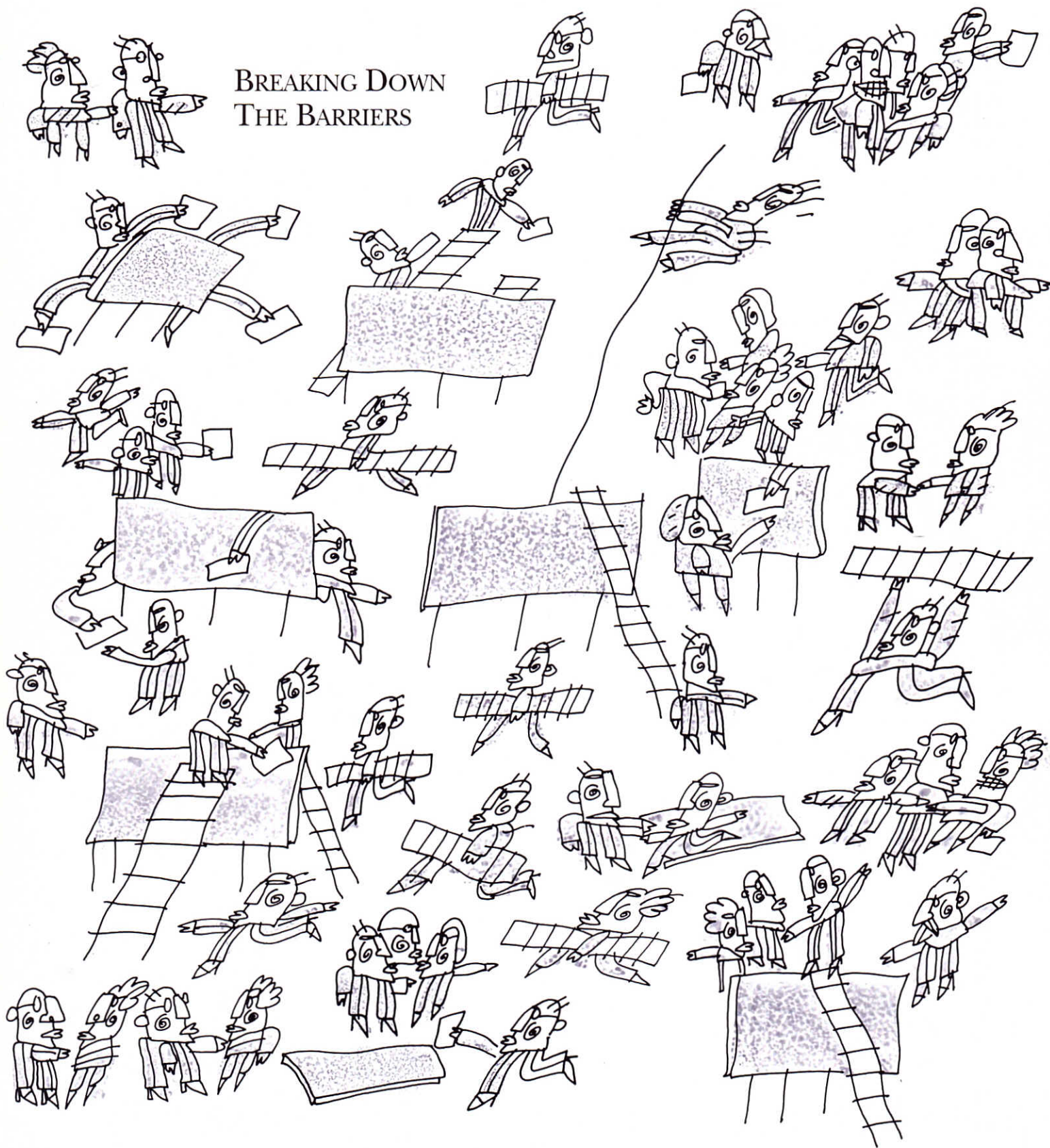




SPECTRUM

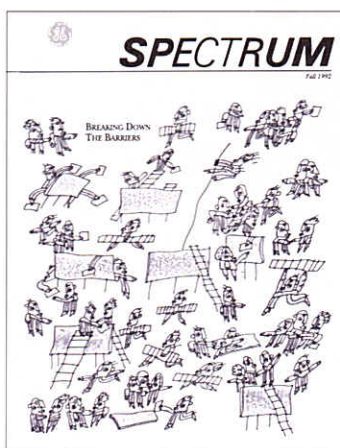
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BREAKING DOWN THE BARRIERS



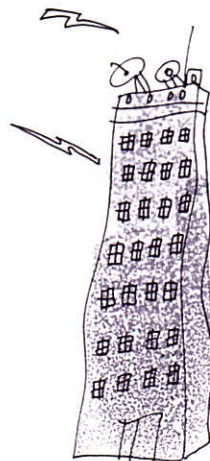
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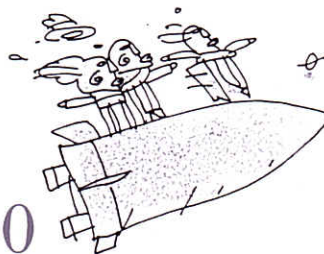
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GEIS' WINNING STRATEGY

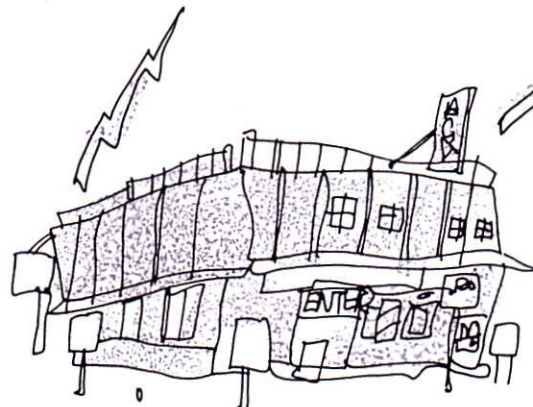
GE Information Services is positioning itself to be the leader in electronic commerce, the growing movement away from paper to network communication to facilitate commercial exchange within and between businesses.

