

Lucent

magazine

Lucent Lights Up
Wall Street

Who We Are

What We Believe

Where We're Going


Lucent Technologies
Bell Labs Innovations

AT 11AM: LUCENT TECH OPENS STRONGLY

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SPM.Z +6005+95

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Welcome

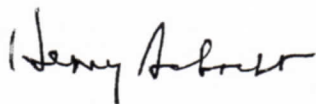
Welcome to the first issue of Lucent Magazine, a publication for the **people** who are the lifeblood of our new company.

This magazine is dedicated to every member of the Lucent Technologies team, both current and retired. We feel a special bond with our retirees who helped build our company and stamped it with a reputation for quality, reliability and innovation. We want to keep all our people well informed.

Since this is the first issue of our magazine, we thought it would be appropriate and timely to include an overview of our new company. In addition, we wanted to capture a sense of our history and tradition, so you'll find an article dedicated to our rich past. You'll also see and read about real people who are carrying on that tradition. In future issues, we'll be publishing many more features on the **people** of Lucent Technologies, because this magazine is a reflection of everyone who is dedicated to making our new company a marketplace success.

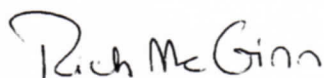
Lucent Magazine is intended to supplement our other channels of communication, including Lucent Technologies Today, our company-wide electronic newsletter, and the other print and electronic publications you receive.

We hope you find this first issue relevant, thought provoking and fun.



Henry Schacht

Chairman and Chief Executive Officer



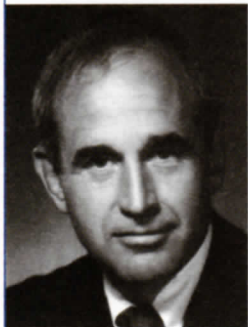
Rich McGinn

President and Chief Operating Officer

Henry Schacht



Rich McGinn



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and ideas for articles.

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Successful IPO

Lucent Lights Up
Wall Street



MICHAEL GAFNEY

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A Historical
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LAWRENCE LIA

What We Believe

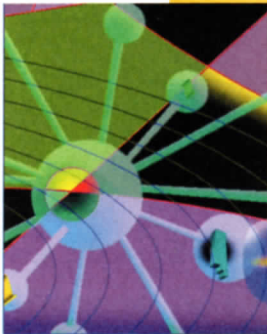
A Pull-out Poster:
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Lucent Technologies
Bell Labs Innovations



Lucent

Lights Up Wall Street



MICHAEL GAFNEY

"The reception was better than AT&T's investment bankers had predicted a month ago and set the stage for AT&T's plan to spin off Lucent as a fully independent company by the end of the year."
New York Times
April 5, 1996

Biggest U.S. IPO Launches Lucent Technologies

For 23 years, Jim Henglein has been a daily presence at the New York Stock Exchange as a technician for Business Communications Systems. When he stood above the trading floor to ring the closing bell after Lucent's first day of trading on April 4, the traders began to cheer and shout: "It's Jimmy!"

Henglein may work for a new company with a new name, but to the traders, he's the familiar guy they still count on to make sure their phones never stop ringing.

Our heritage of excellence and people like Jim Henglein — who are dedicated to delighting customers — factored heavily into why our stock broke a record for the number of shares traded on the first day of an initial public offering (IPO).

"This is a tribute to the feeling that the investment community has for us," said Henry Schacht, chairman of Lucent Technologies.

Nellie Perkins, an electronic specialist at the Oklahoma City Works, purchased the first block of 500 shares on behalf of a Lucent Technologies Pioneer scholarship fund. She went out onto the crowded trading floor with Schacht, Lucent President and Chief Operating Officer Rich McGinn, the chairman of the stock exchange and several other Lucent officers and members of the chief financial officer's organization.

Perkins and Henglein were among more than 100 representative



MICHAEL GAFNEY

September 20, 1995

AT&T Chairman Bob Allen announces that AT&T will split into three companies.

October 12, 1995

Henry Schacht appointed chairman and chief executive officer for systems and technology company. Rich McGinn appointed president and chief operating officer.

February 5, 1996

Lucent Technologies name is announced.

April 4, 1996

Lucent stock sells at New York Stock Exchange for first time.

September, 1996 (estimated)

Lucent spinoff from AT&T completed. AT&T stockholders receive new AT&T stock and Lucent stock.



"Despite yesterday's dull market, AT&T's initial public offering of a 20 percent stake in its Lucent Technologies unit sparked wide-spread interest."

**Wall Street Journal
April 5, 1996**

"Yesterday Lucent was the star attraction at the New York Stock Exchange."
**Washington Post
April 5, 1996**

employees and retirees who were invited to the stock exchange on the historic occasion of the first stock trade. The Lucent people toured the exchange, heard comments from the chairman of the exchange during a lunch and then participated in a program that was taped to show to all employees a week later.

AT&T and its underwriters priced the stock the night before at \$27 a share, which was higher than the \$23 to \$25 price that was estimated in our own prospectus. When Lucent's new stock symbol, "LU," finally went up on the board, trading started at \$31 and 7/8 a share. Within the first few minutes, more than 15 million shares had been traded. At the end of the day, 42 million shares had been traded, and the closing price was \$30 and 5/8 a share. The remaining shares of Lucent's stock will be distributed to AT&T shareholders later this year. ○



MICHAEL GAFNEY



MICHAEL GAFNEY

(above, from left) Carly Fiorina, executive vice president of corporate operations, Nellie Perkins, from the Oklahoma City Works, and Henry Schacht, chairman and CEO of Lucent, watch the "LU" symbol go up for the first time at the New York Stock Exchange.

(left) Rich McGinn, president and COO of Lucent, presents commemorative stock certificates to Nick Spricigo (center), incoming president of the new Lucent Pioneer Kearny Life Member Council, and Dave Porter, who manages the Pioneer scholarship program.



Where We've Been

1909 - AT&T

vowed that phone calls would travel across the United States in five years



John J. Carty
1923

In 1909, a year after the Model T Ford was introduced, John J. Carty, Theodore Vail's chief engineer, stood in front of an audience in San Francisco and made a bold pledge: He vowed that phone calls would be able to travel across the United States by the time the Panama Canal opened, in just five years.

That brash promise put AT&T's reputation on the line. Carty, a former "boy operator" who had risen to top management, knew full well that the technology to send signals across the continent did not exist.

Inventing it was the company's number one priority. Alexander Graham Bell's telephone patents had all expired by 1894, and with it the company's monopoly on the telephone and telephone service. Thousands of new local phone companies threatened AT&T's business.

Vail searched for the best talent and hired Harold Arnold, a bright

young physicist. Arnold faced a monumental task. The existing technology allowed phone calls to travel only the distance between New York and Denver. Arnold desperately needed to find a way to strengthen signals so they could carry calls from New York to San Francisco.

In 1911, Arnold watched as Lee DeForest, an independent inventor, demonstrated his three-element vacuum tube. Listening closely, Arnold could hear it amplify signals very slightly. He quickly grasped its potential and AT&T acquired the DeForest patent.

