



startup

because you can.

One of the wonderful things about starting any new venture is the freedom. To have big ideas, breathe life into them, and build them. From scratch. That freedom is appealing, but exists – practically speaking – for relatively few.

Until now.

Because whether you're two friends tinkering in a garage, or you work inside one of the most venerable enterprises on earth, the rise of a globally connected world offers a truly rare opportunity: the chance to start something totally new.

This is what we believe at IBM. And it is the core idea we are taking to customers (and pursuing ourselves): how to seize this unique moment and rethink what you do, reconceive what you offer and, along the way, reinvent who you are.



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

Dear fellow investor,

Last year my message to you was one of continuity. We were making our strategic vision of a networked world real, in the marketplace and in the laboratory. We were intensifying execution across all our businesses to produce marketplace wins and consistent revenue growth. I said that we planned to stay the course.

We did that in 1998, and the results were strong. Our market value – probably the most important measure of progress to investors – grew \$69 billion. (It has grown by \$146 billion since our major restructuring in 1993.) Last year, IBM's share price rose 76 percent. As 1999 began, our Board of Directors approved the second IBM stock split in two years.

There were good reasons for this growth in investor confidence in IBM. For the fourth straight year, we reported record revenue – \$81.7 billion. Our earnings rose to \$6.3 billion. We set a new record in earnings per share. Customer satisfaction improved measurably. After making substantial investments – \$5.6 billion in research and development, \$6.5 billion on capital expenditures, and \$700 million to acquire companies that strengthened

our portfolio of businesses – we still had substantial cash on hand to return to shareholders via dividends and our ongoing stock buyback program (another \$6.9 billion of IBM shares in 1998). Even then, we finished the year with \$5.8 billion in cash.

We had our difficulties, too. Some were external – the economic distress in Asia and Latin America, soft memory chip prices and a PC price war. Some were of our own making – wrestling with important product transitions in our server line, for example. But overall, in the marketplace and inside the company, IBM remains on track.

You might expect, then, that my message for 1999 would be the same – continuity and staying the course. But continuity is not my message to you this year.

No year is easy to predict, but 1999 promises to be unique for our industry and for IBM. Like every year, we see significant opportunities combined with a truckload of uncertainties. This year, those uncertainties include continuing softness in Asia and Latin America, the impact of the Euro conversion and, of course, the much publicized Year 2000 problem (more on Y2K later).

What makes 1999 different, though, is that a historic shift – something IBM began talking about three years ago – is taking hold, and it’s reshaping everything: how we work, how we shop, how we interact with our governments, how we learn, what we do at home. Every day it becomes more certain that the Internet will take its place alongside the other great transformational technologies that first challenged, and then fundamentally changed, the way things are done in the world.

One school of thought says a new mass medium has been born when it’s used by 50 million people. Radio took nearly 40 years to hit that threshold. TV took 13 years. Cable TV, 10 years. The Internet did it in less than five. As I write this, more than 140 million people are online. Today the Net is largely a U.S. phenomenon, but that won’t last long. Already seven countries other than the United States have about 10 percent of their populations using the Web. In China, which is really just now joining the world economy, Web growth is astonishing.

Figuring out what all those people were going to do when they were linked by the Web has kept the gurus in overdrive. We used to hear a lot about the Information Superhighway, with the Web playing the role of local library. Next, you heard about the Wired World, in which people sent e-mails and then relaxed in chat rooms. All of that has happened, but it isn’t where the real action is.

From the beginning, IBM’s position has been consistent. Since 1995 we have been saying that the Net is about mainstream business, not browsing – about conducting real commerce, not

merely accessing content. At the time IBM articulated this “vision,” it sounded downright uncool. And the gurus said so.

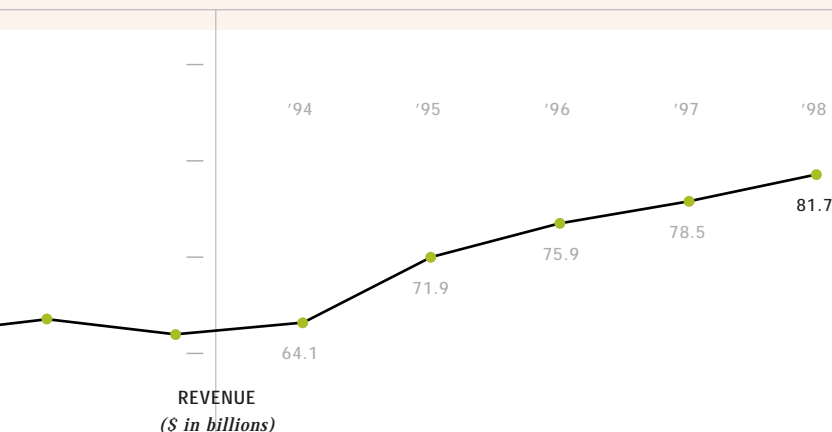
Well, today this position is feeling a lot less lonely. In fact, it’s getting pretty crowded, as the prevailing opinion swings our way and people talk about this transformation in terms of a “networked society” and a “networked economy.”