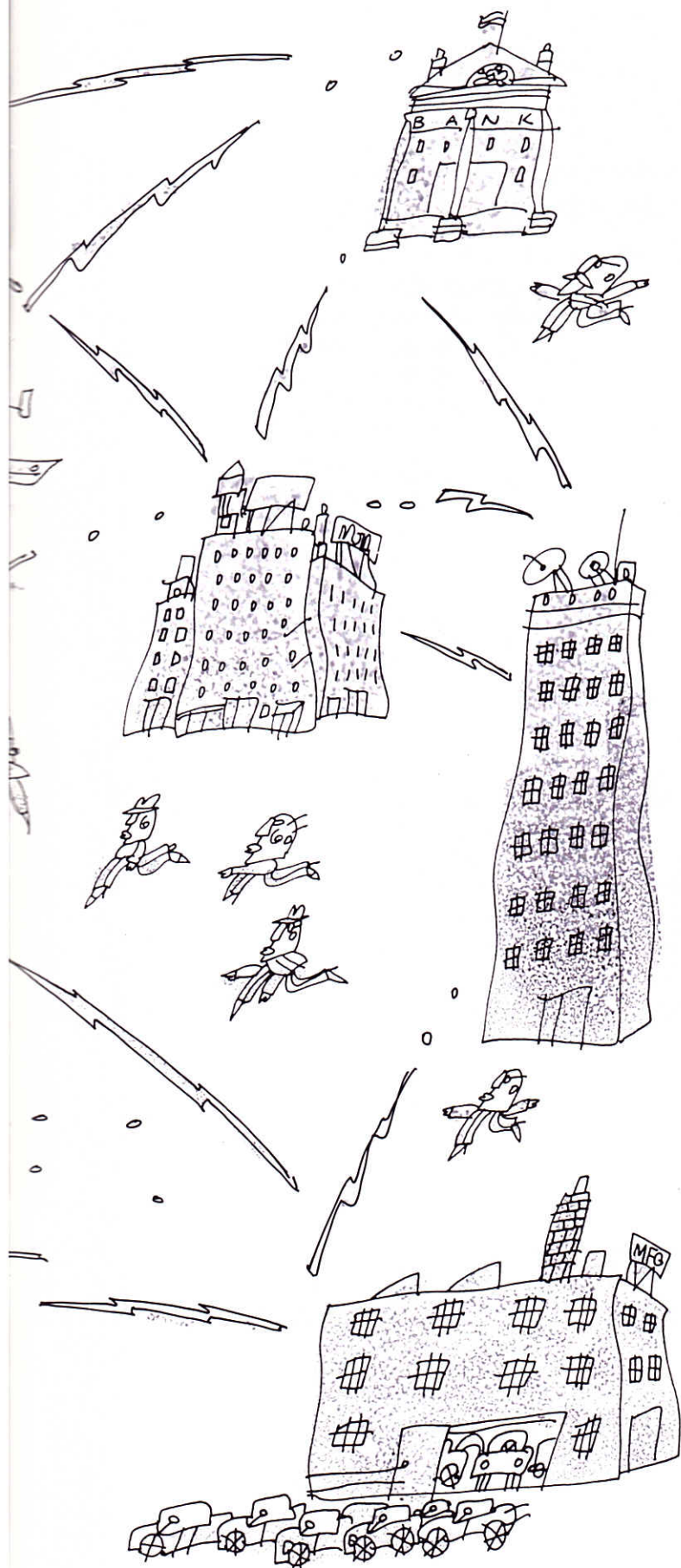


GE INFORMATION SERVICES competes in one of the toughest, most volatile, and most exciting markets in the world. Advancing technologies with increasingly shorter development cycles, changing regulatory environments, and the increasing move toward a global marketplace are changing both the players and the plays.

These same forces are changing companies' expectations of their Information Services providers. Competitive pressures in their markets mean they must streamline their operations, provide higher quality goods and services, and respond quickly to client demands. The fierce competitive environment is requiring all companies to form closer relationship with their vendors, business partners, and clients. Companies increasingly rely on information technology to enable them to do that.

Information technology is at the heart of what is becoming a world of electronic commerce in which paper is replaced by network-based communication in intracompany and intercompany business exchanges. Companies are recognizing that electronic commerce means more than moving information more rapidly. They see it as a strategic tool to enable change in the way they do business—to attain greater





efficiency in their operations, more streamlined dealings with their trading partners, and more effective communication throughout their entire business communities.

GE Information Services is ideally positioned to support this growing need for electronic commerce. Our long-standing leadership in linking trading communities and strategic business partners, using our messaging enablers, MNS, and custom applications, distinguishes GEIS from our competitors in this rapidly growing market. The winners in the new world of electronic commerce will be providers who can offer total business solutions on a global scale.

THE GARTNER GROUP HAS accorded GEIS the leadership position in what it calls Interenterprise Systems, the electronic exchange of messages and documents between business partners, which is a key part of the larger market of electronic commerce. Gartner Group ranks GEIS high in both product strength and the scope of our offerings and relationships. But Gartner sees IBM, with its aggressive alliance and partnering strategy, and Sterling/Ordernet, with its strong software application skills, challenging that leadership role. Companies building portfolios to challenge the leaders include DEC, AT&T, Fujitsu/ICL, and British Telecom. These companies have the scale and the financial strength to invest in building the skills and critical mass they need to gain market share.

However, GEIS has strategic advantage in penetrating the electronic commerce market. As the leading provider of EDI and second only to AT&T in messaging, GEIS is in a strong position to understand the market demands of both these components of electronic commerce services and build on that strength.

Strategic initiatives already under way within GEIS will strengthen our ability to respond to our clients' growing dependence on electronic commerce and keep the competition at bay.

To deliver high quality, cost effective application solutions, GEIS has embraced a three platform processing architecture, interconnecting our proprietary and IBM-compatible platforms and integrating UNIX capability to provide standards-based solutions. This plan has three primary drivers. GEIS must continue to provide high quality support for current client applications and services. We need to be able to interface easily with client systems that use several industry standard operating environments. We absolutely must

incorporate into our architecture lower cost processing power that UNIX servers provide. In addition, working in this standard environment gives GEIS the productivity benefits of sourcing software and using the advanced development tools available for UNIX.

GEIS' THREE-YEAR DEVELOPMENT plan will keep us solidly ahead of our competitors in the electronic commerce market. Our strategy is to integrate our EDI, Business Communications capabilities, and X.400 service in a single messaging service and to extend our messaging capabilities to include X.500 and X.435. This integrated messaging capability will be developed on a UNIX architecture to provide distributed processing. This will enable GEIS to build solutions that extend our clients' native computing environments by having GEIS' service appear as an icon on the user's desktop. And it will position GEIS to serve smaller regional markets.

We will continue to strengthen our consulting skills and support infrastructure to better address the full scope of requirements from clients seeking electronic commerce solutions that enhance productivity.

Our portfolio of industry and cross-industry applications will build upon our investment in integrated messaging and the underlying architecture and support. Incorporating third party applications on a UNIX platform, using state-of-the-art development tools and languages, will enable us to provide more efficient solutions that can be easily replicated. This environment will capitalize on GEIS' strength in providing network-based applications integration and global support with a speed and flexibility that our competitors cannot match. We will place greater emphasis on making applications easier to use and more self-supporting so that we can handle growth, particularly in the number of smaller, less sophisticated companies that are part of our clients' expanding electronic commerce communities.

THE NETWORK PIECE OF OUR strategy reflects the reality that at the lower end of the value chain, competitiveness is capital intensive, and winning is often a question of offering the lowest cost. This

favors communications carriers, who have the advantage of economies of scale. GEIS has concluded that it makes good business sense to work closely with these carriers in selecting our delivery system. Rather than build the high-performance network component of solutions that bandwidth hungry applications require, GEIS is moving toward outsourcing more of our basic network needs.

IN OUR EFFORTS TO IDENTIFY the right provider, GEIS is taking advantage of the scale and leverage of corporate GE to negotiate superior economies, coverage, and quality. The evaluating team is looking at both today's network needs and the evolving need for frame relay, ISDN, ATM, and beyond. Quality and cost will remain the touchstones that guide the decision about where to source and where to build our networking capability.

This strategy of integrated messaging as the foundation for industry and cross-industry business solutions and network-based applications integration strategically positions GEIS to be the leader in the dramatically growing area of electronic commerce. The key is flawless execution.

"Realizing our vision demands thinking outside the box," says Hellene Runtagh. "We must be absolutely attuned to our customers to ensure that we are delivering on their expectations—not ours. We must relish and embrace change—and constantly take a clean sheet of paper as we look for ways to apply our talents and creativity to deliver customer responsive productivity solutions at reduced cycle times and lower costs. We must maintain a culture that has a strong sense of urgency, that sets the bar unrealistically high, and breaks down the barriers that slow us in attaining our goals."

The initiatives described in this issue of SPECTRUM are all directed at creating this kind of culture. □

