

**.COM**



We're not changing our name. Just everything else.  
And we're not the only ones.

Millions of enterprises aren't waiting for a revolution.  
And they aren't just watching one either.  
The revolution has arrived.

With stunning speed, it has swept all of us into a new  
kind of economy and a new kind of society.  
A world of new mindsets and new ambitions, to be sure.  
But also a world where time-honored assets – customer  
relationships, smart people, deft strategy – still matter.  
This is the world of e-business.

It is a world where everyone looks both new and familiar.  
Where any company and every company is a dot-com.  
*e-business is here.* We're never going back.



Louis V. Gerstner, Jr. — Chairman and Chief Executive Officer

## *Dear fellow investor,*

At this point last year, the only thing we knew for certain was that the coming year would be unlike any other. We faced some big unknowns – economic crises in Asia and Latin America, the Euro conversion and, of course, Y2K. Underlying it all, making the uncertainties even more uncertain, was the tectonic plate shift of e-business.

As it played out, 1999 was, indeed, a roller coaster for IBM. The first half saw remarkable growth for our company, but in the second half, Y2K hit us hard. Many of our biggest customers locked down their systems and their spending, and because IBM's customer base contains so many of the world's leading businesses, government agencies and financial institutions – the very enterprises most at risk from Y2K – our sales suffered accordingly.

Even so, when you average out the highs and lows, 1999 was a good year for IBM. For the fifth straight year, we reported record revenue – \$87.5 billion, up 7 percent over 1998. Our earnings rose to \$7.7 billion, a 22-percent increase, resulting in another new record in earnings per diluted common share. Customer satisfaction achieved its highest level in a decade.

After making substantial investments – \$5.8 billion on research and development, \$6 billion on capital expenditures and \$1.5 billion on acquisitions that strengthened our business portfolio – we had enough cash to buy back \$7.3 billion of common shares and to increase our dividend to shareholders. Our market value, probably the most important measure of progress to investors, grew \$24 billion in 1999, and has increased by nearly \$170 billion in the past seven years.

Those are all good numbers, but not good enough. After building some real momentum over the previous two years, IBMers found the last two quarters of 1999

frustrating in the extreme. Some outside the company say it was a wake-up call. I say it was a starting gun, because now, the real race begins.

The dot-coms, it seems, are taking over. You can't chart future strategy, execute a transaction, invest money, even read a paper or magazine or watch TV without, somewhere in the process, bumping into dot-coms and, behind them, the whole world of e-business.

Some find all this energizing, some annoying, but everyone's paying attention. It's the first question I get from any IBM customer in almost any part of the world: "What must I do to survive and win in this new world?" In fact, at the moment, it's just about the *only* question I get.

The fact is, 1999 was the year e-business and the global Internet economy came of age. It was a tidal wave, sweeping everything before it, driving new levels of megamerger activity, carrying thousands of entirely new businesses to unprecedented levels of wealth (much of it probably unsustainable), submerging almost as many others, and rearranging the landscape of commerce.

One conservative estimate is that the e-business opportunity will approach \$600 billion by 2003, and it could well be even larger than that. While the overall information technology (I/T) industry grows at around 11 percent, the e-business portion is growing much faster – at around 22 percent.

All that adds up to a tremendous opportunity for IBM. I'm not talking here about the pent-up demand that will be released as Y2K lockdowns are unlocked. I'm talking about the fact that customers are investing heavily in new e-business applications and solutions. We expect 2000 to be a good year for our company. However, we aren't taking anything for granted. We know how open the field

is and how huge the stakes are. It's tough to be fast, focused and surefooted in a period of explosive change. But that's what we have to do.

As the race begins, these are our top three goals:

[1] **Accelerate our growth.** A hyperdynamic marketplace such as we see today values *trajectory* – that is, the potential for growth – more than current market position. That's good for IBM, because we're entering a period of explosive demand for everything we have – hardware, software, services, component technology, expertise – the whole portfolio. There's no question the opportunity is there, but thus far we haven't captured our rightful share across all segments.

However, when we set our targets high – to grow not with the market, but faster – we've proved that we can deliver. In 1999, for example, our revenue for database products on UNIX and Windows NT was up 56 percent, more than three times the industry growth rate; our custom-logic chip business growth exceeded 70 percent year over year, as we focused on the communications industry; and shipments of our Netfinity line of Intel-based servers increased more than 30 percent. Shark, our new enterprise storage subsystem, was ordered by half of the Fortune Global 100 within the first 100 days of its introduction. In the first three months of the RS/6000 S80 e-business server, we sold as many as Sun shipped of its competitive offering in its first one and a half years. And e-business services, the most exciting growth opportunity since we started our services business, reached more than \$3 billion in

1999 revenue, a 60 percent increase.

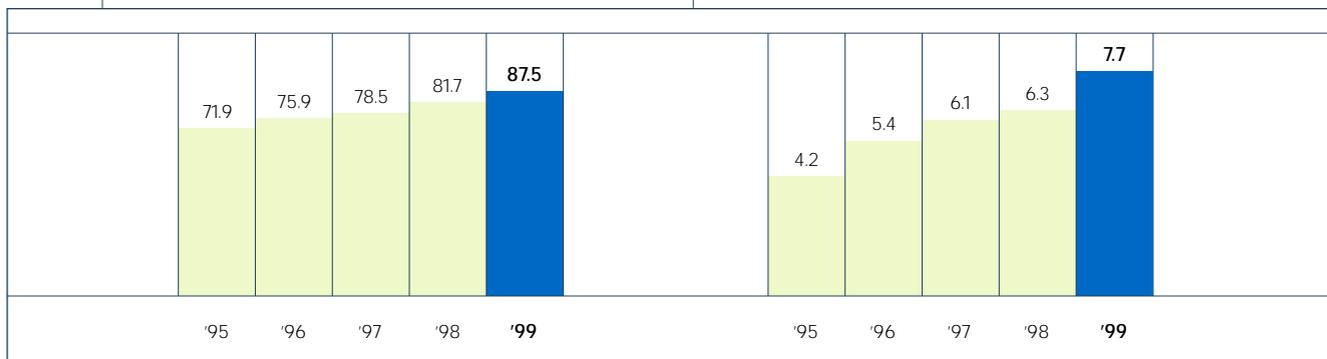
We will continue to shift our portfolio toward the highest-growth e-business opportunities. In this regard, we passed an important milestone last year. Our three major growth engines – services, software and component (OEM) technology – now provide more than half (in fact, nearly 60 percent) of IBM's revenue. Conversely, we are exiting businesses where we can't achieve our growth objectives, or where partnership is the preferred strategy. That's why we formed a networking solutions alliance with Cisco Systems last year. And it's why we scaled back our enterprise application software efforts in 1999, instead partnering with leading software developers like Siebel Systems, i2 Technologies, SAP and Telcordia Technologies.

We are stepping up our work with the NetGen and dot-com companies and aggressively pursuing opportunities in online trading hubs, application service providers and the whole area of pervasive computing. One standout opportunity is in wireless devices, particularly in Europe and Asia, where the number of data-enabled cell phones is expected to surpass the number of PCs in just a few years. We recently signed a deal with Vodafone AirTouch to design, build and manage an Internet portal that will allow businesses and individuals to access content and services over the Internet using a variety of wireless devices.

We're targeting the emerging "white spaces" of the networked world, such as storage, which is being transformed through the emergence of Net-driven storage area networks (SANs); and the

revenue – \$ in billions

net income – \$ in billions



game-changing open-source operating system Linux, which we're moving aggressively to support across our entire product line. And we will continue to build on IBM's e-commerce lead, increasing sales and distribution through [ibm.com](http://ibm.com). In 1998, e-commerce generated \$3.3 billion in sales; in 1999, that rose to \$14.8 billion. We expect to double that this year.

Finally, as the Net shifts computing workload, applications and data from PCs to large server systems, more and more computing solutions will be delivered as a service, over the Web. We've already got a significant Web hosting business, from complex sites for customers like Macy's and the Olympics, to small businesses. And our acquisition of Whistle Communications last June strengthened our ability to offer network computing services to smaller customers.

[2] *In all things, innovate.* By innovation I don't just mean technology – though of course I mean that, too. With our seventh straight year of patent leadership and another record total (2,756 U.S. patents in 1999), IBM's position as the world's premier commercial center of technology innovation is unchallenged. We will continue to invest in that. We will also continue to speed those innovations – such as copper chips and record-setting hard disk drives – into products (our own, and those of our customers). And we'll continue taking on "grand challenges" that bring technology breakthroughs to bear on previously intractable problems. For example, in December 1999,

IBM Research announced a \$100 million push to build a supercomputer named "Blue Gene" – 500 times more powerful than today's fastest computers – that initially will be used to model the mysterious folding of human proteins.

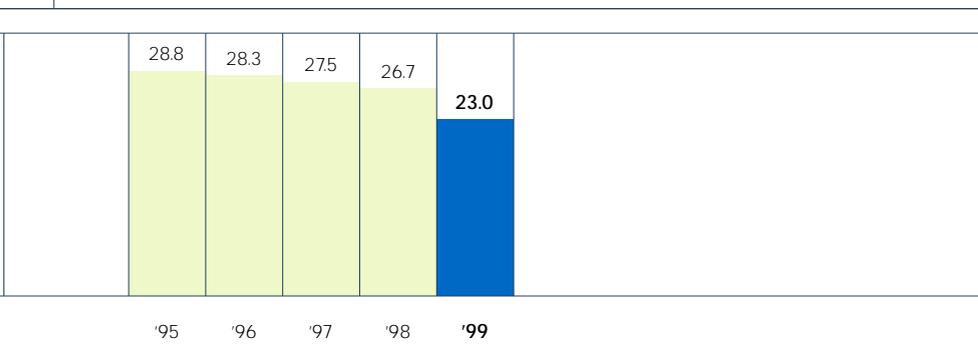
But innovation at IBM has never been about technology alone, or for its own sake. Especially now, when the competitive environment demands that we create radically new ways in which we go to market, attract new employees and structure relationships with customers and partners.

For instance, we have stepped up our efforts to reach out to Internet startups – through novel incubator programs and more than \$700 million in planned startup financing and venture capital investments. We form relationships with dot-coms while they're still in the incubator, so we can help them make technology decisions before they launch. Just as important, we get to see beyond the current technology horizon, understand the trends and deploy that learning directly in IBM. (And, by the way, we've already seen a tidy return on our investments.)

