

Sixteen decisions that *transformed* IBM

TUESDAY, NOVEMBER 10, 1992 C1

## WALL STREET JOURNAL

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## 'Break Up IBM,' Cry Some Investors Who See Value in Those Baby Blues

### HEARD ON THE STREET

By MICHAEL W. MILLER  
Staff Reporter of THE WALL STREET JOURNAL

**NEW YORK** — Investors in International Business Machines are starting to ask a question once unthinkable: Is IBM worth more dead than alive?

With Big Blue's stock mired near a 10-year low, Wall Street is starting to take a hungry look at the dozen increasingly autonomous units into which IBM carved itself last year. Traded separately, the fantasy overhead costs, break all their bad habits and enjoy the juicy market multipliers that software and other high-tech specialties command.

Yesterday, news of a product delay at a competitor helped IBM's stock perk up 1 1/2% to 67 1/2, even though many analysts believe the issue still hasn't hit bottom in its steep autumn dive.

"IBM might have a lot more value broken up," says Charles Biderman, publisher of the Market Trim Tabs investment newsletter. "The train called IBM is headed towards the junkyard, unless the parts of it get off and go their own way."

Don't hold your breath for an out-and-out bust-up takeover of IBM, still priced at \$38 billion. But the company itself is quietly working on ways to give shareholders more value from the Baby Blues.

The current scenario of choice inside IBM, industry officials say: special stocks similar to the General Motors H and E shares, which are pegged to results of the maker's Hughes Aircraft and Elec-

The Story of IBM



	ANNUAL REVENUE (\$bilions)	ESTIMATED PROFIT (\$bilions)	INDUSTRY GROWTH RATE	MARKET CAP (\$bilions)
<b>BIG BLUE</b>	\$67.0	\$2,500	8%-9%	15
<b>SOME BABY BLUES*</b>				
Application Business Systems (midrange computers)	11.4	950	5%-10%	14
Programming Systems (application software)	2.7	290	10%-15%	17
Integrated Systems Solutions Corp. (data processing for outside customers)	0.5	30	15%-20%	2
Pennant Systems (high-end printers)	2.1	30	15%-20%	2
Adstar (disk drives, other computer storage)	11.9	870	20%-40%	14

\*Profits if each unit is sold as a separate company. Stock-price multiples are based on estimated 1992 earnings. Sources: Aries Research; Wall Street analysts

tronic Data Systems businesses, respectively. Compared with an outright spinoff, the GM route would preserve a time-worn strategy to which IBM executives cling with religious zeal: offering its customers one-stop shopping for all sizes of computers.

If there's a stock buyback, a long-term play, a subsidiary to be sold, or a spinoff, audited results will be available. And IBM won't stop until the Baby Blues are audited separately. So an IBM spinoff is a possibility. Please Turn to Page C1

## Wall Street Houses Devise Plan to Go to Golden

NO. 1

## *We decided not to die*

KEEPING IBM TOGETHER

Did the world need a company like IBM anymore? In the early 1990s, our way of computing and our way of working with customers had fallen out of vogue, and we were on a fast track to being dismantled, from within.

Then, in the spring of 1993, new leadership brought a new vision—and a surprising decision. IBM would stay together. We believed niche players weren't the future. In fact, breaking up the company would have been the end of everything IBM stood for.

We made a big bet that customers needed a partner who could both create technologies and integrate them—with each other, and with the customer's business processes.

At the time, it was a gutsy call. They always are when you're alone. But we decided that we should be true to ourselves. It all started with that.



Chess Grandmaster Garry Kasparov versus IBM supercomputer Deep Blue, May 11, 1997

## We reaffirmed our *technical heritage*

### REVITALIZING IBM RESEARCH AND DEVELOPMENT

For us, IBM's heritage isn't captured in the volume of patents we earn, as impressive as that is. (In 2001, we became the first company to receive more than 3,000 U.S. patent awards in one year. It was also the ninth straight year we were awarded more patents than any enterprise in any industry.)

Nor is it mostly a function of the discoveries in new fields that are pouring out of our labs, as exciting as those are. (On the horizon, we look to the promise of our pioneering work in areas such as autonomic systems, nanotechnologies and quantum computing.)

For IBM, the true heart of our technical and scientific heritage is in doing research and development that *matter*. IBM's heritage is technology that changes how business is done, how states can govern, how students can learn. IBM's R&D finds its ultimate scorecard not in scientific journals, but in the impact it has on the fundamental problems and opportunities that exist in the world.

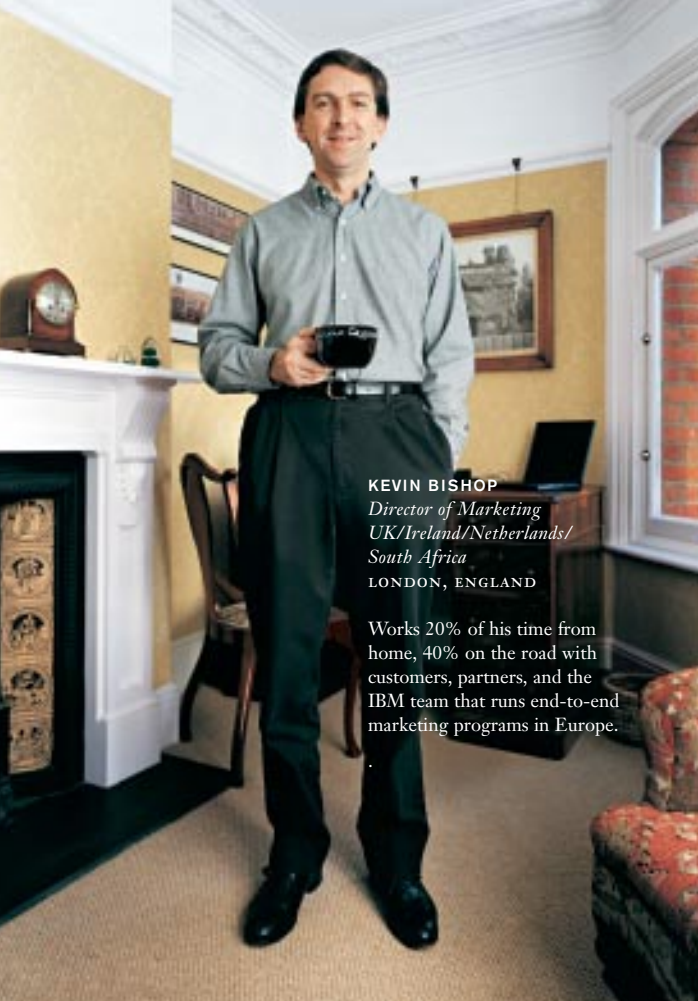
Maybe that's why one Sunday evening in 1997 was such a signal moment. A supercomputer named Deep Blue defeated the reigning chess grandmaster—and announced that IBM was, once again, the place where grand challenges are taken on, and where paradigms get shifted.