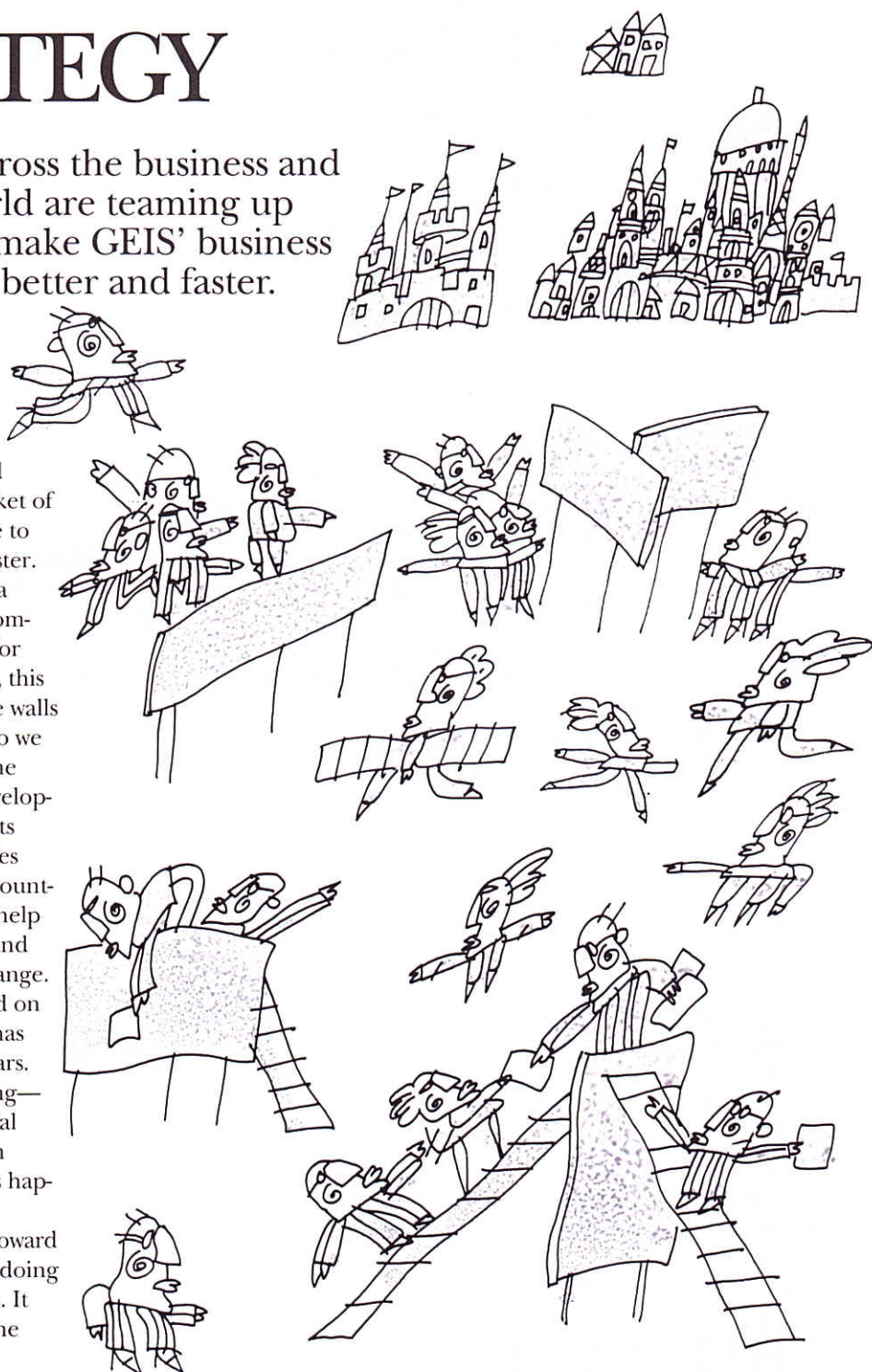
THE BACKBONE OF GEIS' WINNING STRATEGY

People from across the business and around the world are teaming up to find ways to make GEIS' business processes work better and faster.

IN THE VOLATILE and fiercely competitive market of the '90s, companies have to make change happen faster. They have to move with a speed and agility their competitors cannot match. For GE Information Services, this means hammering at the walls that separate functions so we get the right tools into the hands of our systems developers and the right products into the hands of our sales force. The GEIS staff is counting on the Backbone to help break down those walls and accelerate the rate of change.

The Backbone is based on a business practice that has worked effectively for years. It's the idea of networking—cutting across the artificial barriers built up between functions to make things happen faster.

GE has been working toward this boundaryless way of doing business for several years. It started with delaying the



"We're very serious about empowering the Backbone teams. We've asked them to make major improvements in the productivity and cost effectiveness of key business processes."

Hellene Runtagh

management structure, empowering individuals, and creating cross-functional teams. It became part of the GE culture through WorkOuts in which people identify barriers and see them knocked down on the spot. By embracing Best Practices, GE abandoned the "not invented here" syndrome and acknowledged that GE can learn from other businesses to improve their own. Process mapping became a tool for spotting the barriers that get in the way of attaining the speed of movement that all businesses absolutely must gain.

The Backbone builds on all these initiatives and takes them a giant step farther. The Backbone isn't "just another cross-functional team" approach. It's a fundamental change in the way the business operates. It's giving empowerment some real teeth. The Backbone is charged with making our business processes work better. Backbone teams are going to tell the GEIS staff what that will take and the staff will respond.

"We're very serious about empowering the Backbone teams," says Hellene Runtagh. "We've asked them to make major improvements in the productivity and cost effectiveness of key business processes. We expect them to do their homework and test their findings. When they come to us with solid recommendations, we're prepared to give them what they ask for."

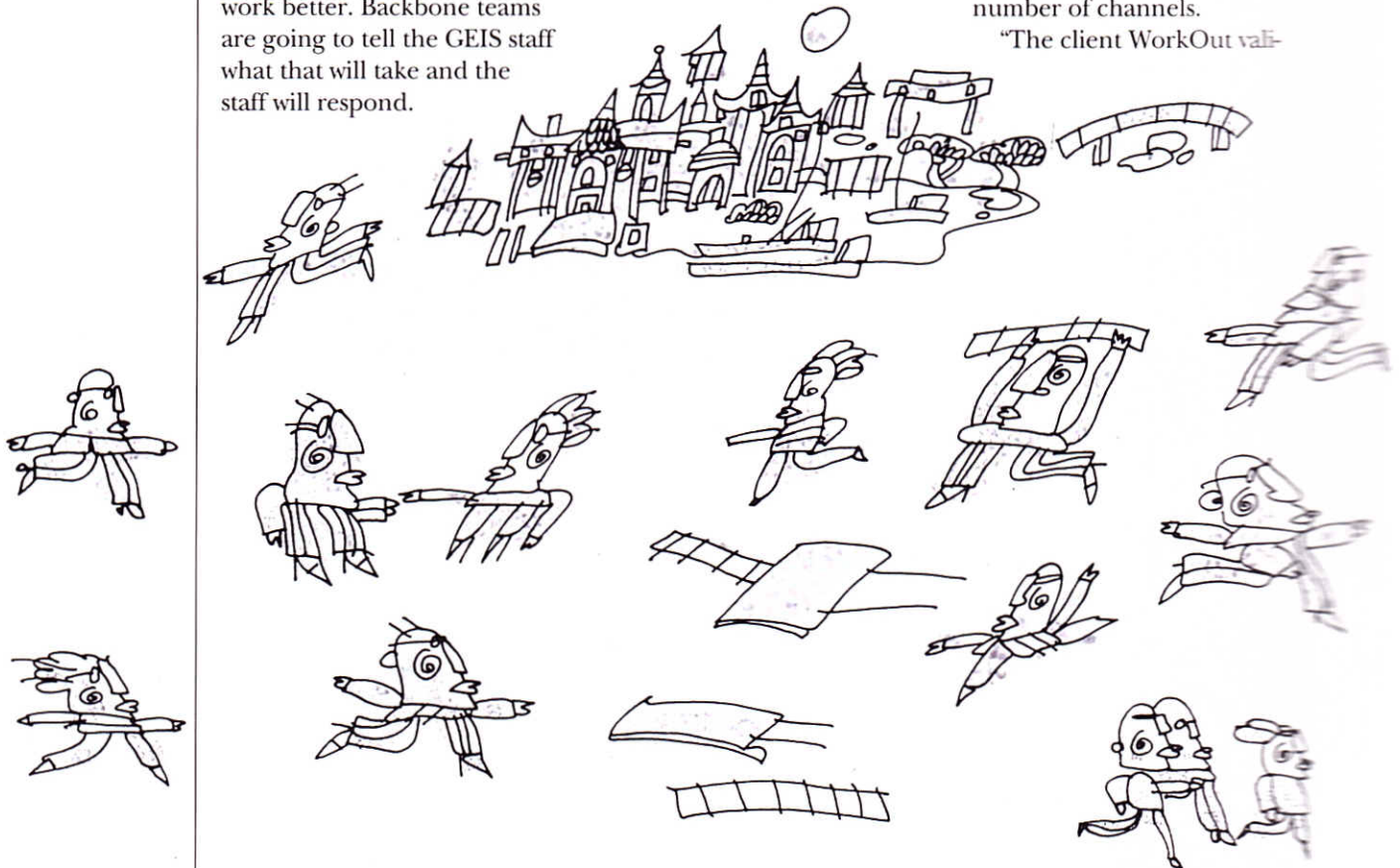
THE BACKBONE IS divided into seven working groups—each one charged with addressing an operational process that doesn't move fast enough. They have very clear charters with 90 day benchmarks. The Backbone knows there is no time to lose.

In attacking the issues, each Backbone team has organized itself a little differently. Some of the teams are using WorkOuts to quickly get to the heart of the problem. The EDI team, for example, organized a

WorkOut session with clients who belong to the EDI Users Group to get their input on three areas the team had identified as major issues.

