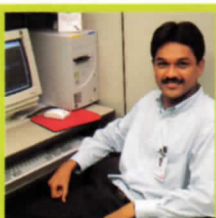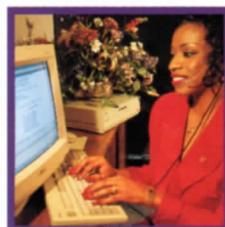# Lucent
magazine

In the Line Of
Service

**What's Next
For Lucent?**

**Going After
New Markets**

letters

Catching the *K56flex* Wave

I am looking for a faster modem and a new Internet access provider, so I was happy when I read Blanchard Hiatt's timely article in the March issue titled Chips Speed Internet. The article said 270 Internet access providers are on board with *K56flex*. I contacted my Internet access provider (one of the biggest and most well-known names in the industry) and the person I talked to didn't know what *K56flex* was. He said that 33.6K modem technology was still in the beta stage and that they could communicate at only 28.8K, maximum.

Kevin Jackson, Mesquite, Texas

[There are now more than 600 companies supporting *K56flex*. A list of Internet service providers can be found at the Lucent Web site: http://www.lucent.com/micro/k56flex and the Rockwell Web site: http://www.nb.rockwell.com. — Editor]

A Chronicle of History

Just a quick note to say that I really enjoyed the Capehart Communications Collection article that appeared in the March issue of Lucent Magazine. An interesting article and the layout was stunning.

Ron Pindak, Murray Hill, N.J.

Lucent Magazine Available on Tape

Lucent Magazine is now available to our visually impaired colleagues on cassette tapes. If you wish to place an order, please call 908-582-5075. Leave your name, address, phone number, which issues you want to receive, and if you want the issues on a two-track or four-track tape.

The Meaning of Software

It has been almost 20 years since I retired as an engineer. The February issue of Lucent Magazine is almost entirely devoted to software. There was a time when I thought I knew what software was — hardware just sat there until software told it what to do. Now I am confused, and I feel left behind. I cannot picture just what this company, which I was once a part of, really does. As a one-time manufacturing engineer, I visualize a factory busily turning out things like central office switches, PBXs, microwave equipment, key equipment and cable. None of these wares are very soft. Perhaps you could enlighten this relic of a previous generation about the current meaning of "software," and maybe even reassure me that we still manufacture lots of things.

Richard Kovaric, Green Valley, Ariz.

Write to Us

Please share your opinions about Lucent Magazine with us by sending letters to:

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KELLY LADUKE

RICK FALCO

On the cover:
Our customers value the service that Lucent
people give them. Employees featured
on the cover tell how they practice
an obsession with serving customers.

Lucent Technologies
Bell Labs Innovations
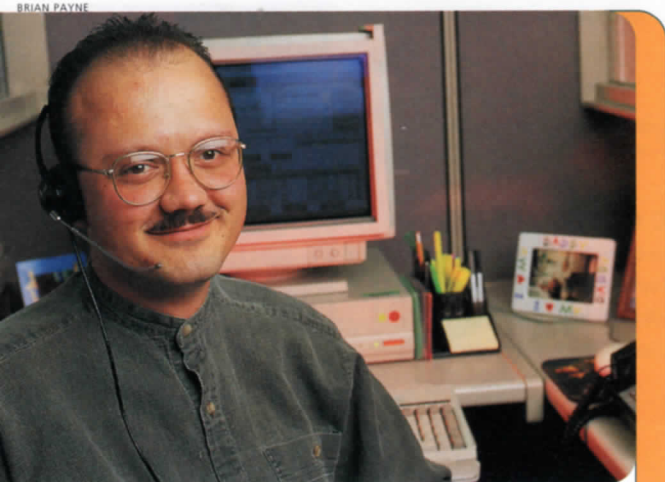
an obsession with customers

Our Service Makes The Difference

Employees Cater to Customers

Going beyond what's expected is the way installer Frank Gomez pleases his Network Systems customers in Denver.

Ask customers what qualities they appreciate most from Lucent and they answer — attentiveness, responsiveness and solutions.

Together, they spell good customer service, which can often distinguish a company. That's why companies like retail giant Nordstrom put personalized service at the forefront to set themselves apart from others. Lucent is no different in making service a hallmark.

"The customer service our employees provide is a critical element to making Lucent stand out from our competitors in the marketplace," said Rich McGinn, president and chief operating officer. "Our company's reputation depends not only on the quality of our products, but the service behind them — that's the differentiator."

Lucent's mission is to be a high-performance company, and one way to achieve this is to embrace our company's value of having "an obsession with serving our customers," McGinn said.

Whether on the telephone giving instructions on how to use a new product or at a customer site installing new telephone equipment, employees know excelling at customer service is how they can make a difference.

Take, for example, Business Communications Systems (BCS) Technician George Pastrana, whose service was of the utmost importance to the U.S. Drug Enforcement Agency in San Diego. His service mattered so much that the agency's managers insisted that a contract awarded to another company be switched back to Lucent — just so they could keep Pastrana.

"I gave them the best service there is," said Pastrana. "Other vendors may have comparable equipment, but service-wise we're the market leader."

Giving his best is what Bruce Wisor does as he answers technical questions from customers who call BCS' National Customer Care Center in Denver. More than 90 percent of BCS' customers take a service contract, so the center responds to a high volume of customer requests. "I treat customers the way I want to be treated, and try to get their problems solved quickly," said Wisor. "I get a wide variety of questions that can be very complex or as simple as how to set the clock on a system. I treat each one as important."

