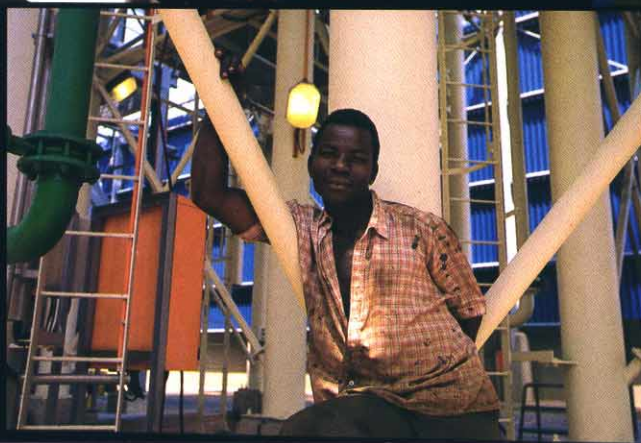
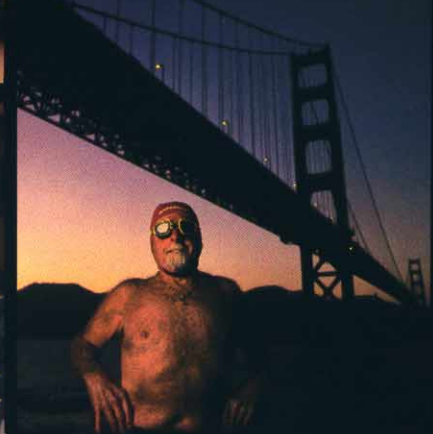


you }



KODAK EPN 6012

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7

## You are facing the future.

It's racing toward us all. A world in which information is advantage. And freedom.

Where time and space are shortened. Where computers operate faster.

Taking up a fraction of the space. Communicating across networks without borders.

You hear it every day.

Cyberspace. Wired. On demand. Seamless access. Productive. Nonstop. Fun.

But what does it all really mean to you?

Does it make your job easier? Does it make your life better?

Can you get there from here?

These questions are important to IBM.

They matter to us because they matter to *you*.

## Dear Fellow Investors:

LAST YEAR I told you that, as we worked to transform IBM and return it fully to industry leadership, we had four clear priorities:

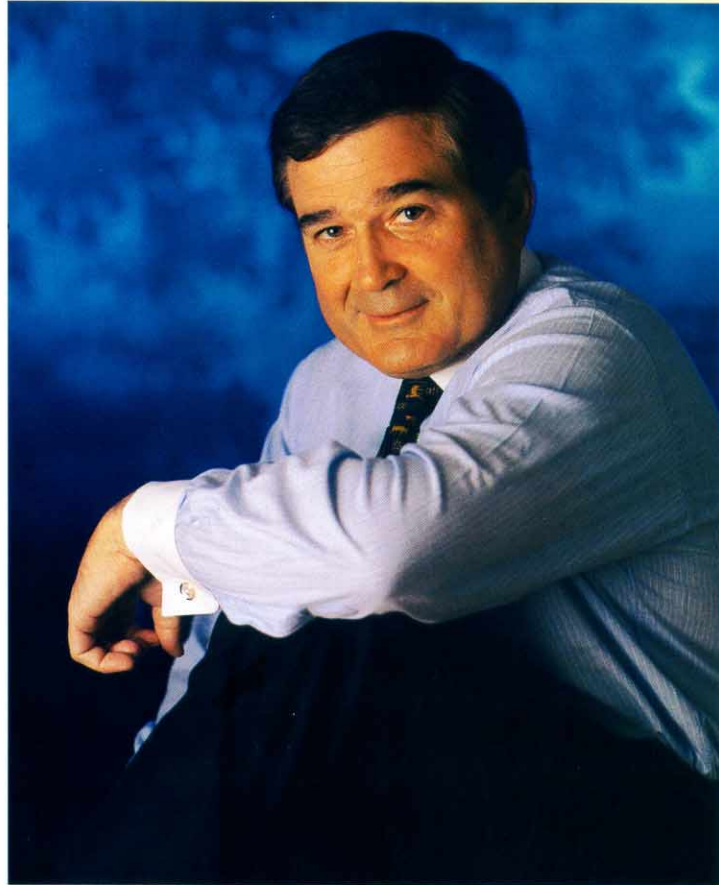
- to be profitable;
- to become more competitive;
- to increase shareholder value;
- to grow.

We have a lot of work ahead on many fronts – growth, speed to market and re-engineering, to name three. We're not the industry leader yet – at least by my definition. Still, I believe we did make significant progress on our priorities and that 1994 was the year a new IBM began to emerge.

Starting with profitability. Last year was a solid one financially. We earned \$3 billion – our first profitable year since 1990 and, compared with 1993, a profit swing of \$11 billion.

Last year we also achieved our first year of revenue growth since 1990. Total revenue was \$64.1 billion, up 6 percent after the sale of the Federal Systems Co.

We reduced annual expenses by \$3.5 billion, or 15 percent. In the past two years, we reduced expenses a



LOUIS V. GERSTNER, JR. Chairman and Chief Executive Officer

total of \$6.3 billion, and we are on course to achieve the additional \$1.7 billion toward our total goal of \$8 billion no later than mid-1996.

We finished 1994 with more than \$10 billion in cash. Our cash flow was exceptionally strong, even after paying out \$2.8 billion in restructuring costs. Just as important, we reduced our core debt – debt in support of operations – by \$3.3 billion, to a total of \$2.9 billion.

Our key report card – market value – reflected all

<i>(Dollars in millions except per share amounts)</i>	1994	1993
<b>For the year:</b>		
Revenue	\$ 64,052	\$ 62,716
Earnings (loss) before income taxes	\$ 5,155	\$ (8,797)
Income taxes	\$ 2,134	\$ (810)
Net earnings (loss) before change in accounting principle	\$ 3,021	\$ (7,987)
Per share of common stock	\$ 5.02	\$ (14.02)
Effect of change in accounting principle*	\$ —	\$ (114)
Per share of common stock	\$ —	\$ (.20)
Net earnings (loss)	\$ 3,021	\$ (8,101)
Per share of common stock	\$ 5.02	\$ (14.22)
Cash dividends paid on common stock	\$ 585	\$ 905
Per share of common stock	\$ 1.00	\$ 1.58
Investment in plant, rental machines and other property	\$ 3,078	\$ 3,232
Average number of common shares outstanding (in millions)	585	573
<b>At end of year:</b>		
Total assets	\$ 81,091	\$ 81,113
Net investment in plant, rental machines and other property	\$ 16,664	\$ 17,521
Working capital	\$ 12,112	\$ 6,052
Total debt	\$ 22,118	\$ 27,342
Stockholders' equity	\$ 23,413	\$ 19,738
Number of regular, full-time employees	219,839	256,207
Number of stockholders	713,060	741,047

\*1993, cumulative effect of Statement of Financial Accounting Standards (SFAS) 112, "Employers' Accounting for Postemployment Benefits."

this. In 1994 our market value increased more than \$10 billion, an increase of 32 percent.

We had our problems too, most notably the performance of our PC unit. We are aggressively overhauling and refocusing the whole operation. Also, we didn't do well in forecasting demand for products. Demand outstripped supply in mainframes, storage devices and certain PC models.

I think it's fair to say, however, that the question

about IBM is no longer one of survival. We've stabilized the company financially and, beyond that, strengthened it. IBM is back, and we're here to stay. The question now is, can IBM grow? I believe it can and that it will, for many reasons, but mostly these two:

First, our industry — information technology (I/T) — is a growth industry. In fact, it's just beginning to rev up. Year by year, even month by month, we make breathtaking advances in computing power, speed, size, stor-

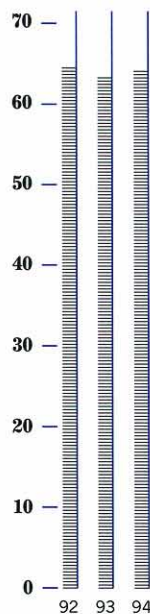
age capacity and more. According to one estimate, in the U.S. in the early 1990s, more was invested in I/T hardware and software than in industrial, agricultural and mining equipment combined. The cost of microelectronics in some cars has now passed the cost of steel.

I have spent a good bit of time in our IBM labs, and I can tell you that right now, we see no limit to the pace of change for at least the next decade. And IBM will be a pacesetter. Last year we were No. 1 in the number of U.S. patents issued for the second year in a row, and our 1,298 patents last year were the most ever issued to any company in any year.