Seventeen clients and eight EDI support people from across functions within GEIS formed three WorkOut teams. One team addressed the issue of how GEIS can more effectively implement, ramp, and support clients. Another team looked at issues surrounding document tracking and reporting. A third team worked on identifying new features and capabilities. At the end of the two-day WorkOut, the teams presented their recommendations to Hellene Runtagh and a course of action was determined. Co-champions from the EDI Users Group and GEIS were assigned to each action item, and a time frame for implementation was determined. Progress on action items is being reported back to the EDI Users Group through a number of channels.

"The client WorkOut val-



dated many of the Backbone team's findings," says Marilyn Peifer. "Keeping clients involved in implementing the action items will ensure that we remain client focused."

Other teams are using Best Practices, both within GE and at other businesses who use similar processes. The Sales Productivity team conducted an internal Best Practices to identify successful approaches to saving eroding business. These "Success Stories" will be posted in InfoTalk.

The New Product Development team did an extensive external Best Practices study of six technology companies. The team talked to managers in marketing and engineering about their processes in product definition, development, rollout, and support. They're testing some of the best practices with four GEIS development teams.

"It's good to take a look outside to discover creative ways other companies conduct business," says Katie Vogelheim. "It forces you to think outside the box. Also it helps to break down internal resistance to change when you can demonstrate that a process works for a respected company."

Some teams are forming subnetworks to help them tackle the issues. Daniel Shih, who is on the EDI Backbone team, for example, formed a subnetwork in ASPAC to make sure the EDI needs in that part of the world are reflected in the team's thinking.

IN EUROPE, PEOPLE on the various Backbone teams have formed a subnetwork. "The objectives of the teams are intertwined," says Wayne Morrison, who is on the Capacity Planning team. "We talk frequently to make sure that our actions are in sync

and that we're not duplicating effort."

Because the teams have the backing of senior management, they find that people are willing to give their support to the teams' efforts.

"The organization is going to know itself better as a result of the Backbone," says Jack Fowlkes, a member of the Capacity Planning team. "We're empowered to tap into multiple sources without worrying about organizational structure or management approval. Once you break down the walls, it's tough to try to put them up again."

Not only are the walls coming down, the teams are seeing issues from perspectives they wouldn't ordinarily be exposed to.

"Working on the Backbone is forcing us to look into areas that appeared to be someone else's responsibility," says Matt Mulligan, who is on the Sales Productivity team. "This is a broadening experience for all of us."

The teams, which are all global in composition, use conference calls as their primary means of team working. They use QUIK-COMM extensively as well.

"The Backbone is breaking down functional, geographic, and cultural barriers," says Katherine Butler. "People are really beginning to think globally, to look at how decisions affect people in other parts of the business and other parts of the world. When you have a big issue to deal with and ambitious goals to meet, you just have to break through the barriers."

While the teams are impatient that they aren't moving as quickly as they would like, most have made substantial progress toward reaching their ambitious goals.

TEAM 1, CHARGED with improving capacity planning, is attacking the issue on three fronts. They're working toward a worldwide capacity planning process, based on the on-line revenue reporting system, Rev*View. A sales forecasting module for Rev*View is in development.

In the interim, the team is working with the account teams of GEIS' 20 largest clients to project capacity requirements. Monthly reviews with sales and finance focus on application changes or additions, price changes, and unique client activity that could have impact on usage. To ensure efficiency in new applications, the team is working with marketing to initiate a requirement to build disciplines, such as operating cost measurement, into the specifications for all new product development. They are looking at ways to improve efficiency of existing products. The team is also examining internal use to see where there may be excessive use. They have updated the catalog name and address file to be able to track usage.

TEAM 2 IS WORKING in tandem with a cross-functional MNS team to meet its goal of improved MNS infrastructure and reduced cycle times. The team has greatly simplified the MNS contract, reducing it from 26 pages to only three. This global contract enables people to write local MNS contracts and to bill clients locally. The team is making use of GEIS' own global network to provide support tools for MNS sales and implementations. They've developed an on-line Worldwide Network Order system to replace the manual systems formerly used to enter client installation requests. The on-line system



"The Backbone is breaking down functional, geographic, and cultural barriers. People are really beginning to think globally, to look at how decisions affect people in other parts of the business and other parts of the world."

Katherine Butler

enables sales people to track the status of MNS orders and keep clients apprised of progress. The team has also developed MNS Service Availability profiles for all the countries GEIS supports. These profiles, which give detailed information on levels of service available in each country, are available in InfoTalk.

TEAM 3'S CHARTER calls for a 50 percent reduction in new client set up time. The team has made a major breakthrough that will greatly improve GEIS' ability to move quickly in negotiating global sales opportunities and closing contracts. The team tackled the process of signing and implementing global clients and energized a global subnetwork to help them address it. The current process, which treats global sales as "exceptions" that require complex negotiation simply hasn't caught up with the changing nature of the business, which is now largely global.

While the current process provides an internal structure to address global sales opportunities, today's competitive market requires a faster, simpler, more client focused approach. The new process is aimed at empowering the lead sales person to meet the client's needs without having to negotiate with each country on pricing and support.

The team's solution addresses what needs to change to deliver speed and quality to the client and the GEIS team worldwide. The proposed new global sales and support process will greatly simplify contract negotiation and eliminate the complexity in our internal revenue distribution. This will let worldwide support people focus their efforts on the client's needs instead

of on internal bureaucracy.

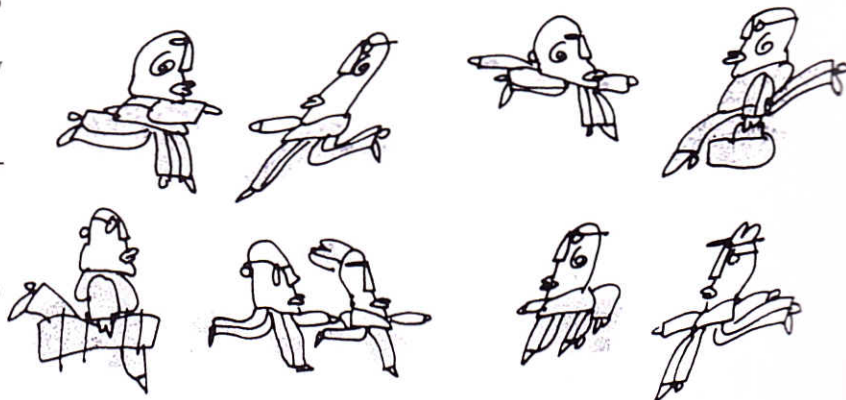
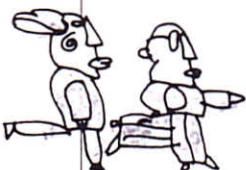
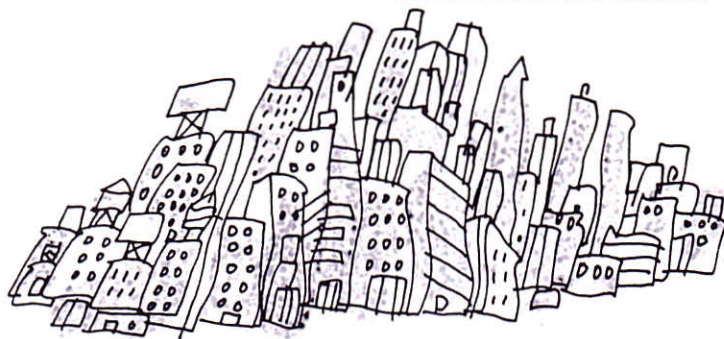
"Individuals have been trying to simplify this process for years," says Hellene Runtagh. "It took a Backbone team with the right mix of functional and geographic know-how to finally make it happen. This validates that the Backbone process works."

TEAM 4 IS TACKLING the product and services delivery process. They're looking at every aspect of product/service delivery from original concept all the way through receipt of the first client invoice. After conducting an extensive Best Practices study, both externally and with GE Corporate Business Development, the team is testing the Best Practices in the GEIS development environment, working with four product development teams—two major enhancements and two new applications.

In parallel, the team has identified several structural and cultural areas in which changes must be made across the busi-

ness to achieve the team's productivity goal. Areas of concern are the need for better cross-functional budget planning and prioritizing and issues surrounding the increased use of cross-functional, global teams—such as the need for training and new measurement processes. The team has asked that staff members work with them to address these areas of fundamental change.