Bruce Wisor treats Business Communications Systems customers the way he likes to be treated.

"The most important part of service is my relationship with the customer," said Frank Gomez, a Network Systems installer whose primary customer is AT&T Wireless Services in Denver. "My main goal is to meet the customer's needs. I feel it's essential that we go above and beyond what's expected."

Speed Makes a Difference

Customers like Raymond Lindquist, director, regional network service assurance for Bell Atlantic, acknowledges how important good technical support and service are to his operation. He has high praise for Network Systems' engineers at the Regional Technical Assistance Centers (RTAC), which provide technical assistance to Network Systems customers around the clock. Lindquist calls them a "top-notch" group upon whom he relies for quick resolution to a network outage. His obligation is to restore telephone service to customers in less than 30 minutes.

"Our customer requirements are so tight, and these switches are very complex. We have to have a good support team or else we wouldn't make our commitment," said Lindquist. "I don't think the RTAC has ever disappointed us."

Outside of the United States, service is no less important. Network Systems' Mitchell Bratland, distinguished member of technical staff in Lisle/Naperville, Ill., works hard at catering to the priorities of his client, Japan's NTT (Nippon Telegraph and Telephone Corp.).

Her tone of voice is just as important as the information she gives to customers, says P.J. Ray, customer service representative for Consumer Products.

"They want information early on, and sometimes it taxes our processes, but we've gone out of our way to meet their needs and keep them informed of the status of issues and any possible problems," said Bratland. "I always try to involve them in our testing efforts in our labs both here and in Japan."

Establishing Relationships

Customer Emilie Evaul of Clearwater, Fla., praises the service offered when she called the Consumer Products National Service Center about trouble with her cordless telephone.

"The representative I talked to was very knowledgeable and went over some items that might help me to fix the phone myself. He gave good service and that's important to me. I was very satisfied," said Evaul.

Toni Gambetta, manager of returns and repairs operations for Consumer Products in Parsippany, N.J., said her group's goal is to make sure customers know they have a place to turn to if they have trouble with a product.

"We strive to make sure customers know we're not just interested in the sale, but in establishing an ongoing relationship if they need service," said Gambetta.

Gambetta said Consumer Products distinguishes itself in the customer service marketplace by providing customers with substitute products within a week after receiving a returned item. This compares with three to four weeks that it generally takes other companies.

P.J. Ray, a customer service representative for Consumer Products' Lease Service Center in Jacksonville, Fla., said when she talks to customers she makes sure she gives them helpful

Eleanor Jenitis, customer satisfaction manager, promotes close business relationships to help the Microelectronics Group.

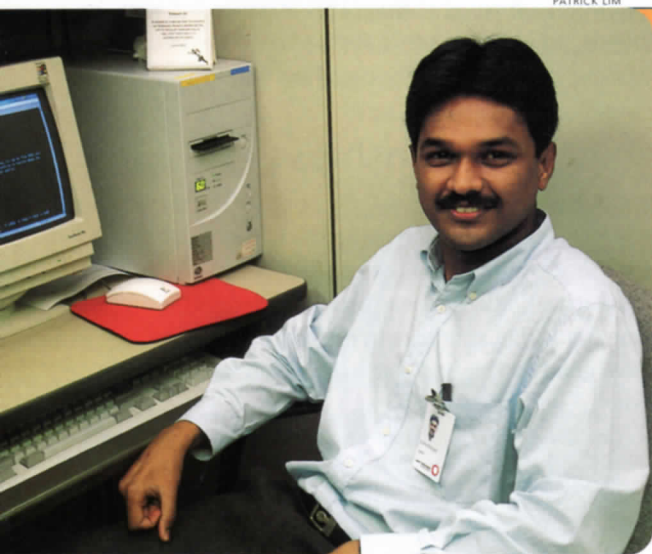information and says it in a tone that conveys warmth and sincerity.

"I enjoy helping customers. Each one is special and I try to personalize each call, so they'll keep coming back to do business with Lucent, and maybe tell their friends what kinds of service and products they received from us," Ray said.

Caring for Customers

S. "Ravi" Ravikumar, an engineer at the Microelectronics Group's Customer Technical Support Center in Singapore, has Seagate as a primary customer. He sticks with some basic practices to excel at customer service as he provides technical support on such issues as device quality. In addition to Seagate, Ravikumar's customers include Apple and Hewlett-Packard.

"I like to 'delight' our customers by providing excellent support that continuously exceeds their expectations. I keep trying to achieve this goal by going to the customer site as often as possible, even when there isn't a problem. I want to give them the feeling that Lucent will take care of them. Ravi is here."

For the Microelectronics Optoelectronics unit, providing good technical support is a big part of keeping customers satisfied. "We strive to establish one-on-one customer relationships every day," said Eleanor Jenitis, customer satisfaction manager for the Optoelectronics unit.

Building trust in addition to providing technical solutions helps Ray Nering win praise from Microelectronics Group customers.

While Jenitis said there is a good deal of teamwork in building customer relationships, one employee in particular can take a bow for helping to win customers for Lucent — Ray Nering, applications engineering manager.

"We get to the table at a lot of companies because of Ray," said Ali Abouzari, market operations manager for Microelectronics. "He understands customer applications and how our products interface with others' products."

Vincent Parillo, senior project engineer for ADC Broadband Communications in Wallingford, Conn., said the technical support he receives from Nering is critical to completing designs for his company, which produces high-speed digital video and data transport systems.