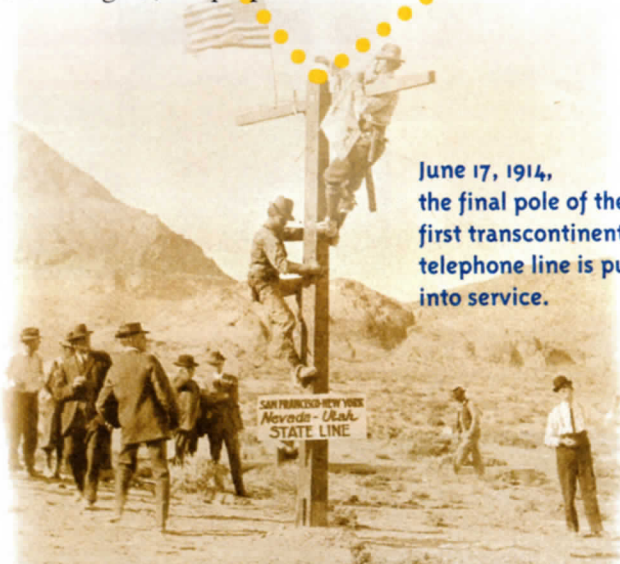
Arnold perfected the invention and, in early 1915, the World's Fair celebrated both the linkage of the Atlantic and Pacific Oceans and the linkage of the United States with coast-to-coast phone service.

Risk-taking. Ingenuity. Focus. Teamwork. Speed. Such is the heritage of Lucent Technologies.

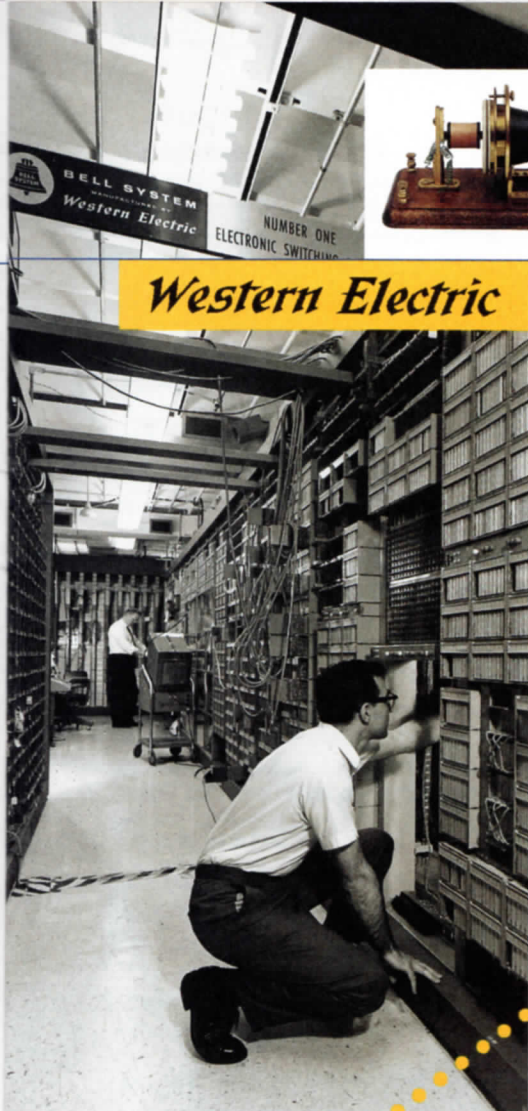
Lucent's roots go back to a one-room electrical and machine shop opened in Cleveland in 1869 by Elisha Gray, an inventor, and Enos M. Barton, a businessman. Gray & Barton, renamed Western Electric in 1872, would grow to be the largest electrical manufacturer in the United States by 1882, a year after it was acquired by American Bell Telephone Co., the company founded by Bell.

Arnold's invention, called the high vacuum tube amplifier, was a turning point in AT&T's — and Lucent Technologies' — history. In 1913, the discovery of the amplifier helped AT&T win a U.S. government decision that established it as the only long-distance carrier in the United States — and set a favorable regulatory climate for the next 70 years. That success also focused the company on the importance of research, paving the way for the formation in 1925 of Bell Telephone Laboratories Inc.

In the decades that followed, innovation after innovation flowed out of Bell Laboratories into communications networks, office buildings and homes. Many of the Labs' ideas became reality in dozens of factories, most notably the Hawthorne Works near Chicago. A city unto itself, Hawthorne had its own railroad, company store and hospital — and at its peaks in 1930 and 1944 employed an astounding 43,000 people.



June 17, 1914,
the final pole of the
first transcontinental
telephone line is put
into service.



Together, the inventions of AT&T's laboratories and the industriousness of its factories changed the world.

But by 1995 the world was a different place. Phone lines crossed oceans, not merely continents, and global and domestic competition undreamed of by Carty and Vail threatened AT&T. The company decided that its equipment and products businesses would thrive best as a separate entity.

For a new business Lucent has an impressive heritage. The ingenuity and business savvy that launched its corporate ancestor during the Industrial Revolution of the 20th century enabled AT&T to realize Vail's dream of universal phone service — a dream as ahead of its time as Henry Ford's desire to make cars available to all.

That heritage will be a powerful force for Lucent Technologies to draw upon as it launches its separate business this year — and tackles the challenges of the Information Age of the 21st century. ○ -by Cathy Fee



- 1869** Gray & Barton formed
- 1872** Gray & Barton becomes Western Electric
- 1876** Alexander Graham Bell invents telephone
Bell forms Bell Telephone Co., AT&T's predecessor
- 1881** Bell Telephone Co., incorporated as American Bell Telephone Co., acquires Western Electric
- 1882** Western Electric opens its first international subsidiary and factory in Antwerp, Belgium
- 1885** AT&T subsidiary formed with Theodore N. Vail as president
- 1913** High vacuum tube amplifier invented
- 1915** Transcontinental service begins
- 1916** Loudspeaker invented
- 1925** Bell Labs born in New York City
AT&T's International business sold
- 1941** Bell Labs opens facility in Murray Hill, N.J.
- 1947** Transistor invented
- 1956** Consent decree orders Bell System to divest all non-telephone activities
First trans-Atlantic cable laid
- 1958** Laser invented
- 1959** Princess phone introduced
- 1960s** Cellular technology developed
- 1962** Telstar I launched
- 1964** Touch-Tone service introduced
- 1970s** UNIX Software & "C" Computer Language developed
- 1973** Bell Labs develops new way to manufacture ultra-transparent glass fibers
- 1976** First 4ESS office goes into service
- 1978** AT&T re-enters the international arena
- 1980** Digital signal processor chip is introduced
- 1982** 5ESS Switch goes into service
- 1984** Bell operating companies divested from AT&T
- 1992** AT&T Transmission Systems wins Malcolm Baldrige Quality Award
- 1993** Memorandum of Understanding with China signed
- 1994** AT&T Power Systems wins Deming Prize
- 1995** AT&T splits into three companies: a systems and technology, a long-distance and a computer business
- 1996** Labs introduces *Inferno* networking software
- 1996** Lucent Technologies offers stock in the largest-ever IPO
Lucent acquires TRT in France and PKI in Germany

Who We Are



LAWRENCE LEA

Lucent Technologies' new ads are proclaiming to the world: We make the things that make communications work.