#### *In 2001*

OUR STRAINED SILICON TECHNOLOGY STRETCHES SILICON TO SPEED  
THE FLOW OF ELECTRONS THROUGH A CHIP—POTENTIALLY  
*boosting chip performance or cutting power consumption* BY 35 PERCENT

OUR CARBON NANOTUBE TECHNOLOGY USES TINY CYLINDERS  
OF CARBON ATOMS—AS SMALL AS 10 ATOMS ACROSS—TO BUILD TRANSISTORS,  
WHICH COULD LEAD TO *smaller, faster, lower-power* COMPUTER CHIPS

OUR RESEARCHERS EXECUTE THE MOST COMPLICATED COMPUTATION  
EVER PERFORMED ON A QUANTUM COMPUTER,  
A TYPE OF *experimental system* THAT HARNESSES CERTAIN PROPERTIES IN BILLIONS  
OF ATOMS TO PERFORM CALCULATIONS EXPONENTIALLY FASTER  
THAN CONVENTIONAL COMPUTERS



**KEVIN BISHOP**  
*Director of Marketing*  
*UK/Ireland/Netherlands/  
South Africa*  
LONDON, ENGLAND

Works 20% of his time from home, 40% on the road with customers, partners, and the IBM team that runs end-to-end marketing programs in Europe.



**ENA D. CANTU**  
*Supercomputer Storage  
and Systems Administrator*  
CAMP SPRINGS, MARYLAND

Spends 100% of her time at The National Center for Environmental Predictions, maintaining the NCEP's operational weather and climate forecasting system.



**PRISCILLA E. HAY**  
*Senior Problem Manager*  
*IBM Baukham Hills*  
*Command Centre Operations*  
SYDNEY, AUSTRALIA

Monitors the I/T systems for more than 80 customers simultaneously from the IBM Global Services command center.



**KISHORE CHANNABASAVAIH**  
*Executive Architect*  
*Centers for IBM*  
*e-business Innovation*  
CHICAGO, ILLINOIS

Spends 40% of his time in customer locations, the rest in the IBM multimedia center solving complex e-business problems.

## *We rewired the enterprise*

TRANSFORMING OUR CRITICAL PROCESSES AND  
BECOMING AN E-BUSINESS

We had met the enemy, and it was us. Too slow, too costly, too insular.

So in 1994, we rolled up our sleeves and started to transform the way IBM works, from end to end. Most companies attempt one major reengineering project at a time. We launched 11—from the way we manage internal information systems, to the way we develop products and serve customers. It was ambitious—but it wasn't enough.

We came to realize that important organizational change also has to happen in a company's social structures—in how people understand what is expected of them, in how they are rewarded and managed, in the ways that ideas are shared. In order to deliver on our value proposition, we had to change the very nature of work.

### *Speed*

SINCE 1993, *cycle time* FOR LARGE SYSTEMS DEVELOPMENT HAS BEEN SLASHED 56 MONTHS TO 16 MONTHS TODAY. FOR LOW-END SYSTEMS, IT'S SEVEN MONTHS—DOWN FROM TWO YEARS

### *Superior Quality*

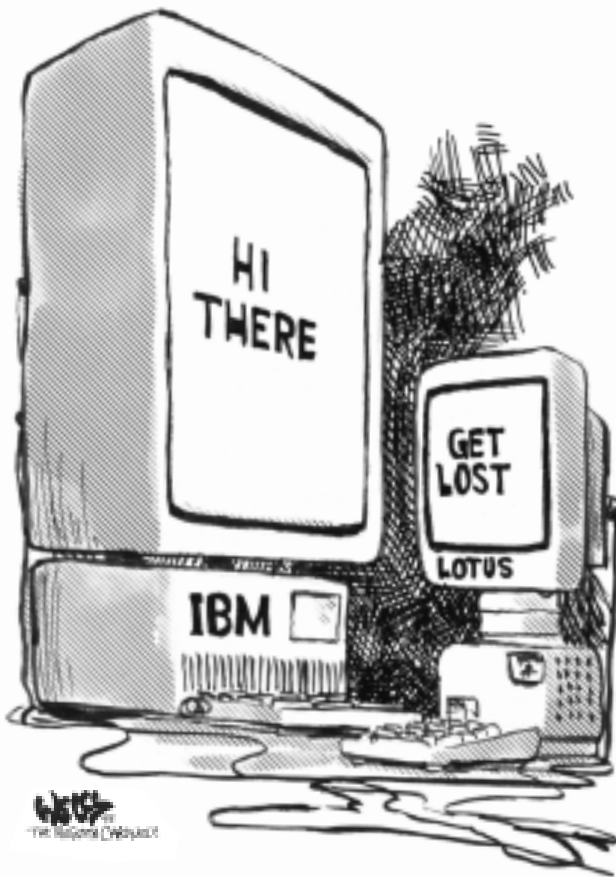
BETWEEN 1997 AND 2001, THE HARDWARE RELIABILITY OF OUR HIGH-END SERVERS *improved by more than 200 percent* WHILE COMPUTING POWER INCREASED BY A FACTOR OF FOUR