Information technology will revolutionize every institution in our society — governments, schools, post offices, libraries and, of course, every form of commercial enterprise. I/T will fundamentally alter the way individuals deal with these institutions and with each other.

But it will not happen the way, or as fast as, predicted by the pied pipers of this industry, who are obsessed with and endlessly promote electronic utopias and who are covered breathlessly by some in the media. What is

revenue  
(in billions)



possible is not always desirable — particularly if it costs too much money. Nor do many people ride on highways just for the sheer joy of spending a day in traffic.

The information revolution will happen, but only when the industry stops worshipping technology for its own sake and starts focusing on *real value* for its customers. We must provide products and services that improve customers' competitive position; that enhance their own customer service; that increase their productivity; that enrich their personal lives. These benefits are what will drive the revolution, not faster and faster silicon or

millions of miles of fiber optics.

There's no reason why our products shouldn't be as simple to use as household appliances — and a whole lot simpler than programming a VCR. In the pages that follow, you'll see how we're making technology easier to use, easier to manage and how we're helping customers of all sizes embrace advanced technology and put it to work in the real world. In the years ahead, you will be seeing and hearing more from IBM on these subjects because I am making this — translating technology into value for cus-

#### IBM strategic imperatives

- 1) Exploiting our technology.
- 2) Increasing our share of the client/server computing market.
- 3) Establishing leadership in the emerging network-centric computing world.
- 4) Realigning the way we deliver value to customers.
- 5) Rapidly expanding our position in key emerging geographic markets.
- 6) Leveraging our size and scale to achieve cost and market advantages.



tomers — a company-wide crusade.

The second reason I am confident IBM can and will grow is because we are focusing on doing the things we have to do in order to grow, and we are making real progress.

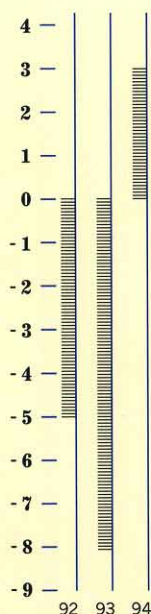
Last year, I told you that no company — in any industry — is going to succeed without a set of tough-minded strategies grounded in a clear understanding of what's happening in the marketplace. I said that, after making IBM profitable, setting such strategies is our single-highest priority because they are critical to growth and building shareholder value.

For more than a year now, we have been working on a dozen or so business and technology strategies. We've made a great deal of progress on some, and on others we've just started. I have grouped these strategies into six "strategic imperatives" — our roadmap for IBM's near-term future. Here's a status report on each of them:

**Exploit technology:** Getting technology out of our labs and into the marketplace, and doing it quickly, is important to success in a fast-changing industry. New products introduced in the past 12 to 18 months accounted for almost half our hardware revenues last year. We rolled out entirely new generations of key IBM product families: a new class of mainframes, AS/400s, storage devices and networking hardware and software. We're exploiting our technology in the industry through technology agreements with companies like Hitachi, Toshiba, Canon and Cyrix. Our patent and

#### net earnings

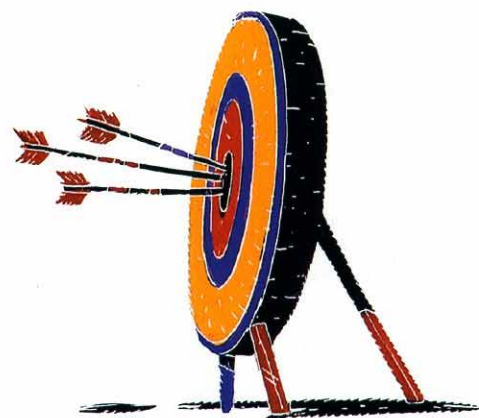
(in billions)



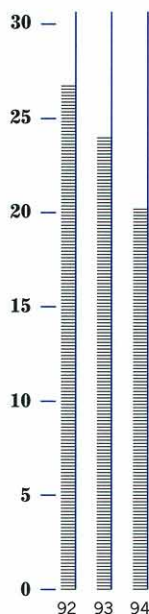
technology licensing agreements contributed nearly \$640 million in cash last year, up from \$345 million in 1993. Sales of IBM technology products to other manufacturers grew to \$3.3 billion in 1994, up from \$1.3 billion in 1993 and more than five times the 1992 figure.

**Establish leadership in network-centric computing:** We're moving on many fronts to define this new market and this new model of computing. We created the IBM Global Network, the world's largest data network, with presence in 700 cities in more than 100 countries. Working with telephone and cable TV companies, we're

field testing IBM technologies that deliver interactive services to consumers and businesses. We're embracing the Internet and helping customers do the same, providing encryption technology, anti-virus software and "firewall" security products to support heavy-duty commercial transactions while protecting vital data from intruders.



**total expenses**  
(in billions)



**Realign the way we deliver value to customers:** Responding to what our customers said they wanted from IBM – global solutions – we created a single, worldwide sales and services organization, and organized it by industry and technology specialization. Almost every person in IBM’s field force today is aligned by product, service or industry. Our direct marketing activities continue to expand. IBM Direct, our largest U.S. telesales operation, grew almost 750 percent in revenues last year.

**Leverage IBM’s size and scale for competitive advantage:** We are rapidly moving to common technology “building blocks” across IBM hardware units to take advantage of economies of scale and to give customers greater interoperability across our systems. Every month, new IBM products and services are being introduced with technologies and features contributed from multiple IBM laboratories. We consolidated more than 100 advertising campaigns administered by dozens of agencies, and now have a single voice with one worldwide ad agency. We consolidated work done by 89 data centers and now have 58 – saving nearly \$1 billion. By increasing our number of mobile

employees and reducing work locations, we’ve eliminated nearly 20 million square feet of office space worldwide. We’re doing common-sense things, too, like consolidating how we purchase goods and services across the company.

**Expand market share in client/server computing:** We now have 42 Open Systems Centers in 34 countries, where we help customers design and implement client/server applications. Our work with customers in these centers grew more than 50 percent last year, to about the \$1 billion revenue mark. We’re focusing on ease of use, systems management and software tools that

improve the way products from IBM and other vendors work together. Independent observers are noting our progress: IBM’s VisualAge tool for creating client/server software was named best application development product of 1994 by both *Datamation* and *PC Week* magazines. And *Datamation* readers picked NetView for AIX as systems management product of the year.

**Expand rapidly in key emerging geographic markets:** We signed several contracts in China to help build an advanced information infrastructure. We opened seven subsidiaries in Eastern Europe and Northern Asia, and



{ Last year IBM was No. 1 in the number of U.S. patents issued for the second year in a row, and our 1,298 patents were the most ever issued to any company in any year.



**cash and marketable securities**

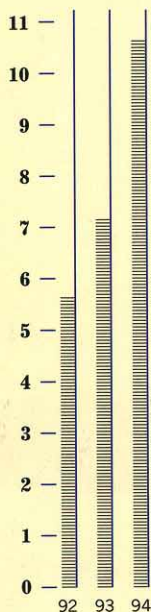
(in billions)

re-established IBM South Africa. We've increased the output of PCs being assembled in China and Russia, opened a PC plant in South Africa, and announced plans to establish a research laboratory in China in mid-1995. We are on track to develop, within the next five years, billion-dollar operations in China, Eastern Europe, South Africa and India.

There's one additional key to growth and to restoring IBM to industry leadership, and it's an important one: our corporate culture — how we view the world, what we focus on, how we work with our customers and among ourselves.

We are doing everything we can to focus everyone here on what's outside IBM — markets, customers, competitors. We're increasing the speed of our decision-making and execution because in an industry changing so rapidly that a product's life cycle is now 9 to 12 months, speed can make the difference between profit and loss. We're completely overhauling our compensation system to make it truly incentive based. And to quicken the process of transformation, we've brought in some new perspectives — more than 60 new executives in 1994 alone.

Even as we make all these changes, I want to emphasize just how much of an asset we have in our people. IBM people are smart. They are tough and durable and resilient. They are proud of this company, proud of their own contributions, and their commitment to success is rock-solid.



We, all of us at IBM, have a lot of work, a lot of change, a lot of rebuilding left to do if we are to complete our transformation. But we are beginning to sense some momentum, and it feels good.

• • •

I WOULD LIKE to take a moment to thank someone who performed a very special service to IBM over the past two years.

Paul Rizzo retired as vice chairman of IBM in 1987 after 30 years of service to the company. When things got tough in 1992, the company asked him to come back and help out, and he did so immediately

and without complaint. Since then he pitched in whenever and wherever he was needed. At year end, he really retired from IBM, and I want to thank him personally, as well as on behalf of the company, for the important part he played in our transformation.

