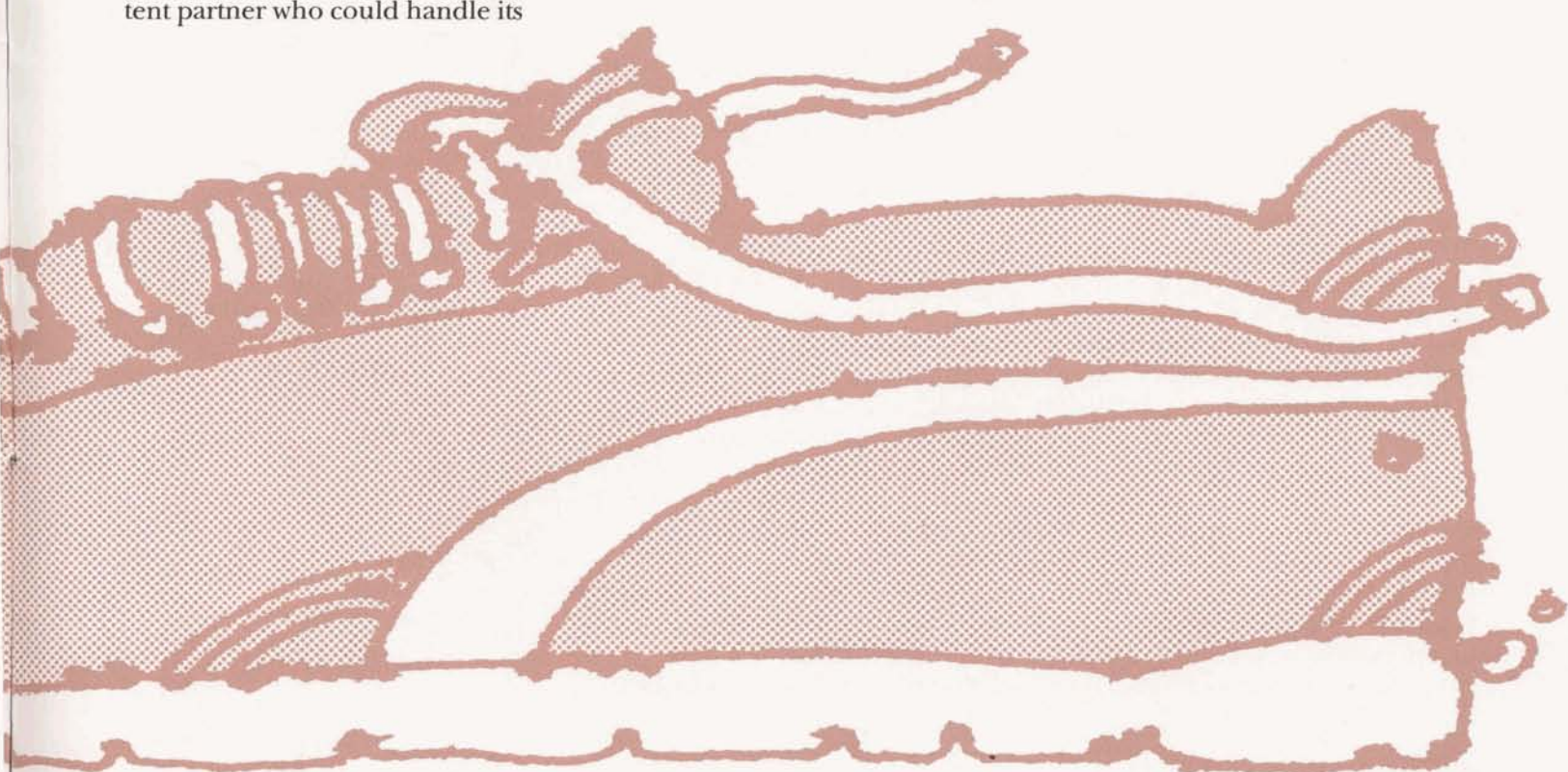
Efficiency Is Key

The Universal Sales and Services

Information system developed by GE IS not only manages overall operations but also integrates management information systems.