"Ray is very responsive to any issue. That's a big plus when you run into problems when you're in the middle of a design and trying to get a product out the door," said Parillo. "He always follows up and makes himself available at our facility to address technical issues when necessary." **O** *-Robyn Roberts*

S. "Ravi" Ravikumar believes frequent visits to a customer site, even when there isn't a problem, is reassuring to his customers in Singapore.

I like to **delight** our **customers** by providing **excellent support** that **continuously exceeds** their expectations. … Ravi is here.

Information At The Ready

Computer *Speeds* Service

Because of a tiny computer, Network Systems installers are winning with WinTRACK and Business Communications Systems (BCS) technicians are very active with ACT (Associate Communication Technology).

Both are on-line computer systems that are enhancing the productivity and efficiency of installers, technicians and engineers. Users of the systems now have a common mechanism for sending and receiving messages, getting their daily work assignments, reporting job completions and requesting materials.

Tom Boesen, a Network Systems installer in Oak Brook, Ill., likes using WinTRACK. "The ability for night-shift installers to see a history of order problems and solutions is a big improvement. WinTRACK makes it possible to send detailed requests for help during the middle of the night, so I don't have to wait for morning to call the office."

Late last year, Network Systems' lead installers began using the technology, and more installers are to be trained on the system. Currently, most AT&T Customer Business Unit engineering and project realization users have access to WinTRACK. Training and deployment will continue through 1997 for installers, which is the largest user group.

Chuck Farris, a Network Systems installer in Tucson, Ariz., said a feature he really likes about the

Tony Smith, a technician in South Carolina, uses the Associate Communication Technology terminal to serve customers more quickly.

WES BOBBITT

system is its ability to provide product documentation and specifications that can help him complete his work.

For BCS technicians, saving time is one of the biggest benefits of using the ACT terminal. The terminal is a notebook-sized battery-powered wireless computer that allows nearly instant communication with service technicians.

BCS technicians who handle the operating unit's large business customers and data technicians are currently using the ACT terminal. The terminal will eventually be rolled out to a select group of general business market technicians.

Tony Smith, a BCS technician in Columbia, S.C., said the ACT terminal cuts down on the time it takes him to communicate with a dispatcher or place a request for materials. Smith said he really appreciates having the proper equipment waiting for him at a job site.

"It lets me feel like I'm more in control. I like the fact that you don't have to come into the office or pick up a phone. I can more easily track my jobs and complete my assignments faster," said Smith.
-*Robyn Roberts and Mary Ellen Alipour*

P. ENSENBERGER

Even in a distant part of the Arizona desert, Chuck Farris keeps on top of customer requests by using the WinTRACK system.

Year Two:

Building a High-Performance Team

"Our Greatest Challenge is Growth"

Q&A

Henry Schacht, chairman and chief executive officer, and **Rich McGinn,** president and chief operating officer, have led Lucent Technologies through its founding, its launch and its marketplace evolution as a new company. Their partnership began 20 months ago, but it has evolved and matured quickly as they've worked closely to meet the challenges of building a new company and **meeting the needs of customers.** For most of Lucent's first year, the most common questions asked of Schacht and McGinn involved what kind of company they were creating. Now the questions involve **where the company is going**. Foremost in their current thinking is Lucent's strategic approach to the global marketplace. Here's what they had to say on several topics, ranging from **our new strategy** to **our evolving culture.**

April 4 marked the completion of Lucent Technologies' first year as a public company. Now that we're into year two, what is our greatest challenge?

Schacht: The greatest challenge for Lucent is accelerating top-line growth (revenues) and continuing robust bottom-line growth (earnings). We're on a good trajectory, thanks to the outstanding efforts of the people of Lucent Technologies. But we have an absolute imperative to accelerate the growth of our top line and at the same time continue the accelerated growth of our bottom line. Our earnings must grow at double-digit rates on a consistent basis going forward. That's a real challenge, especially for a large company such as Lucent.

There's no question that we had a remarkable 1996. The people of this company rose to every challenge in meeting the needs of our customers. As a result, our business grew stronger. But we know that in certain areas some of our competitors grew faster than we did. Our shareholders expect us to grow our top line faster while maintaining the robust growth of our bottom line. Growth rates are set by the market. We aim to gain market share and to do so we must grow faster than the market.

How do we meet the challenge of growth?

Schacht: It all begins with establishing a clear strategy focused on growth. We've identified several key strategic growth areas, and formed teams around each area.

What are the key strategic areas?

McGinn: Obviously, our core business still has tremendous growth potential. But in addition, we'll be putting special emphasis on mobility, data networking, software, services, broadband access, semiconductors and international markets.

How important is mobility?

McGinn: It's a booming business with vast potential — both inside the United States as well as in the international marketplace. The wireless business is growing globally at a rate of more than 20 percent and we see significant opportunities well into the next decade. Carly Fiorina (president of Consumer Products) is leading a mobility team that's looking at how to grow our wireless business even faster. The team is exploring opportunities across the business, including infrastructure, terminals, business systems, digital signal processors, as well as applications such as fixed wireless access, wireless data networking and wireless PBXs.

What are we doing to strengthen our data networking capability?