**LOUIS V. GERSTNER, JR.**

**Chairman and Chief Executive Officer**



## You are an executive on a task force

determined to squeeze profits from your information systems that provide services in the hotly competitive travel and transportation industries. The consultant's report on your desk claims you can cut costs by moving off the "Big Iron" – those glasshouse-enshrined, water-cooled mainframes downstairs. But your operation supports millions of passengers, reservations, flight changes, credit card transactions. Every day. No downtime. No excuses. Can you really roll in new, less expensive technology, achieve your business goals *and* keep your company flying high? In 357 glossy pages, the consultant never answered that one.





...operating at full throttle.

Last spring, Terry Jones, president of SABRE Computer Services, went shopping for a new computer. He had to increase processing capacity to keep pace with the expanding volume of reservations SABRE handles for American Airlines, 60 other carriers and 28,000 travel agencies worldwide. Jones considered water-cooled mainframes (and alternative platforms, too). But he chose a new IBM System/390 Parallel Enterprise Server. Using one-tenth the power and floor space of traditional mainframes, the System/390 performed like a veteran – helping to handle a record 4,102 messages per second during the summer fare wars. And since the System/390 runs existing software, moving up to new technology went smoothly. Getting from here to there with minimum turbulence. That's important – and not just in the airline business.

**TERRY JONES**

*with DC-10 engine and IBM System/390  
Parallel Enterprise Server*



# Designing technology to get you from **here** to **there**

WHEN IT COMES to information technology, few people have the luxury of starting with a clean sheet of paper. That's true whether you manage a mainframe-based global information system or carry a notebook PC in your briefcase. You've made investments in hardware, software and training — investments you can't simply abandon, even when faster, more powerful and less expensive technology comes along.

At IBM, we understand the realities our customers face. So, as we transform virtually our entire product line with advanced technology, we're looking not just at where customers can be, but where they are now.

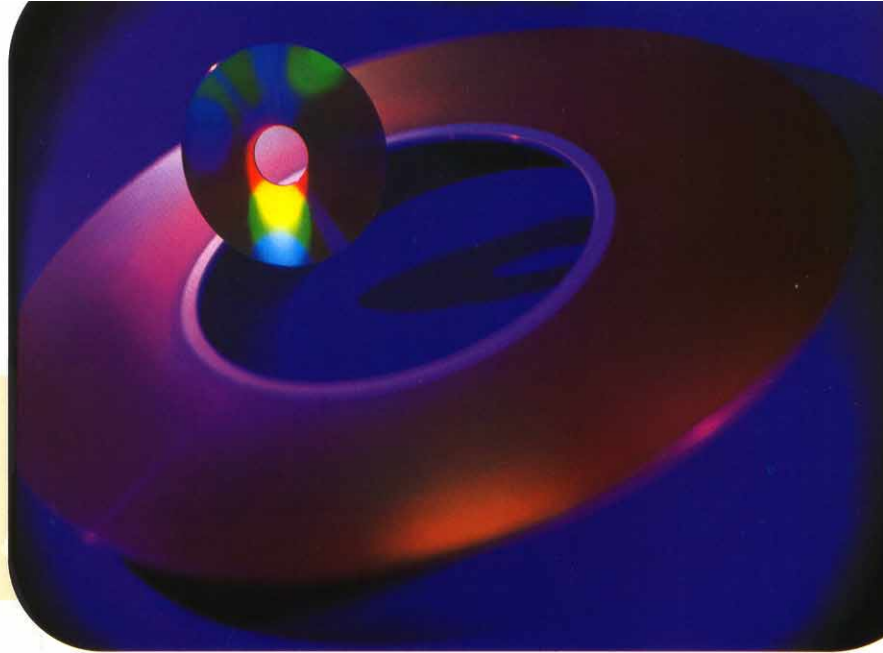
That's why last year was pivotal for IBM. We began delivering to the marketplace entirely new generations — not just upgrades — of IBM's major product families.

Take mainframes, for example. Our new System/390 servers use advanced microprocessors running in parallel, making them smaller, less expensive, more energy efficient and easier to maintain and operate than traditional mainframes. We also made sure these advanced systems can run all existing System/390 software. That's no small consideration to customers who have invested roughly \$1 trillion in large-system software.



**THE TIME WAS RIGHT:**  
For Mike DeRosier, president of Empire Clock Co. in St. Paul, Minnesota, 1994 was the right time for IBM's new AS/400 Advanced 36 server. The new system is the first AS/400 equipped with IBM's PowerPC microprocessor. Trading up from his vintage System/36 saved DeRosier money and space — while boosting performance five times.

**LESS IS MORE:** Even as disk drives get smaller, their storage capacity is growing tremendously. Using 3.5-inch disks and a technology known as RAID 5 (redundant array of independent disks), IBM's new RAMAC systems can hold massive amounts of data — more than 90 billion bytes. RAMAC gives customers greater capacity at lower cost and provides unprecedented data availability.



The same thinking went into reshaping our AS/400 Advanced Series. Last year, we began moving the AS/400 to advanced 64-bit RISC processor technology. By year-end, all AS/400 Advanced Systems and AS/400 Advanced Servers will be based on PowerPC chips, the superfast microprocessors now used extensively in IBM's RS/6000 workstation and server family. This transition will improve AS/400 performance by 70 percent each year through 1997. Equally important to customers, these new systems will run their thousands of existing AS/400 applications without requiring a single line of code to be rewritten or recompiled.

Over time, PowerPC technology will be extended even further into our full range of products through the introduction of new PowerPC-based personal computers and POWERparallel supercomputers.

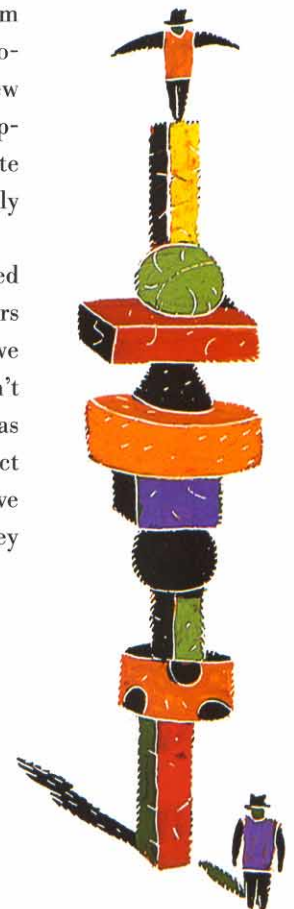
Last year also saw the launch of our RAMAC Array Family, a major advance in information storage technology. RAMAC's RAID 5 architecture distributes information across several small, interconnected disk drives. In the unlikely event that a single disk fails, data is quickly reconstructed from other disks, substantially reducing the risk of customer data loss. RAMAC represents one of IBM's most successful storage product launches ever, with almost 2,000 systems shipped to

customers in its first three months of availability.

Innovative hardware has always been an IBM strength. Today, we're also working to reshape the fundamentals of software technology. Rather than programming and debugging code line by line, developers are turning to new, object-oriented programming environments that let them visually assemble complex applications from pretested, reusable software components. For example, with IBM's new VisualAge family of visual development tools, programmers can create new applications quickly, efficiently and at far lower cost.

At IBM, we're excited by advanced technologies that offer our customers exciting new possibilities. But we know that innovation alone isn't enough. That's why we work just as hard on helping customers extract value, productivity and a competitive edge from technology — so that they can get from here to there.

**BANKING ON OBJECTS:** Object-oriented programming turns pieces of software into reusable components — objects — which programmers can combine to create applications faster. Customers such as Zurich-based Credit Suisse are finding object-based tools like IBM's VisualAge invaluable in developing banking applications in half the development time and cost.



## You are a twelfth-grader in science class

figuring out how to pump up your paper on the Earth's biosphere. Twenty pages of double-spaced dullness. Due Monday. Would be cool to insert a satellite image of the ozone hole. But you've gone to the library five times to find the book you – and your 30 classmates – need. Finally got it on the fifth try.

Great. The page you need is torn out. Probably that Eddie Bevan. Again.





...wired to the rest of the world.

Another boring science project? Not when you're wired, like Jenifer Nestman and her friends at Burnaby South High School and the Provincial School for the Deaf in Burnaby, British Columbia. When they were assigned a project on the biosphere, they went online, using IBM's Internet for Kids pilot software to bypass dusty science books and roam the Internet. They talked to students and educators across North America and downloaded the latest maps and atmospheric charts from NASA. "The Internet makes learning a lot easier and more interesting," says Jenifer. "It makes you want to learn."