For daily operations, every field employee is outfitted with a portable Toshiba T 1200 with remote modem or acoustic coupler by which he can communicate via BusinessTalk with his colleagues, branch offices, and Puma's headquarters. Via the modem, employees can call up MARK III to access order entry files or shipping dates. At the same time, data from field representatives can be keyed in and processed.

Puma sales reps can check the system any time, using their electronic mail boxes on MARK III to access the very latest corporate information, such as actual valid prices





Hans Peter Rudolph, manager, Public Relations, Puma.

and current specialty lines. Transmissions are carried over DATAX-P lines to the central computer on which all order information is updated daily. Individual order entry data is prepared locally and forwarded via file transfer to the central computer.

Even during this first phase of implementation within Germany, the system is bringing market advantage to both Puma's customers and its field representatives. Since both sides now have access to up-to-the-minute information, sales reps can optimally serve customers. In addition, sales billing is exact and up to date. As a result, customers get their goods promptly—and sales reps get their commissions faster.

Faster order entry is only one advantage of the new corporate information system. The system shortens the information pathways

and relieves the sales representatives of administrative tasks. They therefore have more time to do their real jobs—advising customers and selling products.

In the area of sales promotion, Puma's Universal Sales and Services Information system demonstrates some of its best qualities. The additional opportunities that the system offers for ease of reporting and improved internal communications are only welcome by-products. The big bonus for Puma has been real progress toward a more efficient corporate direction.

According to Dieter Knoll, manager, In-house Sales, among the benefits derived from use of the Information System are faster performance of procedures, safe and error-free order entry, rapid exchange of information about incoming orders and the status of orders, and the ability to react more quickly to market trends. And the bottom line is an enhanced image within the industry and a significant advantage over competitors.

Tying In The World

To streamline its worldwide operation, all the different corporate partners and entities must be brought under one roof. Even though the German market has traditionally been the strongest single market, Puma products are produced all over the world. The company keeps very good tabs on business markets and trade, as well as on the current specialty interests of large department stores. Outside Germany, products marketed under the Puma name are partially made

by the subsidiary companies' own production facilities and marketed by their own representatives. In those countries where imports are burdened by stiff duties or are forbidden, partner companies produce Puma products under license.

Speaking of the problems presented by phase II, the worldwide implementation, Hans Peter Rudolph says, "Since people who import our quality goods are almost always independent entrepreneurs with their own logistics needs, production staff, promotion and advertising strategy, we must be slower in introducing the system than what is technically feasible. Marketing strategies of these importers are, of course, closely determined by ours, but we must consider national or regional variations."

"We at Puma are especially happy that we can lean on such a competent partner as GE Information Services," he adds. "GE IS has already acquired extensive experience with similar systems, understands the competitive parameters, and, last but not least, provides proven worldwide support. That will be a real advantage when we integrate our foreign corporate partners into the system."

Puma is headquartered in the lovely little city of Herzogenaurach, near Nuernberg, Germany, where the Dassler brothers started the business in 1924.



BUSINESSCLIPS

Client Services, Switzerland Offers Enhanced Client Support Tool

Client Services, Switzerland, has developed a counterpart to Client*Talk, operational at Client Services, Rockville, which offers a number of features to improve client support and internal information handling.

The Client Database is also a powerful tool for management, providing a variety of reports, statistics, and day to day planning capabilities. The only hardware requirement is a PC with 480K memory capacity. The application can also be installed on a PC connected to a LAN to enable centralized access and update of information.