### *Simplicity*

SINCE 1993, WE HAVE *reduced I/T spending* BY 31 PERCENT (E.G., BY CONSOLIDATING DATA CENTERS)—FOR A TOTAL SAVINGS OF MORE THAN \$2 BILLION

### *Trust*

EMPLOYEES REGARD IBM'S INTRANET AS THEIR *most trusted source* OF COMPANY INFORMATION—SURPASSING EXTERNAL MEDIA, COWORKERS AND THEIR IMMEDIATE MANAGERS





NO. 4

## We didn't take “*no*” for an answer

WHAT THE LOTUS ACQUISITION TAUGHT US

History records that on June 5, 1995, we launched the hostile takeover of Lotus Development Corp. At the time, it was billed as the largest software acquisition ever. It was actually much bigger than that.

It was the moment that signaled we were out of survival and turnaround mode; when we asserted the will to lead again.

In acquiring Lotus and its elegant collaborative software program, Notes, we simultaneously filled a hole in our portfolio, made a bold move into the world of networked computing, and announced that IBM was back.

With its debut in 1964, the IBM System/360 defined an era in high-end computing. And the name was no accident. The 360, as in the perfect circle, was the paradigm of proprietary systems architecture—its own self-contained world of hardware, software and peripheral equipment.



## We fought for an *open world*

THE END OF PROPRIETARY COMPUTING AT IBM

IBM used to be the poster child for closed, proprietary computing. In the early days of the information technology industry, computer makers built systems that were compatible with their own product lines (mostly), but not with anyone else's.

Even today, that's the way a few I/T companies still build their products—locking in customers and locking out flexibility and choice based on architectural “choke” points.

But not IBM. By the 1980s, it was clear that any high-tech company that tried to impose closed technology on customers would be standing on the wrong side of history. Getting to the right side wasn't easy.

It involved opening up our software to run on all the industry-leading platforms, and supporting non-IBM software on our hardware. Even our services business had to change—recommending, installing and supporting non-IBM products.

We did all that, and along the way built a reputation for backing any effort, with any vendor or any customer, to give our products an even more open identity.

IBM PRODUCES MORE SERVER-BASED MIDDLEWARE ON THE  
WINDOWS NT OPERATING SYSTEM THAN MICROSOFT

IBM ACTIVELY BACKS THE GLOBAL GRID FORUM  
COMMUNITY'S VISION OF OPEN STANDARDS FOR THE “GRID” NETWORKS THAT WILL  
UNITE COMPUTER SYSTEMS AROUND THE WORLD,  
REGARDLESS OF THEIR LOCATION, OPERATING SYSTEM OR MAKER

IBM IS A LEADING SERVICES PROVIDER FOR  
ORACLE AND COMPUTER ASSOCIATES PRODUCTS

1,000 IBM DEVELOPERS—MORE THAN AT ANY OTHER COMPANY—  
ARE WORKING ON LINUX

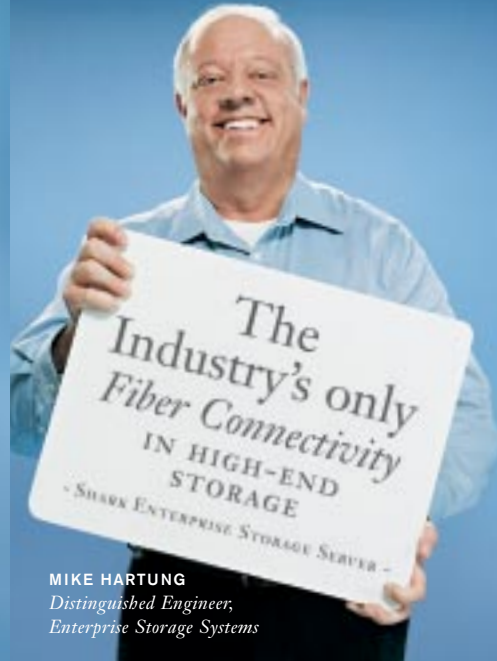
WE DONATED MORE THAN \$40 MILLION IN  
APPLICATION DEVELOPMENT TOOLS TO A NEW, INDEPENDENT, OPEN-SOURCE  
SOFTWARE COMMUNITY CALLED ECLIPSE



**GOPI ADVANI**  
*Product Development Team Leader,  
Wireless RF Products*



**WILLIE NATHAN**  
*Software Engineer*  
**S. LYNN SANDERS FORE**  
*Advisory Engineer,  
eServer xSeries Architecture and Technology*



**MIKE HARTUNG**  
*Distinguished Engineer,  
Enterprise Storage Systems*



**MARCIA SPRINGFIELD**  
*Manager,  
Mobile Hardware and Software Solutions*



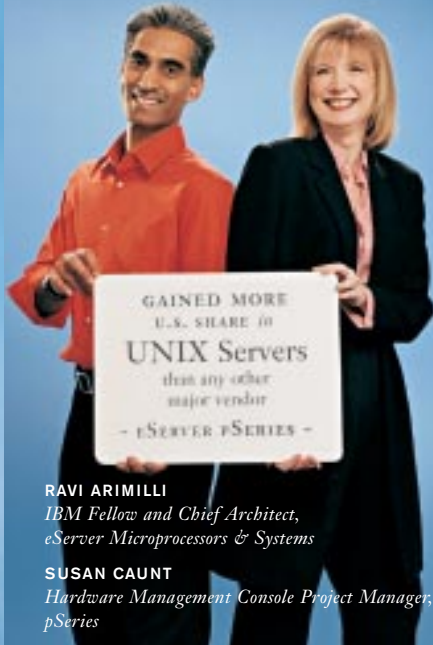
**BOAS BETZLER**  
*Senior Software Engineer*