We're also innovating in how we build relationships with such important communities as software developers (via our [developerWorks](http://developerWorks) Web site, a resource for the Web's 10 million-plus developers worldwide) and future employees (witness last summer's "Extreme Blue" internship program, which gave some of the world's brightest computer science students a chance to work on real, cutting-edge IBM projects).

Finally, we continue to drive innovation in

total expenses as a percentage of revenue



transforming IBM into a leading e-business – and not just in e-commerce sales, which I mentioned earlier. In providing e-care for customers, we handled 42 million self-service transactions in 1999, avoiding some \$750 million in support costs. We delivered 25 percent of our internal training via distributed learning, which has not only saved us more than \$200 million, but made it far easier and faster for our people to educate themselves. Through e-procurement, we bought about \$13 billion in goods and services over the Web, saving at least \$270 million. And our intranet, which we believe is the largest and most heavily trafficked in the world, has emerged as a vital business platform and knowledge-sharing medium for IBMers. It is quickly becoming IBM’s digital nervous system.

**[3] Shape the new face of IBM.** What will “IBM” mean to customers, potential customers and employees, and the public at large in the years ahead? Our brand used to be touched and our company experienced primarily through our products. But going forward, a smaller percentage of our customers will buy an item with “IBM” stamped on it. Instead, when they experience the benefits of our innovative technology, much of it will be inside other companies’ branded products, or at work behind the scenes in the computing infrastructure of the Net.

Even more important, they’ll experience IBM in the person of another human being. Sometime within the next five years, more than half of our

revenues and workforce will come from services. This will mean that, very soon, revered IBM brand attributes like quality, reliability and innovation will primarily be descriptors of IBM people – their knowledge, ideas and behavior – just as today they describe IBM ThinkPads, servers and software.

We are very proud of what we accomplished through the 1990s in reanimating the IBM brand. Going forward, as the nature of our business changes, we will create new ways to make “IBM” relevant, compelling and exciting to people. And since so much of the IBM experience will be shaped by our people, I believe one of the most important tasks will be building the training, development, reward and knowledge management systems that support the IBM workforce. In other words, the strategic connection between our culture and our brand will be even more important – and more visible.

**What’s Next?** Last year I told you about three trends that were shaping the immediate future of information technology:

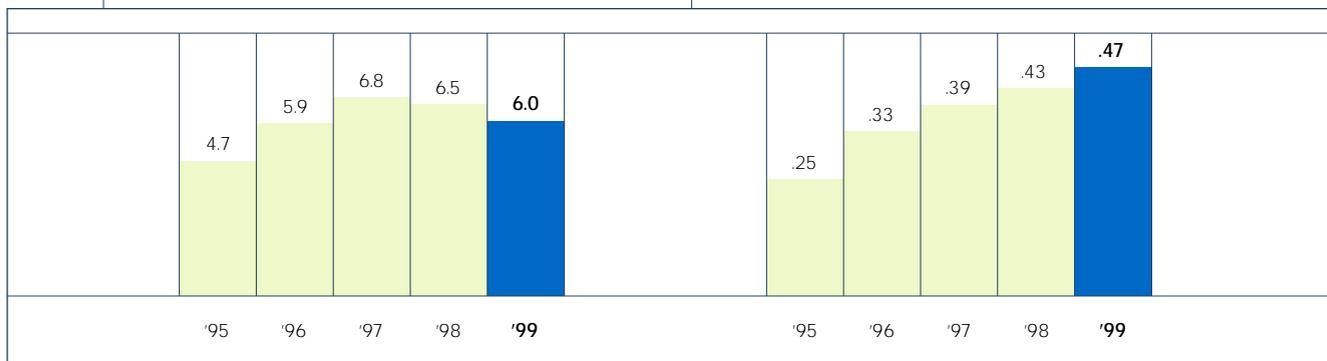
- > the Internet was creating not just new businesses, but new business models;
- > competitive advantage in the I/T industry was moving from creating technology to helping customers use it; and
- > with the rise of the networked world, the PC era was over.

There was some clucking about my PC era statement by the usual suspects, but amid the ups and downs of 1999, all three trends were confirmed and underscored in the marketplace.

ADJUSTED TO REFLECT A TWO-FOR-ONE SPLIT OF THE COMMON STOCK EFFECTIVE MAY 10, 1999

capital investments — \$ in billions

dividends — \$ per share



## financial highlights

International Business Machines Corporation  
and Subsidiary Companies

(Dollars in millions except per share amounts)	1999	1998
<b>FOR THE YEAR:</b>		
Revenue	\$ 87,548	\$ 81,667
Income before income taxes	\$ 11,757	\$ 9,040
Income taxes	\$ 4,045	\$ 2,712
Net income	\$ 7,712	\$ 6,328
Earnings per share of common stock—assuming dilution	\$ 4.12	\$ 3.29*
Earnings per share of common stock—basic	\$ 4.25	\$ 3.38*
Cash dividends paid on common stock	\$ 859	\$ 814
Per share of common stock	\$ .47	\$ .43*
Investment in plant, rental machines and other property	\$ 5,959	\$ 6,520
Average number of common shares outstanding (in millions)		
Assuming dilution	1,871	1,920*
Basic	1,809	1,869*
<b>AT YEAR END:</b>		
Total assets	\$ 87,495	\$ 86,100
Net investment in plant, rental machines and other property	\$ 17,590	\$ 19,631
Working capital	\$ 3,577	\$ 5,533
Total debt	\$ 28,354	\$ 29,413
Stockholders' equity	\$ 20,511	\$ 19,433
Number of employees in IBM/wholly owned subsidiaries	307,401	291,067
Number of common stock holders	646,702	616,800

\*Adjusted to reflect a two-for-one split of the common stock effective May 10, 1999

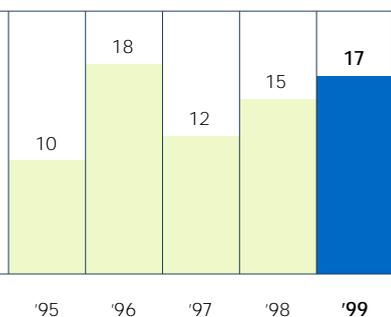
This year I'd like to mention three other important developments (actually, they are more like new realities) that are now taking hold:

> Up to now, the primary impact of e-business has been on individual companies. Now the Internet is reinventing entire markets – you might say, the very *idea* of a market. A few years ago, search engines took off because people needed help finding information on the Web. Then, as e-commerce

exploded, search engines morphed into portals, which helped people find not just information but also products and services.

Last year we began seeing entirely new business life-forms – companies that function not like traditional companies, because they don't make or sell anything themselves, but very much like markets. They help buyers find and qualify sellers. We call these "e-marketplaces" and "e-exchanges," and we already see them facilitating business-to-business

number of acquisitions



transactions in chemicals, steel, pharmaceuticals, industrial goods of all kinds, capital, even labor.

As they grow, e-marketplaces hold the potential fundamentally to change the dynamics of every industry, as they venture out into the global, borderless marketplace of the Internet, with millions of buyers looking for millions of sellers, and vice versa. IBM is already working with pioneers in this area, like SciQuest.com, e-Chemicals and PartMiner.

> **Market control is no longer a sensible or an achievable business goal.** I don't think this is fully understood by Wall Street. In the world we're now leaving – defined by the era of proprietary technology and computing architectures – customers were dependent on the providers of key pieces of technology. New iterations, new features came out when the provider decided they would.

The Internet changes all that. Customers, not technology providers, are in the driver's seat. No longer is it possible to operate a successful information technology company from the lab out; an e-business economy requires that we organize ourselves from the customer in. (And this applies not just to labs, but to garages. If what you want to do is get some cool new technology into the marketplace and then cash out, that's one thing. But if you want to build an enterprise that lasts, you've got to address some real customer need.)

Breakthrough technology is just as crucial as it ever was – but it doesn't confer control. For our industry, that changes everything. No technology company can any longer dream of coming up with

the magic bullet that will establish it as "the next IBM" or "the next Microsoft" – that is, sole owner of a key platform. I believe the wild market valuations of many dot-coms reflect the persistence of "Next Big Thing" thinking – the idea that one or more of these companies will lock up some controlling position. We're not managing IBM – or investing its resources – in the expectation of or hope for that kind of control. Instead, we're building an enterprise that will thrive in a more complex, interdependent and open world.

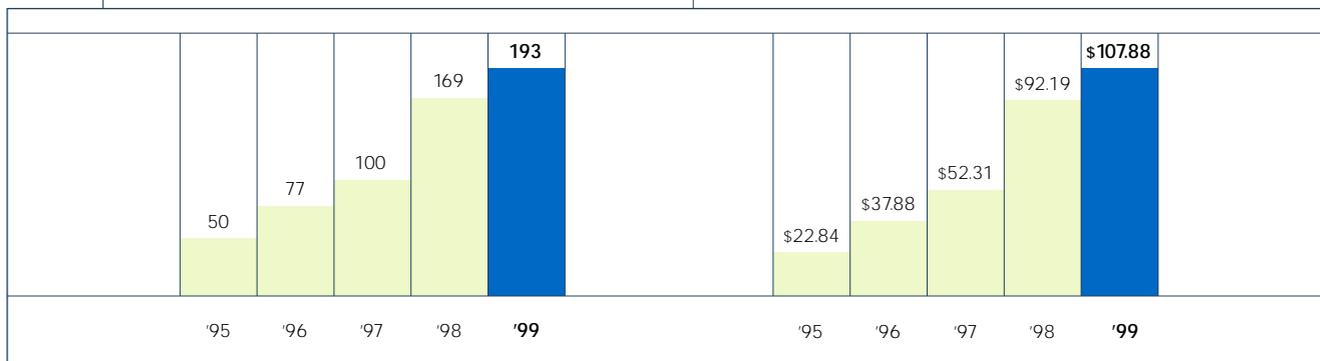
> **The intersection of societal issues and the Internet will force our industry to grow up – fast – and assume a new level of public responsibility.** It is disturbing to see many of the new members of our industry – and even some of the "old" ones – act as if the rest of society had no call on them. Yet modern history shows that when a new technology really matters, when it changes society in fundamental ways, the industry that pioneered it – be it telecommunications, energy, transportation or broadcasting – has always been called upon to take responsibility for those changes, for their impact on people and on the planet. If the industry doesn't, people do something about it – as they should – often through government intervention.

We are now at one of those inflection points. The Internet is driving everything our industry creates into every factory, store and office – and also into every home, classroom and voting booth. Crucial issues such as privacy, equal access, data security, national security, protection of children and

YEAR-END CLOSING PRICES ADJUSTED TO REFLECT A TWO-FOR-ONE SPLIT OF THE COMMON STOCK EFFECTIVE MAY 10, 1999

IBM market value – \$ in billions

stock performance



education are all profoundly affected by this onrush. In most cases, our technology is at once a threat and an important part of the solution.