TEAM 5, CHARGED with improving EDI implementation and productivity, is examining the various areas that affect the productivity of our EDI business. The team drove an effort to create a team of geographically dispersed EDI experts to strengthen support for the EDI sales force, working closely with sales people to understand their requirements. As a first step, the EDI Sales Support and Consulting group has been moved from marketing to the sales organization, reporting to the Technical Services Organization. The group will continue to work with sales and the Backbone



team to refine its charter to play an expanded role in the pre-sales, implementation, ramp, and ongoing support of EDI clients.

To streamline the set-up process, the team conducted a cost/benefit study and validated the feasibility of EDI BASIC, a simple, step by step software package that automates some basic set-up functions. To remove the complexity of EDI use for small, non-computer oriented suppliers, the team has proposed development of a simple, easy to install version of EDI*PC. This project also has strong client endorsement. To reduce the number of calls to client services, the team has proposed using periphonics as an interface to EDI*EXPRESS, so trading partners could use their touchtone phones to query the status of interchanges. Such calls account for 15 percent of calls to Client Services.

TEAM 6 IS CHARGED with improving the testing and integration of new products by involving GEIS field people in the test and integration process. The team's challenge was more a cultural one than an implementation change. The team had to convince

field people that participating in the testing of new hardware and software was actually of benefit to them and worth changing their way of working to use the test bed rather than their local network node.

"If we catch the bugs in our products and services before we deploy them out to our clients, everybody benefits," says Maura Conley. "This enables us to be proactive rather than reactive in supporting our clients."

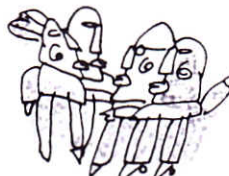
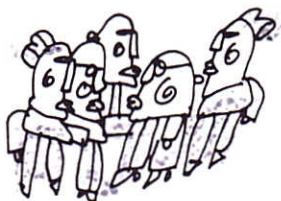
The team has launched six global internal tests, including the MARK III hyperchannel, which was tested by GTE and Apple SDC groups and by the EDI development group in Nashville. The team also facilitated a wide range of client custom application testing against the MARK*NET Switcher Replacement release. Significant problems were discovered in the test phase. The new switcher is now carrying commercial load with no client problems reported. Major test initiatives for the remainder of 1992 include RNN 12.0, DPS 9000 Phase II, and additional product testing.

TEAM 7 IS CHARGED with identifying the kind of tools, training, and support needed to make a quantum leap in sales productivity across the business. The team is examining productivity gains that can be made globally as well as initiatives in different parts of the Triad. Global initiatives include Sales and SDC assessments to strengthen skills and identify areas for improvement,

product fairs that expose clients and prospects to a broad spectrum of GEIS applications, and the Best Practices study of erosion halting initiatives, mentioned earlier. An Executive Contact program, which involves GEIS staff in major opportunities, is being initiated to help sales people gain access to senior executives. In Asia Pacific a development program for new hires has been put in place, and in Europe, a dedicated team has been appointed to identify large, complex sales opportunities.

BACKBONE TEAMS continue to set aggressive goals for themselves. In meeting those goals, they will increasingly involve other people in the business, whose expertise can help speed the process along.

"The productivity gains charged to the Backbone teams simply must be attained," says Hellene Runtagh. "To remain competitive in this decade and beyond, GEIS must deliver what our clients want, when they want it, and at a competitive cost. And in doing so, we must maintain the highest levels of quality. That's a tough agenda, but it's what is required of all businesses that hope to be competitive in the '90s." □



DELIVERING THE FUTURE FASTER

Three accelerated investment projects have dedicated teams working to gain speed to market with new products and services.

TO MAINTAIN competitive advantage, GEIS has to deliver the future faster. GE is investing in our doing just that. At the time of the 1992 budget review, GE gave GEIS \$5 million beyond our budget request for 1992 to invest in development projects that will give the business clear market advantage. GEIS is using this investment to fund three projects, one that will give us market advantage in messaging services and two that will give us new applications to enter very attractive markets.

Each of these projects has dedicated, cross-functional teams focused on delivering the product or service. Team leaders report to a number of vice presidents to ensure that the team is seeing the big picture. Each project has clear measurable goals for which the teams are accountable.

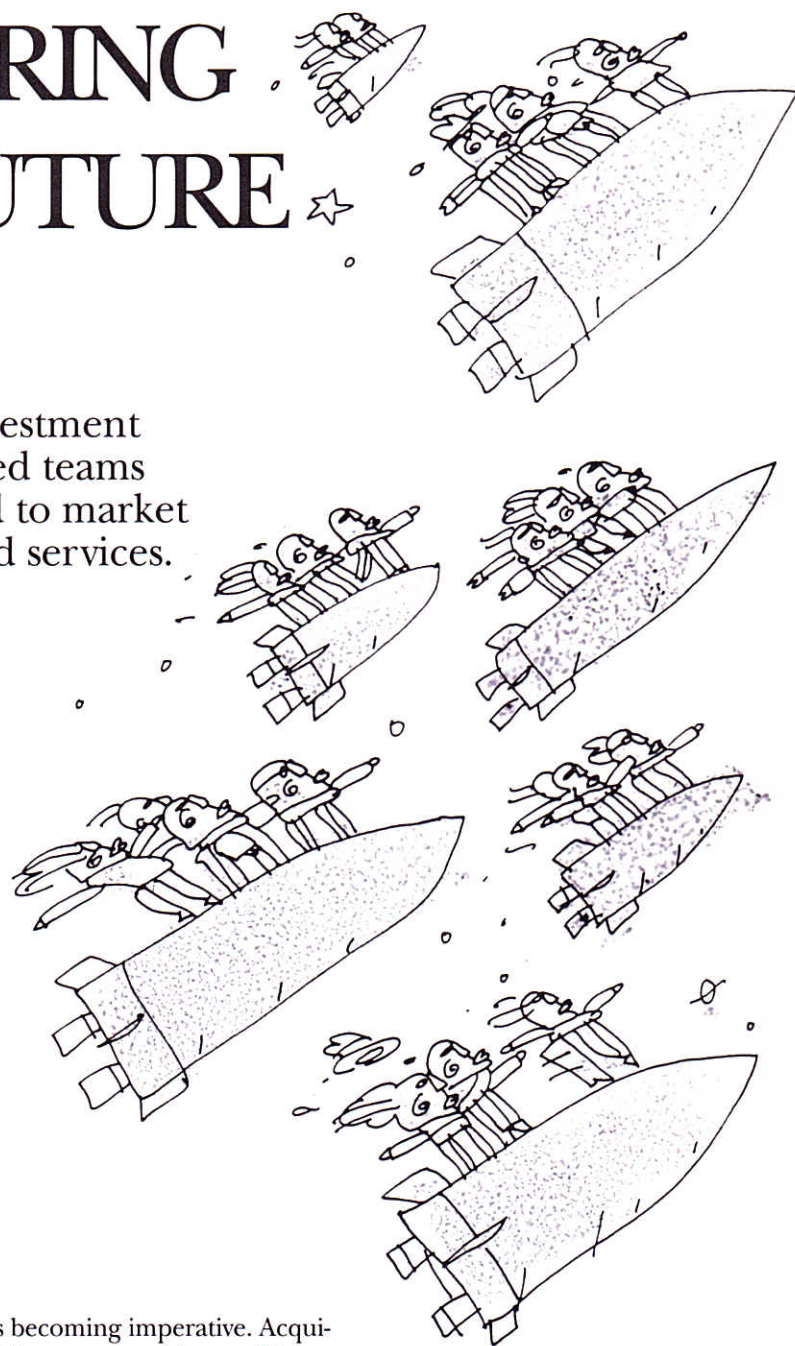
DISTRIBUTED SERVICES/ INTEGRATED MESSAGING

In the fast paced '90s, quick and easy access to data critical to achieving business objectives

is becoming imperative. Acquisitions, partnerships, and joint ventures are blurring distinctions between clients, vendors, and business partners. As user communities grow and their relationships become more complex, companies look for both speed and ease in communicating. They are recognizing that they can gain greater efficiency and communicate more effectively by having their various messaging services harnessed into an integrated messaging solution. And they want

this integration at the desktop.

To respond to these demands and gain competitive advantage, GE Information Services is devoting part of its accelerated investment to developing a distributed services/integrated messaging capability that will make all GEIS' messaging services accessible through a single system interface. The project is at once the most capital and people intensive of the three accelerated investment



As user communities grow and their relationships become more complex, companies look for both speed and ease in communicating.

projects, because it entails a major change in the way GEIS delivers our messaging services.