McGinn: Data networking is a very important growth area for us. We see its implications across most of our businesses, including Network Systems through offerings such as ATM switching, and BCS, through Agile Networks products, and offerings created with our partner, Bay Networks. Bill O'Shea (president of Business Communications Systems), with the help of Joe Colson (Network Systems president-AT&T Customer Business Unit) and Pat Russo (executive vice president-chief staff officer), is leading a team that's concentrating on data networking opportunities. Our customers want their data needs to be managed with the same kind of reliability and low cost as their voice needs. They are looking to us to help them. That means we have to look at communications holistically for our business customers and help service providers evolve their networks in ways that allow them to handle data traffic as easily as voice traffic.

The Internet continues as an unprecedented growth phenomenon, prompting us to respond quickly to market demand. In addition to the 20 Internet products we announced last year, we recently announced our Internet Telephony Server for service providers and enterprise customers, and our Access Interface Unit, which we sold to Ameritech, to help service providers respond to the growing problem of congestion.

What is the key to growth in our software business?

McGinn: Software happens to be one of our core competencies. We've already built a $2 billion software business. Now it's clear that we can grow our software business on several levels, depending on where the most profitable opportunities lie. Software solutions for the Internet, for example, are clearly going to be in demand. Dan Stanzione (president of Network Systems and Bell Labs), with the help of Arun Netravali (vice president-Research), is leading a team looking for those software growth opportunities.

Network management is another one of our core competencies that may be one of our great growth opportunities. Today's networks will continue to evolve, but many of the significant developments over the next few years will be in the spaces between networks. Our Internet products are one example of filling the spaces between the telephone network and the Internet.

(continued on next page)

Where do you see opportunities in services?

More than 90 percent of BCS' customers take a service contract, so it's obvious our service differentiates us. On the network services side, there's an opportunity for us to differentiate ourselves and become more than a supplier of technology and equipment. We can become a provider of total business solutions to network services providers. In other words, we say to our customers, "We'll take care of whatever you need to support your business in designing, building, running or maintaining your network."

Gerry Butters (Network Systems president-North American Customer Business Unit) is leading a team looking at growth opportunities in areas where we see increased customer demand, including network engineering and management, remote monitoring and remote diagnostics.

What suggests that broadband access will be a growth market?

Today, bandwidth has become like potato chips. Everyone wants more. Customers are increasingly demanding the ability to see one another as well as talk to one another. As video, broadband and multimedia applications continue to proliferate, bandwidth has the potential to be one of the fastest-growing segments of the industry. Some predict it could grow by a factor of 10 between now and the end of the decade. Jim Brewington (Network Systems president-Product Realization) is leading a team that's looking at ways to take advantage of this tremendous growth opportunity.

What's the opportunity in semiconductors?

McGinn: Semiconductors is a very important business for us. We expect it to grow as we continue to execute on (Micro-electronics' President) Curt Crawford's strategy of focusing on high-growth areas. Value is continuing to migrate to the chips. The Wall Street Journal recently reported that Texas Instruments is the leader in digital signal processors (DSPs), but Lucent is the leader in communications DSPs — the fastest-growing segment of the industry. It is this kind of focus that will put all of Lucent's businesses on the high-performance track.

How about our global strategy?

McGinn: Global growth is vitally important. Don Peterson (executive vice president and chief financial officer) is heading a team devoted to developing plans to grow our overall business in the international marketplace, consistent with our high-performance goals. We're looking at a worldwide market opportunity that's growing at a rate of more than 10 percent annually. Between now and 2000, the global market is expected to grow by about $137 billion. Last year, our international revenues grew by 20 percent over 1995. With two-thirds of our growth opportunity outside the United States, we're targeting those markets and customers where we have the best opportunities for long-term growth and success. Areas of growth are not hard to find. We must choose those areas where there is a good match between our capabilities and our customers' growing needs, and execute with discipline and excellence.

Beyond our strategic initiatives, what else is critical for growth?

Schacht: Of course, having the right strategy is critical. But how we operate is just as important. Now that we're through the launch year, it's a great time to focus on our behavior. Are we fast enough? Are we truly obsessed with our customers? Do we have an environment that encourages each of us to perform at the highest level? If you want to be a high-performance company, as we say we do in our mission, you have to have a high-performance environment — a style and spirit — that fosters growth. Pat Russo is leading our efforts in strategy — what we do — and operating environment — how we do it.

What characterizes a high-performance environment?

McGinn: Our Lucent values capture a lot of them. High-performance companies have a culture in which the ***customer's need*** or demand is the deciding factor.

In these operating environments, people understand customers' needs and even the needs of customers' customers. In such cultures, holding internal meetings without discussing customer needs is rare. Executives visiting a city for a meeting automatically schedule meetings with customers. Customers are at the forefront of everyone's thinking.

High-performance companies *focus on results*, rather than activities. Objectives are clearly set, the progress carefully measured and the results rewarded. Companies with *growth mindsets* are not finished with planning cycles until they produce double-digit growth objectives. They put their resources and energies into products with high-growth potential and prune away those that fall short of their high expectations. In high-performance companies, people willingly sign up for stretch goals because the only important objective is significant, profitable growth over the previous year.

Along with a growth mindset, high-performance companies think *globally*. In our industry, markets outside the United States offer tremendous growth opportunities. Understanding those markets, cultures and customer needs is obviously

Characteristics of a
High-Performance Team

According to the Delta Consulting Group, you know you work at a high-growth, high-performance company when:

1. You notice a pervasive **growth mindset** throughout the company. The leadership plays a pivotal role in providing direction, fostering the growth mindset and working external relationships.

2. You know the company has a crystal-clear **growth strategy** that is deployed throughout the company. Rock-hard values supporting growth are owned, relayed clearly and driven from the top.