At IBM we call this “e-business,” and it represents an enormous opportunity. We expect the overall information technology industry to grow at an annual rate of 10 percent, to \$1.6 trillion by 2002. Of that, the e-business segment will grow to \$600 billion, and it will grow twice as fast as the industry overall. (We intend to capture a good chunk of that new business.)

I said that 1999 is going to be unique. Here’s why: With this fundamental change just beginning, I believe that the next two years are going to witness a sweeping shakeup. In just about all businesses – including information technology, but also banking and retailing and health care, and in the noncommercial world, too – we will see new leaders emerge, and we will see some old, longtime leaders sink. Competitors will spring up out of nowhere – competitors called “something.com.”

Savvy businesspeople know this and are intensely focused on what to do. IBM holds daylong seminars on the new world of e-business for CEOs and CIOs from every part of the world. Of late there have been no empty seats. In the pages of this Annual Report, you will read what we tell these customers about e-business and what it takes to succeed in the evolving networked world. We’ll also tell you why we think IBM is uniquely qualified, structured, situated and ready not only to benefit from all this change, but to emerge stronger than ever.

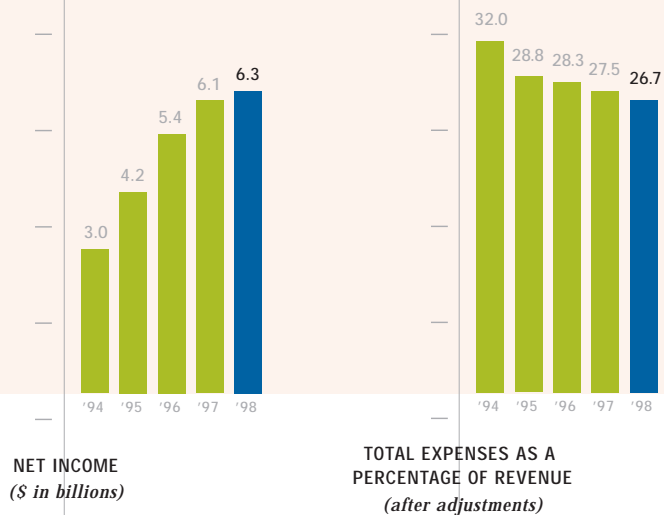
As we stand on the brink of the 21st century, with the mass media full of millennial retrospectives and predictions, there’s a strong temptation to make grand pronouncements. I’m going to try to resist that temptation. However, at our CEO/CIO

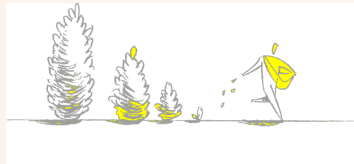


FINANCIAL HIGHLIGHTS International Business Machines Corporation and Subsidiary Companies

(Dollars in millions except per share amounts)

	1998	1997
For the year:		
Revenue	\$ 81,667	\$ 78,508
Income before income taxes	\$ 9,040	\$ 9,027
Income taxes	\$ 2,712	\$ 2,934
Net income	\$ 6,328	\$ 6,093
Earnings per share of common stock—basic	\$ 6.75	\$ 6.18
Earnings per share of common stock—assuming dilution	\$ 6.57	\$ 6.01
Cash dividends paid on common stock	\$ 814	\$ 763
Per share of common stock	\$.86	\$.775
Investment in plant, rental machines and other property	\$ 6,520	\$ 6,793
Average number of common shares outstanding (in millions)		
Basic	935	983
Assuming dilution	960	1,011
At year end:		
Total assets	\$ 86,100	\$ 81,499
Net investment in plant, rental machines and other property	\$ 19,631	\$ 18,347
Working capital	\$ 5,533	\$ 6,911
Total debt	\$ 29,413	\$ 26,926
Stockholders' equity	\$ 19,433	\$ 19,816
Number of employees in IBM/wholly owned subsidiaries	291,067	269,465
Number of common stock holders	616,800	623,537





NEW PRODUCTS Nearly half of 1998's \$35.4 billion in hardware revenue was generated by products introduced in the past 12 months.

meetings and whenever I meet with customers, I am asked where IBM stands on a wide variety of technology issues. I'd like to cover a few of these, because I believe they are the ones on which the new leaders will be focusing more and more over the next two years. At IBM, we are.