During the first phase of the project, a cross-functional team, under the leadership of Donna Valtri, spent an intensive eight-week period studying all dimensions of integrated messaging: client requirements, competitive activity, development issues, and support capabilities. The team identified all the elements that will be required to develop an integrated messaging capability and the mix of expertise needed to maximize development of each functional piece of the system. Cross-functional teams comprising a mix of engineering, marketing, SDC, and support people will work in parallel to develop the vari-

ous pieces of the integrated messaging solution.

GEIS' DISTRIBUTED services/integrated messaging solution will provide a common way to route and store messages—including E-mail, X.400 messages, and EDI documents as well as graphics and photographs. The team's concept of "message" goes beyond traditional print messages to include voice, image, and video.

The service will support features of BusinessTalk 2000, such as company specific data bases and bulletin boards, news clipping service, and access to third party data bases. It will allow clients to do things like look up information in a data base from within an EDI application or transmit a spread-

sheet as an E-mail message without having to close one application and open another.

From GEIS' perspective, consolidating today's disparate messaging engines (QUICKCOMM, EDI*EXPRESS, X.400, OPEN*NET) into a single engine will enable major productivity gains in product development and support.

The DS/IM team is developing the integrated messaging service on a UNIX processing platform. The service will strictly adhere to industry standards, so it will be easy to integrate all a client's messaging requirements, whether provided by GEIS, by a third party, or by the client. Because the service will run on a high performance network, it can easily interface with applications

THE DESIGN TEAM

"THIS IS A DREAM of an opportunity for a team to start with a clean sheet of paper and define and deploy the next generation of our service," says Marty Reese. "I'm proud to be on the team."

As the DS/IM design team takes up residence in their new quarters in the Vitro Building on West Gude Drive, about a mile from Metro North, the evidence of teaming is everywhere. The day SPECTRUM visited the team, Ron Fellows officially had the day off, but he was at Vitro anyway, running temporary LAN connections for the team, because not having a LAN was impeding their progress. Quarters are cramped while



The DS/IM Design Team meetings are characterized by lively exchange of ideas. Here Guy Fisher (right) makes a point as Ron Fellows listens intently.

office space is under construction. People are adjusting to working in spaces smaller than most people in the cubicle world of Rockville are accustomed to.

"The physical proximity of our offices helps us come together as a team," says Gary MacPhee, "That's why we

moved in before construction was complete."

The team's perspectives are diverse; so are their personalities. Ron Fellows is the project's chief architect (he also manages the Rockville Technical Center). Marty Reese worries about the front end user interface. Marty



The DS/IM Design Team from top to bottom. Team leader Donna Valtri with (left to right) Ron Fellows and Guy Fisher; Gary McPhee and Mandy Schuyler; Richard Liu and Paula Rodriguez.



divides his time between Rockville and Pleasanton, California, where he manages the Western Technical Center. Richard Liu looks out for system management and operations—how the design affects Technical Operations and Client Services. The three marketers in the group—Guy Fisher, Mandy Schuyler, and Gary MacPhee bring the perspectives of GEIS three key enablers: EDI, Business Communications, and Core Systems, respectively.

Paula Rodriguez recently joined the team to watch for quality issues that could affect testing and integration, because as Paula says, "Quality is built into a product, not tested in." Mike McGaha is on board to look after billing, accounting, and security issues. "Security features have to be built into the design of the service," says Mike. "So do the elements required to catch the data for billing. You don't wait until the system is built to worry about these things."

Kevin Boyne, who has managed European Operations since July of 1989, joins the team in September to lead the Client and Operations Support team and to give the

team a European perspective. Donna Valtri, the team leader, has a diverse marketing background that helps her wear the big hat.

"While we each have a specific piece of the design as our primary responsibility, we have to understand everybody else's perspectives to get the design right," says Richard Liu. "There aren't any barriers or turf protecting here."

The design team meetings are at once informal and intense. The informality comes from their having spent a good bit of time together, learning how to put personalities and modes of expression aside and concentrate on ideas. The inten-

sity comes from their collective desire to get the design of DS/IM right and put GEIS out in front of the market.

"I think the team works together so well because each member has enormous respect for the expertise of the others on the team," says Donna Valtri. "They don't let the way people say things get in the way. And everybody has a sense of humor. That helps a lot too." □

running on a client's local area network.

THE INTEGRATED messaging service will provide the foundation for building total customer solutions. Applications such as financial consolidation, order entry, and X.500 directory services can be easily integrated into the service. GEIS' distributed service/integrated messaging solution will appear as a natural extension of the client's native computing environment, whatever hardware or software they may be using.

A design team to lead the development effort has been named and staffing of the development teams is underway.

The teams will take advantage of emerging software techniques and object oriented programming tools to substantially boost productivity. They will actively search for sourcing opportunities for components of the system. The effort is a major step toward realizing a key element in GEIS' strategy: being superior in enabling technologies and application integration.

GENES2000

In the fiercely competitive '90s, business leaders need to keep close track of their company's performance worldwide. They need immediate access to up-to-date strategic information that enables them to make rapid decisions to improve quality, serve clients more responsively, and gain competitive edge. And they need this information distilled into an easily usable format. GE Information Services is responding to this need by offering a high impact information management system, using Comshare's Executive Information System (EIS) software. Commercializing a pri-

vate label version of this software is the second accelerated investment project. The system will be marketed as GENES2000 (Global Enterprise Network Exchange System).

GEIS PRODUCTS, especially EDI and BusinessTalk, and client custom applications produce substantial amounts of transaction data. The GENES2000 software will enable GEIS to capture that data and organize it into graphical presentations that show business trends, revenue breakdowns—whatever information is strategically important to a business. This information, accessible at the desktop, will enable business leaders to constantly monitor the state of the business and make faster and sounder business decisions.

GEIS will offer the system as a value added enhancement to applications we presently provide to clients. Our clients may also resell the system to their clients. Mitchelmatix, for example, gives major insurance companies access to a huge data base of information on parts and service costs in automobile repair to enable adjusters to quickly estimate the cost of repairs. The company is interested in selling the GENES2000 software to its insurance clients, so it can provide them valuable trends data extracted from the parts and services data base resident on our IBM service.

GEIS LEADERS ARE presently using Comshare's EIS software to keep their fingers on the pulse of the business. The internal model presently has four modules: Revenue, Client Impact Index, The Morning Call Report, and EDI Daily Volume. Data is gathered from



Debbie George, GENES 2000 team leader.

data bases on MARK III into a data hub on MARK 3000 for processing. The system produces highly graphical displays of the data. This gives business leaders an overview of the state of the business and enables them to react quickly to client situations to ensure that GEIS' high quality and performance standards are being met.

The GENES2000 team will be geographically dispersed. Debbie George, the team leader, will be located in the Detroit office, so she can work closely on a joint marketing strategy with Comshare, which is located in Ann Arbor, Michigan. She has a small team in Rockville working on commercializing the software. As the system is rolled out, Debbie will add field support people to the team to put GEIS close to our clients.

To make sure that the software works well in the GEIS environment, Debbie put together a steering committee that cuts across all functions of the business—Marketing, Sales, SDC, Information Systems, Engineering, and Technical Operations. Their role is to identify any problem areas before the application is rolled out and to give guidance to the marketing, training, and

“Our finance people use the LEX2000 software. They like it. They are fully behind us in our marketing effort.”

Steve Waechter

support efforts. Similar committees are being put together in Europe and ASPAC in preparation for the roll out of GENES2000 in these markets.

Comshare provided the steering committee a three-day training session to acquaint them with the software. A training class for Sales/SDC field people is being developed as well.

At the same time, the GENES2000 team is working on developing industry specific prototypes of the system for our focus industries, so clients can see how the system could be applied in their specific industry environment.

The team is working toward a third quarter launch of the product.

LEX2000 FINANCIAL CONSOLIDATION AND ANALYSIS SYSTEM

As companies expand their operations into the global market, the need to effectively track their global revenue and analyze performance in various countries and regions becomes critical. GE is no exception. GE has been using an on-line financial consolidation and analysis system since 1983. The system, called LEX2000, was originally developed by RCA. It is now used by corporate GE and by most of the GE components, including GE Information Services. Since implementing the system, Corporate Information Technology (CIT) has invested in adding features to make it very robust and flexible. GE has turned the responsibility to support LEX2000 over to GEIS and has given us the right to commercialize the system for sale outside of GE. GEIS has selected the commercialization of LEX2000 as one of its accelerated investment projects.