3. The company has a sharp **focus on the core business** and divests non-core businesses.

4. You see **competitive innovation** all around — in creating products and offers; in creating processes that lower costs and maximize speed; and in benchmarking at world-class levels.

5. Aggressive new **product development** replaces products and offers before they become obsolete — before the competition acts.

6. The company uses **partnerships** to bring broader scope without adding employees or spending resources. And the company retains its focus on critical areas.

7. You see **cost leadership**. Costs are brought down all the time — and this reduction is key to the company's growth strategy. The company uses cost-cutting to better position itself against the competition and stay one step ahead.

8. Focusing on **speed**, the company uses the improvement of cycle time as a key competitive weapon. The company tracks speed in all aspects of the business — how long it takes to get to a decision, to market, to innovation, and to replacement.

9. Corporate **structure stays simple**. Recognizing that complex structures inhibit change and growth, the leadership puts the right people and resources in place, then lets things happen.

10. **Semi-autonomous business units** have end-to-end accountability but are creatively linked to other business units by strategic necessity. Teamwork within and across units drives behavior.

11. Your company insists on hiring, retaining and developing the **best people**. Strong performance management stems from high requirements and tough feedback.

12. **Global focus** is obvious. The corporate strategy aligns with growth in global markets. Business units have strong international expertise and leadership.

important to long-term success. Including people with non-U.S. passports on leadership teams, and holding meetings outside the U.S. are natural behaviors for high-performance companies.

Speed and responsiveness are two more hallmarks of a high-performance company. When we ask our customers what they mean by the term "speed," they say it's simply giving them what they want, when they want it. Often this means making decisions faster by cutting through bureaucratic red tape. Finally, we need an *open and supportive* environment where everyone feels free to contribute to a team effort.

What strengths can Lucent build on to create a high-performance operating environment?

Schacht: I think one of the greatest strengths in a high-performance operating environment flows from the diversity of people and ideas. I'm proud of the fact that we have one of the most diverse senior leadership teams in corporate America, including three women, three African-Americans and one Asian. In addition, half the members of the Executive Council have had professional experiences outside of Lucent Technologies. I think that's important because real diversity goes beyond race, gender and sexual orientation. Diversity of experiences and of ideas also is important.

Lucent has a tremendous diversity of talent and ideas. Creating an environment where people can apply their talents and their ideas to business solutions will drive business success and long-term growth. You create an environment that values diversity by rewarding it, seeking it out, measuring it. And most of all, by being intolerant of intolerance.

What are some specific behaviors that need to be reflected in Lucent's culture?

Schacht: Like Rich, first and foremost, I want us to have a culture where everyone is obsessed with meeting and exceeding customer expectations. Also, I think it's important that we have an open and supportive environment at Lucent, a culture marked by candor and widespread sharing of information. I would like everyone, at every level and from every organization, to feel they are part of the overall team, working on and contributing to common goals.

We all want a culture marked by clear and constant communication, one where leadership teams hold regular town meetings in a setting where everyone is free to speak their minds and where positive debate is encouraged.

An environment that supports risk-taking also is important. There are valuable lessons to be learned from making mistakes if they are communicated up, down and across the organization through a 360-degree feedback approach.

McGinn: The culture we are striving for is one where people speak with passion about producing results and back it up with a bias for action and a sense of urgency in getting things done. In such an environment, people are aware of what the

We worked together to build an exciting new company. Now we must work together to make Lucent Technologies a truly great company.

competition is doing and respond by serving customers faster and more efficiently. Finally, the culture we want to evolve is one that rewards results, constantly encourages innovation and prizes creativity.

What do you consider Lucent's greatest internal challenge?

Schacht: One key challenge, which may seem mundane but is very critical, is the revamping of our information systems. With our Global Enterprise Solution, we're using SAP's integrated software to streamline our internal information systems so they operate faster, more effectively and more efficiently. While there's a tendency to look at it as a computer systems replacement program, the reality is that what we will accomplish is a "social re-engineering" of the way we do business. We'll be able to share and retrieve information much faster. That will make us more responsive to our customers, and, importantly, it will lower our cost structure. In many ways this project is a great example of how a critical business initiative can only succeed with the total support and participation of the entire team from top to bottom.

What gives you the most confidence that we'll become a high-growth company?

Schacht: No question, it's our people. I've worked in a lot of places, and the talent, energy, commitment of Lucent people is something I find myself constantly energized by.

McGinn: As a 26-year veteran of this business, I've been delighted by how excited and energized Lucent people are by the opportunity of a lifetime we all have in creating a new company. And our VIP survey confirmed what people have been telling me — they're proud and optimistic about Lucent, but they see that there are opportunities to cut the bureaucracy and to move faster in serving our customers. We worked together to build an exciting new company. Now we must work together to make Lucent Technologies a truly great company. **O**

All People, Different Ideas, World-Class Results

A high-performance company grows and succeeds through an operating environment that leverages the diverse talents and ideas of all its people. Lucent, through its diversity, supports a high-performing operating environment by aiming to ensure that we achieve business excellence through decisions based on the widest range of individual perspectives. It's built around three principles: "All people, different ideas, world-class results."

We define diversity as the quality of being different and unique at an individual or group level — with a focus on how differences help us achieve business excellence, not on the differences themselves. Diversity of people leads to diversity of ideas — and casting the widest net possible for ideas produces innovative solutions and competitive advantage for Lucent.