**DONALD FERGUSON**  
*IBM Fellow*



**NELSON M. MATTOS**  
*Distinguished Engineer and Director,  
Information Integration—Data Management*



**RAVI ARIMILLI**  
*IBM Fellow and Chief Architect,  
eServer Microprocessors & Systems*  
**SUSAN CAUNT**  
*Hardware Management Console Project Manager,  
pSeries*



**DAVE BOUTCHER**  
*Senior Technical Staff Member,  
iSeries Linux Development*

## We decided *our products* would set the standard

NOT ON PLANET IBM, BUT ON PLANET EARTH

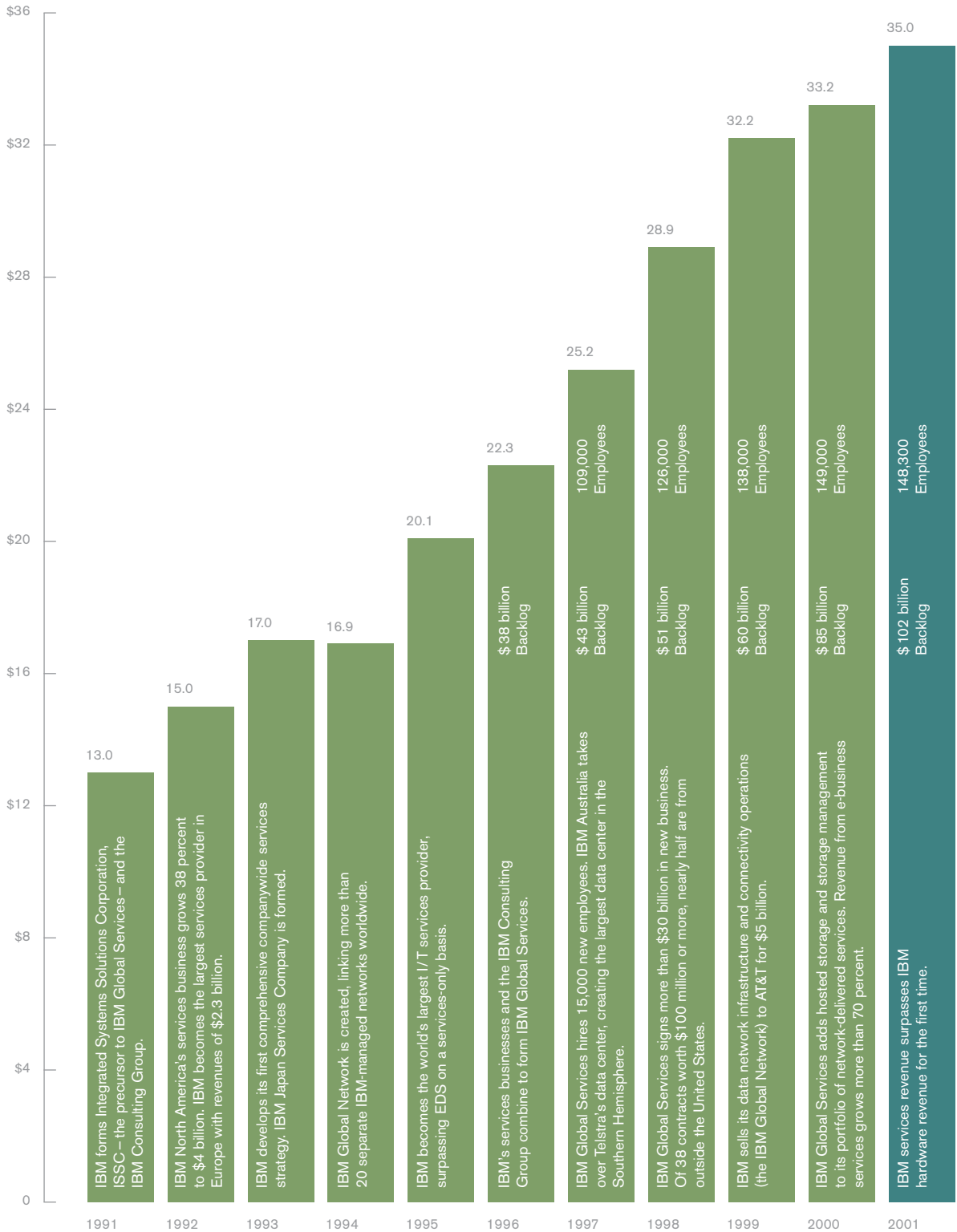
For a long time, we won with such consistency that we started to look for another challenge. We began to compare the performance of our products against *our own* prior generation, regardless of what our competitors were doing. By the early '90s, it was clear we were playing the wrong game.

So we stopped the internal benchmarks, and got serious about winning against the best the marketplace had to offer.

That decision forced us to speed up, to bring new technologies to market on shorter and shorter cycles. And it also triggered a chain reaction across the company—changing our investment and acquisition strategies, our approach to market analysis and the way we prioritize research efforts.

Today, we are the number 1 or number 2 company in servers; collaborative software; custom logic; middleware; I/T services; maintenance; Web software; high-end disk storage; distributed application software; and total software.

It's remarkable how much more you win when you're in the right game.



Total IBM Services Revenue (\$ in billions)

## *We grew a business from the ground up*

### THE BIRTH OF IBM GLOBAL SERVICES

Put another way, we realized that the future of the computer industry wasn't in computers.

In 1991, we were a \$64.8 billion company that got less than \$6 billion from non-maintenance services. Ten short years later, the business of information technology *services* generated more than 40 percent of our \$86 billion in sales and became the single largest source of revenue in our portfolio.