JENIFER NESTMAN  
with keyboard and a few friends



SOME SAY today's Internet is the roadbed for the Information Highway. Maybe so. But we think there won't be just one "I-Way," any more than there's just one mode of transportation today. Instead, we'll likely see a variety of interconnected "networks of networks," both public and private.

We've defined this emerging market opportunity as "network-centric" computing — *computing* because it's fundamentally about moving, managing and presenting digital information. And that's what IBM has been doing for decades. What's generating so much excitement is that these networks will have tremendous bandwidth, so they can transmit new types of digital information — movies, X-rays, animation. And they'll be fast enough to support true interactivity — videoconferencing and interactive games, for example.

We're working hard to establish leadership in this market. We're leveraging our digital heritage to develop the technologies from which these networks will be built, and helping customers design business and consumer

applications to exploit these networks.

In Victoria, Australia, IBM is assisting the Royal Children's Hospital in a "distance learning" trial to help ill and injured young people continue their education — and keep up with their classmates — from their hospital beds. We're also field testing interactive services with Hong Kong Telecom in Asia, Le Groupe Videotron in Canada and Cox Cable in the U.S.

Behind the scenes, we're making this new world possible by developing a variety of high-performance network technologies — video servers, storage devices, set-top TV boxes, and database and network management software.

A particularly critical networking technology is Asynchronous Transfer Mode (ATM). ATM is extremely fast, supporting over 2 billion bits per second. It also enables transmission of multimedia information across a single network. Last year, we introduced our first ATM products, part of our Nways family of networking hardware and software.

ACT I

# Building networks that work for you

(Six actors stand on a Mississippi steamer, carrying my sketchbook, other, at different levels. They work as an ensemble.)

EDWARD: I stand on the deck of a Mississippi steamer, carrying my sketchbook.

WOMAN 1: The day is hot.

MAN 1: In spite of the breeze on the river.

EDWARD: I lean against the railing.

SOPHIE: Got my bare feet in the Mississippi mud. Sun makes my eyes almost shut.



{ THEATER IS THEATER IS...MULTIMEDIA: Using IBM's Person to Person software for videoconferencing and distance collaboration, Cheryl Faver, artistic director at New York's Gertrude Stein Repertory Theater, can work with artists and designers around the world. From bi-coastal production meetings to global multi-site performances, Faver's theater is pioneering a "World Stage Network," linking arts organizations and schools with real-time collaborative technology.



**ON-RAMP TO THE VATICAN:** Once accessible only to scholars, the Vatican Library holds some of the world's rarest literary works including those of Dante, Ptolemy and Virgil and this 1477 illuminated edition of Homer's *Iliad*. Now, these masterpieces are going online. Supported by high-resolution imaging and networking technology from IBM, they are being made available globally on the Internet and other networks.



In November, we demonstrated a pilot model of the IBM Media Streamer, a system that stores and delivers huge volumes of video and other multimedia information. Operating in an open systems environment, Media Streamer is designed to transmit many streams of information smoothly from a single copy.

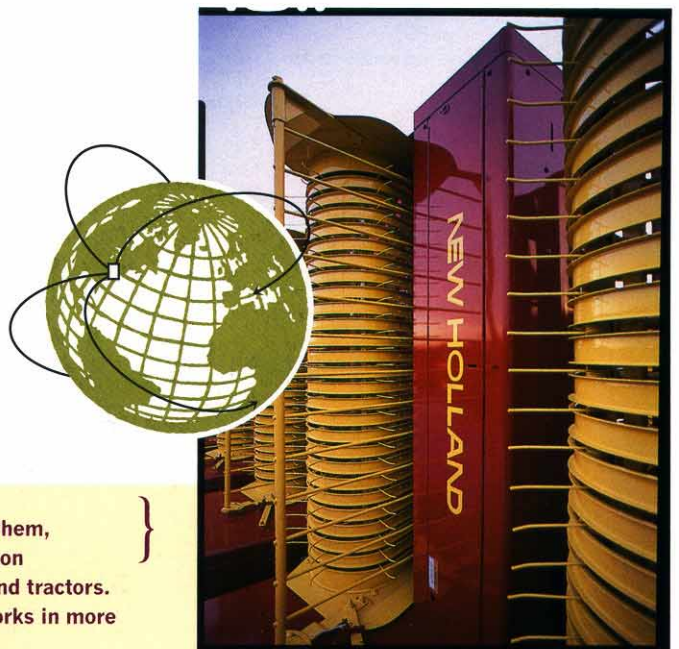
IBM software – from our DB2 relational database to our popular AIX multiuser operating system – is well positioned to exploit complex network capabilities. And our newest software for personal computers, OS/2 Warp, even includes a simple one-click connection to the Internet.

Not all enterprises want to build and maintain their own networks. Some prefer to buy telecommunications services or outsource their entire network. That's why last year we created the IBM Global Network, a high-speed voice and data communications network that already serves 2 million users at some 25,000 businesses and government agencies in more than 100 countries.

We're also providing services to strengthen the use of the Internet to make it ready for complex commercial

transactions. In December, we announced a number of these, including a "firewall" offering, which protects a customer's private network from outside intrusion.

Whether you're a student "surfing the Net," a doctor practicing long-distance telemedicine or a historian viewing ancient artwork from thousands of miles away, you're experiencing the power of computer networks. And no one is working harder to bring people and information together through network-centric computing than IBM.



**WORLD-CLASS NETWORK:** Using the IBM Global Network to connect them, New Holland North America, Inc., engineers remotely collaborated on electronic blueprints to design their company's newest combines and tractors. The IBM Global Network supports more than 5,500 customer networks in more than 100 countries.

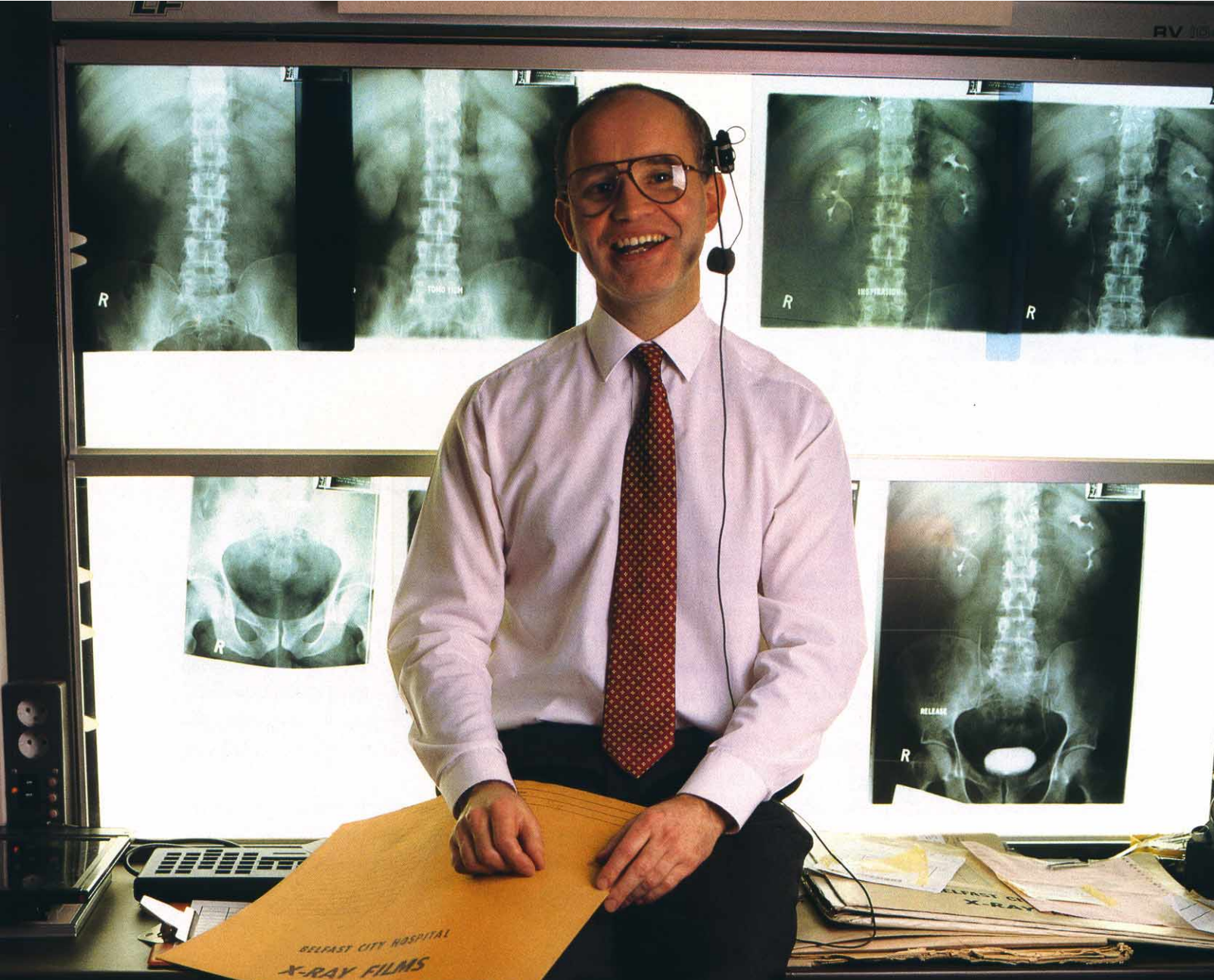


## You are a radiologist working late

searching for a foothold in a man-made mountain of paperwork. Patient X-rays, CAT scans, MRIs.