"I see wireless as a big part of the future for Lucent. So when I'm repairing the radio receivers and transmitters in our wireless telephone system, I want to make sure that a high quality product goes out. My biggest satisfaction is getting with Bell Labs to figure out a problem."

Randy Stinson, manufacturing technician, BCS, Shreveport, La.

We can say that because we design, develop, manufacture and market telecommunications systems, components and software for wired and wireless, narrowband and broadband, analog and digital telecommunications networks around the world. This work is carried out by four operating units — Business Communications Systems, Consumer Products, Microelectronics and Network Systems. And Bell Laboratories is the innovation "engine" that powers them all.

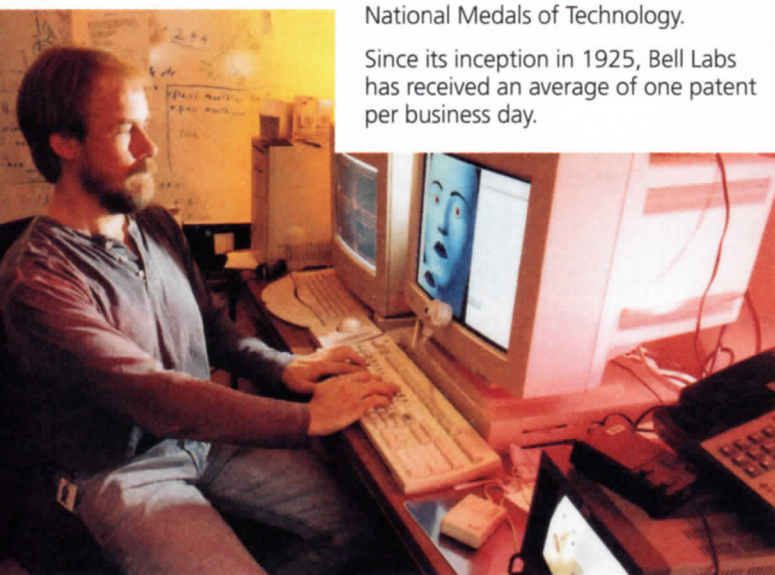
Bell Laboratories

Conducts research and development focused on software and information sciences, digital signal processing, communications science and networking technologies, microelectronics and photonics.

Bell Laboratories Key Facts

Discovered a seemingly endless number of technologies, including breakthrough inventions: the communications satellite, cellular telephony, electronic switching, the solar cell, the transistor, the laser, fiber optics, and the digital calculator. Won four Nobel Prizes, seven U.S. National Medals of Science and five U.S. National Medals of Technology.

Since its inception in 1925, Bell Labs has received an average of one patent per business day.



FELIX H. BRYANT JR.



Business Communications Systems

No.1 in U.S. PBX systems
No.1 in U.S. Key systems
No.1 in U.S. Voice Processing systems
No.1 Worldwide in structured cabling systems.

Major Things BCS Makes:

The *BusinessWorks* family of solutions, which meets customers' messaging and networking needs.

Definity Enterprise Communications Server, *Merlin Legend* and *Partner* communications systems.

PassageWay products that link PBXs to computers.

Intuity Audix and *Definity Audix* voice messaging systems.

TransTalk 9000 Digital Wireless System that eliminates the need for telephone wires in the office.

Multimedia Communications Exchange server that allows real-time videoconferencing and data-sharing.

BCS Key Facts

Customers are businesses in more than 1.5 million locations in more than 90 countries.

Installed more than 38,000 PBX systems for large businesses and 1.3 million office communications systems for smaller business customers around the world.



"We do whatever we can to help our customer buy Lucent products and services. Often that means going to the customer's location several times a week and even visiting our customer's customer to find out what they need. It feels good when we pull together something that helps the customer."

D'Ann Renner, marketing sales consultant, Bell South customer team, Network Systems, Atlanta, Ga.

Consumer Products

No. 1 in U.S. corded telephones
No. 1 in U.S. cordless telephones
No. 1 in U.S. telephone answering systems

Major Things Consumer Products Makes:

The *Digital Portable Telephone 6730* and *6720*, the first digital cellular phones to be designed and manufactured by Lucent Technologies.

The industry's first 25-channel cordless telephone.

The *Personal Information Center 882*, a combination telephone, speakerphone and personal information manager.

Consumer Products Key Facts

Customers are small businesses and a majority of U.S. households.

Ranks third globally in the telephone products market.

With help from Bell Labs innovations, introduced several "firsts," including the first cordless phone with wired-phone sound quality, the first all-digital answering system, the first cellular phone with "soft-key" menus and commands, and the first cellular phone with circuitry that filters out background noise.

Microelectronics

No.1 worldwide in digital cellular DSPs
No.1 worldwide in ASICs
No.1 worldwide in videoconferencing integrated circuits
No.1 worldwide in telecommunications power systems

Major Things Microelectronics Makes:

Digital Signal Processors (DSPs) — chips for digital cellular phones, feature phones, digital answering machines, modems and other communications systems.

Application specific integrated circuits (ASICs) — chips used in computer disk-drives and other communications products.

Power systems that supply energy for telecommunications infrastructure and distributed power for laser printers and computer components.

Optoelectronic components that transmit optical signals over a wide variety of fiber-optic networks.

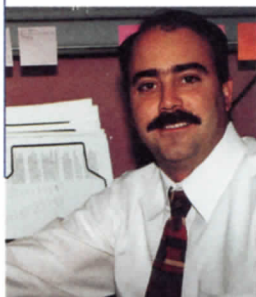
Microelectronics Key Facts

Customers are world's leading manufacturers of communications equipment.

A leading supplier to the wireless industry.

More than half of the world's digital cellular phones contain Microelectronics products.

The only U.S. company to win the Shingo Prize for Excellence in Manufacturing twice; won Japan's top quality award, the Deming Prize, in 1994.



"Mornings are hectic because reports on the previous day's microchip wafer production are needed for staff meetings. When we have a really good day of production, everyone is happy because it means everyone worked hard, and it's reflected in my reports." *Alfredo Etchegoyen, reports and results specialist, Microelectronics, Orlando, Fla.*

"If you break down why our customers buy a product from us, at least 50 percent depends on support. They want to know we'll be there after the purchase. I love being out with the customer, working profitable solutions, with a great team of people."

Rosemary Garavaglia, national customer service manager, Wireless Products, Consumer Products, Piscataway, N.J.



ALLAN LUFTIG



BLACK STAR

"Sometimes there is a gulf between the American and Japanese cultures and business styles. It is important to understand the real requirements and concerns of our customers and the company. That makes it possible to have a win-win situation." *Kenji Wada, senior sales manager, Microelectronics Japan, Tokyo.*

Network Systems

Tied for No. 1 in worldwide market share.

No.1 in U.S. switching
No.1 in U.S. transmission
No.1 in U.S. networking software
No.1 in U.S. wireless networks

Major Things Network Systems Makes:

Wireline and wireless services supported by the *5ESS* switch platform, the industry's most reliable electronic switching system.

Leading edge software, ranging from the *5ESS* switch long distance platform, to applications software, to the *A-I-Net* intelligent network software.

Broadband, including SONET transport solutions and ATM systems for switching voice, data and video signals on public networks.