How did that happen? It was partly the result of old-fashioned hard work and serious commitment—growing customer by customer; building disciplined management and financial systems; and investing to hire and train experts in everything from I/T consulting, to systems architecture, to Web services. We used our financial strength to fund the expensive push into outsourcing. And we placed informed bets on the future—in areas such as I/T utility services (“e-business on demand”) and hosted storage.

But most important, the success of IBM Global Services comes from something very simple—a clear understanding of customers' needs. We saw that technology and business were converging to create something new—and challenging—for every kind of enterprise. We had the deep experience in both areas to help our customers combine them most effectively.



IBM and Computer & Technologies Software Ltd. form a strategic alliance to provide e-business solutions in China.



Sharp and IBM jointly form a new solutions company and enter into a strategic outsourcing partnership.



IBM and Shanghai Telecom form a strategic alliance to provide e-business hosting services.



IBM and The Bank of China's Jiangsu Branch celebrate the installation of the 100th Shark Enterprise Storage Server.



IBM and the Korea Institute of Science and Technology Information sign Asia's largest supercomputer deal.



Malaysia's CyberVillage Sdn Bhd joins IBM's Accelerated Growth Program.



## *We put down roots in Asia*

### CAPTURING NEW MARKETS

For IBM, Asia isn't an "emerging market." We started our first operations there in 1925, and have built a \$17 billion franchise—which alone would make our Asian operations one of the largest information technology companies in the world.

Identifying the world's emerging growth markets isn't that hard. The trick is operating inside those markets as a local enterprise, one that understands business practices and cultural traditions that can form barriers-to-entry more formidable than tariffs or entrenched competitors.

Until the mid-'90s for example, Asian companies staunchly resisted strategic outsourcing, long after other parts of the world had embraced it. When we signed our first outsourcing contracts in Japan, it was because our customers understood that their employees were not moving to a foreign company with a local presence, but to a Japanese company with very familiar values and principles.

STRATEGIC OUTSOURCING REVENUE IN ASIA WENT FROM  
NOTHING IN 1995 TO \$2.6 BILLION IN 2001,  
WITH 47 PERCENT GROWTH AT CONSTANT CURRENCY LAST YEAR

IN JAPAN, SERVICES REVENUE IN 2001  
INCREASED 25 PERCENT IN A VERY DIFFICULT ECONOMY

OUR STAFF IN THE PEOPLE'S REPUBLIC OF CHINA STOOD AT 120 IN 1991.  
THAT'S GROWN TO A WORKFORCE OF MORE THAN 11,000 TODAY, INCLUDING  
WHOLLY OWNED SUBSIDIARIES AND JOINT VENTURES.  
REVENUE INCREASED 30 PERCENT TO \$1.5 BILLION IN 2001

**PAUL CHOU**

*Emerging Interactive Spaces*

IBM and Steelcase Inc.: innovative work environments that integrate architecture, furniture design and advanced I/T to increase creativity, improve comfort and provide more personalization.

**PAUL BORREL**

*Product Lifecycle Management*

IBM and Dassault Systèmes: advanced solutions that enable product innovation, design collaboration and the sharing of product data with pervasive computing technology.

**DAVID E. JOHNSON**

*Text Mining and Computational Linguistics*

IBM and Wachovia: a system that learns and performs fast, accurate and high-volume text documentation categorization.

**KATHERINE BETZ**

*Secure Electronic Payments*

IBM, The Bank of Tokyo-Mitsubishi and The Industrial Bank of Japan: a framework for global financial institutions and their corporate customers to use the Internet for payments.

**DAVID NAHAMOO**

*Human Language Technologies*

IBM and T. Rowe Price: the first natural language understanding system that allows 401(k) participants to manage their accounts simply by speaking into the phone.



IBM Researchers who work on first-of-a-kind projects with customers, The Thomas J. Watson Research Center

## We brought the marketplace into *our labs*

BRINGING CUSTOMER FOCUS TO OUR TECHNICAL COMMUNITY

“IBM products aren’t launched. They escape.”

During the early 1990s, we heard that frequently, both from customers and from our own scientists, engineers and developers.

So we set to work reinventing the way we create, develop and deploy new technologies. We got innovations to market much faster, but we also found we had to do the reverse—bring real-world customer wants and needs into our laboratories.

Today, the linkage between our research and development labs and the marketplace has never been tighter. At the same time our researchers are chasing computational grand challenges or pioneering the frontiers of material science, we’re just as apt to be building prototype solutions with a customer. In fact, one quarter of our researchers are involved in this kind of joint project. Ideas flow in. Technologies flow out. The result is a new type of creative chemical reaction—between the discoveries of the lab and the immediate needs of business—that opens up new possibilities in both.



**NINTENDO**  
GameCube

**CANON**  
PowerShot S30  
Digital Camera

**e.DIGITAL**  
Treo 10 Digital  
Music Jukebox

**DELL**  
Inspiron 8200 Notebook Computer

## *We shared the crown jewels*

### BUILDING THE OEM BUSINESS

There was a time when all our component technologies, such as semiconductors and hard disk drives, went inside our own products. And only there.

That was then, this is now. In order to support our massive investments in R&D, we needed additional revenue streams, so we began doing something previously unthinkable—selling our technology products to other high-tech companies. Fortunately, our technology was so good that we sold a lot of it—multibillion dollars' worth, creating a large OEM (original equipment manufacturer) business.

But that was just for openers. Now is when it gets interesting.

We're entering a period of explosive demand for semiconductors—from processors for the largest servers to chips in everything from your car to your microwave oven, plus billions of Net access devices like intelligent cell phones or PDAs.

Every one of those devices needs memory, storage and communications capability, in addition to the processor. And for every kind of device, there's a slightly different kind of chip design.

This is a good time to have the largest custom chip business in the world. We do. In 2001, IBM was one of only two top-30 chip makers that grew revenue.