The office staff has left for the day, and you've got another two hours reviewing, revising and signing reports. All routine – or as routine as medicine can be. Until you come across some unexpected images. They suggest something more serious than pneumonia – a tumor? The physician-in-charge will want your analysis first thing tomorrow. Which means you have an appointment with the keyboard tonight – at 20 words a minute.





...putting your voice to good use.

Dr. John Lawson, consultant radiologist and clinical director of radiology at Northern Ireland's Belfast City Hospital Trust, no longer waits hours for typists to prepare his medical reports. With IBM's new VoiceType Dictation System, Dr. Lawson speaks into a microphone and his personal computer types his reports – making them instantly available to other doctors and nurses via the Northern Ireland Radiology System. And since VoiceType reduces doctors' dependence on administrative help, they can spend more time on patient care. "We were one of the first in the world to use this technology, but in several years' time, I predict everybody will be working this way," says Dr. Lawson.

DR. JOHN LAWSON  
*at work*



# Creating intelligent technology that's easy to use

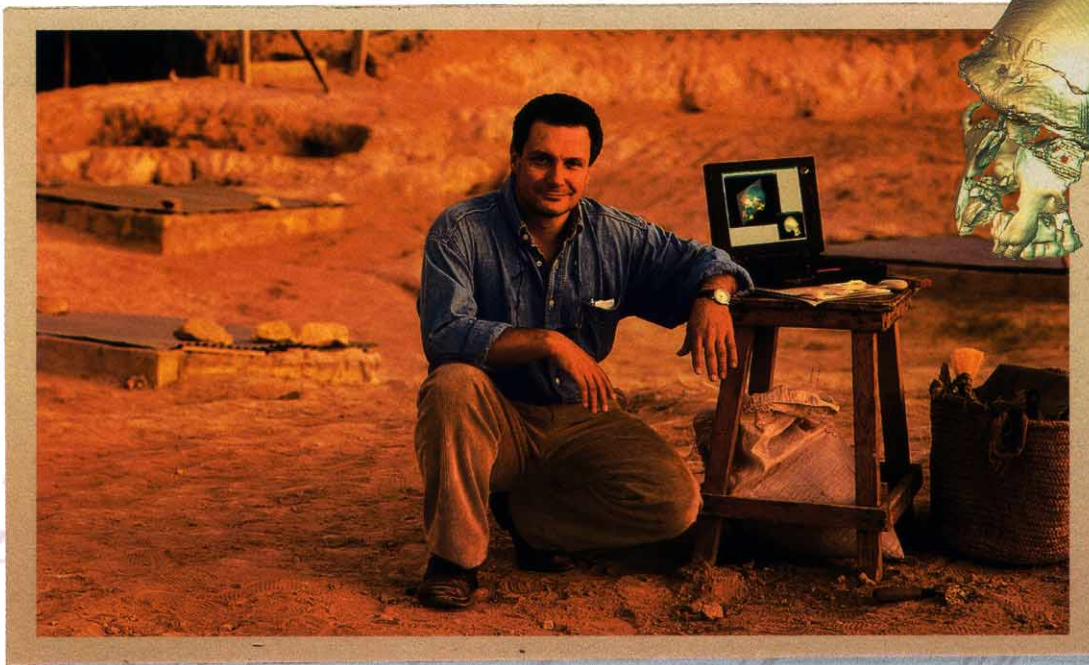
It's HAPPENING so fast. A few years back, speech-recognition technology required the power of a mainframe. Today, IBM's VoiceType Dictation System transcribes 70 to 100 words per minute with 97 percent accuracy or better, and boasts a vocabulary of up to 32,000 words. And it runs on a PC.

Speech recognition is what we at IBM call a Human-Centered technology. It's easier than using a keyboard or mouse. It's more natural, more intuitive. More human.

Human-Centered technologies are an important focus area for IBM because in the not-too-distant future nearly everyone will be a technology consumer.

But this growth opportunity won't be realized unless we make technology so accessible and easy to use it will be virtually transparent. Which is why we're so excited about computers that listen. And why we're working hard to drive other Human-Centered technologies from our laboratories to the marketplace – technologies like language translation, pen-based computing and handwriting recognition.

We want to give people the flexibility to choose the way they work with their computers. For some, pointing and touching is preferred. Others want the control and familiarity of a pen.

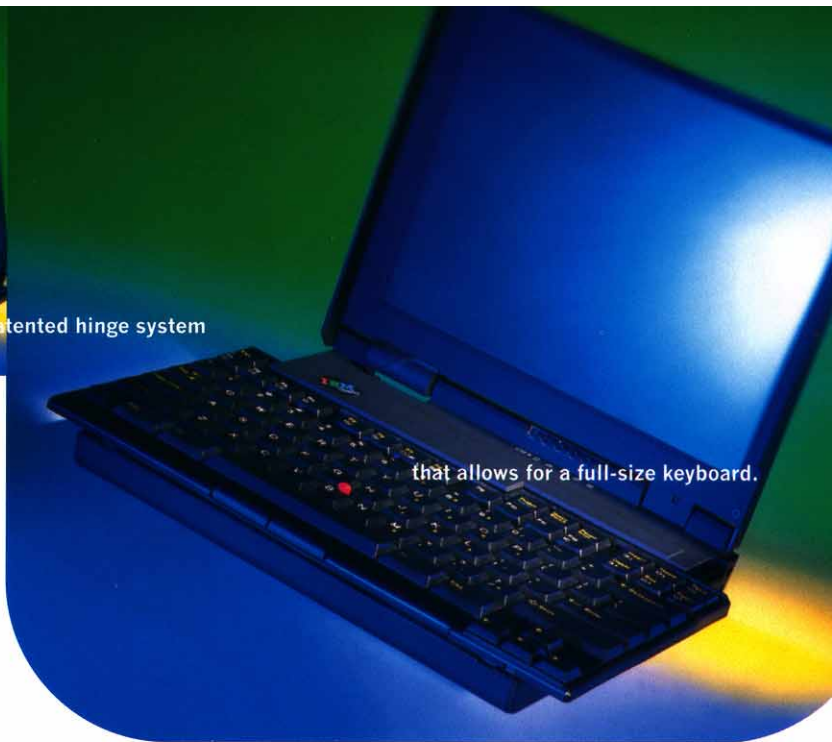


**UNEARTHING CLUES:** At an anthropological dig near Casablanca, Dr. Jean-Jacques Hublin, left, of the Musée de l'Homme in Paris discovered fossilized skull fragments. With help from IBM research scientists and IBM's Visualization Data Explorer, Hublin and colleague Dr. David Dean electronically created a unique reconstruction of hominids who lived in North Africa 400,000 years ago.

*... nipe ne peuvent pas travailler de 11h30-14h. continuer aussi de...*



The new ThinkPad 701C



features a patented hinge system

that allows for a full-size keyboard.

At the Chicago Mercantile Exchange, for example, traders still scribble orders on pads. But in place of pencil and paper, they use electronic pads and IBM's pen technology for OS/2. Orders are transmitted directly from the traders' pads to trading pit. That's faster and more reliable than depending on runners with handfuls of paper, racing around the pit.