The implications are clear. Our industry has a very limited opportunity to step up to these imperatives and demonstrate responsible leadership. Just as we are entitled to ask our public institutions to adjust to a world that runs at Web speed, so the information industries themselves must learn to define their ambitions with the broadest constituency – and longest time frame – in mind. The business of e-business is not the IPO; it's the future. At IBM, that's how we're shaping our business decisions and our actions in the ever-more-essential arena of Internet-driven public policy.

\* \* \*

There has never been a headier time to run a business – or a more challenging one. For all its fluctuations, though, I find myself more optimistic than I have been in my seven years at IBM – and that optimism has been deepened by three lessons of 1999.

First, the global economy has proven a lot more resilient than many of the doomsayers predicted. A networked world, it turns out, cushions rather than amplifies local downturns.

Second, technology and technology professionals came through the challenge of Y2K with flying colors (including tens of thousands of IBMers who exemplified our company at its very best in the way they helped our customers and our

own company through this challenge). A year ago, a severe backlash against technology in the wake of Y2K seemed likely. Going forward, people will probably feel confident in I/T's ability to survive even the severest of threats.

But the biggest reason for my feeling of optimism about IBM's prospects is the change in IBM itself. In identifying and defining e-business, we have created a huge, entirely new kind of market for our goods, services and expertise – and we are stepping up to an entirely new set of challenges. We are reshaping our own company into a fundamentally different enterprise, what *Business Week* magazine recently called "The Biggest Dot.Com of Them All."

I don't make predictions. Even with 1999's uncertainties largely behind us, our industry, our economy, the developments in technology and the shape of the emerging global culture remain far too dynamic to predict outcomes. But I am certain of one thing that 2000 holds in store for IBM. This year we will attack our remarkable opportunities with a new level of aggressiveness.

Watch this space.



Louis V. Gerstner, Jr.  
Chairman and Chief Executive Officer

*e-business is here.*

*e-business innovation center*  
atlanta georgia

To help customers take their franchises to the Net in a way that's smart, cool and consistent with their existing brands, IBM's growing global network of nine e-business Innovation Centers is staffed with experts in areas like interactive design, Web use analysis, portal personalization and data mining technologies for proactive selling.

A photograph of two women sitting on a rocky ledge, looking out over a vast mountain range. The woman on the left is wearing a red and black jacket and a patterned headband. The woman on the right is wearing a yellow and black jacket and a patterned headband. They are both wearing sunglasses and appear to be in a mountainous, outdoor setting.

## *jagged edge mountain gear*

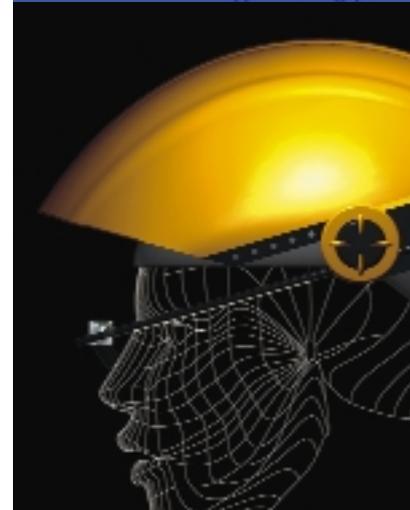
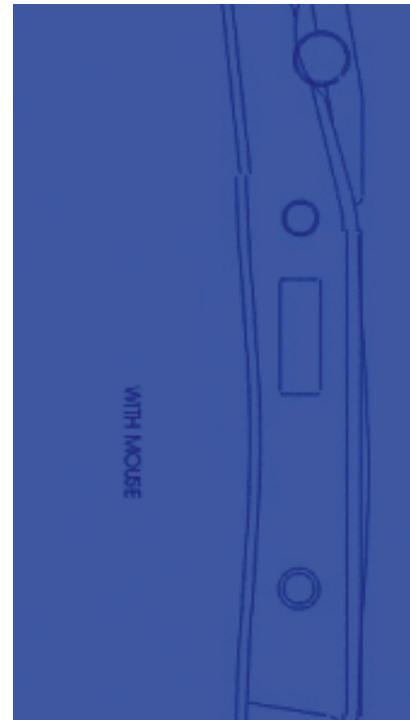
[www.jagged-edge.com](http://www.jagged-edge.com)  
telluride colorado

Started by twins Paula and Margaret Quenemoen, this outerwear manufacturer and retailer turned to IBM's Small Business WebConnections service to get the same e-business edge as bigger competitors. The service provides a single, easy-to-install Internet connection – utilizing the toaster-sized Interjet from IBM's Whistle Communications – as well as registration of a dot-com name, business-class e-mail, firewall security and around-the-clock technical support. And it's all available as an inexpensive monthly service – so a major capital investment won't push *them* over the edge.



eToys  
www.etoys.com  
santa monica california

With no physical stores (but very big warehouses), eToys has become the Internet's largest seller of children's products. To make sure it can handle the traffic – even during those heavenly but scary holiday spikes – eToys uses NUMA (non-uniform memory access) servers pioneered by Sequent Computer Systems, which IBM acquired in July. Sequent's specialty is linking lots of Intel processors to operate as a single UNIX system.





## post-PC design

raleigh north carolina

IBM's Industrial Design team is thinking "out of the box" – literally – to dream up and design new "Net appliances" for the post-PC age. As computing power moves to the network and touches our lives in myriad new ways, the venerable personal computer is morphing into a variety of specialized, ergonomic and inconspicuous "edge of network" computing devices. IBM's recent creations include concepts (shown clockwise, bottom-left to right) for an electronic newspaper (download, roll up and read anywhere); a PC in a hardhat with a built-in display and wireless Internet connection; and another you can strap over your shoulder.



## ibm consulting group

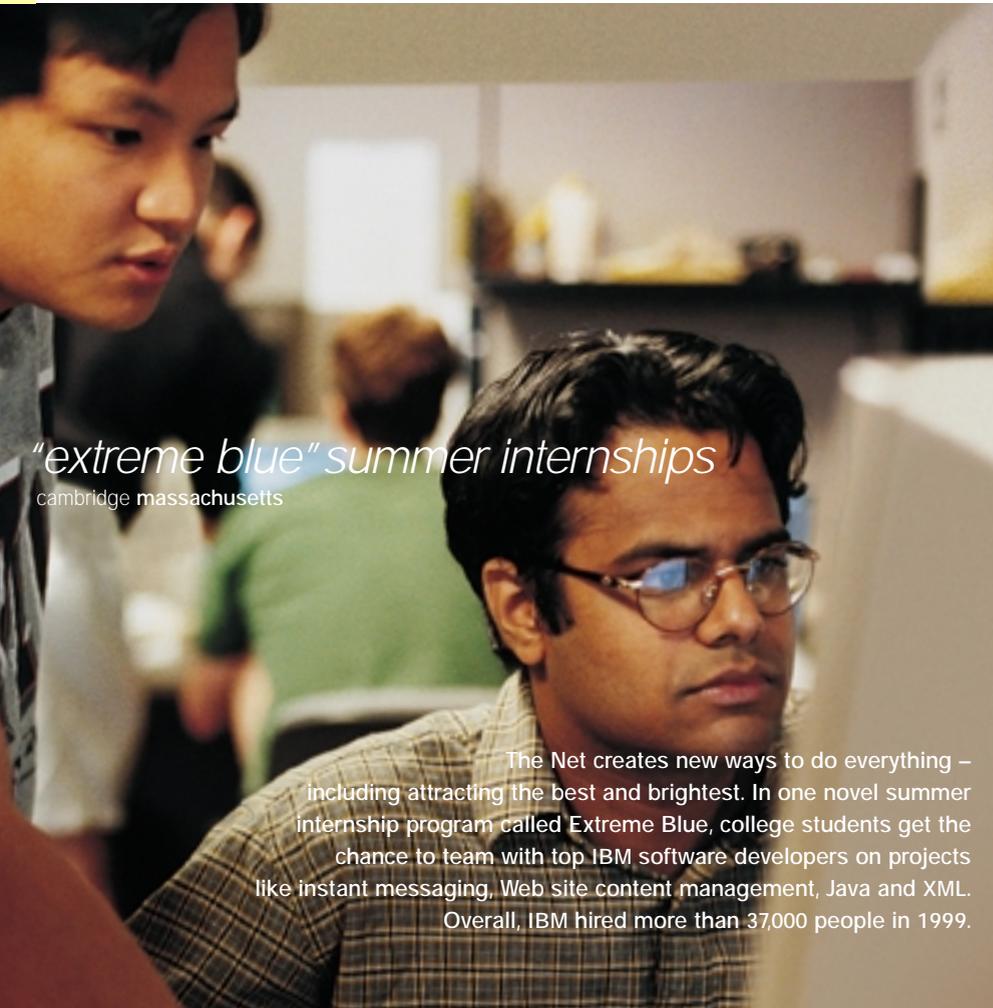
chicago illinois

Sometimes, the rush to the networked world takes on a "ready, fire, aim" quality. But if you're betting the ranch (or even a part of it) on a move to the Net, success requires a plan – and the expertise to implement it with speed and precision. With more than 65,000 consulting and systems integration practitioners, IBM is the world's number-one provider of e-business transformation services.



This January, 4,000 of IBM's 90,000 Business Partners – which now include Web integrators, software developers, Internet service providers, and application service providers, as well as retailers, distributors and remarketers – converged on San Diego to plan ways to grow the \$28 billion in IBM revenue they generated in 1999.





## *"extreme blue" summer internships*

cambridge massachusetts

The Net creates new ways to do everything – including attracting the best and brightest. In one novel summer internship program called Extreme Blue, college students get the chance to team with top IBM software developers on projects like instant messaging, Web site content management, Java and XML.

Overall, IBM hired more than 37,000 people in 1999.



## *ibm.com call center*

greenock scotland

Call centers – and the Net – make it easy for any customer to have a direct relationship with IBM. Recently, IBM's call centers – like this 60,000-square-foot facility, one of 24 worldwide – were integrated with Web-based sales and support. In 1999, IBM sold nearly \$15 billion over the Internet and handled 42 million Web-based self-service transactions.