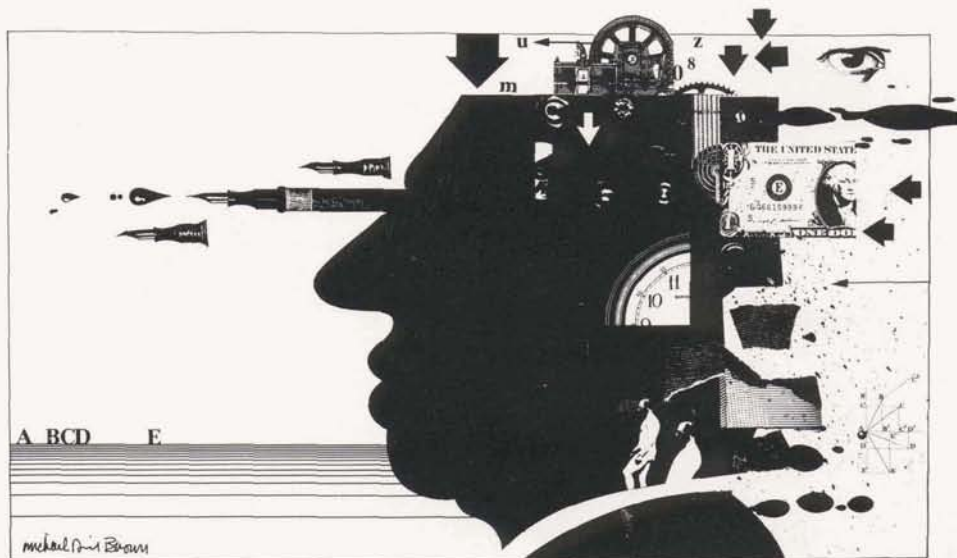
The Client Database enables the user to retrieve any information about a client with a few key strokes and at the same time get a listing of the history of the problem and its current status.

The application consists of two screens containing client information relevant to dealing with clients' problems—hardware configuration, telecommunications access method, GE IS software in use, contractual agreements, et cetera.

Any number of call logs can be created and logically attached to a client file, thereby recording phone calls with the client and the problem reported. Other fields, such as date, time, and telephone number, are automatically copied into the call log. Once a call is entered, priority levels can be defined into a status field and the time spent recorded.

For a problem that requires more than one or two phone calls, the user may open a *Customer Incident Report*, which is sequentially numbered by the system. Any number of call logs can be linked to a *Customer Incident Report*. Once the problem is resolved, the *Customer Incident Report* can be closed and printed.

Several report utilities provide fast and direct access to any data stored in the system. Some of these reports are predefined and can be used for daily planning, statistical records, and report-



ing to management. Some additional functions, such as backup and reindexing of files, are password protected.

The Client Database has been used in Client Services Operations in Switzerland for several months and is continuously improved to meet CSO requirements. The system is now being used in Germany as well. It is available to any Client Services Operation at a nominal fee by contacting Angelika Schallek (QC ANGELIKA).

AIA Pilot Begins

GE Information Services is one of eight electronic messaging providers in the US participating in a pilot project that will interconnect their networks so that users of any of their services can communicate electronically with users of any of the other services. The project is driven by the Aerospace Industries Association, whose 300,000 E-mail users need to share information among themselves and with suppliers in the government who use other E-mail services.

The AIA believes it can save time and money on projects that involve more than one company. "The bottom line is that it will save time," says Steven

Farowich, the AIA project leader. "And when you save time, you save money."

Not only would the open system save money for users, it would also bring additional revenue to E-mail providers. Ken Murphy, manager, host products, estimates that additional revenue from the AIA could top \$35 million per year.

The interconnection pilot project relies on the X.400 electronic mail standard of the Open Systems Interconnection (OSI) protocol suite. Joe Berdini of Client Services has taken a leading role in working with the other service providers to identify the requirements and implement a client support network between all the X.400 service providers.

GE IS has begun formal testing with AT&T, MCI, and Dialcom. Two GE IS clients, Northrop Corp. and General Dynamics, are participating in the pilot. Two other clients have contacted their local sales offices to explore the possibility of satisfying both their EDI and E-Mail requirements by using a single X.25/X.400 connection to GE IS.

GE IS is currently the only service provider who can provide this solution. This offers an opportunity to displace our competitors and provide our clients with a solid messaging platform on which higher value applications can be implemented.

FASTFAX

Q Does Apple sell their products at a discount to GE employees?