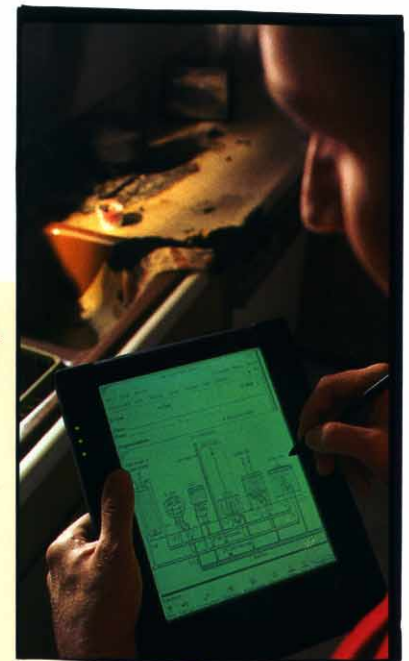
Human-Centered technology involves more than bypassing the keyboard. It doesn't do much good to communicate faster with your computer if you can't get the information you need out of it. That's why IBM is putting just as much thought into improving machine intelligence and computer navigational tools. We're creating intelligent agents — highly personalized software programs which hide the complexity of difficult tasks by doing the work for you. You'll be able to send an agent out on a network to search for data or perform chores like buying stock or booking airline reservations.

Last year, IBM announced Parallel Visual Explorer, innovative "data mining" software that graphically analyzes massive databases by dozens of variables, and lets you see relationships and trends that were previously invisible. Parallel Visual Explorer is a powerful tool for any data-intensive field. It's currently being used in AIDS research. It's helping companies spot subtle buying trends and segments in their customer lists. It even showed IBM how to improve the way we make circuit boards.

Ease of use. At IBM, it's more than just another pretty interface.

**NO COMPROMISES:** Users of ultralight notebook computers have long contended with tiny keys crowded together onto a shrunken keyboard. No more. IBM's new ThinkPad 701C sports a patented full-size keyboard that expands as the lid is opened. The 701C also delivers advanced desktop computing features like speakerphone, fax and a 10.4-inch screen — all in a 4.5-pound package.

**ESTIMATES ON THE SPOT:** State Farm's fire claims representatives once used ballpoint pen, paper and stacks of huge construction manuals to estimate fire damage from their offices. Now, they use a different kind of pen — and IBM ThinkPad 730T computers — to review building data, calculate and print estimates at the loss site. The 730T reduces processing time for claims from weeks to hours.



## You are an automotive engineer in Russia

crawling across an industrial drafting table on your hands and knees, drawing plans for a new car in the old 1:1 ratio. This one's expected to compete in Eastern European and Chinese markets. Unfortunately, it'll take another year or so before the design gets from blueprint to hand-carved wooden prototype, and another six or seven before all the kinks are worked out and it's fully tested. By then, other manufacturers will have rolled out at least six new and improved models. And you'll still be crawling.





...driving the market.

For Edward Nezhura, an engineer at the Russian automobile maker GAZ, designing a new car is no longer a once-in-a-lifetime affair. GAZ was the first Russian manufacturer to employ an IBM CATIA computer integrated design system – with revolutionary results. The company's lead time has been more than halved. Testing times have been shortened dramatically, and the new models are expected to hold their own against international competitors. With this modern technology, says Nezhura, "more alternatives can be explored."

**EDWARD NEZHURA**

*with 1995 Gazelle and  
GAZ colleagues*



FOR NATIONS racing to develop, the information revolution carries a special urgency. Without fundamental changes in the way they manage and distribute information and support communications, they won't keep up. In many cases, making those sweeping changes means building – or rebuilding – entire information infrastructures from the ground up.

High-growth countries represent tremendous, once-in-a-century market opportunities. Few companies have the size, expertise and resources to take part. IBM is one of them, and we're hard at work.

In the People's Republic of China, IBM's worldwide banking expertise is helping to modernize the payment systems of several major banks. Farmers around the country will soon benefit from an IBM POWERparallel SP2 supercomputer we're installing at the government's weather forecasting agency – the largest SP2 installation in Asia. We're also involved in a range of national infrastructure programs, including a number of "Golden Projects." In one of these, we're building networks to address the information needs of up to 500 cities.

# Delivering the future all around the world



**IBM RETURNS:** IBM South Africa was re-established in 1994, and IBM's headquarters for African operations was transferred from Milan to Johannesburg. Among our customers based there: South African Breweries, one of six leading brewers in the world, which turned to IBM to handle its information systems, resulting in an \$84 million outsourcing contract.





**AUTOMATING SOCIAL SECURITY:** IBM Argentina won a \$360 million outsourcing contract to administer that country's nationwide social security system. Personal data is gathered through automated teller machines and by using intelligent character recognition technology for information submitted on tax forms.

**CHINA'S INFRASTRUCTURE PROJECTS:** IBM last year began work on several national projects in the People's Republic of China. Among them: one of China's "Golden Projects," which will result in a massive digital information system that will one day connect people and businesses in as many as 500 cities. Also in 1994, IBM announced plans to establish its fifth research center, in Beijing.



IBM's systems are automating India's tax system. Through improved efficiency in collections, the government expects greater funds to be made available for the country's health and education programs.

We're also growing rapidly in Central and Eastern Europe. Since 1991, IBM has opened subsidiaries in a half-dozen formerly Communist nations – Poland, the Czech Republic, Slovenia, Slovakia, Bulgaria and Russia. Just outside Moscow, the Kvant factory in Russia's "Silicon Valley" has produced more than 30,000 PCs for the Russian market. IBM employs over 1,000 people in the local area, and several hundred others work for IBM alliance companies and business partners.

Last year, we re-established IBM South Africa, and moved headquarters for our entire African operations to Johannesburg from Milan, Italy.

In Latin America, where we've long had a strong presence, IBM continues to expand its operations. In Argentina, an IBM team won an outsourcing contract to manage the information needs of that country's social security system. In Brazil, we developed systems to plan and control production processes, as well as manage materials and inventory, at Honda's new automobile plant in the Amazon.

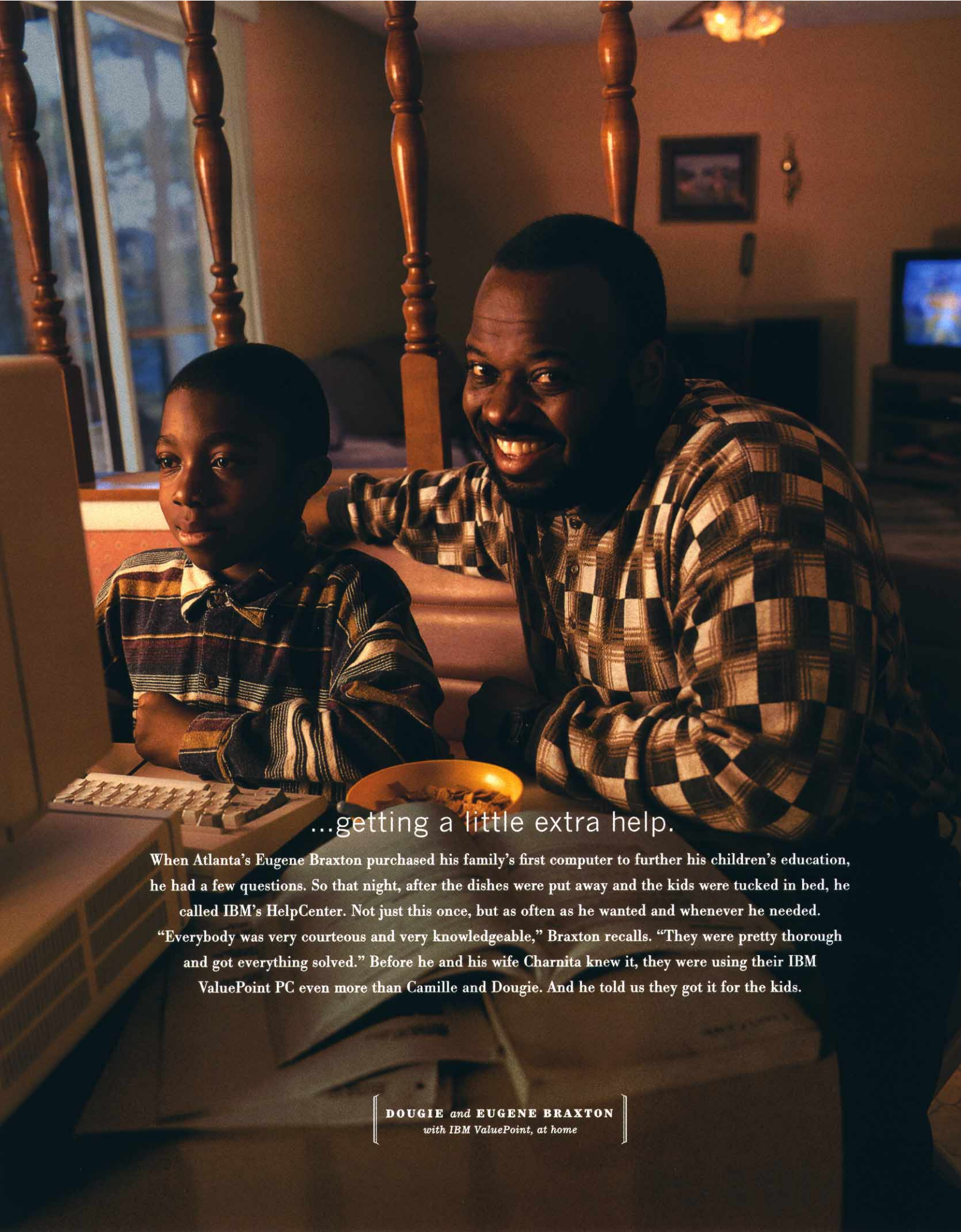
Around the world, modern information technology has become an economic equalizer. IBM is in these markets to sell products and market services. But we can also be a force for positive change. Through our global experience and advanced solutions, businesses and governments in emerging nations are leapfrogging outdated technology – and landing squarely in the 21st century.