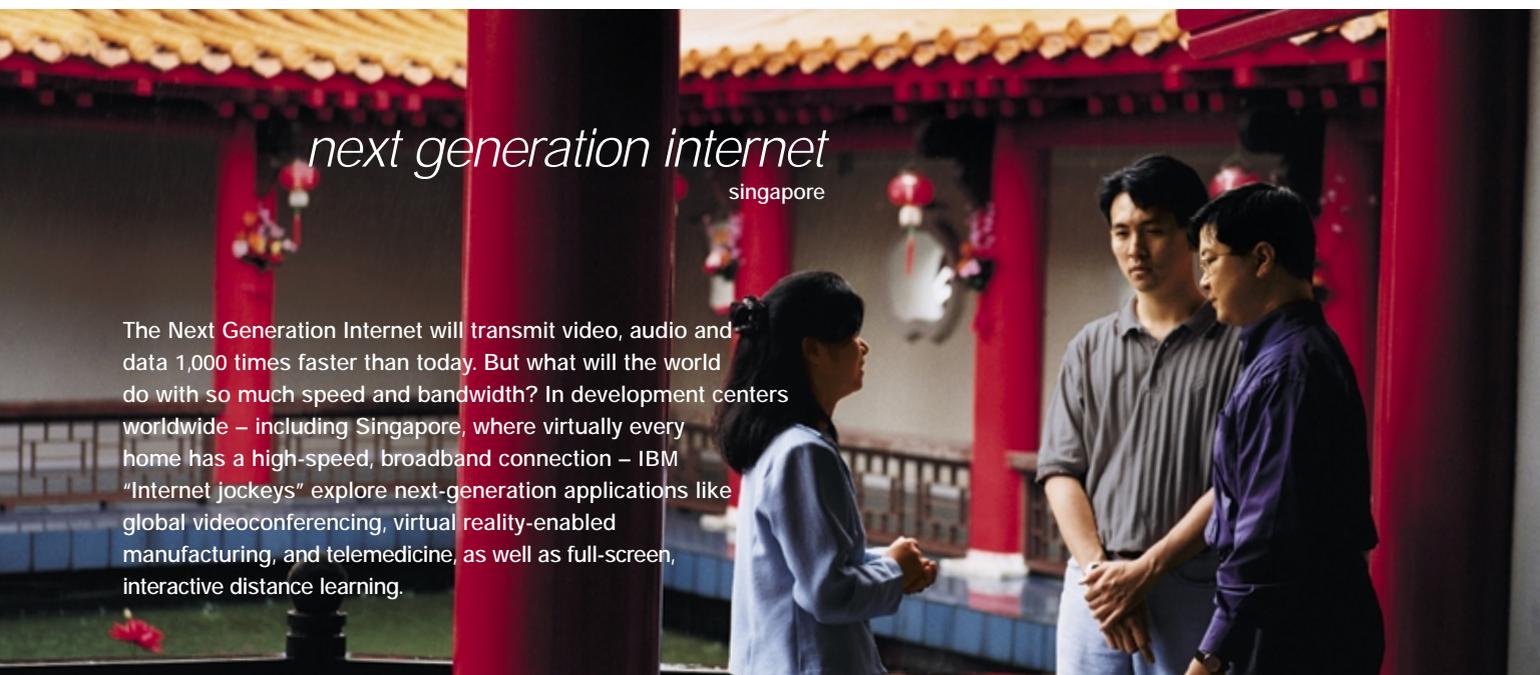




## *netfinity manufacturing*

greenock scotland

Every important e-business application resides on some computer server, somewhere. This IBM manufacturing site turned out nearly half of the hundreds of thousands of Netfinity servers shipped to customers in 1999. Netfinity's ability to bring mainframe-style reliability to the red-hot market for servers based on Intel processors is one reason it increased its market share last year.



## *next generation internet*

singapore

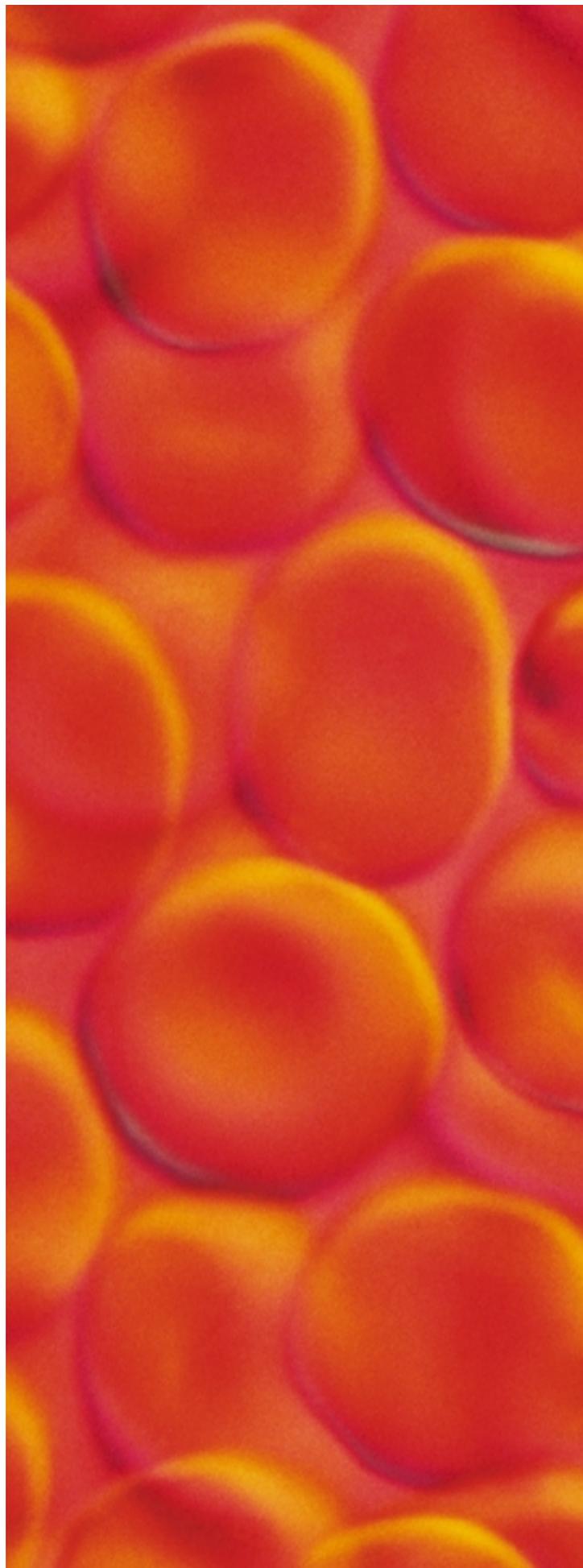
The Next Generation Internet will transmit video, audio and data 1,000 times faster than today. But what will the world do with so much speed and bandwidth? In development centers worldwide – including Singapore, where virtually every home has a high-speed, broadband connection – IBM “Internet jockeys” explore next-generation applications like global videoconferencing, virtual reality-enabled manufacturing, and telemedicine, as well as full-screen, interactive distance learning.

## *project blue gene*

thomas j. watson research center  
yorktown heights new york

How do subtle changes in the way proteins form turn otherwise normal red blood cells into cells that cause the condition known as sickle cell anemia? In December, IBM announced a \$100 million multiyear initiative to build a supercomputer powerful enough to explore such questions by simulating the “folding” of proteins into their complex, final shapes. Dubbed “Blue Gene” by IBM researchers, the computer may help unlock hidden causes of cancer, Alzheimer’s disease, cardiovascular problems, stroke or arthritis. Armed with that kind of information, scientists can then begin the search for new diagnoses and treatments needed for cures.

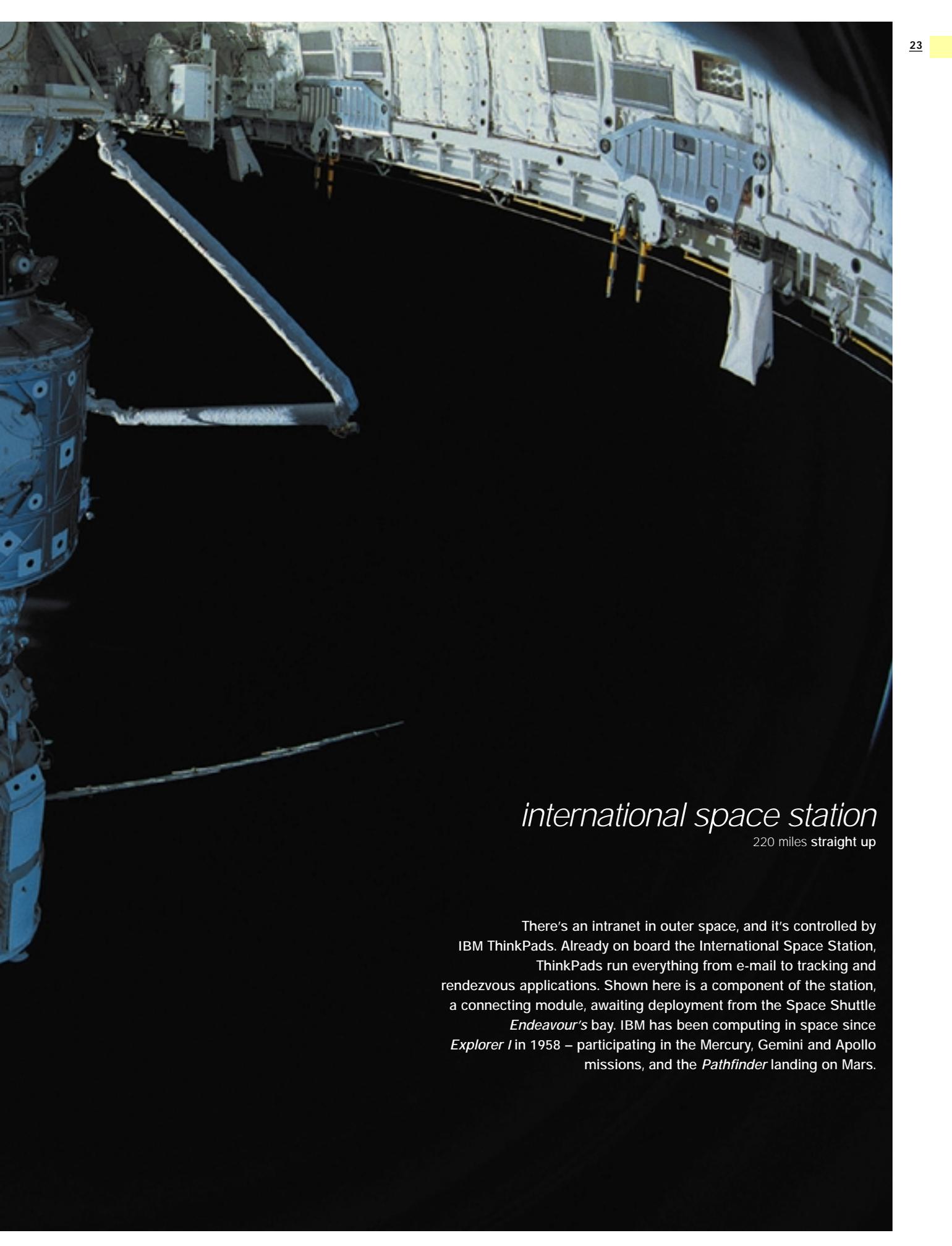
When completed, Blue Gene will be able to calculate at one “petaflop” (a quadrillion operations per second) – some 500 times more powerful than today’s fastest supercomputers. To achieve that kind of performance in five years (a full 10 years ahead of the information technology industry’s current rate of performance improvement), IBM is developing a new architecture that will be, appropriately, “self-healing” – so the system can overcome failures during the more than one year of computation needed to simulate the folding of just one protein.