Structuring cabling systems, including *Systimax* SCS, a wiring solution for office buildings, complexes and campuses and *Exchangemax* SCS, for service providers' central offices.

Network Systems Key Facts

A leader in all areas of telecommunications networking.

Provides systems and software to 23 of the world's 25 top network operators.

Leading equipment supplier for the emerging PCS market.

Won the world's largest telecommunications contract — a \$5 billion seven-year agreement to build a wireless network in Saudi Arabia.

Built a complete nationwide cellular network in Argentina.

One of the world's largest producers of network software.

Awarded 60 percent of \$3 billion Sprint Spectrum venture's nationwide wireless network.

Our Values

Our values are based on our proud and shared traditions and shaped by the demands of this new world we're helping to create. Together, we will define and refine our values as our company grows.

These values are our touchstone. This is the kind of company that we aspire to be. Our values will guide the behavior and decisions of all Lucent Technologies people around the world as we deal with our customers, our partners, our suppliers, the communities in which we work and live and -- most of all -- each other.

2 a commitment to business excellence

While there are many elements of business excellence, we believe a focus on speed, innovation and quality is the best way to meet our goal of providing the world's best and most innovative communications solutions.

Speed

We're faster than the competition in recognizing and responding to customers' needs. We're bold enough to take risks, but we always balance our desire for speed with diligent fact-finding and consideration of different points of view.

Innovation

We continually innovate so that our products, processes and services better serve our customers. We give people the flexibility to perform their jobs and creativity is rewarded. We're committed to a continuous learning environment where we constantly upgrade our skills.

Quality

In order to provide superior customer value, we continuously improve our work through a commitment to quality principles.

1 an obsession with serving our customers

Mutual Respect & Teamwork

We support and celebrate diversity of people and ideas in our work environment and in the communities in which we work and live. Each of us has an obligation to speak up and an obligation to listen. We encourage constructive contention; we confront issues with mutual respect. We pro-actively communicate and share information with colleagues throughout the business. We expect the best of ourselves and each other. No person is alone in his or her pursuit of an objective; we are a team.

4 a strong sense of social responsibility

We live up to our responsibilities to serve and enhance the communities in which we work and live and the society on which we depend.

All of our actions are driven by our desire to serve our customers better than anyone else in the industry. We strive to partner with every customer. We work not only to meet their needs but to exceed their expectations. Our customers can rely on us and on our commitment to them now and in the future.

Personal Accountability

We each take ownership for the success of Lucent Technologies. Our objectives reflect our aspiration to be the best in the world. Our rewards are determined by our results. We keep our commitments. We recognize ourselves and each other as Lucent's most valuable assets and strive for personal excellence as well as team success.

Integrity & Candor

We uphold the highest level of business ethics and personal integrity. We are honest and candid in all our dealings with our customers, shareholders, suppliers, partners, the communities in which we work and live, and each other. We support behavior consistent with our values and speak up when we see behavior that is not consistent with our values.

3 a deep respect for the contributions of each person to the success of the team

Each of us has rights and responsibilities as members of the Lucent Technologies team. We have the right to work in an environment where mutual respect, teamwork, integrity and candor are the norm. And we have the responsibility to foster that environment and actively contribute to the overall success of the team.

Our Mission

To provide our customers with the world's best and most innovative communications systems, products, technologies and customer support.

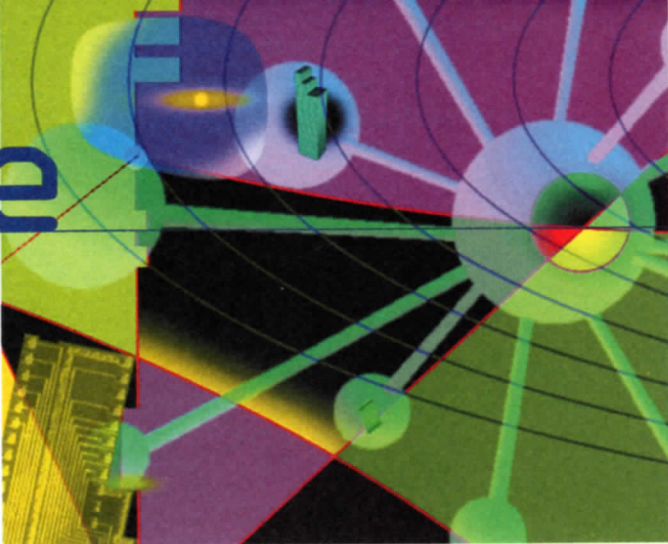
Powered by excellent people and technology, we will be a customer-driven, high performance company that delivers superior, sustained shareholder value.



Lucent Technologies
Bell Labs Innovations

We make the things that make communications work.

Where we're going



Once a business has carved out a clear direction and a set of goals to mark its progress, it then faces a wide array of choices as it pursues its business objectives. Evaluating these choices and deciding which to adopt result in a company's strategy.

"Strategy is really about making the choices that propel your business in its right direction," said Carly Fiorina, executive vice president of corporate operations.

Fiorina, who leads Lucent's strategic planning effort, said, "We intend to build on our leadership position in the most dynamic industry in the world and to grow our business faster than the market."

Communications industry experts forecast annual growth of 10 percent or more, but certain segments and certain parts of the world are experiencing much higher growth rates.

"We are going to focus on the areas of highest growth," Fiorina said, "and we've already made the strategic choices to guide our efforts. In fact, we made 10 important strategic choices to help us deliver on the promise of our new company."

Five of those choices involve promoting business growth, and five involve business discipline. "We did not make these choices in a vacuum," said Fiorina. "We made them after evaluating where we stack up against our competitors, as well as what we needed to accomplish on behalf of our customers."

Fiorina noted that while Lucent has tremendous advantages that its competitors would love to have — including our broad product line, our technology base, the talented and dedicated people throughout the company, and a great track record — "we need to sharpen our focus and apply our resources to even greater advantage in the marketplace."

The 10 strategic choices we've made, said Fiorina, "get us on that track."

The choices that promote growth include an emphasis on:

Wireless Communications

Society is growing increasingly mobile; people don't want to be tethered to their phones. All of Lucent's operating units contribute to its wireless business. Network Systems (NS) sells wireless systems to network operators, a market that is growing at the rate of 33 percent a year. Together with Business Communications Systems (BCS), NS recently offered a product that allows people to take cellular phones into the office and use them as wireless business systems. Consumer Products has established a unit that makes digital cellular phones. Chips from Microelectronics are in many of those phones. And Bell Labs designed the chips.

Networking Software

More sophisticated technology demands smarter networks. And software provides that brainpower. It's a \$2 billion business that's very profitable. We begin our new life as one of the world's largest producers of networking software in a \$30 billion a year annual market that's growing by about 13 percent a year. Lucent Technologies software, developed by Bell Labs, is also in products the other operating units make. BCS' *PassageWay* products, for example, use Bell Labs' Computer Telephony Integration (CTI) software. This software permits instantaneous access to customer records on a computer screen when a customer calls, eliminating waiting time.