## You are a parent on a mission

staring at a large cardboard box in the middle of your living room. A personal computer. The inevitable purchase of the '90s. After months of subtle pressure from your spouse (and not-so-subtle pressure from your 10-year-old), you've finally made the investment. Fax modem. CD-ROM. Prodigy. Games your kids talk about in their sleep. The works. Now it's time to break open the bubble wrap and see if this hot rod for the Information Superhighway comes with directions. Or maybe a wrench.





...getting a little extra help.

When Atlanta's Eugene Braxton purchased his family's first computer to further his children's education, he had a few questions. So that night, after the dishes were put away and the kids were tucked in bed, he called IBM's HelpCenter. Not just this once, but as often as he wanted and whenever he needed.

"Everybody was very courteous and very knowledgeable," Braxton recalls. "They were pretty thorough and got everything solved." Before he and his wife Charnita knew it, they were using their IBM ValuePoint PC even more than Camille and Dougie. And he told us they got it for the kids.

DOUGIE and EUGENE BRAXTON  
with IBM ValuePoint, at home



## Whatever your **needs**, we're working with **you**

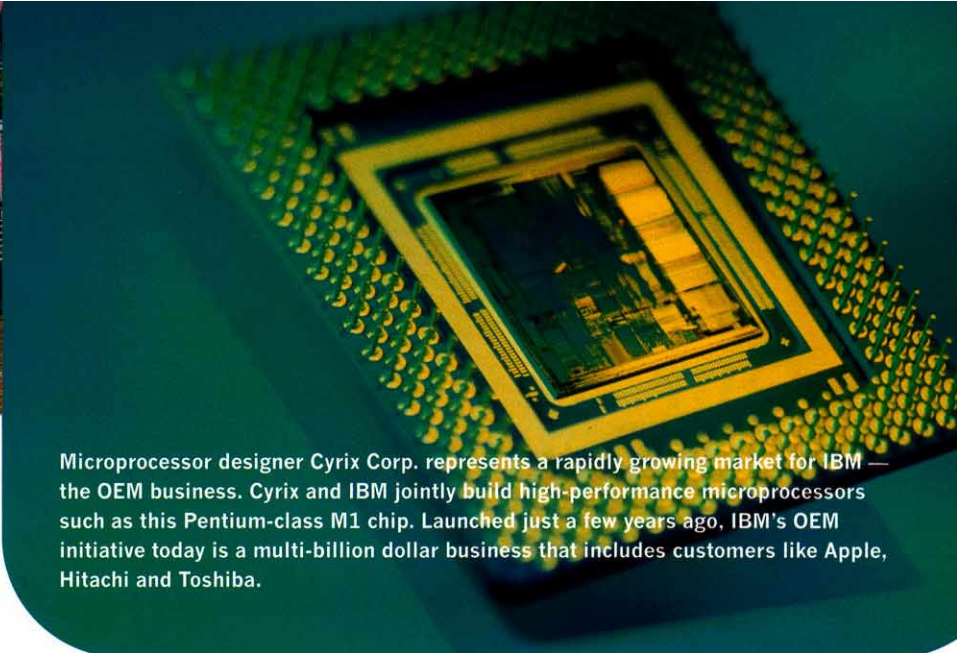
COMMUTING BY CHOPPER: In the Gulf of Mexico, IBM Petroleum Industry client manager Marty Koszewski steps aboard the *Western Spirit*, one of a fleet of seismic ships operated by Western Atlas International, Inc. Western Atlas uses IBM mainframes, POWERparallel supercomputers and shipboard RS/6000 workstations to gather and analyze detailed seismographic data for the petroleum industry.

THINK of the typical IBM customer. Who comes to mind? Big companies? Government agencies? Universities?

At one time, that was probably true. Today, IBM works with a truly diverse group of customers. Consumers. Small businesses. Even competitors who buy or license our technologies and incorporate them into their products.

We've found that all of our customers – including our traditional “large” customers – want to work with us in new and different ways. So we're developing strategies and adjusting our operations to meet their needs.

Many customers, for example, like to simply pick up the phone and order products from us. Customers bought nearly \$1 billion in products last year from our IBM Direct and PC Direct U.S. telesales operations – a year-to-year sales increase of almost 750 percent for IBM Direct alone. Total PC Direct customers now number more than 100,000. And we've established similar telesales operations throughout Europe, Latin America and Asia Pacific. Our presence in retail stores is also soaring. In Japan, for example, IBM PC dealers doubled last year, from 500 to 1,000.



Microprocessor designer Cyrix Corp. represents a rapidly growing market for IBM — the OEM business. Cyrix and IBM jointly build high-performance microprocessors such as this Pentium-class M1 chip. Launched just a few years ago, IBM's OEM initiative today is a multi-billion dollar business that includes customers like Apple, Hitachi and Toshiba.

Customers who need immediate help with an IBM product can call 24-hour-a-day operations, such as IBM's HelpCenter in the U.S. During 1994, the HelpCenter answered more than 3 million calls.

Last year, we fundamentally realigned our global sales and distribution force. Instead of being organized and managed by geography, today nearly all IBMers who call on customers belong to an industry group — insurance, petroleum, transportation, banking, government — or are specialists in our product platforms, like AS/400, RS/6000 or OS/2. The logic behind the change is straightforward. Customers around the world told us they want to work with people who are familiar with the dynamics and challenges of their business — not just IBM's — and they want to work with specialists who know how technology can help them run their business.

Some customers prefer to hand over the keys and let

IBM manage their information systems, freeing them to focus on what they do best. This business — known as outsourcing or managed operations — is growing rapidly. IBM's worldwide managed operations units signed \$7.5 billion in new business in 1994, bringing the value of committed business to nearly \$28 billion.

IBM's OEM (original equipment manufacturer) activities continue to grow quickly. In this business, IBM sells or licenses technology, such as disk drives, chips and subsystems, to other technology companies. From a standing start in 1992, OEM generated more than \$3 billion in 1994 and is projected to grow faster than the rest of the industry in 1995. Sales are primarily driven by our storage and semiconductor divisions, whose customers today include Apple, Cyrix, Hitachi and Toshiba.

Big companies or parents with big questions — today's IBM customers want to work with us on their terms. We're happy to oblige.



**OUTSOURCING SUCCESS:** With support from IBM subsidiary Integrated Systems Solutions Corp. (ISSC), AK Steel is saving millions of dollars a month in operating costs and improving customer service. The results: in under 18 months, AK Steel went from least to most profitable U.S. integrated steel manufacturer. Here, ISSC programmer Janet Stewart and AK Steel Executive Vice President Mark Essig discuss processes to further streamline finished inventory.



# Our corporate responsibility: investing in the future

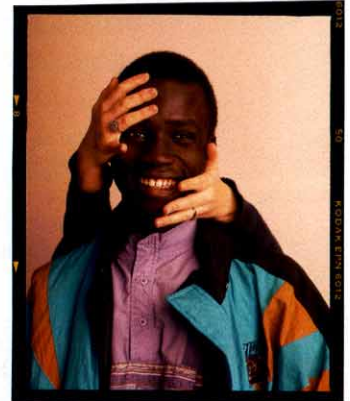
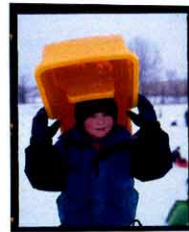
IT IS PERHAPS the greatest gift we can give our children – a future full of promise and hope. This past year, IBM committed the majority of its corporate philanthropic efforts to two endeavors designed to improve prospects for the future – education and the environment. These initiatives are in conjunction with our ongoing support of health and human services, the arts, culture and higher education.