The Lucent values guide our thinking about how we relate to each other and to our customers and our competitors. Every Lucent value has a link to the benefits of diversity. Behaviors that impede Lucent people from offering their personal best get in the way of serving our customers; limit our ability to deliver business excellence; are disrespectful of the contributions of all people; and are, therefore, unacceptable.

Ensuring Lucent's diversity is not something that will happen by itself. Nor is it something only our top leadership needs to worry about. Every manager needs to create and support a diverse team. Every Lucent employee, in every part of the business, must be intolerant of unacceptable behaviors — bigotry, bias, harassment — that limit people's ability to contribute.

If you feel you have been discriminated against, or if you've observed discrimination in your workplace, discuss it with your management. If you need assistance in how to handle a complaint, work with your Human Resources representative or call 1-800-363-5942. Employees outside the United States can call 908-559-7737. ○

New Territories Call For New Thinking

As Lucent pursues growth in new markets, it says 'no' to the status quo.

Lucent is supplying cable to Qwest, an interexchange carrier, as it builds a $2 billion nationwide network with Frontier. Above, workers using a "railblazer" bury conduit for Lucent *TrueWave* fiber-optic cable in a railroad right-of-way that snakes through mountains in California and Nevada.

You could almost feel what was on the other side of the door as Nina Aversano went around the room asking each member of her quality council to give up budget and staff to go after Sprint PCS' business. The consortium had just purchased wireless licenses that covered a U.S. population of 183 million. Opportunity had come calling and it wouldn't wait long at the door.

Everyone on the council was tight on resources. Yet everyone gave some up to open that door wide — and let in the opportunity for growth.

Aversano, president of global commercial markets, Network Systems, calls that 1995 meeting a crucial turning point. "We had to fund our own growth. It never would have happened if my team had not been willing to invest in the future of this business."

Much of the future of Lucent Technologies lies in our ability to go after growth opportunities like this one — new markets, new customers and everything non-traditional. This pursuit is across the business. Business Communications Systems, Consumer Products and Microelectronics all have growth initiatives of their own, sometimes worked in tandem with other units.

The U.S. Telecommunications Act of 1996 pried open markets in every area of communications. International

Going After Growth

TOM SOBOLIK

markets are well on their way to deregulation. These events gave us a giant mega-mix of opportunity as new players look at our innovative products and services, experience and industry know-how. Those new players include former competitors in new alliances, competitive local exchange carriers (CLECs), personal communications services (PCS) providers, interexchange carriers, independent telephone companies, cable television companies, global mega-carriers and second operators overseas.

Sprint PCS, one of those new players, initially told Lucent its chances of supplying the PCS network were one in 1,000. One year later, the venture signed Lucent for 60 percent of its markets. "Everybody pitched in to help on this one," said Bill Nelson, vice president-Sprint team, referring to the internal teamwork with the wireless customer business management group, developers at the Product Realization Centers, and folks in customer support and implementation.

Wall Street Wants to Know

Why all the attention to new markets? "Wall Street wants to see whether we can serve and address new business opportunities as well as we have served established businesses — our traditional regional Bell operating company (RBOC) customers," said Aversano. "It's the next step in Lucent's progress as a company. We have great competencies, people and resources. But given the enormous competition in the worldwide marketplace, we have a responsibility to ourselves and our shareholders to find new markets where we can apply our excellent technology, and keep the customers we already have." No one says that's easy.

(continued on next page)

"New markets test you to the limits," says Nina Aversano. "For Lucent, that simply makes us a stronger company."

Much of the future of Lucent Technologies lies in our ability to go after growth opportunities — new markets, new customers and everything non-traditional.

RICK FALCO

A Time Warner Cable installer feeds custom-designed high-bandwidth Lucent cable under the streets of New York City. ANTEC is Lucent's primary distributor to cable television companies in the United States.

Circuit City, Sears, WalMart... and Network Service Providers?

Consumer Products has been selling its phones through thousands of retailers in tens of thousands of outlets across the country. "When you have that kind of penetration, it's difficult to find growth," said Bob Wonsetler, product management director, Consumer Products. "But we are seeing great additional growth with the regional Bell operating companies (RBOCs)."

Through internal teaming efforts, traditional customers for Network Systems have become new ones for Consumer Products. "Network service providers — RBOCs and long distance companies both — are entering a more competitive arena with the Telecom Act. They want to grow the use of their networks and get their brand name out in front of the network user." By meeting those needs, Consumer Products gains new business.

There's more cross-Lucent synergy. Service providers that have bought the popular *5ESS* switch from Network Systems can use Consumer Products terminals to show off its features, said Wonsetler. For example, instead of asking consumers to remember numeric codes for automatic call-back and other features, service providers can offer new Lucent phones sporting handy call-back buttons. Providers also can offer consumers integrated services digital network (ISDN) features at home with Lucent's ISDN terminals.
-Shirley Chan

Going After Growth

At global commercial markets, a large growth engine for the company, astute tightrope walkers balance great risks with high rewards — much like their customers. New competitive local exchange carriers (CLECs), for example, "represent true entrepreneurism at its best," said Bill Plunkett, customer team vice president-CLECs. "They came into the business not because they know how to run a telephone company or operate a switch, but because they have some money and an idea."

Similarly, new PCS providers often are "strategic investors who may not know much about this business, but they are dead serious about establishing a presence with the best technology they can get," said Doris Jean Head, customer team vice president-wireless. "The more successful they are, the more desirable they will be to any number of players."