Debbie Parks
Atlanta, GA

A Yes they do. GE has a national account with Apple. Call the National Account Manager for GE at Apple in Cupertino, CA, (408) 996-1010. For more information about discounts for GE employees, check Employee Discounts in Fast*Fax on InfoTalk.

Q I have looked through all the sources of information I have and cannot find the distributor for Portugal. Can you provide some information about the Portuguese distributor?

Jukka Heikkinen
Helsinki, Finland

A Our distributor in Portugal is SoftinforGal. Their import manager, Graca Marques, can be reached via the QUIK-COMM system (INFORGAL).

Q One of my clients wants to know whether they can have their logo on QUIK-COMM to FAX, instead of the GE IS logo. Is that possible?

Norm Silverman
New York, NY

A The use of client logos is one of several enhancements to QUIK-COMM to FAX under evaluation. For more information, see Products & Services Bulletin Board: MESSAGING PRODUCTS/QUIK-COMM TO FACSIMILE/QUIK-COMM to FAX Commercial/PLANS.

Q I have a client who wants to communicate with GE IS via the QUIK-COMM system but does not want to set up a cross community. Is there anything we can do for them that would allow them to send QUIK-COMM messages to our QK11 system?

Ann Simi
Arlington, VA

A We have set up a QUICK-COMM system on catalog QK13 that can be used to send messages to us. This is typically a last resort, since cross community is available. You can find a form on InfoTalk that needs to be completed and sent to Validations.

You can access the information on QK13 via InfoTalk path: Products & Services/MESSAGING PRODUCTS/QUIK-COMM SYSTEM/Installation Procedures/QK13 Sign-Up Info. NOTE: Ann pulled the form on to her PC and then edited it and sent the completed form (questions and answers included) back to Validations. This helped make everybody's job easier.

Q Do we have a distributor in Brazil?

Roger Faucon
Brussels, Belgium

A Proceda Technologica S/A has been our distributor in Brazil since October 1988. Their import managers, Reisaburo Takeda and Dalton Cortucci, can be reached via the QUIK-COMM system (TAKEDA and DALTON). Willie Niezen (NIEZEN), manager, Latin America, is the GE IS contact for Proceda.

Q Is there an on-line list of Mark III error codes?

Taryn Alderton
London, UK

A The LIBR program UTL*** will allow you to retrieve Mark III F77 and FIV error codes. For example, if you wanted to find the meaning of F77 error code number 14, you would type in /UTL*** IER 14. The program would return this message: 124 = File not saved

Q Aren't there some guidelines for GE IS Proposals?

Norm Silverman
New York, NY

A Yes, here is another excellent use of InfoTalk. Under Sales Support, you will find files on Proposal Support and Presentation Support. You'll find your guidelines there, plus boilerplates for our service line offerings. No more searching around on QK11 or DY28 for files that no longer exist or are outdated.

Q What happened to the DBINFO*** file that used to have information on our databases?

Diego Pannuto
Milan, Italy

A That file has been eliminated since I could not find anyone willing to maintain the information in a commercially presentable manner.

If you need information about our databases, your best bet is Fast*Fax/Databases in InfoTalk. Fast*Fax maintains this file as needed and requests the field to update Fast*Fax on any modifications, deletions, or additions.

Q One of my EDI clients asked how we tax on EDI*EXPRESS traffic. How is the tax applied?

Nancy Ponzetti
San Francisco, CA

A The resources for this application are taxed as if it were normal usage. That means we follow

the county and state requirements. At present we calculate taxes for only two states, Ohio and Texas.

Just a note to US sales personnel. As of March, the Multi-Country Service Supplement is available for EDI*EXPRESS clients. For more information, see Fast*Fax/MCSS and EDI*EXPRESS in InfoTalk.

Fast*Fax Tips & Notes

For all those people wanting to join QUIK-COMM group addresses, please remember that you need to send a message only to the owner of the group, not the entire group, which may have as many as 200 addresses. To find the owner of a group, do a Find command in InfoTalk. The system will list the members of the group and at the end of the list give the owner of the group.