**COMPAQ**  
iPAQ Pocket PC



**NIKON**  
Coolpix 5000 Digital Camera



**FRONTIER LABS**  
Nex II Digital  
Audio Player



**e.DIGITAL**  
MXP 100 Digital  
Audio Player/Voice  
Recorder



**KYOCERA MITA**  
ECOSYS Printer  
FS-1800



## *We didn't give up on the mainframe*

A RETURN TO ENTERPRISE COMPUTING

“I PREDICT THAT THE LAST MAINFRAME WILL BE UNPLUGGED  
ON MARCH 15, 1996.”

*Stewart Alsop, InfoWorld, March 1991*

In 1991, Stewart Alsop was far from alone. Most respected industry pundits were declaring the end of the “mainframe era.” So we don’t hold it against him. We’re just glad he has the grace and good humor to see things differently today.

To be fair, the “mainframe,” circa 1991, *was* a dead end. But we believed (along with a lot of our customers) that this *way* of computing—serious, secure, industrial-strength—would always be in demand.

So we stuck with “big iron,” but reinvented it from the inside—infusing it with an entirely new technology core, reducing its price, and building support for open standards and operating environments like Linux.

Since 1992, shipments of mainframe computing capacity have increased more than 30 percent annually. And in the years since the last one was to have been unplugged, our mainframe business has generated revenues in excess of \$19 billion.

“IT’S CLEAR THAT CORPORATE CUSTOMERS STILL  
LIKE TO HAVE CENTRALLY CONTROLLED, VERY PREDICTABLE,  
RELIABLE COMPUTING SYSTEMS—EXACTLY THE KIND  
OF SYSTEMS THAT IBM SPECIALIZES IN.”

*Stewart Alsop, February 2002*



**JIM HANEY**  
*Vice President*  
*Architecture and Planning*  
WHIRLPOOL CORPORATION

“In our business, the supply chain is as important to our competitive advantage as the quality of our products. Our WebSphere-based partner trade portal dramatically improved ordering time and cut our costs by more than 80 percent.”

“In today’s economy the investments we make in technology have to pay back. Our Tradetopia extranet assists sales managers and food brokers in planning and tracking trade promotions and in handling deductions. It produced 100 percent ROI in under a year.”

**DANIEL P. DILLON**  
*President and Chief Executive Officer*  
WELCH FOODS, INC.



**PHILIP F. MOONEY**  
*Director, Corporate Archives*  
THE COCA-COLA COMPANY

“Flexible and efficient management of CNN’s huge, daily volume of content is one of the keys to our success. Extending content—such as our 150,000 hours of archive content in a digital world—will be done with enterprise-level media management systems via IBM middleware.”

“In order to understand our brands and their positioning, our employees have to be steeped in the traditions, history and imagery of our company. We’ve been able to bring to life thousands of video clips, photos and documents and make them instantly available to our associates all over the world.”

**GORDON CASTLE**  
*Senior Vice President, CNN Technology*  
CNN



**MAYNARD WEBB**  
*President, eBay Technologies*  
EBAY

“Our business is our website. We’ve got 42 million registered users who are listing millions of items and transacting over \$30 million in gross merchandise sales on the eBay site each day. You don’t run that kind of Web enterprise on anything but industrial-strength platforms.”

“We’re transforming our business with a new e-business infrastructure—powered by IBM database, communications, application and system management software. For customers, this means new and better services. For employees, it means our intranet, e-Spacio, can simplify and speed up how we work.”

**JOSE MANUEL AGUIRRE LARIZGOITIA**  
*Senior Vice President and CIO*  
BBVA GROUP



## We majored on *middleware*

### BUILDING OUR SOFTWARE BUSINESS

In 1993, nobody would have recognized the term “middleware.” Today, it is nearly 40 percent of the \$230 billion software marketplace.

It’s also what we bet our software business on in 1995, when we were looking for IBM’s next growth opportunities.

Middleware is the collection of products—databases, transaction management systems, messaging, systems management—that lets customers do things they care about. Things like allowing your online bookstore to make recommendations based on prior purchases, or keeping your credit card information confidential when you go to the Net to buy an airline ticket.

Middleware represents 80 percent of our \$13 billion software business. We’re the world’s leading provider, and we’re growing faster than our main competitors.



*(music under)*

*Web Guy:* I've got some great ideas for our website. We could have a spinning logo like this one... or a flaming logo. This is cool!

*Boss:* You know what would be a great idea? If people with PCs anywhere could order our products...and that was all tied together with inventory, billing, vendors. You know, the works. Then, that would change everything.

*Web Guy (perplexed):* I don't know how to do that.

*Closing title shot:* IBM helps thousands of companies do real business on the Web.

*e-business logo...(music out)*

## We found *our voice*

REINVIGORATING THE IBM BRAND AND EVANGELIZING E-BUSINESS

We recaptured something we'd lost—our ability to engage our customers and our industry in a meaningful conversation about what matters to us, and to them.

This wasn't about cranking up the volume, issuing more press releases, or producing memorable TV commercials. It was about rediscovering our confidence and articulating what we believe. Things like:

- WE ARE ENTERING A POST-PC ERA.
- THE DOT-COMS ARE FIREFLIES BEFORE THE STORM.
- THE WINNERS IN THIS INDUSTRY WILL DO ONE OF TWO THINGS: INNOVATE OR INTEGRATE.

When we rediscovered our voice, we discovered something else: our sense of direction, the courage to stand apart from the crowd and, ultimately, what it means to speak out like a leader again.