Minutes Count

In customer segments like these, relationships built on trust are fundamental to doing business. And you can't get anywhere without speed. "The smaller the competitive local exchange carrier, the faster its decisions are made. It only takes them a matter of hours — and they want us to react in a matter of hours as well," said Plunkett.

NextWave Wireless' agreement to purchase $200 million in CDMA-based PCS infrastructure equipment and related services took 10 days from initial negotiation to signing. "PCS providers paid a lot for their licenses and they need revenue stream as soon as possible, so they look for a supplier that can get their network deployed as

Lucent pursues non-traditional customers like President Bryan Corr's Oneonta Telephone, an independent wireline, cellular and cable service provider serving Blount County, Ala.

MIKE CLEMMER

"Small companies like CFW need Lucent to partner with us; we need your depth of expertise to analyze the technology available and adapt it to our needs," said Dave Maccarelli, president of CFW Telephone, based in Waynesboro, Va.

quickly as possible. For Lucent, that means plenty of opportunity to be creative — in how we help them deploy their networks and spot areas where they can generate more revenue," said Head.

Because many non-traditional and new customers are start-ups, Lucent often must help provide financing as well. "Providing vendor financing often enables our customers to get off the ground and grow," said Aversano. "Financing requires care because we have a responsibility to our shareholders to manage the assets of the company. But we have customers looking to get into the business, and including financing as part of the discussion has become a way of life." Lucent chose to offer financing to a few customers, she said, after carefully reviewing their business cases, meeting the heads and managers of those businesses, and consulting with financial advisors.

Countering Old Culture

Financing falls under Lucent's new entrepreneurial spirit. Financing is "absolutely counter-cultural" to our ways of working with our traditional customers. "They never needed financing," said Aversano.

Going against the flow gets her up in the morning. "I love this new markets opportunity because it pushes against the status quo. It's very healthy, but it makes a lot of people very uncomfortable," she said. "What's most exciting is moving people from a place where they say, 'we can't do that because we've never done that before,' to a place where they can see how we can go for it." **O** -*Shirley Chan*

Microelectronics
Helps Cars
Drive Cellular

What's driving the latest cellular application? Cars, of course. High-end cars that will carry an integrated car radio and cellular phone located in the space that a car radio usually occupies in the dashboard. The radio-tuning buttons, for example, double as a telephone keypad.

Blaupunkt-Werke, a leading car-stereo maker based in Hildesheim, Germany, partnered with Microelectronics to get to this market first. Microelectronics' *Sceptre* chips supply the electronics for the GSM (Global System for Mobile Communications) phone.

Motorola, NEC, Nokia, Mitsubishi and other leading GSM players already rely on Lucent's GSM solutions for mobile telephony. "But instead of concentrating solely on the cellular phone market, this move with Blaupunkt has established a vertical market for us — the automotive market," said Phil Carrier, marketing director, wireless products, Microelectronics. -*Shirley Chan*

Two for one: Car-stereo maker Blaupunkt worked with Microelectronics to offer an integrated car radio and GSM phone for the dashboard.

Borderless Carriers:
A New Breed
of Customer

As deregulation and increased competition continue around the world, powerful telecom operators are looking for new ways to compete. They are entering into global alliances and creating a new kind of critical customer for Lucent Technologies.

"The birth of mega-carriers or borderless carriers comes from PTTs (post, telegraph and telephone administrations) and former PTTs feeling pressured to find either new customers outside of their home markets, new things to sell, or a balance of the two," said Marc Schweig, international strategy and development vice president, Network Systems.

Among the mega-carriers are: AT&T-Unisource (a joint venture focused mainly on European markets), Global One (a joint venture of Deutsche Telekom, France Telecom and Sprint), and Concert PLC (British Telecom's merger with MCI). Here's a brief look at one of these mega-carriers and how we serve it.

Mega-Customer, Mega-Service

Concert operates throughout Europe via second operators — virtual foreign subsidiaries of Concert, noted Schweig. These include Cegetel in France, Viag in Germany and Telfort in the Netherlands.

How do we serve Concert? For one, Dana Zitek, Lucent's global account manager, Concert, directs activities from the United Kingdom. Working in close partnership with him is Mike Decelle, MCI global customer team vice presi-
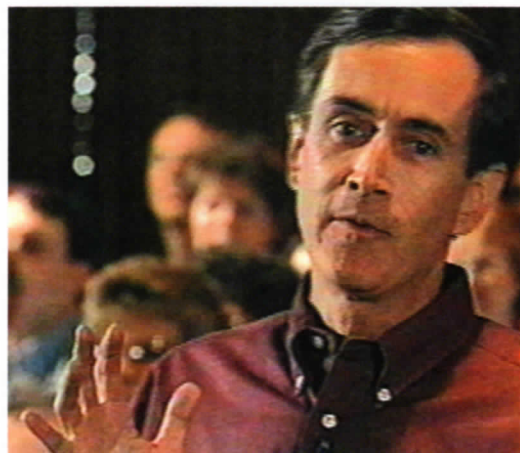
How do you serve a global customer like Concert PLC? With a global account team, said Dana Zitek.

dent, based in the United States. Salespeople are based in both countries. Designated Bell Labs engineers support this account exclusively. And in an exceptional move for Lucent, London — not the United States — has the lead.

"Concert serves some 43 million customers in 70 countries," said Zitek. "It will be the world's second largest carrier of international phone traffic and the largest carrier of Internet traffic. How we serve Concert has to be very different. Lucent must work with this critical customer globally — to offer them the highest value wherever they do business."