Multimedia Convergence

Our customers want systems that incorporate wireless and wireline, local and long distance, voice, video and data. They want "any-media" machines. Lucent Technologies will concentrate its focus on innovations that deliver broadband public and private networks that carry the multimedia instantaneous, interactive voice, data and video communications of the 21st century. These high capacity networks will increasingly replace existing voice and data networks.

Aggressive but Selective Globalization

Economic developments throughout the globe present outstanding opportunities. Only 600 million of the world's 5 billion people have telephones, and half the world's population has yet to make a call. But we can't be everywhere and do everything. Our efforts will aggressively focus on areas with the greatest prospects for profitability.

Our Strategy



"We intend to build on our leadership position in the most dynamic industry in the world and to grow our business faster than the market."



Carly Fiorina

These choices place a renewed focus on the world's fastest growing markets, markets where Lucent Technologies seeks a leadership position.

Fiorina said growing the business and its profitability will take far more than great products delivered by great people. It also will take a sound business discipline.

Fiorina said, "Becoming the high-performing company we're striving to be requires us to become more efficient."

To address these and other issues, Fiorina said the company has decided to aggressively manage five vital areas of the business, including:

Maintaining world-class gross margins.

Reducing general and administrative expenses to a level far lower than currently exists.

Increasing investment in R&D to stimulate growth of new products.

Lowering the tax rate to a level that reflects businesses similar to ours.

Maximizing return on assets, to ensure a high return on capital investments.

Lucent Technologies' target is for revenues to grow faster than the market in 1996 and continue to increase each subsequent year. Achieving that growth will mean speeding innovation and winning in the marketplace against fierce competitors, Fiorina said.

"We already have some great examples," Fiorina pointed out, including the Sprint Spectrum deal and the introduction of *Inferno* software.

"We are going to have to earn that growth one customer at a time," Fiorina said. "At the same time, we have to put in place a strong business discipline that leads

Inferno heats up growth in networking software

Innovation, software and speed: These watchwords of Lucent strategy sum up the story of the *Inferno* network operating system.

Inferno is a suite of networking software for building and delivering interactive network-based applications — anything from electronic mail, Internet services and work-at-home capabilities to video games and pay-per-view movies — on almost any computer, entertainment system, or smart phone, and over almost any kind of network.

Just a year before its announcement as a commercial product, *Inferno* began as a concept generated through interactions between researchers Phil Winterbottom and Rob Pike and Bell Labs President Dan Stanzione. Today it stands as a sign to customers and competitors that Lucent is a team capable of delivering strategically important communications software from the labs to the marketplace — fast and first.

"*Inferno* is not just the best" available solution to the problems it addresses, said Stanzione, "it's the only game in town, especially for devices with limited memory and processing power. It builds on our core competency in networking software."

Inferno was created by Winterbottom, Pike, and colleagues Sean Dorward, Dave Presotto and Howard Trickey of Bell Labs' Computing Sciences Research Center. A dedicated 20-person business team led by Vice President and

continued on next page

to efficiencies that strengthen our bottom line."

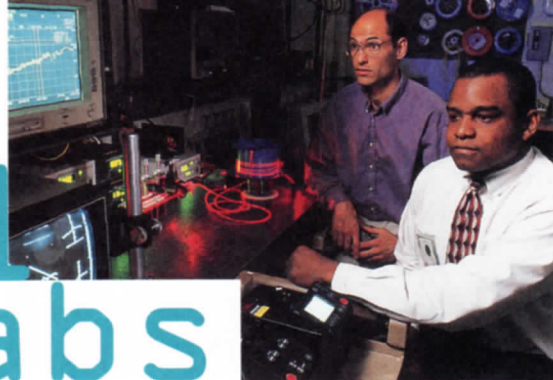
Outsourcing information systems to Integrated Systems Solutions Corp., a subsidiary of IBM, is an example of a strategic choice in the area of business discipline, as were the planned sale of modem-maker Paradyne and the closing of Phone Center stores.

Lucent Technologies' strategy will continue to evolve as the business confronts new choices that surface in the dynamic information industry. With each choice, the company will sharpen its focus on the marketplace and on delivering the kind of results that attract shareholders, reward employees and delight customers. Our business strategy, after all, is a matter of choice and of choices. ○



BEL

Bell Labs



At Bell Labs, David Digiovanni and Daryl Inniss are involved in photonics — one of Lucent's key information technologies.

Inferno continued

General Manager Mike Skarzynski will develop and market the product.

"*Inferno* provides an information infrastructure for peer-to-peer communications — using all the resources of the network to run applications," Winterbottom said. "If this story were reported as an Internet play, that would be missing the point. *Inferno* turns the existing Internet model inside-out."

Point taken. Industry analysts and media alike responded positively to the *Inferno* launch, Lucent Technologies' first major corporate announcement after the initial public offering of stock. The widespread media coverage not only positioned *Inferno* as a unique product in a vital market, but also helped to strengthen Lucent's image as a leading software company.

The article in the May 7 issue of the Wall Street Journal opened with the statement that with *Inferno* "Lucent Technologies is taking on the software giants with versatile new networking software." The Journal also quoted industry analyst Peter Bernstein, president of Infonautics Consulting Inc., who said "*Inferno* is designed to take the chaos out of the electronic Tower of Babel."

On the same day, an article in the New York Times said *Inferno* stands out because it has Bell Labs behind it. "Despite the difficulties in introducing an operating system in today's market, *Inferno* is expected to attract attention, for its heritage as well as its technology. Bell Labs is the creator of UNIX, which is the operating system on which the Internet is based as well as the underpinning of most modern client-server systems, in which programs are shared across networks of multiple computers."

The editor of Client-Server News, Maureen O'Gara, was quoted in the Times as saying that *Inferno* "will be positioned as the glue that holds the entire network infrastructure together seamlessly."

For more information, visit the *Inferno* site on the Internet: <http://inferno.bell-labs.com/inferno/>.



Members of the *Inferno* software team include Sean Dorward, Phil Winterbottom and Rob Pike.

Look around your workplace. The words "Bell Labs innovations" are all around you. On ID badges, business cards, stationery, building signage and keychains. These words are shorthand for Bell Labs' mission: to provide the technology that fuels the new company's growth. And, to get that technology to the marketplace so that Lucent is the world's leader in systems and services.

Bell Labs President Dan Stanzione underscores Bell Labs' role in innovating for the business. But he makes a clear distinction between innovation and invention. Bell Labs has long been known for its inventions: the laser, the transistor, and the Telstar communications satellite, to name a few. The focus now is on innovating, bringing key technologies to market with increased speed, Stanzione said, to give Lucent Technologies a greater competitive advantage.

Key Technologies

Bell Labs is working with Lucent's businesses on technology roadmaps to define which products they require to be successful and what technologies underlie those products. The focus will be on key information technologies:

Wireless
Software
Photonics
Silicon chips

And, innovation requires business people and technologists to work together as a customer-focused team. "It's a team sport," Stanzione said.

Inferno is an Example

As part of the innovation process, Bell Labs also will help launch new independent businesses within Lucent, to take advantage of a few significant innovations to enhance Lucent's market position. "We have just announced our first such business, a breakthrough project called *Inferno*," said Stanzione. (See related story.) "We expect to bring other innovations to the market quickly through business teams within Lucent."