*banesto bank*  
madrid spain

Banesto's customers literally carry a full-service bank in their pockets. The first Spanish bank to provide secure electronic payments over the Web is now one of the first banks anywhere to enable Internet banking using the Wireless Application Protocol – the de facto global standard for Internet communications on wireless devices like cell phones.





## *international space station*

220 miles straight up

There's an intranet in outer space, and it's controlled by IBM ThinkPads. Already on board the International Space Station, ThinkPads run everything from e-mail to tracking and rendezvous applications. Shown here is a component of the station, a connecting module, awaiting deployment from the Space Shuttle *Endeavour's* bay. IBM has been computing in space since *Explorer 1* in 1958 – participating in the Mercury, Gemini and Apollo missions, and the *Pathfinder* landing on Mars.

*acorn*  
*smart housing project*  
oakland california

Learning to read just got a little bit easier for 9-year-old Frank Martin, thanks to IBM's participation in an award-winning program designed to address issues like youth literacy and adult job training. Acorn's 293 families each get an IBM Network Station "thin client" computer and high-speed links to the Internet. And because challenges like these can't be addressed with information technology alone, IBM is also supplying educational consulting and customized courseware.



*information security practice*

amsterdam the netherlands

Nanette (top left window), Han (center) and Daniel (top right) are on the wanted list. Our customers pay them and their teams of industry specialists and "ethical hackers" to exploit business vulnerabilities and attack computer systems in order to stress-test company defenses and evaluate risks.

As security moves to the top of customers' agendas, with growing requirements to protect against theft, industrial espionage and fraud, IBM's information security practice is doubling its revenue annually.



## *Power4 chip testing*

yorktown heights new york

IBM's top-of-the-line RS/6000 and AS/400 servers will sport a powerful – and identical – new brain in 2001. The Power4 will be IBM's first commercially available "gigaprocessor" – a chip with an internal clock speed of a billion cycles per second. It will feature improved bandwidth, as well as IBM invented technologies like copper interconnect and silicon-on-insulator.





*e-business consulting*  
rio de janeiro brazil

With Internet use in Latin America growing faster than anywhere else in the world, Glauciene Bentes and the e-business consulting team in Brazil don't lack for opportunity. They have partnered with 24 companies that, using IBM technology, have developed some of the most innovative e-business sites in the country – from a virtual supermarket based in Minas Gerais to Boa Compra, a mega-boutique hosting 200 online shops.

Kevin Wilson  
Director of Technology  
YourLives.com

Christine Herron  
Founder, Chairman and CEO  
Mercury2, Inc.

*internet startup incubator*  
palo alto california

In the lonely Web years before billion-dollar IPOs, most NetGen startups needed an angel. So why not a well-heeled angel in blue? IBM is partnering with Internet service provider Conxion to provide up to \$1 million in technology and services to selected Internet startups. The price? Nada. At the end of six months, the startups can buy or lease the equipment or walk away altogether.

Mark Cahsens  
CEO  
ebuddies.com

Shane McRann Bigelow  
President and Chief Revolutionary  
E-Pair.com

Christian Buckley  
CEO  
QOSES

David Allen  
Business Development  
ebuddies.com



## *network processor*

burlington vermont

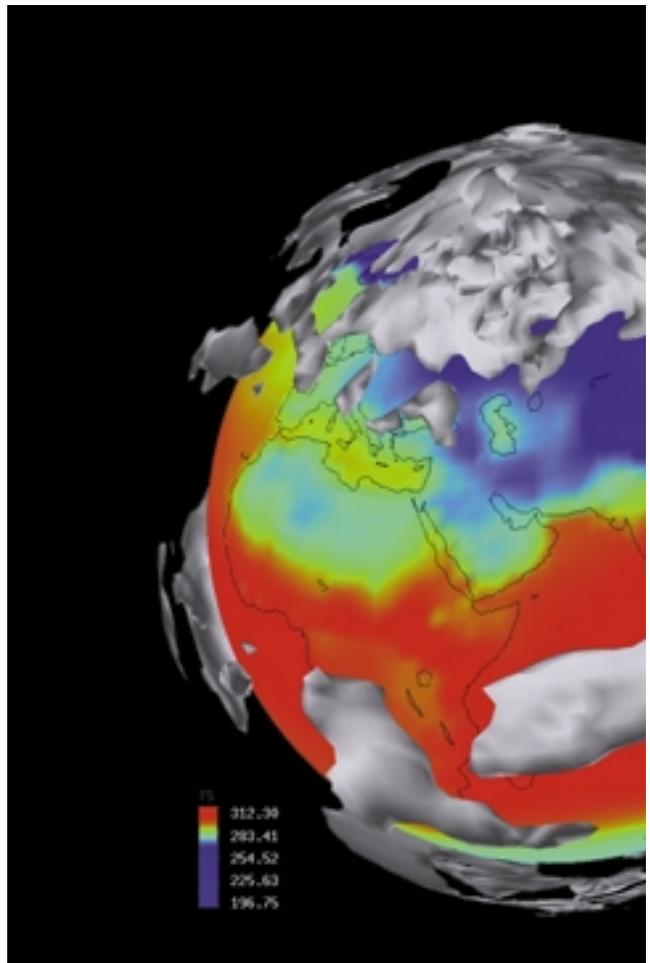
Meet the post-PC processor – faster, more adaptable and more upgradable. Specialized chips like these are needed in advanced communications equipment to manage applications like streaming audio and video at speeds far beyond the reach of traditional microprocessors. Here, chips etched on 8-inch wafers await final “dicing,” or cutting into hundreds of thumbnail-size processors.

*national center  
for atmospheric research*

boulder colorado

As industrial pollutants continue to alter global chemistry in barely understood ways, predicting long-term climate changes could be key to preserving life on our planet. At the U.S.

National Center for Atmospheric Research, scientists are improving our odds with an IBM RS/6000 SP supercomputer that can calculate the interactions of thousands of variables (like ocean temperature, precipitation and ozone depletion) over extended periods of time. In this simulation, white areas of cloud cover float over warmer surface temperatures shown in red and yellow, and cooler areas in blue-green.

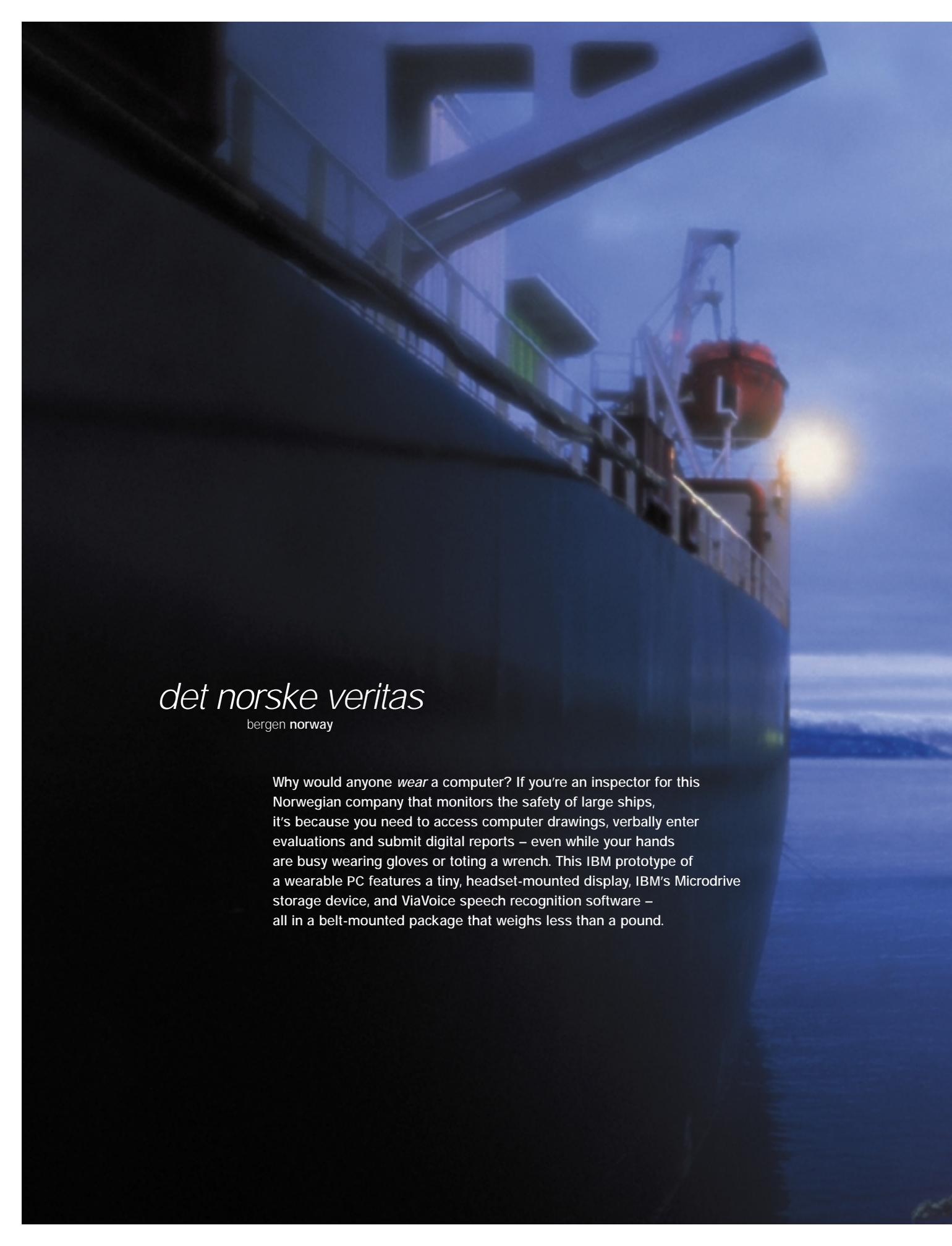


*planetRx.com*

anywhere

Since December, customers with handheld computers have been able to go to PlanetRx.com to order over-the-counter medications and other health and beauty products. IBM provides RS/6000 SP and Netfinity servers, DB2 Universal Database and WebSphere software, as well as the technology that translates information from Web format to one used on handheld computers, such as this IBM WorkPad.