THE LEX2000 SYSTEM collects financial, accounting, and measurement data from all parts of an organization, consolidates the data, and creates financial reports for analysis. Because LEX2000 was developed under the direction of finance people, it presents data the way finance people are used to viewing it. The menu driven system is easy to use and easy to adapt to changes within the organizational structure, such as reorganizations or acquisitions. The system is so easy to use that finance people can make changes themselves rather than relying on Information Systems people to make them. They just specify their new requirements, using menu driven screens and finance terminology.

LEX2000 is more than a numbers cruncher. The system has features that permit data to be entered, mapped to predetermined categories, consolidated, and reported in various formats. For example, an international company may want data reported both geographically and by product line.

The system can handle collection of data from different accounting structures and reported in different currencies. It can accept data directly from most standard spreadsheet programs without rekeying. An administrative module permits the client to control security and access to data. For example, country managers may have access only to the financial data of their countries, while regional managers may have access to data on all the countries within their regions.

The system comes in both a mainframe and a PC version. The mainframe version consists of software and data bases residing on our IBM service. The PC version, which operates

on most LANs, will use BT2000 to communicate between sites. A site license for BusinessTalk will be a standard part of the PC package. Services like access to financial news feeds will be optional but will be made very attractive to users.

The LEX2000 team comprises ten developers in Princeton, New Jersey, and two support people in Fairfield, all of whom formerly reported to GE CIT. The team leader, Pam Druhan, has a small group in Rockville, which is preparing LEX2000 for commercialization during the second half of 1992. Tim Dowd, GE Accounts, has already closed a major licensing agreement with GE Capital for use of LEX2000 throughout its 23 businesses. Not only is this a major sale but GE Capital provides an excellent reference for sales outside GE, because their clients closely match our focus industries. Support for installation at GE Capital will be provided by the team in Princeton.

AFTER THE EXTERNAL launch, people with financial expertise, both from the LEX2000 team and from GEIS' finance operations worldwide will be available to assist sales people in closing opportunities and implementing the service.

“Our finance people use the software. They like it. They are fully behind us in our marketing effort,” says Steve Waechter, the team's executive sponsor. “They're looking forward to talking to their peers about the benefits of the system. It's a chance for them to put on a brand new hat.”

The accelerated investment projects share a single objective: getting the speed and agility that winning in today's market requires. □

GOOD MORNING, GEIS

Long before cross-functional teams became recognized as the way to gain speed and quality, GE Information Services was gathering a cross-functional team together every day to answer the Morning Call.

MORNING CALL, one of the long standing efforts undertaken by GE Information Services to be responsive to clients, is perhaps GEIS' earliest example of cross-functional teamwork. Every morning, key people from Client Quality Programs, Technical Operations, Engineering, and SDC from all parts of the Triad get together for an interactive conference call to check the state of the business and address client issues that have arisen in the past 24 hours.

The agenda for Morning Call is determined by the Daily Client Quality Report, a print-out of data collected by the Morning Call data base on MARK III during the preceding 24 hours.

The report begins with an executive summary showing the Client Impact Index for the week to date, the year to date, and major incidents that occurred during the reporting period. This is followed by the client report card, client inci-



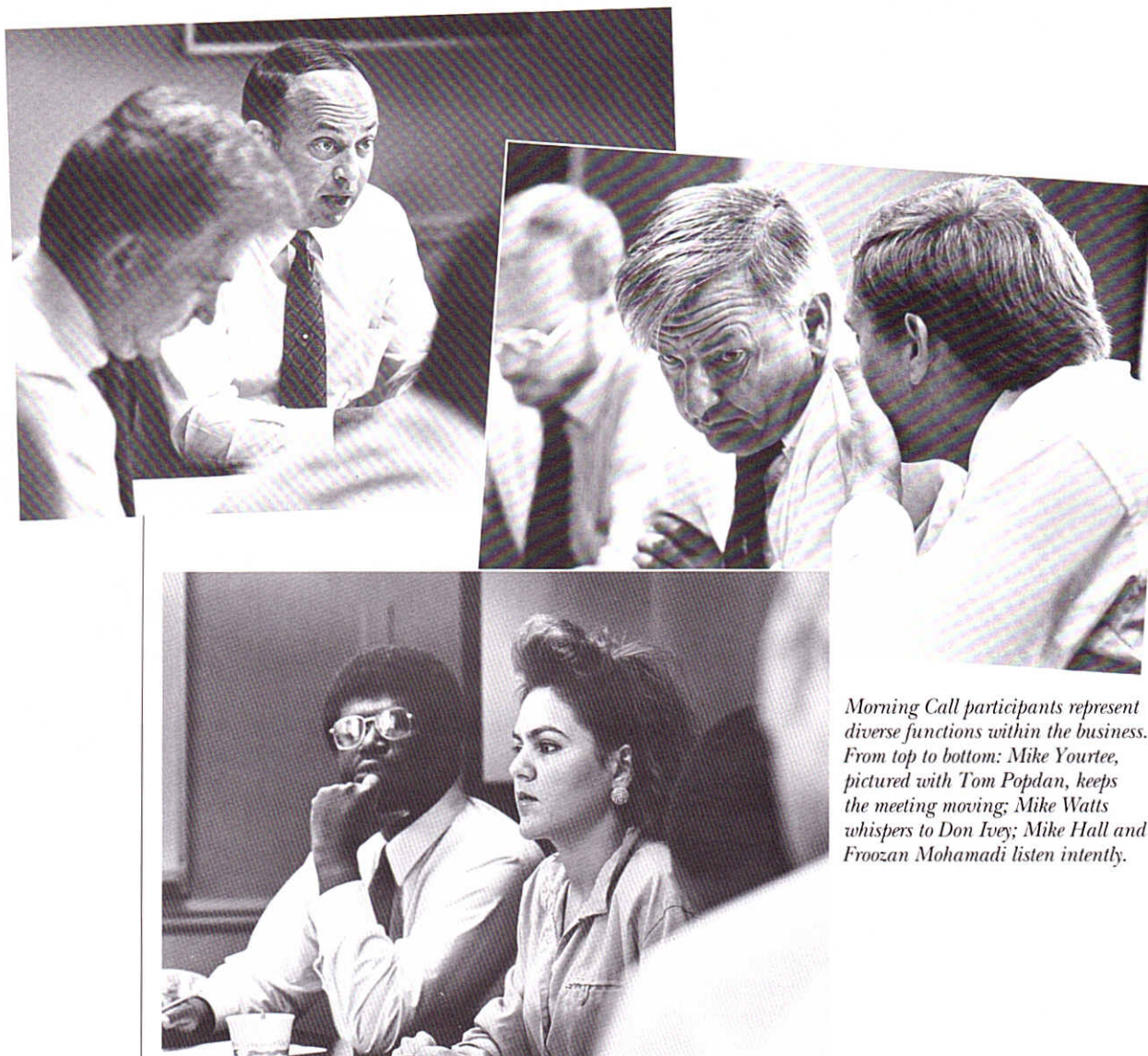
Every work day morning at 8:30 sharp, Mike Yourtee convenes Morning Call. With Mike are (counter clockwise) Tom Popdan, Fil Ward, Froozan Mohamadi, Mike Hall, Tony Hose, Pete Swanson, Mike Watts, Don Ivey, and Milt Higgins.

dents during the previous 24 hours, and client open issues.

The "report card" contains grades from more than 100 clients in the U.S., Europe, and Asia Pacific. Another dozen clients send more extensive report cards that grade GEIS' service on everything from reliability to security to response time and client services support. Clients using what Mike Yourtee, manager

of Client Quality, calls the old grading system give GEIS a daily or weekly grade of our overall service.

"The old grading system doesn't really give us a good insight into what elements of our services we're falling down on—what the client's expectation of our service is," says Mike. He hopes in time to move all clients to the new sys-



Morning Call participants represent diverse functions within the business. From top to bottom: Mike Yourtee, pictured with Tom Popdan, keeps the meeting moving; Mike Watts whispers to Don Ivey; Mike Hall and Ferozan Mohamadi listen intently.

tem, which builds an individualized report card based on what that particular client considers to be important elements of our service. The client weights each graded category according to its importance to quality satisfaction.