Network Systems



Dan Stanzione

"We want our innovative capability and technical excellence to make Lucent the customer's first choice in the marketplace."



The ability to innovate depends heavily on technical excellence — hiring, developing and retaining the world's best technical talent, Stanzione said.

"We want our innovative capability and technical excellence to make Lucent the customer's first choice in the marketplace," he added.

The telecommunications industry is in the midst of a powerful customer- and technology-driven revolution — a digital and multi-media revolution enabled by the key technologies we're focusing on, Stanzione explained. "This revolution will change the world our customers live in — the way they live, work, play and communicate. And it's evident that Bell Labs has a fundamental role in making Lucent Technologies the leader in that revolution. The golden age for innovation is still ahead of us," he said. ○

Thais Brouillette is part of the team at Network Systems' Wireless Product Realization Center in Mount Olive, N.J., where resources are focused on meeting the growing demand for wireless products.

U.S. regional telephone companies are merging. Public telecommunications companies outside the United States are going private. Cable TV, long-distance and local telephone companies are invading each other's turf. New technology is creating new markets and changing old ones. And competitors are springing up like wildflowers.

How do you become a world market leader in the midst of such change? By exceeding customer expectations, engaging employees and increasing shareowner value, said Dan Stanzione, president of Network Systems and Bell Laboratories. That's Network Systems' strategic direction.

Focus On Customer

"Focusing on customers is our highest priority. And a large part of that focus on customers is flawless execution. We have to become more flexible, more agile and above all more focused on customer-driven execution," said Stanzione.

This means providing high-quality solutions that exceed customer expectations, on-time, at worth-what-paid-for prices and with excellent customer service — and doing all this responsively and quickly. Network Systems' goal is to exceed customer expectations by speeding up its processes to deliver on a timely basis what its customers *want*, and understanding market demands — what customers *need*. Then, Network Systems is using the best new high-growth technologies to meet those needs:

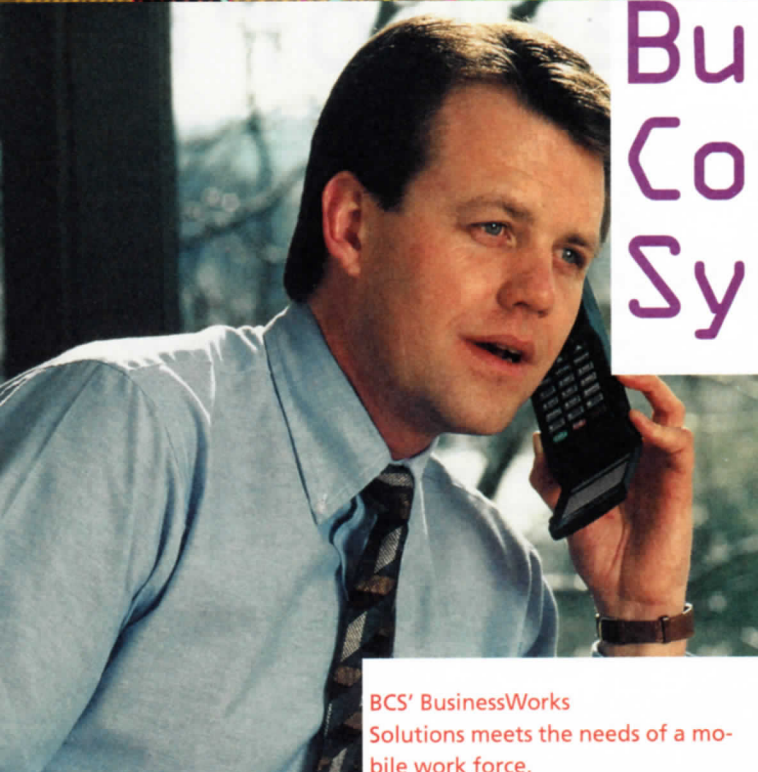
wireless software broadband

Increase Shareowner Value

The next element in Network Systems strategic direction is increasing shareowner value by maintaining profitable revenue growth and becoming world-class in managing assets. "We'll maintain our margins by developing new high-value products and offers such as wireless, software and broadband on the product side and international growth on the market

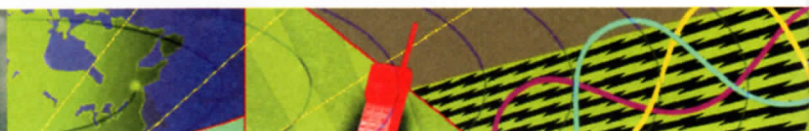
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BCS' BusinessWorks Solutions meets the needs of a mobile work force.

Business Communications Systems



Business Communications Systems (BCS) is a Chairman's Quality Award winner and a successful operating unit with a clear strategy: "We will be the leader before, during and after the telecommunications industry transformation."

Even restructuring didn't dent that strategic intent. "Clear leadership in an industry that is transforming itself remains our overriding goal. As part of Lucent, we still need to do the same fundamental things, but the context in which we must do them has changed," said Pat Russo, president of BCS. "The external focus on Lucent is much sharper as a separate company. The bar is higher, but the opportunities are greater as well."

BCS' strategic initiatives are to:

Strengthen the core business: BCS must increase market share and leverage its leadership in the design, development, manufacturing and servicing of business communications systems to continuously improve levels of performance for customers, shareholders and associates.

Grow globally: BCS dropped the word "global" from its name when it joined Lucent because BCS' global thrust is self-evident. BCS serves customers at more than 1.5 million locations in more than 94 countries.

Network Systems *continued*

side," said Stanzione. Network Systems will approach the international markets in a more selective manner, he added.

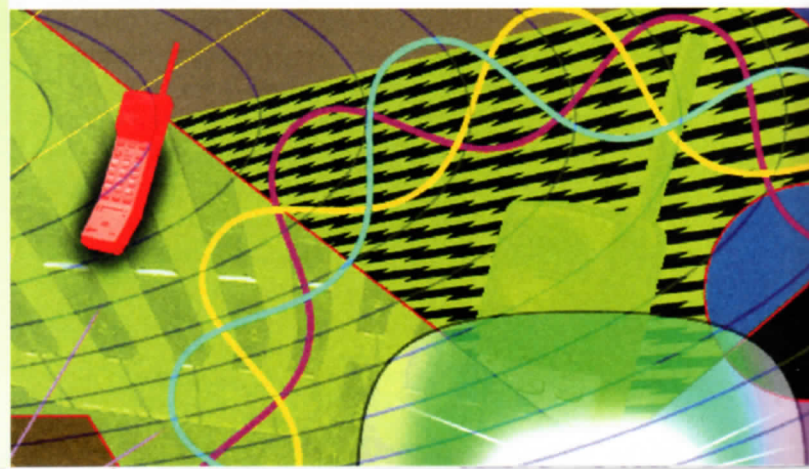
To achieve world-class asset management, Network Systems has instituted programs to reduce product costs, gain better control of inventory, deliver products to customers faster and spread the end-of-the-year peaks in revenue and profitability over the whole year.

Engaging People

And then there's the people component of Network Systems' strategy. "Effective execution of our strategy hinges on having talented people who are informed, skilled, disciplined and focused. Accordingly, Network Systems is developing an organization-wide training and development program focusing on business management, customer service, sales, technology and leadership.