*det norske veritas*

bergen norway

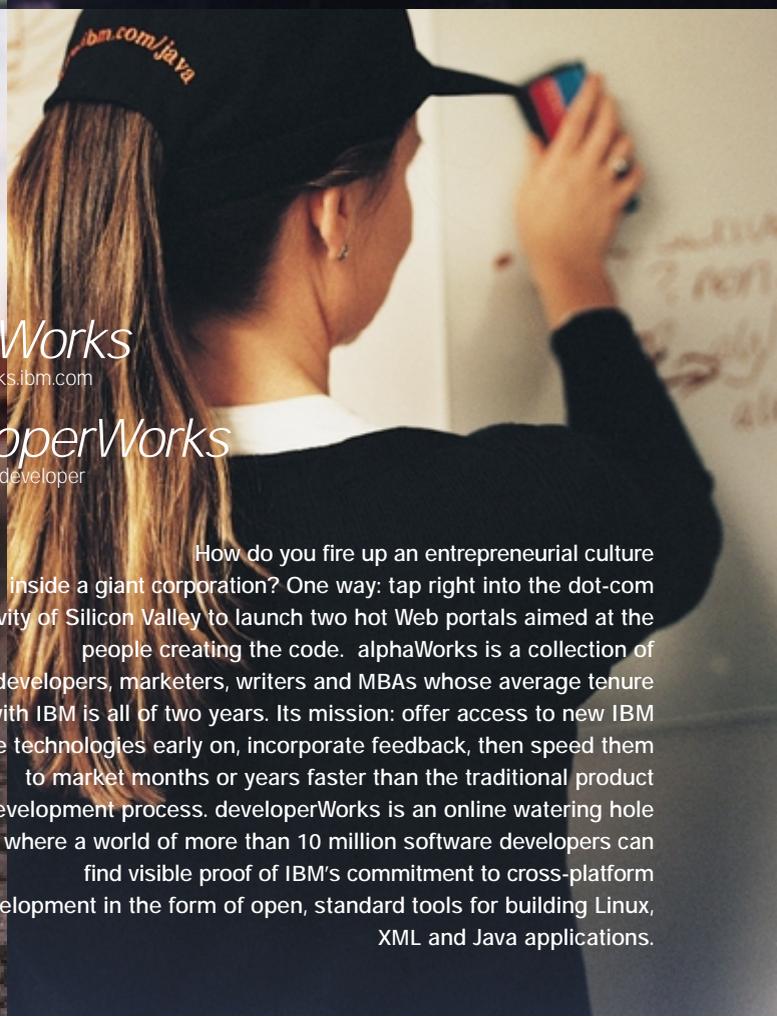
Why would anyone *wear* a computer? If you're an inspector for this Norwegian company that monitors the safety of large ships, it's because you need to access computer drawings, verbally enter evaluations and submit digital reports – even while your hands are busy wearing gloves or toting a wrench. This IBM prototype of a wearable PC features a tiny, headset-mounted display, IBM's Microdrive storage device, and ViaVoice speech recognition software – all in a belt-mounted package that weighs less than a pound.



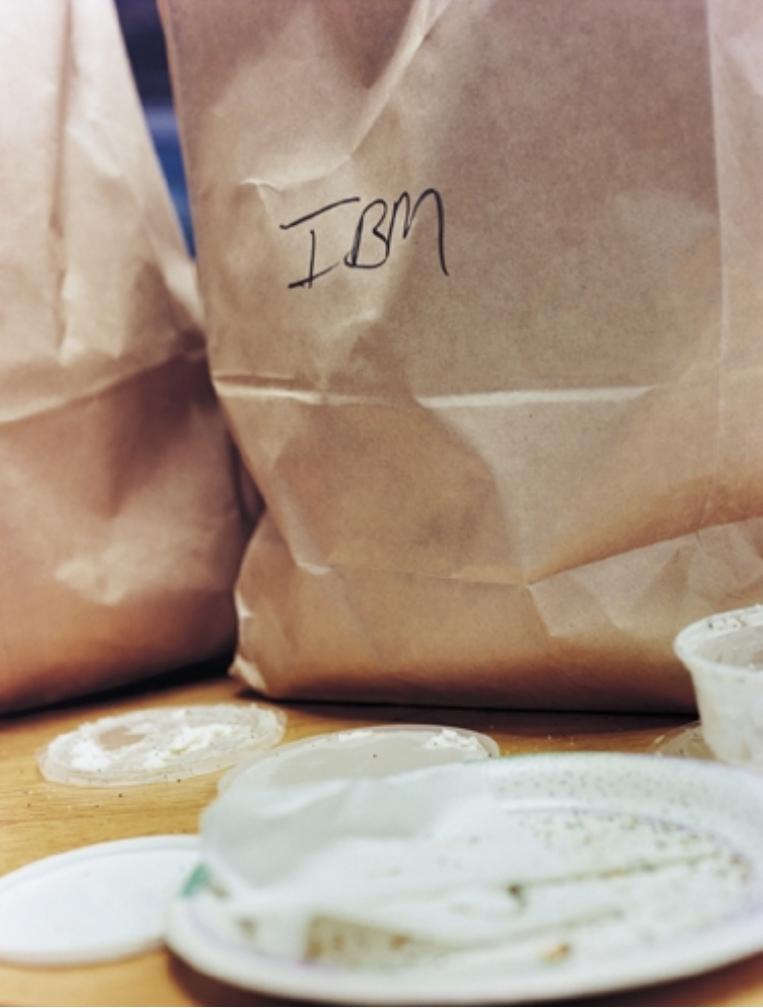


*alphaWorks*  
www.alphaWorks.ibm.com

*developerWorks*  
www.ibm.com/developer  
silicon valley



How do you fire up an entrepreneurial culture inside a giant corporation? One way: tap right into the dot-com creativity of Silicon Valley to launch two hot Web portals aimed at the people creating the code. *alphaWorks* is a collection of developers, marketers, writers and MBAs whose average tenure with IBM is all of two years. Its mission: offer access to new IBM software technologies early on, incorporate feedback, then speed them to market months or years faster than the traditional product development process. *developerWorks* is an online watering hole where a world of more than 10 million software developers can find visible proof of IBM's commitment to cross-platform development in the form of open, standard tools for building Linux, XML and Java applications.



## *e-business testing center*

gaithersburg maryland

Enough fiber-optic cabling to stretch from Washington, D.C., to Los Angeles and back again; more than 10 billion instructions per second of processor capability; more than 40 terabytes of disk storage. It takes that kind of computing muscle to model customers' technology infrastructures, then stress-test them to see if they can handle day-to-day operations (or even the possibility of runaway success). That's why more than 500 customers have come to this IBM Testing Center – the largest such test bed in the world – to put their systems through the paces.





*ford motor company*  
*accelerated solution center*  
dearborn michigan

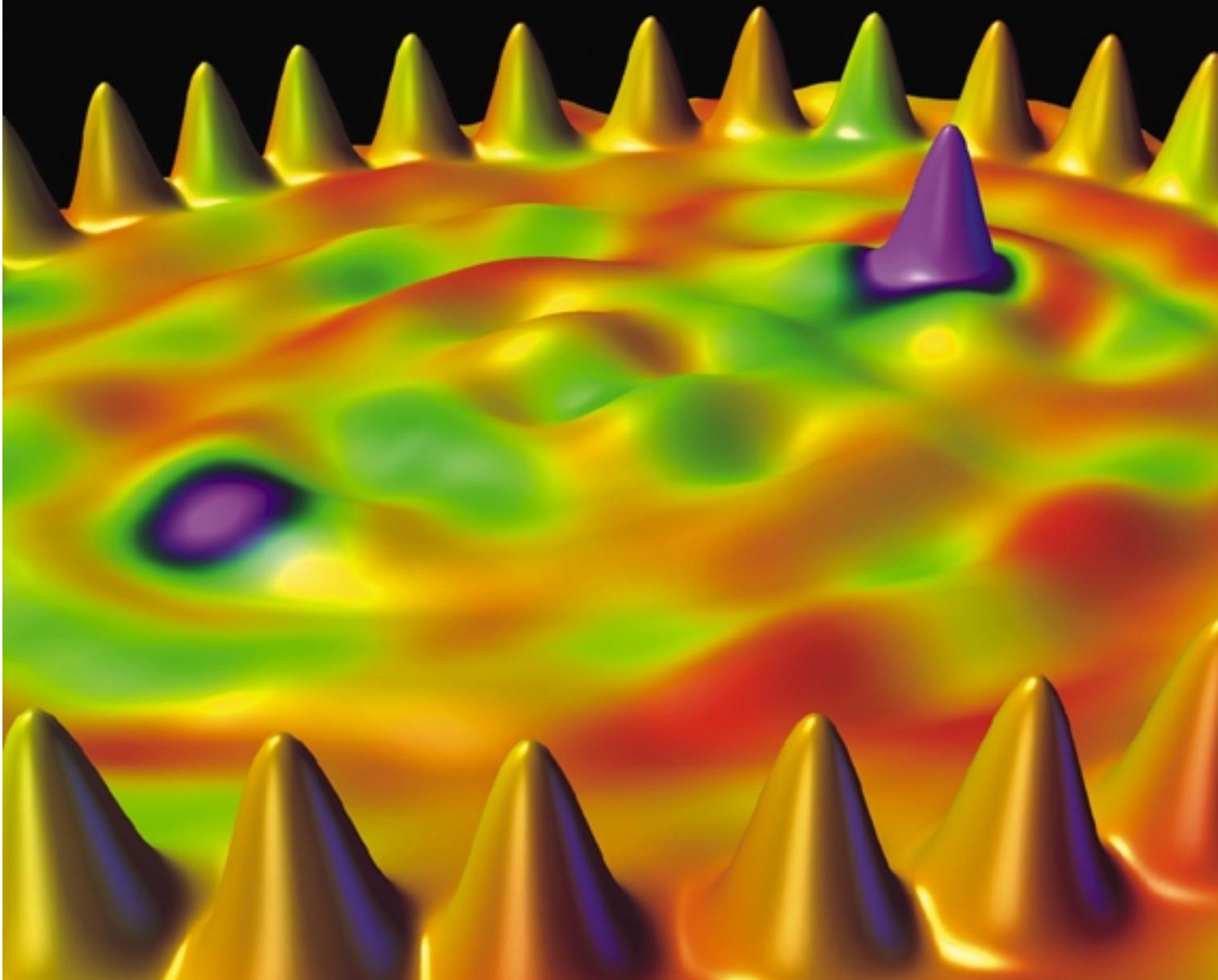
Ford's Accelerated Solution Center is a novel experiment that welds IBM and Ford programmers into tightly integrated teams to speed the development of e-business applications. Ford contributes automotive expertise and IBM brings its e-business knowledge. Part of a \$300 million services agreement, the approach has slashed Ford's software development time in half and cut costs by 30 percent.