APPLE COMPUTER, for example, grades GEIS on host performance, response time, security, and reliability. Since they have global users, they give separate grades for U. S, European, and Pacific operations on network availability and client services. GTE has a different set of criteria. GTE

grades GEIS' central system availability, MARK*NET availability and response time, and system software quality. They grade the service desk in Tampa as well as Client Services in Rockville. They even give a separate grade for our support of their merger with CONTEL.

These individualized report cards give us a better picture of how well we are serving key clients and where our service is falling down. Most importantly, the new reporting system builds a sense of partnership by enabling an ongoing dialogue. When Knight-Ridder was preparing for its

live photographic coverage of Super Bowl XVI, they were experiencing some network interrupts that could seriously jeopardize their success. In what became known as count down to Super Sunday, Rick Blair, president of PressLink, Knight Ridder's on line news service, gave daily grades on GEIS' effort to correct the problem.

By Friday, Blair gave a "C" for network performance, but an "A" for team effort. By Sunday morning, it was "As" all around, and Rick Blair was so pleased with the team effort that he even promised

to root for the Washington Redskins to recognize the team effort out of Rockville.

Sometimes the dialog is less dramatic but just as satisfying. Like GTE Hawaii sending "many mahalos to the Atlanta team for all their hard work" or Boise Cascade taking the trouble to write in, simply to say, "Thanks for a great Friday."

IN ADDITION TO the report card grades and comments, the Morning Call data base system collects client incident reports filed by client services desks around the world. Each incident gives the nature of the problem, the level of impact on the client, and the status of the fix. The report concludes with client open issues, the nature of the problem, its duration, the executive responsible, the individual handling the problem, and the status of the resolution.

At 6:00 a.m. Eastern Time on every working day, the data base generates a concise Daily Quality Report. The report is sent by QUIK-COMM to GEIS staff and to people all over the business who have responsibility to support our clients.

Promptly at 8:30 a.m. Eastern Time, Morning Call begins. People from Technical Operations, Engineering, and Client Quality Programs assemble in the Morning Call room in the Maryland Center in Rockville. Once the Ohio Center, Nashville, Amstelveen, Applications Operations in London, and Worldwide Client Services check in, one of the most tightly run, action oriented meetings within GEIS begins.

The Client Report Cards are scanned. If a client has given GEIS less than an "A," that client usually appears on the client incident listing. If not, a champion is assigned to

contact the client to determine the reason for the low grade.

On to client problems. Without missing a beat, Mike Yourtee walks the team through each client problem. The responsible person reports actions taken and their results. If the problem has not been resolved a plan of action is determined. The issue is assigned to the appropriate executive, a champion is assigned, and the item is placed under open issues for the next day's report. If additional resources are required, they are identified. If off-line follow-up is required, it is agreed upon.

Then it is on to open issues. The status of each issue is reported, action taken to date, and course of action to be followed.

To more efficiently resolve client problems, Client Quality Programs is using more teaming in attacking issues.

"We used to work serially to address certain issues, with one functional group passing the problems off to another," says Mike Yourtee. "This just slowed down the resolution process. When a client problem overlaps several areas, we attack it as a team and work all the issues simultaneously. The result is quicker resolution."

When all open issues have been addressed, the floor is opened for other issues. Ohio? Amstelveen? London?

The meeting usually adjourns at 9:00 a.m. sharp.

But that's not the end of the Quality Report. Client Quality staff uses the data to do trend analysis and root cause analysis so GEIS can prevent problems rather than solve them.

To improve the level of service worldwide, last year Client Services introduced Morning Call in Europe. Run

by Joke Blanker in Amsterdam, with John Samuels representing Client Services in London, Client Services desks from across Europe call into Morning Call to discuss issues with clients based in their countries. This means that when the Morning Call begins in Rockville, Europe can report on issues they have already dealt with and those that they need support from Rockville to resolve.

WHILE WORKING toward setting up Morning Call in Asia Pacific, Colleen Hill calls in to either Europe or the U.S. to address client issues in her part of the world.

Client Quality Programs is working to get greater field involvement in the Morning Call process.

"We encourage all account reps to let their clients know that this service is available to them," says Gerri Stoner. "This is good for the client and good for us. For the client, it sends a clear message that we care about the level of service we provide and are actively working to improve it. For GEIS, the more data we can collect, the better we can identify where our problem areas are and what we should be addressing first." □

Editor's Note: To be added to the direct distribution address for the Client Quality Report, send a QUIK-COMM to REIVA. The report is also available in the QK 11 catalog. Simply log on to QK 11 and enter ICSRPT\$. The report will soon be available in InfoTalk as well. Account executives who would like to have a client added to the daily report card should contact Mike Yourtee (MIKE) or Tom Popdan (TOMP) to initiate the process.

manager takes a lot of puzzle pieces that are already formed and tries to make them fit together," says David. "A project team shapes the pieces, smooths and sands them at the outset to make sure they'll fit."

PROJECT TEAMS CONTINUE to expand the mix of their membership. The White Lightning project team which is developing X.25 service for the high-performance network, for example, includes Arno Overmeer in Amstelveen, who has made significant contributions in support of the network in Europe. Arno's understanding and good working relationships with the PTTs and PDNs in Europe will contribute significantly to deployment of the X.25 high-performance network in Europe. The team talks with Arno once or twice a week to make sure their development plans are taking into account the special needs of European users.

Mike Bradshaw, advisor to the X.25 project team, feels that this cross-functional approach to development efforts is helping engineering and operations people get closer to the clients.

"When you work on just one piece of a project, it's hard to see your work from the client's perspective. You don't control the project; you can't control total quality," says Mike. "On a project team, you take ownership. You want to develop a product that will make the client smile."

People on all the project teams agree that working with people from other functions is giving them a broader perspective.

"I hear engineering people asking marketers, 'Who's the client for this project?' and I hear marketing people saying to engineers, 'If these aren't the best specs for this project, what are the alternatives?'" says Mike Bradshaw.

"I didn't hear that kind of exchange five years ago."

WHILE IT'S HARD to precisely measure the productivity gains derived from project teams, team members and managers agree that getting all the issues on the table at the outset and understanding the requirements of other functional groups ensures higher quality development, fewer bugs during testing, and smoother deployment and support.

"We're still learning how to work together as teams," says Maura Conley. "But I think there's no doubt that when all the functions critical to the success of a product are involved up front, there is much greater ownership and far less finger pointing. I think that as we get better at teaming, it will become the natural way to get the job done." □

this new capability," says Afshin Sepehri. "We had to go through the growing pains to get it right. Our experience should make future UNIX development efforts go more smoothly."

The team also tapped other expertise they needed for the project. "The core project team gave some structure to our effort and the training they had been through helped us gel as a team more quickly," says John Wittenberg. "But that didn't keep us from adopting other people into the team when we needed their expertise. During development, Norm Harvey's UNIX group was of particular value to our efforts, and Norm was very generous in lending us expertise. Once we began commercialization, the Deployment and Technical Support and UNIX Techniques organizations were critical to our success!"

The team took a very disciplined approach to developing the application. They looked at all the features

that an ideal application would have and then estimated the time required to build each feature. With a six-month development cycle driving the project, they decided which of the desirable features they could develop in that time frame and which would have to wait until a later release. With the team bringing all perspectives to the process, they were able to develop an initial release that marketing felt they could market and sales felt they could sell.

"The cross-functional makeup of the team ensured that we got the specs right before we wrote the application," says John Wittenberg. "At the outset, marketing and sales didn't agree on which application features to include. There was a lot of gnawing and jawing, but in the end we had a product that everybody accepted."

Sheila Blanch, the team's advisor, feels that having someone from sales on the team helped give the team a

real world perspective. "It was the next best thing to having a client sitting right in the room," says Sheila.

In February of 1992, the first commercial client went up on the service. By the end of July, twenty-three clients were using Session Manager Plus. To support a global roll out of the product, Mike Bahnsen, Felix Dupont, and Jon Frey made a worldwide training tour. Mike gave people the technical overview, Felix explained contract administration, and Jon gave the nuts and bolts of how to make a successful MNS sale.

With Session Manager Plus successfully launched, the development team is already working on version 1.1, which will incorporate additional features that clients say they want. The plan is to continue making releases every six months to keep step with client demand.

The team is thinking about calling the next release "Session Manager Ultra." □