- ***The Internet isn't just creating new businesses. It's creating new business models.***

Businesses and institutions are finding that the Net is the most potent tool they've ever had to build competitive advantage. I don't mean just online retailing, which has been getting a lot of attention lately. Many of the most impactful e-business solutions we are building with our customers are aimed at transforming less glamorous but extremely important processes like supply chain management, customer service and support, and distribution.

But the important point is that e-business is not simply a matter of adding another distribution channel or introducing some new efficiencies. It is driving customers to do business in a fundamentally different way.

This feverish search for new business models is having another interesting effect. It's creating a breeding ground for a new generation of startup companies. This may not be surprising. What has been unexpected is that *every* business and institution now has a chance to rethink what it does.

IBM is in a strong position to help. In our solutions business we have amassed thousands of experts who understand the inner

workings of 26 major industries, from banking to entertainment to education. In working with thousands of customers, we come to understand which issues are common from industry to industry – and we can leverage that knowledge for our customers very quickly.

- ***The greatest competitive advantage in the information technology industry is no longer technology.***

Without question, strength in basic and applied research remains essential in our industry – not only to achieve the breakthroughs that make new products possible, but also because they give the discoverer a unique ability to foresee, and shape, the future.

However, technology changes much too quickly now for any company to build a sustainable competitive advantage on that basis alone. Someone is always inventing some software code or device that is a little faster or cheaper. More and more, the winning edge comes from *how you help customers use technology* – to steal a march on their competitors, to implement entirely new business models. That means creating integrated solutions that draw on the full range of products and, increasingly, services. And it means connecting the dots between what you learn in the lab and what you learn in the marketplace.

We understood this when we decided six years ago to keep IBM together. And we've seen it borne out most clearly where all the pieces of information technology come together – in

STOCK PERFORMANCE 1998
End-of-week closing prices



information technology services. With its huge current demand, solid fundamentals underlying future demand and lack of a dominant competitor, I/T services has all the earmarks of a classic growth business.

I believe that IBM is well positioned to win a disproportionate share of that growth. IBM Global Services has grown in just eight years from a \$4 billion to a \$24 billion business, with better than 20 percent annual growth. And its market leadership is increasing, because the 126,000 IBMers who work in services can draw on all the technology and human assets of IBM, including an R&D community with a strong record of innovation (they just marked their sixth straight year of U.S. patent leadership).

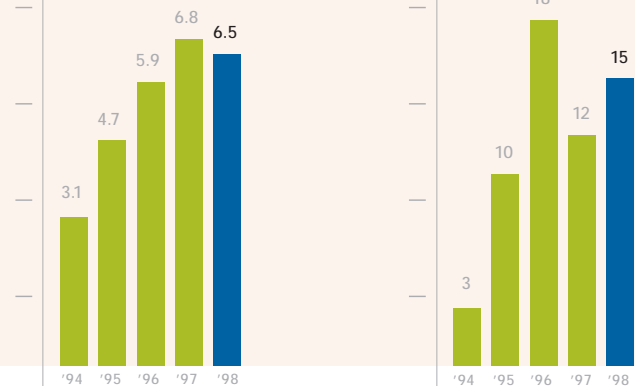
- **The PC era is over.**

This is not to say that PCs are going to die off, any more than mainframes vanished when the IBM PC debuted in 1981. Indeed, IBM's own PC business was an important turnaround story in 1998. But the PC's reign as the driver of customer buying decisions and the primary platform for application development is over. In all those respects, it has been supplanted by the network.

You experience this every time you go online to buy a book or trade stock. Where is the transaction executed? Where is the data managed and stored? Where does the processing take place? A teeny part is handled by your PC. Most of the work is done behind the scenes, in the network, by bigger computer systems.

Businesses deploying network applications have to handle an exponential increase in the volume of interactions and transactions, and they need to do something useful with the tidal wave of information generated from those interactions. Both needs are driving the rediscovery of enterprise computing – that is, industrial-strength servers and the software that runs on them.

As the Net takes over much of the work previously performed by PCs, we're seeing another interesting development: a proliferation of new personal computing devices – personal digital assistants, Web-enabled TVs, screenphones, smart cards and a host of products we have yet to imagine. One market research firm predicts that sales of non-PC Internet devices will surpass PCs within five years. This explosion of “information appliances” will bring computing to millions of new users – perhaps a billion people – faster and more affordably than the PC could ever have taken us.



CAPITAL INVESTMENTS
(*\$ in billions*)

NUMBER OF ACQUISITIONS

All of this is very good news for IBM – the company that, in many ways, invented enterprise computing. In recent years we've invested heavily to reinvent our server and enterprise software lines. Middleware products like Tivoli systems management, Lotus Notes and Domino, and DB2 Universal Database have been standout performers. The advent of non-PC devices is also benefiting our OEM (original equipment manufacturer) business, where we sell IBM components like chips and disk drives to other technology companies, many of them our competitors. It's a business that's already growing at double-digit rates.