NEW & REVISED DOCUMENTATION

Approximately 100 new and revised documents have been published so far this year and since the last issue of Spectrum. The list below contains a selection of a little over 50 of these. (Mostly agreement forms, price schedules, and article reprints were deleted to cut down size of the list.) Copies of all these publications can be secured using the On-Line Ordering System (OLOS).

Pub. No.	Publication Title	Date Pub'd	Pub. No.	Publication Title	Date Pub'd
1389.00A	The BusinessTalk System Product Profile	Rev., 8905	3917.06	QUIK-COMM to X.400 Access Service Product Profile	New, 8913
1389.12-1	BusinessTalk V5.0 Administrator's Guide	New, 8844			
1389.13	BT5 PC User Documentation Package	New, 2/89	3920.05	MARK 3000 Session Manager User's Guide	New, 8852
1389.13-1	BT5 PC User Guide	New, 8847	3920.06	Managed Network Services For the Global Business Community Brochure	New, 4/89
1389.13-3	BT5 PC Quick Reference	New, 8841			
1389.14	BT5 MAC User Documentation Package	New, 2/89	5070.26D-1	The EDI*T System: Version 2.4 User's Guide	Rev., 1/89
1389.14-1	BT5 MAC User Guide	New, 8841	5070.84	Petroleum Industry Portfolio	New, 12/88
1389.15	BT5 Implementor's Guide	New, 8904	5070.84-1	Joint Audit Date Exchange (JADE) Brochure	New, 12/88
1401.01N	Teleprocessing Services International Access Directory, April-June, 1989	Rev., 8914	5070.84-2	Joint Interest Billing Exchange (JIBE) Brochure	New, 12/88
			5070.84-3	Computerized Equipment Pricing System (CEPS) Brochure	New, 12/88
2051.07-8E	MARK 3000 Service: 8. MVS Utility Subroutines	Rev., 8852	5070.84-4	API PipeNet System (PIPENET) Brochure	New, 12/88
2051.07-9E	MARK 3000 Service: 9. MVS Disk Pack & Tape Management	Rev., 8852	5070.84-5	OILEX Brochure	New, 12/88
2051.89	MARK 3000 Service: Application Integration Management Manager User's Guide	New, 8852	5070.84-6	Credit Card Services Brochure	New, 12/88
3410.72-10	Your Guide to Office Communications: QUIK-COMM to FAX February 1989	New, 2/89	5070.85	The COEP System User's Guide	New, 8906
3410.129	QUIK-COMM Connector Developer's Guidelines	New, 8852	5070.86	The COEP System: PWS User's Guide	New, 8906
3410.130	Handling Business Messages Brochure	New, 12/88	5070.91	The COEP System Implementation Guide	New, 8906
3410.131	The QUIK-COMM Connector Portfolio	New, 8852	5070.92	The COEP System Administrator's Guide	New, 8906
3410.133	QUIK-COMM Toolkit Developer's Guide	New, 8852	5072.01-1	The DESIGN*EXPRESS System User's Guide	New, 8906
3410.134	QUIK-COMM Toolkit Reference Guide	New, 8852	5072.01-2	The DESIGN*EXPRESS System High-Speed Service Access User's Guide	New, 8906
3410.135	QUIK-COMM Toolkit Utilities Guide	New, 8909	5072.02-1	The DESIGN*PC System User's Guide (includes the two DESIGN*EXPRESS books above)	New, 8906
3410.136	QUIK-COMM to FAX Service Product Profile	New, 8908	5072.03-1	The DESIGN*DISPLAY User's Guide	New, 10/88
3411.09-1	PC Mailbox Multiuser User's Guide	New, 3/89	5072.08	DESIGN*EXPRESS System Overview	New, 8845
3411.09-2	PC Mailbox Multiuser Installation Guide	New, 8912	5073.09A	Translator Interface and Print Programs User's Guide	Rev., 8905
3411.09-3	PC Mailbox Multiuser Quick Reference	New, 3/89			
3411.14	PC Mailbox MultiUser Product Profile	New, 8910	5075.13	The Bancor*Express System Brochure	New, 12/88
3412.04	QUIK-COMM to Wang Office Connector Folder	New, 12/88	5076.00	UPC*EXPRESS Product Profile	New, 8910
3501.48	Application Recovery User's Guide	New, 8909	5076.01	Retail Industry Brochure	New, 3/89
3917.02	OSIAM/OSI Access Manual	New, 1/89	5076.02	UPC*EXPRESS Catalog Brochure	New, 3/89
3917.03	X.400 MHS Directory Services User's Guide	New, 8852	5214.01	Information Systems for Port Communities Brochure	New, 2/89
3917.05	QUIK-COMM to X.400 Access Service Addressing Quick Reference Guide	New, 8913			