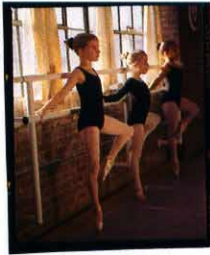
Our greatest focus in 1994 was a program known as Reinventing Education. Aimed at kindergarten through grade 12, this program calls upon local U.S. school districts to partner with IBM in a dramatic and deeply rooted restructuring of primary and secondary schools. The goal is to support nothing less than fundamental school restructuring and broad-based, systemic change to improve student performance throughout the nation.

IBM's first partner in this effort is North Carolina's Charlotte-Mecklenburg School (CMS) System, which serves some 85,000 students in 123 primary and secondary schools. In September, CMS announced the construction of a unique, four-school Education Village on a 200-acre campus adjacent to IBM's Charlotte facility.

Designed to educate some 5,200 students and to train teachers throughout North Carolina's largest school district in new methods, the Village will function much as a teaching hospital does with doctors. The Village will feature state-of-the-art teaching facilities at two elementary schools, one middle school and a high school. Rather than use traditional age/grade classifications, the Village will cultivate performance groups of students who will advance to new groups once they've mastered the material – without regard to age or grade.

The schools in the Education Village will set high performance standards, and focus on language skills such as reading, writing and speaking in the early years. By graduation, each student will be expected to be fluent in at least two foreign languages.





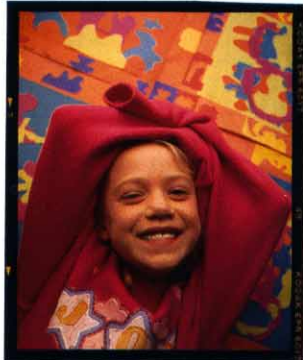
Technology will also play a vital role at the Education Village. Not only will it comprise part of the classroom curriculum and teacher training, but it will also connect schools to community centers and to students' homes – effectively lengthening the school day.

The Education Village is the first example of a school system committed to Reinventing Education. We hope it becomes a role model for the nation.

In addition to education, IBM supports research on ways to preserve and protect the environment. The IBM Environmental Research Program has provided technology grants to major universities and research institutions around the world to stimulate the study of environmental problems using computer-based technologies. The program focuses on ways in which modeling and simulation techniques, remote sensing, database development and data-collection technologies offer new knowledge and understanding in the environmental arena.

Areas of research range from the conservation of biological diversity to the study of global climate change, from acid rain deposition to urban and regional air quality, from optimizing groundwater remediation to protecting coral reefs and mangrove systems. IBM technology is a powerful tool in the study of these global environmental issues.

IBM also upholds environmental responsibility with respect to its own operations. Information on IBM's environmental programs and performance is provided in "IBM and the Environment," a report available from First Chicago, as noted on the inside back cover of this annual report.





# Is your bandwidth “gooey”?

(a low-RISC guide to talking the Tech)

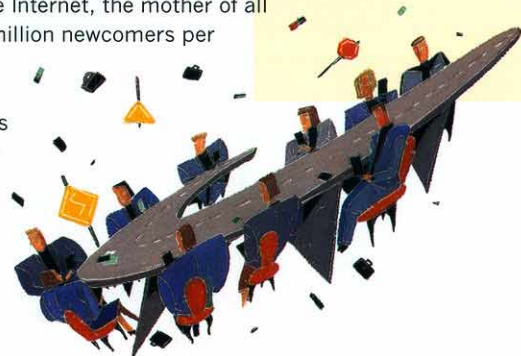
**Bandwidth }** Transmission capacity. The number of bits and bytes that can be sent through a given system or network. A good thing to have lots of, especially with the coming of videoconferencing, telemedicine, and other data-intensive, multimedia online applications. Explains how “Star Wars” can be reduced to itty bitty bits, sent through a cable and reassembled in your living room and why high-bandwidth technologies like ATM (see below) are a major investment area for IBM.

**GUI }** Pronounced “goo-ey.” Short for Graphical User Interface, or point-and-click. Based on the amazing fact that most humans don’t like typing long strings of programming instructions. GUI replaces them with easy-to-use icons, menus and pointing mice. User-friendly. Good for operator self-esteem. The Workplace Shell in IBM’s OS/2 Warp operating system is very GUI, making computing simple, more natural, almost fun.

**RAID }** Not a police bust. Stands for Redundant Array of Independent Disks. Distributes your data over several smaller interconnected disk drives instead of one big one. Gives you faster data retrieval and better protection against data loss. If one drive crashes (believe it or not, this has happened), your data is quickly reconstructed from redundant data on the other disks. Very smart. RAID Level 5 is the most popular version, and IBM was first in the industry to offer it on everything from PCs to mainframes.

**Information Highway }** Overused, but still very relevant. Actually, highways is more precise. Refers to high-speed networks of networks, including the Internet, the mother of all networks. More than 30 million users. An estimated 1 million newcomers per month. Provides access to thousands of databases, billions of files. Encourages data browsing, directory “surfing.” Has its own subculture and lingo, but has been discovered by the business community and now handles an increasing volume of commercial traffic. Another “I-Way,” the IBM Global Network, launched in 1994, is the largest network of its kind: 25,000 business and government agency customers, more than 100 countries. We call it the Businessperson’s Internet. No passport required.

**Cyberspace }** Coined by a science-fiction writer in the '80s. Now a fact. Refers to a “virtual meeting place” of online networks, databases, electronic forums, e-mail, Internet, etc. Doesn’t really exist, except when you use it. Bigger than life. Multidimensional. Instantaneous. Even as you read this, thousands of social and professional transactions are taking place in cyberspace. The final frontier. Makes you tingle.





**Multithreading/Multitasking }** Hard to spell, but very important. Multitasking is your operating system's ability to handle several users or applications simultaneously. Lets you print a document while sending e-mail. Or while hunting for clues in *Myst*. Multithreading breaks up a single complex program into smaller, more manageable chunks. The chunks are run separately but simultaneously, then reassembled. Makes more efficient use of all available processing capacity. Boosts processing speed. Ideal for Parallel Processing (see below). A key feature in advanced operating systems like OS/2 Warp.

**Parallel Processing }** Power in numbers. Puts clusters of microprocessors, rather than one large (and expensive) processor, to work on the same computing problem. Efficient. Cost-effective. Upgrades easily and boosts reliability: if one microprocessor fails, the rest keep plugging away. Not that we're bragging, but one of our POWERparallel supercomputers using 512 processors is the world's fastest, most powerful general-purpose computer, capable of some 136 billion calculations per second. It does in one second the work of 25,000 mathematicians performing a complex calculation every minute for 73 years. Now there's an Olympic sport.



**ATM }** Not the cash machine thing, exactly, but part of it. Stands for Asynchronous Transfer Mode. Describes a switching technology for sending voice, video and other digital data on the same line, at the same time, and at speeds up to 1,000 times faster than conventional networks. Key information-highway technology. Boosts "bandwidth" (see above). A must for data-intensive online applications like movies-on-demand. Very wave-of-the-future and a building block of IBM's network-centric computing strategy.

**RISC }** Way better than it sounds. Short for Reduced Instruction Set Computer. A computer architecture using fewer, simpler processing instructions, executed more frequently. Lots more efficient. Lots faster than conventional chips (Intel's X86 comes to mind). A leading example of RISC is PowerPC, IBM's new microprocessor family found inside IBM's RS/6000 and AS/400 and debuting soon in PCs and POWERparallel supercomputers.

**TeraFLOP }** Sounds like something your stockbroker should warn you about. Actually measures computer performance: one TeraFLOP equals 1 trillion FLoating Operations Per second. HUGe. Don't even try to guess how many zeros (it's 12). There's no TeraFLOP-class machine on the market yet, but IBM's Scalable POWERparallel Systems SP2 will get there. Soon.

**Intelligent Agents }** Your dream employees. Sophisticated software that does complex tasks, researches information, finds whatever you need on the information highways and byways. Still in development, but promising. You tell the agent what you want, and it's off, combing databases, perusing online catalogs, monitoring your stock portfolio, making hotel reservations, etc. The ultimate timesaver, and a major element in IBM's push for "Human-Centered" technology.



## We are IBM

We have two fundamental missions. First, we strive to lead in the creation, development and manufacture of the industry's most advanced information technologies, including computer systems, software, networking systems, storage devices and microelectronics. Second, we translate these advanced technologies into value for our customers worldwide – through our sales and professional services units in North America, Europe/Middle East/Africa, Asia Pacific and Latin America.