- ***We're only at the beginning – more is coming.***

Two more things actually – and they're both extensions of the network computing revolution.

First, the basic components of computing – processors, memory, storage, networking – are becoming so small, powerful and inexpensive that soon computing will be embedded in all kinds of everyday things that don't look at all like computing devices: cars, roads, machine tools, vending machines, houses.

When all these are connected to the Net, they will make possible a new class of applications, invisible to end users but vitally important to businesses and institutions. Imagine this: Automakers will be able to gather real-time information about the performance of their cars. Soft drink companies can tie together their vending machines to learn what's selling (and not selling), at what prices, in what regions, at what temperatures. Imagine not just a billion connected people, but a trillion connected devices. We call this Pervasive Computing.

The second major development looks like the polar opposite of Pervasive Computing, but it's really just the flip side. A new class of heavyweight computing systems is emerging that will make possible new ways to gain insight – and *foresight* – from

both the enormous, underutilized stores of data that organizations already possess, and the sea of information that pervasive computing devices will generate. We call this capability Deep Computing – named after our chess-playing supercomputer Deep Blue, which combined ultrafast processing power with sophisticated analytical software.

In Deep Computing, we're already applying what we learned from Deep Blue to real-world initiatives that were previously inconceivable, like modeling pharmacological agents, simulating weather patterns for more accurate forecasting, and mining databases in retail or insurance for patterns and insights. What the future holds – solutions in everything from genomics to financial markets to disease control – is almost impossible to fathom today. But we're out there pushing the edges and learning.

- ***The Year 2000 problem is important, and it's being addressed. But a lot of work remains to be done – fast.***

While no one knows for sure what will happen, we believe the largest companies, institutions and government agencies will be ready, particularly those in technologically advanced nations. They got an early start fixing their systems, and they are using this year to test extensively. Less certain is how smaller businesses and emerging nations will fare. They've got to pick up the pace.

To help our customers worldwide, we have deployed thousands of IBMers and mobilized thousands of our business partners. Most of our client teams are working through specific plans with their customers. We will deploy even more IBMers to the extent we can (we've already asked our people to alter vacation plans). And internally, we are working just as hard to ensure that IBM's own essential operations are ready.

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PATENT LEADERSHIP In 1998, for the sixth consecutive year, IBM was awarded the most U.S. patents, shattering the previous record (our own) by more than 40 percent. We received **2,658** U.S. patents in 1998, 934 more than in 1997, and we eclipsed the next closest company by 38 percent.



e-IBM IBM itself is turning into one of the world's largest e-businesses. In 1998, we sold more than **\$3 billion** of products and services over the Internet.

As I look at the information technology industry today – its economic fundamentals, its technological underpinnings and even its emotional tonality – I see an industry that looks, operates and trades more like a business at the beginning of a growth cycle than one reaching maturity.

Perhaps even more remarkably, I see the same qualities in IBM.

The thing that most surprises and delights me about our company is not how we've reinvented our internal processes from the ground up. Nor how we're relentlessly improving execution and teamwork. Nor even that we're practicing what we preach, making encouraging strides toward becoming the world's premier e-business – in everything from procurement, where Net-based purchasing should save IBM nearly a quarter of a billion dollars in 1999; to e-commerce, where our online sales in December reached \$38 million a day; to using distance learning to improve IBMers' skills.

As important as all that is, the thing that most persuades me that we are at a key inflection point in IBM's history is simply what it actually feels like to be here today.

Given what we have accomplished over the past six years, it would have been natural for IBMers to indulge themselves in well-deserved pride at having turned the ship around, or comfort in resuming a familiar role and stature. When I came to IBM in 1993, frankly, my fondest wish was for the company to return to its former position of leadership.

More and more, however, my colleagues are preoccupied not with our achievements of the recent past, but with the vast prospects opening before us. Not that we're taking anything for granted – like confusing a bull market with personal and institutional success. But it's as if, on our journey back up to a familiar plateau, we shot right past it and kept on going.

This is something I never dreamed of six years ago. Spurred by the extraordinary adventure of building a networked world, this large and storied enterprise now believes that its best years lie ahead of it – that its past, and that of the information technology industry as a whole, were just a preamble. As we move into 1999, with all its near-term momentum and all its external uncertainties, what we are most acutely aware of is the trajectory of this underlying shift, of a company and an industry that feel as though they are just getting started.

And of one more thing: a group of people who can't quite believe their good fortune. To be at this place, and at this time. Count me among them.

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