"Being part of a new company means there is no shortage of opportunities for Network Systems," said Stanzione. Among them: finding new customers in long-distance providers like Sprint and the new companies entering the emerging PCS (personal communications services) markets, and working closer with the other Lucent units to provide new solutions for Lucent Technologies' customers. "We're all partners in building a new company and shaping a future that we can be proud to hand over to the next generation of Lucent people," said Stanzione.

Our
Strategy



Become successful in multimedia communications:

Rapid changes are hitting the global communications industry as voice, data, image and video merge. Service providers are being deregulated; technology is converging. BCS' customers face pressure to become more efficient and to serve their customers' changing needs better. BCS' challenge is to transform its business to succeed in the multimedia markets. To meet that challenge, BCS creates and provides integrated offers under the family name of *BusinessWorks Solutions*. These offers, which are designed to address problems that businesses face today, are focused in three areas: customer sales and service, conferencing and collaboration, and distributed and mobile work forces.



Pat Russo

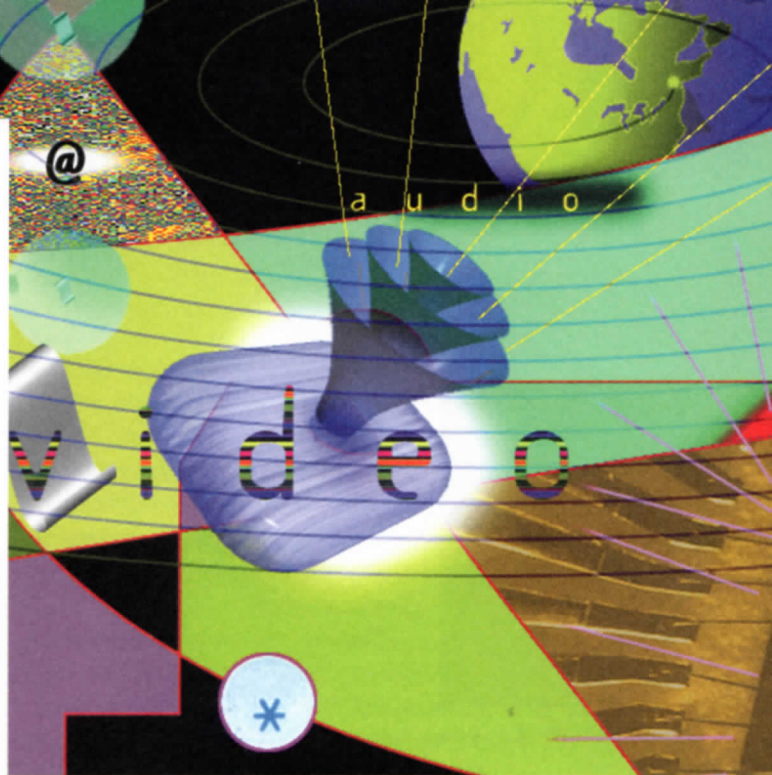
"We're proud of our progress, but frankly, our focus has to be on tomorrow."

Create a supportive culture: For the past three years, BCS has been working toward cultural change. The goal — supported by internal programs — is to create an environment where associates are accountable and empowered to act on behalf of the customer.

As part of Lucent, new synergies offer even more opportunities, said Russo. One example: BCS and the Network Systems operating unit earlier this year offered a product that allows people to take their cellular phones into the office and use them as wireless business systems.

Such success must have been hard to imagine a few years back, when BCS was a business in trouble. Its turnaround is a shining success story, but don't expect Pat Russo to bask in it. "We're proud of our progress, but frankly, our focus has to be on tomorrow. We're in a whole new ball game, in which every home run really counts.

"It's not opportunity we lack," she said. "Our charge will be to figure out how to move quickly. Speed and focus are essential." ○



MVT in Transition

Just one year ago, the Multimedia Ventures and Technologies (MVT) unit was part of the Multimedia Products Group, one of AT&T's four large business groups. MVT, at its peak, employed more than 5,000 people. Early in 1995, AT&T made a strategic decision either to strengthen the MVT unit's ties to the core business or to exit those businesses.

MVT President John Berndt, whose 33-year AT&T career has included several presidential positions in business communications services and international spheres, is in charge of the change, outlined below:

- Advanced Technology Systems and the Strategic Support Services Division—the parts of MVT that support the U.S. federal government's need for specially designed systems — and their more than 3,000 people began reporting to Business Communications Systems (BCS) President Pat Russo earlier this year, joining other similar teams from Network Systems and BCS.
- The Ventures Corp., which funds start-up businesses, was assimilated into AT&T's Strategy and New Service Innovations Group.
- MVT exited two businesses, one that made encryption products for secure voice communications and another that developed acoustic noise suppression technologies and products.
- MVT is in the process of selling AT&T Paradyne, the Florida-based unit AT&T purchased in 1989, which makes network access products, such as modems, that connect computers to phone lines. Roughly 750 of Paradyne's people transferred to BCS, about 150 people left the business and the remaining 1,200 are positioned to work for the new owner.

Commenting on the changes in MVT, Berndt noted, "I am pleased that we were able to successfully move or place the vast majority of MVT people. My focus is now on Paradyne's current operations, sale, and future business success."

Microelectronics

Ask Curt Crawford and he'll tell you the Microelectronics Group is the most exciting business in its industry.

"The markets we're in are fundamental to all the major technology changes happening in communications today," said Crawford, who is Microelectronics' president. "When you look at the technology associated with the Internet, multimedia, interactive and wireless communications, Microelectronics' products are key to them all."

Because of Bell Labs' innovation, Microelectronics offers digital signal processor (DSP) chips and application specific integrated circuits (ASICs) that are among the fastest, smallest, most powerful in the market; software algorithms for its DSP chips that are considered among the best in the industry; and the lasers in the optoelectronic components that are among the most reliable.

And customers agree. Microelectronics' chips are in the majority of all digital cellular phones and standards-based videoconferencing equipment used in the world, and in most of the network switches used by U.S. telecommunications service providers. Its power systems fuel most of Hewlett-Packard's ink jet printers, as well as some of the world's most sophisticated switches and base stations. Microelectronics' optoelectronic components are used in much of the world's fiber-optic telecommunications networks.



Curt Crawford

Microelectronics' strategy is to be in the fastest-growing segments of the electronics industry



Dowdell Carey makes sure that Microelectronics chips made in Orlando, Fla., are among the best in the world.

Focus on Competitive Advantage

Armed with this array of products, Microelectronics' strategy is to be the best in the fastest-growing segments of the electronics industry.

To achieve that goal, Microelectronics has two simple rules:

Only participate in markets where Microelectronics has the potential to be No. 1 or No. 2 in the industry.

Only participate in markets where Microelectronics has a strong competitive advantage.