## quantum mirage

almaden research center  
san jose california

It looks like a freeze-frame of a technicolor raindrop, taken milliseconds after impact — but it could someday lead to extraordinarily small computing devices a few nanometers (billionths of a meter) across. In February, three scientists at IBM's Almaden Research Center discovered a fundamental new way of communicating information on an atomic scale using a "quantum mirage." This scientific achievement, which projects information about one atom to a spot where no such atom exists, may make data transfer in nanoscale electronic circuits possible, enabling ever smaller, but more powerful, computers.

To demonstrate the effect, the research team used a Scanning Tunneling Microscope (a Nobel-prize winning IBM invention) to create a "quantum corral," the ring of yellow atoms partially visible here. When a cobalt atom (the tall magenta peak on the right) is placed at one focus of the ellipse, a smaller mirage appears at the other focus (the lower left magenta spot).



*e-business is here. We're never going back.*

## the abc's of @

Having unleashed the e-business revolution, we at IBM take seriously our responsibility to help people understand it all. Here's a brief guide to help you sort through the vocabulary, history and unique culture of all things "e."

### the "lingo"

#### **B2B (adj.)**

As in "Business-to-Business," the biggest and most lucrative e-business marketplace – pegged by industry consultant Gartner Group at nearly \$4 trillion by 2003, compared to estimates of \$380 billion for B2C (Business-to-Consumer).

#### **clicks-and-mortar (adj.)**

Also "clicks-and-bricks." A heretofore traditional (bricks-and-mortar) enterprise that "gets" the value of e-business and integrates its online and offline operations, creating benefits for each. For example, a customer who buys something from your online store might have the option of returning it either by visiting the physical storefront or by requesting a prepaid shipping label from the Web site.

#### **e-line (n.)**

You're said to be "above the e-line" if you operate on the Net. You're below it if you actually have physical stores, manufacturing facilities, distribution centers, etc. Since most enterprises are somewhere in between, we prefer the notion of an *e-zone*. Interestingly, travel through the zone is two-way – witness AOL's planned merger with Time Warner (a dot-com moving down through the zone to add physical operations and assets).

#### **incubator (n.)**

A startup nest – that is, a business or project that provides financing, technology, office space and marketing muscle to fledgling e-businesses, sometimes in exchange for equity in the new company. IBM's involvement in incubator programs, such as our joint venture with Silicon Valley Bank and Internet service provider Conxion, helps these NetGen companies get to market, and gives us an excellent early-detection system to spot technology trends and market directions.

#### **infomediary (n.)**

A service – usually a Web site – that brings together the latest information and prices from a variety of suppliers, and delivers them online to buyers. Quickly evolves into an "e-marketplace" (see "A Brief History of e"). For example, the infomediary SciQuest ([www.sciquest.com](http://www.sciquest.com)) created an e-marketplace where researchers in the life sciences industry comparison shop for lab products with just a mouse click before placing an order. (Not to be confused with the less-appealing "infodromedary," an e-commerce site that may go for days without being updated.)

#### **NetGen (adj.)**

Short for "Network Generation." Applies to companies born during the explosive growth of the Internet and the Web. Easily recognized – until lately (see "clicks-and-mortar") – by names emblazoned with the insignias of the networked world – the ubiquitous "dot" and the mysterious "com."



## a brief history of e [ *then* -> *now* ]

### profit (n., v.)

The market valuations of many dot-coms notwithstanding, still a valid measure of business success.

### stickiness (n.; from sticky, adj.)

In the Web world, sticky is good. A sticky site is one that attracts and keeps users. To make a site stickier, its creators may add personalization elements, online communities and discussion areas, user feedback, and extensive links.

### vortal (n.)

Vertical portal. It provides all the features of a "portal" (a Web site for a general audience, with its own content and links to other sites – like Yahoo!), but for a specific audience, such as expectant parents, fly fishers, or steelmakers and their customers. Software developers, for example, go to sites like IBM's developerWorks ([www.ibm.com/developer](http://www.ibm.com/developer)) to find resources, code and tools, and to swap ideas within a like-minded community.

### wallet (n.)

A small software program that resides on your computer or a server, allowing you to e-shop till you drop. The wallet usually consists of encryption software that can hold your already-submitted payment information (such as credit card or online account), a digital certificate to identify and protect you, and even the address where you'd like your purchase sent. Wallets speed the process and eliminate buyer frustration, thereby increasing sales.

### client/server -> Internet

In the mists of time (less than a decade ago), the information technology industry made a big promise. It was called client/server – and it described seamless connections and communication among all kinds of disparate computing platforms. It didn't happen. The promise of "any client to any server" proved to be far more costly and difficult to implement than anyone expected. Then, along came the Internet and its open communications protocols. Almost before we noticed, the long-awaited promise of any-to-any connectivity materialized – not just among computers, but also among the people and the enterprises that use them.

### big iron -> strong iron

How big are mainframes these days? Smaller than you might think, and far more powerful than just a few years ago. Recast in the Net world as enterprise servers, they are about the size of a refrigerator, but nearly 30 times more powerful – as measured in MIPS (millions of instructions per second) – than just five years ago. And enterprises turning into e-businesses are finding more value for these powerful servers than ever before, using them both to host existing systems and applications, and to integrate those with their new online offerings for customers, suppliers and employees.

### hard drives -> microdrives

IBM makes, and sells, a lot of hard disk drives, many to our competitors in the PC market. (We're flattered that they want to pay us for better hardware.) We've also been shipping our tiny-but-powerful 340-megabyte Microdrive to such customers as Kodak, Samsung, Hitachi and other leaders in the consumer electronics field. Just a little over an inch square, the Microdrive can hold 1,000 digital compressed photos, six hours of CD-quality music, or the equivalent of 300 novels.

### trading hours -> friction-free markets

The closing bell says it's time for people to go home. But their money wants to hang out and play some more. Pure demand, unhindered by distance or time differences, can set prices on the Web while we sleep, and sellers don't need to wait for a phone call or a fax to hear from the market. Online brokerages and computerized exchanges already do big business in after-hours trading, and other marketplaces – for parts, supplies, services, you name it – are starting to follow suit.

### e-businesses -> e-marketplaces

Today, the company. Tomorrow, the industry. Once a business e-enables its operations, it can find itself in new terrain, where all its competitors and customers are also operating as e-businesses. At that point, "buy, sell, trade online" doesn't apply just to stocks and bonds, but to every transaction in which an enterprise engages. Airlines and hotels are already auctioning off unsold seats and rooms via Web sites; universities are accepting online bids for tuition to fulfill their enrollment targets. And consolidators and infomediaries are bringing all parties together, with up-to-the-minute bids, prices and availability information. Markets become more liquid and efficient, and obstacles like time and geography become so... 20th century.



# 1999: *the highlights*

## our portfolio

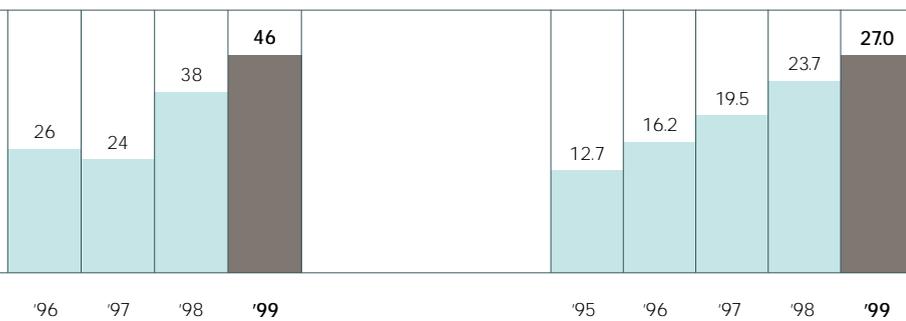
### services

In 1999, IBM extended its lead as the world's largest provider of I/T services. Revenue grew 11 percent; customers committed to more than \$38 billion in new contracts, and the backlog of engagements (work we'll do and be paid for this year and into the future) grew 18 percent to more than \$60 billion.

And in the most explosive segment of the marketplace – **e-business services – revenue increased 60 percent, to more than \$3 billion.** Factor in all the other services revenue that can be attributed to e-business – from consulting, business intelligence and strategic outsourcing – and our e-business services revenue easily doubles.

number of signed strategic outsourcing contracts valued at more than \$100 million

services revenue – [excluding maintenance, \$ in billions



### enterprise and personal systems

Customers ordered record server processing capacity in 1999. We also took some major steps toward building for the future, introducing new high-performance servers and acquiring two companies with strategic technologies. Sequent Computer Systems strengthens the high end of our Web server line, while Whistle Communications' elegant "thin server" technology is a key feature of our e-business offering for smaller enterprises. Among the other high points:

- > Added **hundreds of ISV applications** to our platforms.
- > Made the industry's most sweeping commitment to **drive the Linux operating system** across all our server lines.
- > **Increased share of the 500 most powerful supercomputers** in the world by 36 percent, establishing IBM as the leader in high-performance computing in 1999.
- > Replaced Compaq in 1999 as the #2 mobile PC vendor in the world. **ThinkPad unit volumes grew 50 percent faster** than the industry.