"Concert has a very clear intention to operate, procure and profit on a global basis," agreed Schweig. "So if it can negotiate global agreements with a supplier like us ahead of time, it can avoid costly, time-consuming steps to find a supplier each time it enters a new country. Global agreements would be a whole new way of doing business." -Shirley Chan and Matthew de la Haye

Going After Growth

BCS Gains
New Sales Agent

Expands Into Data and Consulting

Business Communications Systems' (BCS) new agreement with Southwestern Bell to sell co-branded Lucent business products to large businesses in the carrier's five-state region is another example of how Network Systems is helping other operating units find new growth opportunity.

The agreement, aided by Network Systems' strong relationship with Southwestern Bell, calls for 170 Lucent salespeople, along with Southwestern Bell's sales force, to sell co-branded *DEFINITY* Enterprise Communications Servers and related products to customers in Arkansas, Kansas, Missouri, Oklahoma and Texas. While the Lucent salespeople remain Lucent employees, they also will represent Southwestern Bell when selling this equipment in its territory.

"This relationship is strategically important as we seek innovative ways to ensure double-digit growth in our core markets," said Dana Becker Dunn, BCS vice president of marketing and strategic business planning.

Growth also comes in two other areas — data networking and consulting services. Although they are relatively small parts of BCS' overall business today, new and converging markets like these will account for half of the unit's revenue growth over the next three years.

BCS late last year said it was forming a separate data sales force to handle data networking products. Led by Paul Sylvia, former executive vice president of Agile Networks and now vice president, advanced data networking at Lucent, the sales force will number about 250. Managers to head the 10 U.S. regional operations have already been hired from such companies as Cisco, Bay Networks and 3Com.

The market for professional and consulting services also expands as customers attempt to deal with their increasingly sophisticated and complex voice and data networks. *NetCare Services*, a business within BCS, focuses on revenue opportunities in three areas:

- Professional services for business applications, such as call centers and messaging networks.

- Enterprise network management for voice, data, video and multimedia networks.

- Management services for customers who want to outsource their customer care centers.

-Nina Wood

THE WALL STREET JOURNAL.

Southwestern Bell to Sell Lucent Gear, Canceling Pact With Northern Telecom

ST. LOUIS POST-DISPATCH
MARCH 13, 1997

Bell, Lucent Team Up On Sales In 5 States

San Antonio Express-News

S.W. Bell, Lucent form sales alliance

TELEPHONY

Carrier/vendor dream team
WAYNE CARTER, Associate Editor-News

How I Serve Customers In New Markets

Lynda McHale Kane, market manager, Network Cable Systems Products, Atlanta

"Qwest has become a big player in the long-haul market by building a multiple-wavelength long-distance network with our *TrueWave* fiber-optic cable. Providing creative network solutions for new customers comes from listening and gaining a clear understanding of their business goals. The key to winning Qwest's business was knowledge-sharing all around. We shared our knowledge of network evolution and Qwest gained the confidence that their new network positions them for the next generation."

Frits Bosch, director of global accounts and new operators, Network Systems, Europe/Middle East/Africa region, Hilversum, the Netherlands

"We know the Dutch PTT very well, like partners in a marriage. Working with new operators is more challenging to our company. Their matrix of influencers is complex because several companies have a share in the business. And with liberalization starting in most of Europe on Jan. 1, 1998, these new operators are under tremendous time pressure to build networks. They need suppliers to provide total solutions — and do it fast."

DuQuesne Kepler, operations manager, *NetCare Services*, Caribbean/Latin America region, Business Communications Systems, Mexico City

" I'm just starting to build a regional team for *NetCare*, a new Lucent business that aims to be the world's leader in call center consulting. To serve our customers, we will first learn about their business. Then we'll help them leverage their call center equipment — use it to become more productive."

John Cox, sales support manager, Consumer Products, Parsippany, N.J.

"Network service providers are looking to marry the calling services they provide with products they can offer customers. For example, we styled our caller ID phone so the display is easier to read. Service providers also want their own logos on our products. This shows the customer is so enthused about our product, it's willing to put its name on it. That feels great. And it serves to grow Lucent as a company."

Kevin Green, IBM sales manager, Microelectronics Group, Richmond, Va.

" In the beginning, it was difficult to understand. How is Business Communications Systems' (BCS) sale of a private branch exchange to IBM going to help me sell my digital signal processor to the same company? But it's a fantastic strategy. By talking to BCS and Network Systems, we can come up with a better, cross-Lucent strategy to sell to IBM. Before, we were each at the base of a tremendous block of ice, individually chipping away. Now, together, we're looking to provide comprehensive offers — solutions to IBM's business problems. We want to form an ice sculpture with a few key moves."

Sharon Lu, senior director, external relations and business planning, Lucent Taiwan Telecommunications Co. Ltd., Taipei, Taiwan

"We went beyond basic selling to KG Telecom and Tuntex Telecom, wireless operators, by playing a strategic business partner role. We helped them prepare for their wireless licenses and provided advice on a network and roaming strategy. That's beyond the usual scope of what I do in working with traditional customers, and it's much more innovative."

Guru Pai, sales director, Network Systems, Whippany, N.J.

"I don't keep too rigid a calendar now because it's hard to stick to it. NextWave Wireless makes huge decisions quickly. The pressure on us to reach closure at the negotiating table was very high. Our traditional processes and structure would have made that hard; we required a very high level of trust from our officers. Our customer is breaking all sorts of records getting to market. Working with compressed intervals, we're doing the same."

Lucent Technologies
Bell Labs Innovations