**BOB QUINN**

*Finance Program Manager*



**KIM SHEDLIN**

*Administrative Assistant*



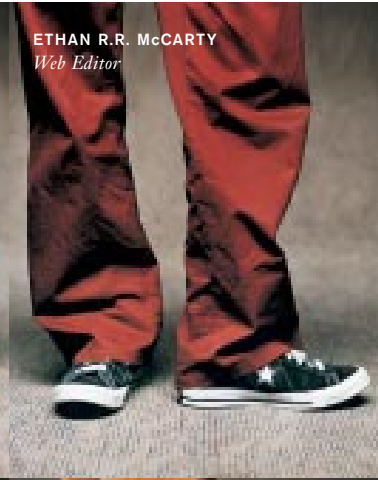
**DANIEL DREYER**

*Human Resources*



**ETHAN R.R. McCARTY**

*Web Editor*



**JIAN M. WU**

*I/T Specialist*



**LAUREN WINSTON**

*Certified Sales Specialist,  
Personal Computing*



**BRADFORD HOBBS**

*Director, Corporate  
Brand Strategy*



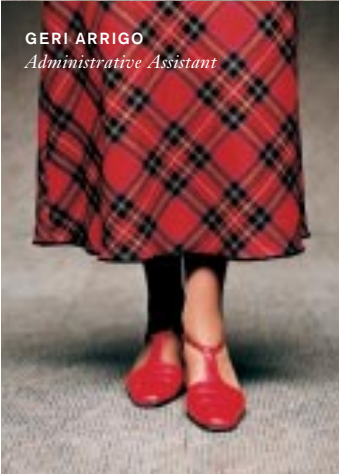
**LUBA M. LABUNKA**

*Senior Project Manager,  
Emerging Market Finance*



**GERI ARRIGO**

*Administrative Assistant*



**KIMBERLY NASUTA**

*Systems Management Integration  
Professional*



**LARRY RICCIARDI**

*Senior Vice President*



**GRACE SUH**

*Program Manager  
Corporate Community Relations*



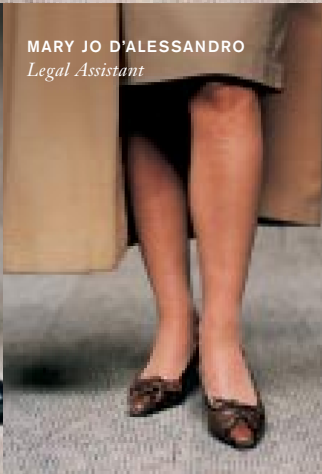
**JOHN T. O'LEARY**

*Software Account Manager*



**MARY JO D'ALESSANDRO**

*Legal Assistant*



**MAUREEN POWER**

*Client Services Principal,  
J. P. Morgan Chase & Co.*



**RICHARD MUSHLIN**

*Researcher,  
Computational Biology*



## *We loosened our tie*

### CHANGING CORPORATE CULTURE

In the early days of the 1990s, we knew that a lot of things about IBM had to change: financial, strategic, operational. We tackled those, and by the middle of the decade, the company was no longer on life-support.

But there was one more hill to climb. In order to deliver on IBM's value proposition—uniting business knowledge and technology to provide integrated solutions for our customers—we had to change something even tougher.

Ourselves.

We've reinvented how we compensate people and who we hire. We provided people with the tools, opportunities and flexibility to control their own work/life balance, and their own learning. We've rethought all kinds of assumptions about management, including the role of the manager.

Changing a company's culture—turning it once again into an unbeatable competitive asset, rather than a near-fatal malady—that's about a lot more than allowing people to bring their dogs into the office or dropping a dress code.

And, for the record, "dropping the IBM dress code" was the biggest culture-change move we *never* made. We simply said IBMers should dress appropriately for the task at hand. We trusted their judgment—on a lot more than clothing.

[REDACTED]

[REDACTED]

[REDACTED]

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## We remembered our *middle name*

BUILDING A REPUTATION IN BUSINESS INNOVATION

At our core, we've always been a technology company—including back in the '60s and '70s, when we were taking a consultative approach to transforming customers' back-office processes like accounting and payroll.

In the late 1980s, however, we lapsed. We forgot that the commitment to business solutions—not technology for technology's sake—is what separates IBM from the field.

That's the reason we're no longer organized by geographic regions or product sets, but align our expertise and resources around customers and industries. It's why we created a services business and committed ourselves to integrated solutions.

And it's what led us to define the Internet phenomenon not as “the network” or “the Information Superhighway” or “the wired world,” but as “e-business.”

It's why we're quite comfortable with our middle name.



INTERNATIONAL BUSINESS MACHINES CORPORATION  
500 MADISON AVENUE  
NEW YORK 22, N. Y.

OFFICE OF  
THE PRESIDENT  
Confidential

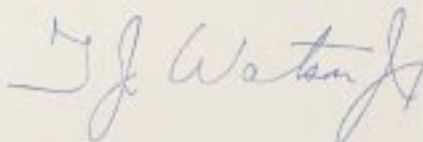
September 21, 1953

Policy Letter #4

The purpose of this letter is to restate for all of the supervisory personnel of the IBM Company the policy of this corporation regarding the hiring of personnel with specific reference to race, color, or creed.

Under the American system, each of the citizens of this country has an equal right to live and work in America. It is the policy of this organization to hire people who have the personality, talent and background necessary to fill a given job, regardless of race, color or creed.

If everyone in IBM who hires new employees will observe this rule, the corporation will obtain the type of people it requires, and at the same time we will be affording an equal opportunity to all in accordance with American tradition.



T. J. Watson, Jr.



## We never abandoned *our values*

### OUR RESPONSIBILITY TO THE COMMUNITIES IN WHICH WE WORK AND LIVE

Everything else in this report has been about what changed over the past nine years. This is about what didn't.

Long before there was an Internet, before computers, or semiconductors, or even vacuum tubes, there were ethics, corporate citizenship, social and environmental responsibility and fairness.

We make our business in the high-tech revolution of the networked world. But we *built* our business on a system of beliefs. These values transcend the progression of one generation of technology to the next—or, for that matter, of one generation of people to another.