- > Most important, we came on strong in **three strategic segments:**

#### **UNIX : RS/6000 S80**

*Debuted in September as the world's fastest e-business UNIX server. Customers purchased as many S80s in its first three months as Sun shipped of its competitive product in its first 18 months.*

#### **High-end storage : Shark**

*Shipped more than 1,000 units within the first 100 days of its introduction, and penetrated half of the Fortune Global 100.*

#### **Intel-based servers : Netfinity**

*Increased shipments by more than 30 percent and gained market share.*

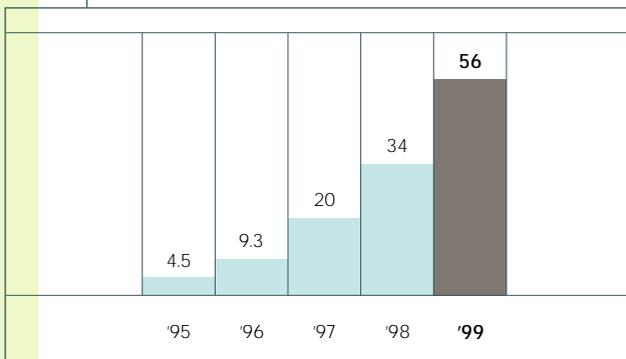
## software

IBM middleware, a key component in building current and next-generation e-business solutions, grew in double digits and faster than the industry. Our strategic e-business middleware products on UNIX, Windows NT and other fast-growing platforms grew significantly:

	revenue growth rate ('98/'99)	industry growth rate
Tivoli Systems Management:	<b>34%</b>	20%
Business Integration Software (MQ Series):	<b>96%</b>	53%
Database Products:	<b>56%</b>	16%
Web Application Servers:	<b>59%</b>	25%

- > **40 percent** of the top 100 retailers in the world use IBM's WebSphere Commerce Suite to drive their e-tail sites.
- > IBM has an unmatched collection of professionals devoted to advancing open Internet standards and applications – more than **500 XML**, **600 Linux**, and **4,000 Java** professionals worldwide.

Lotus Notes seats – [ in millions

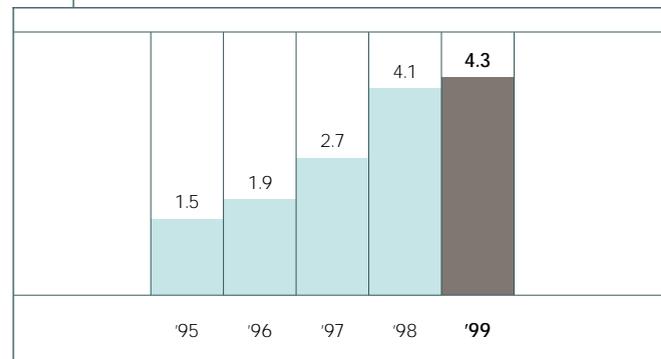


## oem

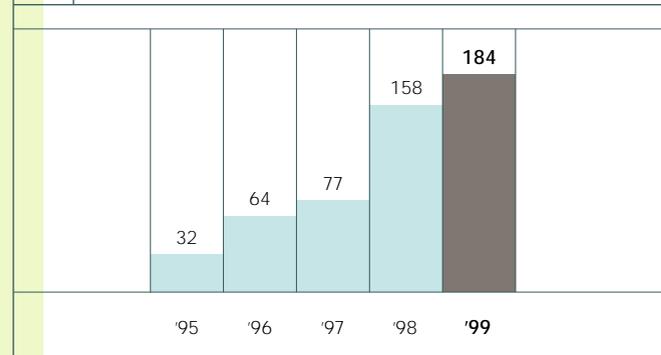
Overall, OEM hardware revenues – from sales of components and finished products to other high-tech companies – increased 15 percent to \$7.8 billion last year. That does not include the vast majority of revenues from five major OEM contracts signed in 1999, which are forecast to deliver \$30 billion over five to seven years.

- > Shipped more than **2 million** copper chips since their introduction in 1998.
- > Led the industry with more than **40 percent** of the mobile hard disk drive (HDD) market. Introduced the industry's highest-capacity mobile HDD at 25 gigabytes.

OEM storage revenue – [ \$ in billions



number of custom microchip designs for customers



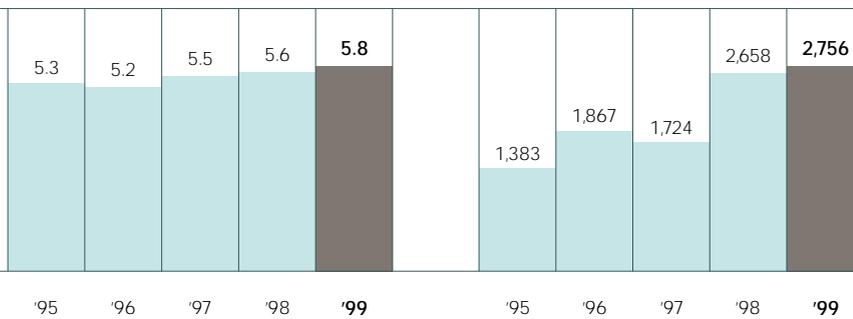
## research and development

At our core, we are a technology company. In 1999, the industry's greatest foundry of technical innovation achieved breakthroughs ranging from **new world records in magnetic storage densities to the creation of transistors made of organic materials**. These transistors could lead to products like flat-panel computer displays that you can fold and put in your pocket.

For the seventh consecutive year, IBM's technical community led the world in U.S. patent awards, with 2,756 – 900 more than the second-place finisher. Our intellectual property portfolio earns IBM more than \$1 billion in licensing royalties, in addition to securing our technical leadership now and for years to come. In fact, **one-third of the technologies we patented in 1999 are already in the marketplace**.

research and development investments – [ \$ in billions

total number of patents



## pervasive computing

Pervasive computing is the inevitable extension of the networked world. It describes a mosaic of computing that extends beyond traditional computers and PCs to include an array of small computing devices like handheld computers and intelligent cell phones, as well as lots of everyday things – from household appliances to clothes and machine tools – all containing a little embedded computing and networking capability.

In 1998, pervasive computing was largely a strategic vision. In 1999, that vision became reality. **Last year, IBM signed nearly 250 pervasive computing-related contracts, with more than 100 customers**, for revenue in excess of a quarter of a billion dollars. We are helping **Vodafone AirTouch** – to build and run a global Internet portal that will allow its customers to use a variety of wireless devices to access content and services over the Net. For **Swissair** we are developing an application that

will allow passengers to check in from their mobile phones.

Of these engagements, **more than 60 percent were signed in the last four months** of the year, demonstrating that our customers are now starting to make investments in extending their e-businesses to the universe of new computing devices – like cell phones and palmtop organizers – which already outsell personal computers three to one.

## our transformation

Last year, we made important progress toward our goal of transforming IBM into a premier e-business. Sales of products and services over ibm.com averaged \$40 million a day for the full year, and \$50 million a day in the fourth quarter.

IBM e-procurement web purchases – \$ in billions | e-commerce revenues – \$ in billions



### e-care for customers

QUESTIONS AND PROBLEMS RESOLVED VIA IBM.COM

1998: 14 million  
1999: 42 million

COST AVOIDANCE

1998: \$ 300 million  
1999: \$ 750 million

### supply chain management

On-time delivery improved by up to **95 percent**, and the time from order entry to delivery for some products has been reduced to two days.

### distributed learning

More than **25 percent** of internal training was delivered via distributed learning to nearly **135,000 employees**, producing cost avoidance and productivity gains of more than \$200 million.

### e-care for business partners

Partners generated more than half of all IBM e-commerce revenues. More than **14,000 partners** used ibm.com to access product and marketing information.

## 21st century alliances

To ensure that we will participate in the explosive growth of e-business services – projected to represent nearly 60 percent of the total e-business opportunity by 2003 – we're striking alliances with hundreds of Internet service providers, application service providers, independent software developers and professional services firms such as Web integrators.

More than 850 Web integrators – like USWeb/CKS, Razorfish, US Interactive, Rare Medium and Viant – signed on with us in 1999. Among independent software providers, we established much stronger relationships with SAP, Siebel Systems and i2 Technologies for enterprise resource planning, customer relationship management, and supply chain management solutions.



U.S. President Bill Clinton and IBM Chairman Lou Gerstner  
National Education Summit  
IBM Executive Education Center  
Palisades, New York September 1999

## *“The time for analysis and evaluation has passed”*

With those eight words in his address at the 1999 National Education Summit, IBM Chairman and CEO Lou Gerstner crystallized why there is no going back on the issue of world-class standards as the catalyst for reform in America’s public schools.

The 1999 Summit was the second national conference in three years on the issue of raising academic performance and student achievement in K-12 public education in America. Both were held at IBM’s Executive Conference Center in Palisades, New York, and both were co-chaired by Gerstner.

Driving high-quality public education is just one manifestation of IBM’s long-standing commitment to the communities that sustain our operations and our families. Through a \$40 million grant program called Reinventing Education, we apply advanced information technologies and the expertise of some of our top technologists to improve learning. In recent years, the program has expanded to include schools in seven other countries, including a 1999 grant in the United Kingdom.

While education is our most visible philanthropic endeavor, we’re far from single-minded about our responsibilities as a good corporate citizen. In the U.S. portion of the largest-ever survey on the role of business in society, consumers identified IBM as the company that best exemplifies effective corporate citizenship.

In 1999, IBM dedicated more than \$116 million to programs that assist people in need. Individual IBM employees added another \$25 million through matching grants and donations to nonprofit organizations and educational institutions. And they gave

even more – volunteering more than 4 million hours of their own time to local causes.

We are a company with a commitment to a culture of inclusion, one that draws on the talents of a workforce as broad and diverse as the markets we serve in more than 160 countries worldwide. In 1999, the number of minority executives in the United States increased by 31 percent. Women executives across IBM increased by 27 percent, and in March of this year the company was recognized by highly regarded Catalyst, Inc. for its leadership in advancing the careers of women throughout our workforce.

Hosting the 1999 National Education Summit is completely consistent with the commitment to community leadership. Nobody – at least none of the realists – believes the transition from low standards to high standards will be easy, or that it will be made without painful consequences in the short term, as schools step up and end practices like social promotion.

Yet when the Summit adjourned, governors from across the United States – along with business leaders, educators and representatives of both major teachers’ unions – had done two things: reaffirmed their commitment to high academic standards as the starting point for reform; and committed to execute a specific set of priorities – with deadlines – to move schools toward the goal of dramatically improved student achievement.

“We can’t cut and run when some students can’t meet the standards. We have to redouble our efforts and provide the help they need,” Gerstner said. “We have to have some faith in our children and our teachers. They’ll deliver. It’s up to us to give them the chance.”

## *company mission*

At IBM, 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.

We translate these advanced technologies into value for our customers through our professional solutions and services businesses worldwide.