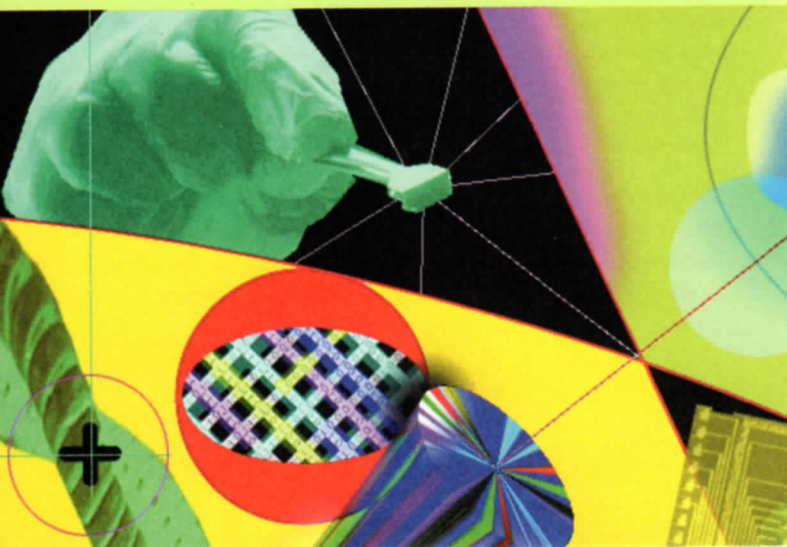
Sticking to these rules recently led Microelectronics to put two of its businesses up for sale: the custom manufacturing business in Greensboro, N.C., and the printed circuit board business in Richmond, Va. Although the businesses were successful, Crawford and other Microelectronics leaders felt Microelectronics did not add a clear competitive advantage.

International Growth

International growth also is a key part of Microelectronics' strategy. Microelectronics' 1996 first-quarter sales to non-U.S. customers were 49 percent higher than they were in the first quarter of 1995. This, plus its domestic sales growth, make Microelectronics the fastest growing unit in Lucent.

But Crawford says this is no time for Microelectronics to rest on its laurels. "We plan to move and grow as the communications industry grows, looking for new opportunities as the industry evolves." Crawford already sees new places where Microelectronics' DSPs will be needed: in the new and faster cable and ISDN modems under development and in the wireless digital handsets being designed for new cellular services.

The challenge for Microelectronics is the same as it is for the rest of Lucent — to move faster, to keep up with the changes in the industry and to be where the growth is. ○



Our Strategy



Consumer Products

For Consumer Products, the road to profitability and growth is paved with digital wireless phones, corded and cordless phones and answering systems.

All designed and manufactured in-house; based on a set of common platforms developed by Bell Labs; built to the customer's order; and stamped with Lucent Technologies' name and logo.



Homa Firouztash

One of the first strategic steps Consumer Products had to take was to close its Phone Centers. According to Homa Firouztash, who becomes CP's acting president in July and is vice president and general manager, Wired Products, competing against the "mega" stores that offered deep discounts and huge selections had become too difficult. Consumer Products chose to focus on the core competency of Lucent Technologies: designing, developing and manufacturing communications systems.

New Direction Begins

Consumer Products is already laying the groundwork for its new direction by:

In-house manufacturing: By the end of the year, 90 to 95 percent of new products will be designed and manufactured at Consumer Products facilities. In 1995, Consumer Products manufactured a far smaller percentage of its own products.

Platforming: Paring down its sprawling number of product designs into a select few core designs. New products will be built from various combinations of these platforms.

Build-to-order: When the new product designs are ready in 1997, they will be assembled after customers' orders are received and shipped directly to the retailer or service provider.



With these three steps, Firouztash believes Consumer Products can get new products to market in half the time it does today. Other benefits: responding more accurately to customer demand, keeping down inventory costs and gaining more control over quality and production cost.

And, being part of Lucent means working more closely with other units such as Network Systems to tap new opportunities to sell equipment to local telephone companies. Telephone companies are eager to market equipment that makes special network features such as Caller ID easier to use.

Digital Cellular is Key

Probably the most visible strategic change for Consumer Products will be its aggressive entry into digital cellular phones, a market expected to grow explosively over the next five years.

"The growth of cellular and digital has revitalized the terminal equipment business," said Lew Chakrin, vice president and general manager, Wireless Products. As Chakrin sees it, Lucent Technologies can become a major player in the business it invented.

Consumer Products has opened a product realization center (PRC) in Piscataway, N.J., where all of its digital cellular phones will be designed and manufactured. Two of these phones were unveiled earlier this year. The rest will be available in early 1997. The center combines under one roof all of the elements needed to bring a new product to market: planning, research and design, manufacturing, marketing and distribution. ○

The 6720 wireless phone is the first cellular telephone designed and manufactured by Lucent Technologies.



Articles in this section were written by Cathy Fee, Ollie Hartsfield, Carl Kelly, Patrick Regan and Dan Van Atta.

Illustrations by John Hersey

What Lucent means to me



Ken Chung
Network Systems
Hong Kong

"Lucent Technologies has created state-of-the-art technology in the telecommunications industry. This is not only a valuable heritage, but also a driving force for me to be innovative. We have a chance to explore more ideas without bureaucratic boundaries and implement them in the new environment. I'm taking this as an opportunity to redefine where I want to go. Also, colleagues can learn how to support each other."



Denise McIntyre
Advanced Technology
Systems
Whippany, N.J.

"I am looking forward to being part of Lucent as it evolves from inception to maturity. Our strong foundation in research, development, manufacturing and installation will allow us to continue to be recognized as a world leader in telecommunications. I envision great opportunities for Lucent, its employees and our customers."



Carlos Ortiz Capetillo
Environmental
Health & Safety
Guadalajara, Mexico

"Lucent is like a newborn who has been granted a magnificent heritage, history, success and value. This heritage means a legacy as well as an important responsibility to remain great in the future. We are distinguished in being the generation of associates that will help this newborn to grow up and educate it on how to be global, competitive, profitable and a good citizen. But it will have to be done at the speed of light, for that is the speed at which the surrounding environment is evolving."



Heather Gamble
Business
Communications
Systems
Toronto, Ontario

"Working for Lucent is an opportunity to grow with the most exciting technology company since Microsoft."



Mohammed Al-Dhalaan
Public Affairs
and Public Relations
Saudi Arabia

"In Saudi Arabia, telecommunications is being developed to become one of the most modern in the world. Lucent Technologies clearly assumes for itself the responsibility of helping Saudi Arabia achieve its vision for telecommunications. In this manner, Lucent Technologies is the harbinger of big beginnings and therein lies the challenge of making it work right at the start so generations to come will see for themselves that in Saudi Arabia, Lucent Technologies 'made the things that make communications work.'"



Sharon Kirby-Magill
Bell Labs
Holmdel, N.J.

"My father was one of the structural ironworkers who put up the steel skeleton of the Holmdel site. I can remember as a child visiting my father at lunch and asking him what would be done here and he told me about the research and development of the Labs and I thought that was so exciting. Through my school years, I'd hear about the accomplishments and opportunities at Bell Labs. I've always wanted to work here, so it's a dream come true for me to be part of Lucent Technologies."



Sue White
Network Systems
Malmesbury,
United Kingdom

"Lucent in the UK provides an excellent work environment where there is a great deal of teamwork and dedication. Our company also offers good career development opportunities within the global organization enabling employees to widen their experience in many fields."

Lucent Technologies
Bell Labs Innovations





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Bell Labs Innovations



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