Of course, as the needs within communities changed, so did the nature of our philanthropic efforts, or the way we applied our expertise and technologies. We adapted the approach, but never the underlying principles.

So perhaps this last decision is really more of a pledge, or a promise that a company and its people make to the institution, and to one another: To remain faithful to values that never change. And to remember—at every step of the journey—who we are, and what we stand for.

*In 2001*

IBM CONTRIBUTED MORE THAN *\$127 million* TO PROGRAMS AROUND  
THE WORLD THAT HELP PEOPLE IN NEED

INDIVIDUAL *employees contributed another \$51.2 million* THROUGH MATCHING  
GRANTS AND DONATIONS TO NONPROFIT ORGANIZATIONS AND INSTITUTIONS

IBMERS *volunteered more than 4 million hours* OF TIME AND EXPERTISE  
TO A BROAD RANGE OF LOCAL CAUSES

IBM CONTINUED ITS COMMITMENT TO *improve the quality*  
OF K-12 EDUCATION THROUGHOUT THE WORLD WITH ITS \$70 MILLION  
REINVENTING EDUCATION GRANT PROGRAM

U.S. ENVIRONMENTAL PROTECTION AGENCY PRESENTED IBM  
THE 2001 ENERGY STAR® *“excellence in corporate commitment”* AWARD

DURING THE PAST SIX YEARS, IBM HAS *increased its number* OF WOMEN  
EXECUTIVES WORLDWIDE BY 246 PERCENT

# Seven shifts that *will transform* the future (yours, and ours)

## 1. Computers *will care* for themselves.

Mere humans don't stand a chance of keeping pace with the coming onslaught of data volumes and transaction flows, not to mention the complexity of information systems themselves. Fortunately, mere humans can infuse the systems with the ability to manage the complexity themselves. Called *autonomic computing* (after the human autonomic nervous system that governs activities like heart rate, digestion and breathing), this will make our systems more reliable, self-managing, self-protecting and even self-healing—freeing up enterprises to focus on more creative things, like new uses for those very systems.



## 2. *Advanced computing devices will take* a lesson from a mollusk.

Scientists today can etch microscopic lines in computing components that are astoundingly fine, but the processes are themselves astoundingly intricate, complex and increasingly expensive. Now, scientists are taking a cue from the lowly abalone, which organically combines materials to form a shell 3,000 times stronger than its component elements. That principle of natural self-assembly is behind using chemical reactions to form materials with built-in nano-scale features. IBM scientists have already moved individual atoms. Tomorrow, they just might be able to make those individual atoms do some amazing work.



## 3. Enterprises will dismantle *industrial age* workplaces.

Once, we shoehorned people into office complexes so they could be near the filing cabinets and each other. No longer. "The office" will be discarded in response to a changing workforce with radically different expectations, a marketplace that has no time for bureaucracy (or time zones), and technologies that make the traditional workplace an e-workplace. At IBM, we're not only studying this in our labs—we're also learning about it, and living it, in our e-business-enabled work lives.



#### 4. The *small (and energy-efficient)* will pack quite a wallop.



For many of tomorrow's most massive computing challenges, IBM scientists expect to see 10 times the energy efficiency at the same cost by assembling "cellular architectures" of thousands, even millions of simpler microprocessors that will work in parallel on discrete "chunks" of a problem. When aggregations of these power-efficient chips combine their resources over virtualized computing networks, we may see supercomputer performance within reach, not just of enterprises of all sizes, but individuals.

#### 5. Converging technologies may *decode* (and extend) the book of life.

The mapping of the human genome was as much a triumph of advanced computation as of advanced biology. Now that we've created this autobiography of our species—a book 3 billion chemical letters long—what we read there may drive astounding quality-of-life improvements: dramatic reductions in the cycle time for development of new pharmaceuticals; personalized medications that interact with an individual's unique genetic make-up; and the potential to defeat scourges like heart disease or AIDS. Some researchers believe we're on the verge of the first significant increase in life spans—on the order of 20 years—since the introduction of antibiotics.

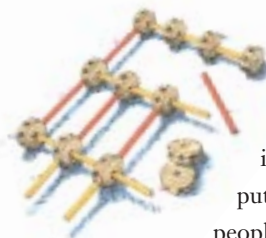


#### 6. You'll be able to manage *an army of "you."*



People used to worry that cyberspace would mean the loss of individual identity. If only. We collect too many identities—passwords, user names and customer profiles that multiply every time we surf a new website—and as a result, fragment the image we present any time we enter a physical store, classroom, website, bank, or government office. The solution? Technologies being developed today by IBM and others can make possible one "virtual identity"—single, encompassing and under our total control through all our daily interactions and transactions. If we've earned preferred-customer status, we'll get it. If we're a first-timer in need of some extra hand-holding, that, too, will be obvious.

#### 7. All computers (and computer users) will join "*the grid.*"



Just as electricity has become part of the global infrastructure on which modern life depends, the same thing is about to happen with computing. What's coming is an interconnected, shared computing infrastructure through which people will access the computational resources of...the world. In essence, millions of computers will be interwoven into a gigantic grid which people will use like a utility. This emerging global infrastructure will be, essentially, like one big computer.

the 1990s, the number of people with a mental health problem has increased in the UK (Mental Health Act 1983, 1990).

There is a growing awareness of the need to improve the lives of people with mental health problems. The Department of Health (1999) has set out a strategy for mental health care in the UK. The strategy is based on the following principles:

• People with mental health problems should be treated as individuals, with their own needs and wishes.

• People with mental health problems should be given the opportunity to participate in decisions about their care and treatment.

• People with mental health problems should be given the opportunity to live in their own homes and communities.

• People with mental health problems should be given the opportunity to work and to contribute to society.

• People with mental health problems should be given the opportunity to live a full and meaningful life.

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