INDUSTRY BRIEFS

IBM is integrating its internal and external (IBM IN) data communications services in Europe and is building a high-speed backbone. The proposed backbone, which will provide a direct path from any national network to another, is being designed to deliver a response time of one-half second between national gateways.

IBM's twin ring backbone will go into operation this year. It will link together four IBM sites—two in England and two in the Netherlands—via parallel rings of leased lines. There will be two nodes at each site, one for each ring. The rings will be joined by a high-speed link between the front-end processors at each site so that traffic can be re-routed from one ring to another.

The backbone will be connected to other IBM networks around the world, notably in the US, Japan, and Hong Kong.

Four more telecommunications operators—Regie des Telegraphes et des Telephones of Belgium, Telecom Australia, PTT Telecom Netherlands and Singapore Telecom International Ltd.—have each bought a 5 percent stake in Computer Sciences Corp.'s Infonet international data network, reducing CSC's stake in Infonet to 40 percent. France Telecom, and Deutsche Bundespost, with 15 percent each, and Televerket of Sweden and Telefonica de Espana SA, with 5 percent each, took their stakes in Infonet last September.

Tymnet McDonnell Douglas Network Systems Co. is planning a range of new products, including network bridges, smaller versions of its largest packet switches, and faster switches for voice and data communications, sources said. The new products appear to be aimed at breaking Tymnet out of its packet-switching niche and bringing Tymnet networks closer to the desktop.

The company plans to push its packet switch technology into the local area network (LAN) territory with bridge products for linking remote segments of Ethernet and token-ring

personal computer networks.

Analysts say that the LAN bridges could help Tymnet move into fresher data communications markets. The bridges capitalize on the rising popularity of workstation networks by supporting the communications protocols embedded in Unix computer operating systems.

McDonnell Douglas announced an end-to-end network management system for Tymnet networks, designed to optimize resource usage while minimizing overhead. The network management system, built around a Sun Microsystems server and access workstations, is UNIX-based and provides state-of-the-art graphics capabilities. Written in the industry-standard "C" programming language, the system allows for easy customization.

The network management product supports the life cycle of the network, from the planning and requirements

stage through installation, daily operation and expansion. It will be available in late 1989.

NYNEX and Telenet Communications Corporation, a US Sprint Company, have announced an agreement to field test NYNEX's digital Data-Over-Voice (DOVPATH) private line access service. Voice and data will be transmitted over two ordinary telephone lines between Telenet's sales offices and its data center in New York City. The trial will allow Telenet to evaluate the performance and operational characteristics of NYNEX's new private line service, which uses the universal data voice multiplexing (UDVM) technology. This technology combines voice and digital signals over a single telephone line to the local company central office. DOVPATH digital private line service will transport the UDVM data stream to value-added networks like Telenet's.



As an expression of their friendship, Dr. Hisao Kanai of the NEC Corporation presented Bob Hench with a traditional Japanese doll. Bob, in turn, donated the doll to the Executive Briefing Center in Rockville, so that his friends and colleagues can enjoy this rich expression of Japanese culture.

MILESTONES

Congratulations to the following GE Information Services employees who celebrated service anniversaries in February, March, and April 1989.

YEARS

30

Don Montgomery
Nashville, TN

John Sellers
Rockville, MD

Nick Stamatiades
Brook Park, OH

Sol Koppel
New York, NY

Norman McBurney
Rockville, MD

Denis Senko
Rockville, MD

Kirt Stanfield
Rockville, MD

Terrence Thiel
Rockville, MD

James Malecki
Rockville, MD

James Marzonic
Englewood, CO

Andrew Sabol
Brook Park, OH

John Summerville
Rockville, MD

Bob Votta
Parsippany, NJ

Arnold Grift
Amstelveen,
the Netherlands

Randy Howard
Atlanta, GA

Clare King
Rockville, MD

Darryl Kuka
Rockville, MD

Daniel Mackey
Tampa, FL

Bert Meerman
Hong Kong

Linda Morris
Rockville, MD

Edward Nockunas
Englewood, CO

Myra Pierce
Atlanta, GA

Malcolm Robarts
New York, NY

Leo Schneider
Rockville, MD

Colin Spinks
Sydney, Australia

Robert Tessier
Montreal, Canada

J.G. "Sonny" Tom
Los Angeles, CA

Jean Marc Verla
Paris, France

Juergen Vidic
Cologne, Germany

Nancy Visocki
Parsippany, NJ

Sid Waxman
San Francisco, CA

YEARS

5

Thurston Balfour
New York, NY

John Bennett
Rockville, MD

Koen Bertoen
Amstelveen,
the Netherlands

David Bleistein
Rockville, MD

Thomas Bodnar
Rockville, MD

Ian Bullen
London, England

Dave Butler
Rockville, MD

Charles Cappello
Meriden, CT

Sandra Carey
Parsippany, NJ

Harry Coffin
Cleveland, OH

Lynette Demarest
Rockville, MD

Vincentia Ferrara
Englewood, CO

Dodie Gilbert
Los Angeles, CA

Anthony Hall
Rockville, MD

Scott Hamilton
Rockville, MD

Keith Huffman
Rockville, MD

Dennis Lin
Rockville, MD

Michael Manzi
Brook Park, OH

John Mosley
Rockville, MD

Dennis Perry
Brook Park, OH

Philip Provin
Rockville, MD

Bob Rengers
Rockville, MD

David Rice
Rockville, MD

Chuck Sarich
Rockville, MD

Bonnie Sax
Rockville, MD

Richard Scott
Nashville, TN

Mark Smith
Rockville, MD

John Towles
Rockville, MD

Jack Hieu Tran
Rockville, MD

Paul Tubach
Rockville, MD

Donna Valtri
Rockville, MD

Frances Wicks
Tampa, FL

John Workman
Rockville, MD

Lincoln Yarbrough
Rockville, MD

YEARS

25

Louis Hauschild
Rockville, MD

Thomas Popdan
Rockville, MD

Peter van der Geest
Rockville, MD

Norman Wetzel
Rockville, MD

YEARS

15

James Beesley
Brook Park, OH

Rodney D. Clark
Rockville, MD

John Coyle
Rockville, MD

Paula Evans
Brook Park, OH

Paul Foster
Rockville, MD

Sally Friedmann
Atlanta, GA

Steven Furr
Rockville, MD

Charles Galloway
Rockville, MD

Mary Jane Low
Schenectady, NY

YEARS

10

Isodor Affat
Rockville, MD

Lori Allen
Rockville, MD

John Batchelor
Bellevue, WA

Michael Brombach
Cologne, Germany

Chris Cardwell
Rockville, MD

Ruth Culican
Rockville, MD

Josef Descovich
Vienna, Austria

Armin Diener
Zurich, Switzerland

Anita Finucane
Brook Park, OH

Harrison Freeman
Brook Park, OH

Phyllis Gallichio
Chicago, IL

YEARS

20

Wally Beck
Rockville, MD

Horst Berger
Frankfurt, Germany

Christopher Brook
Rockville, MD

Mike Cowie
Melbourne,
Australia

Roy Gamer
Rockville, MD

Joe Grzegorzewski
Parsippany, NJ

Carolyn Jones
Rockville, MD



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0308.34
Printed in USA