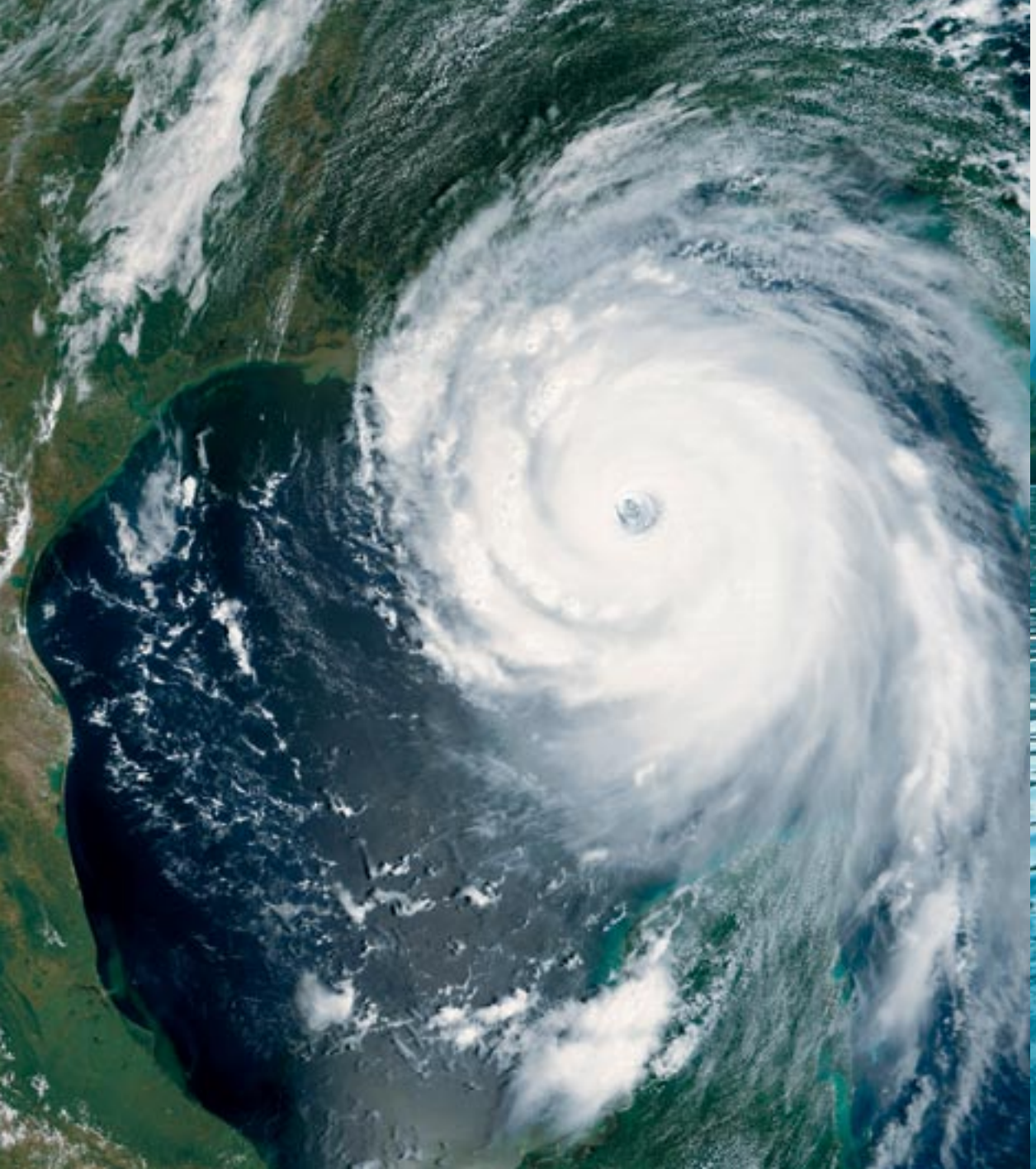
THINK

Our world is made up
of complex systems.




6
5
4
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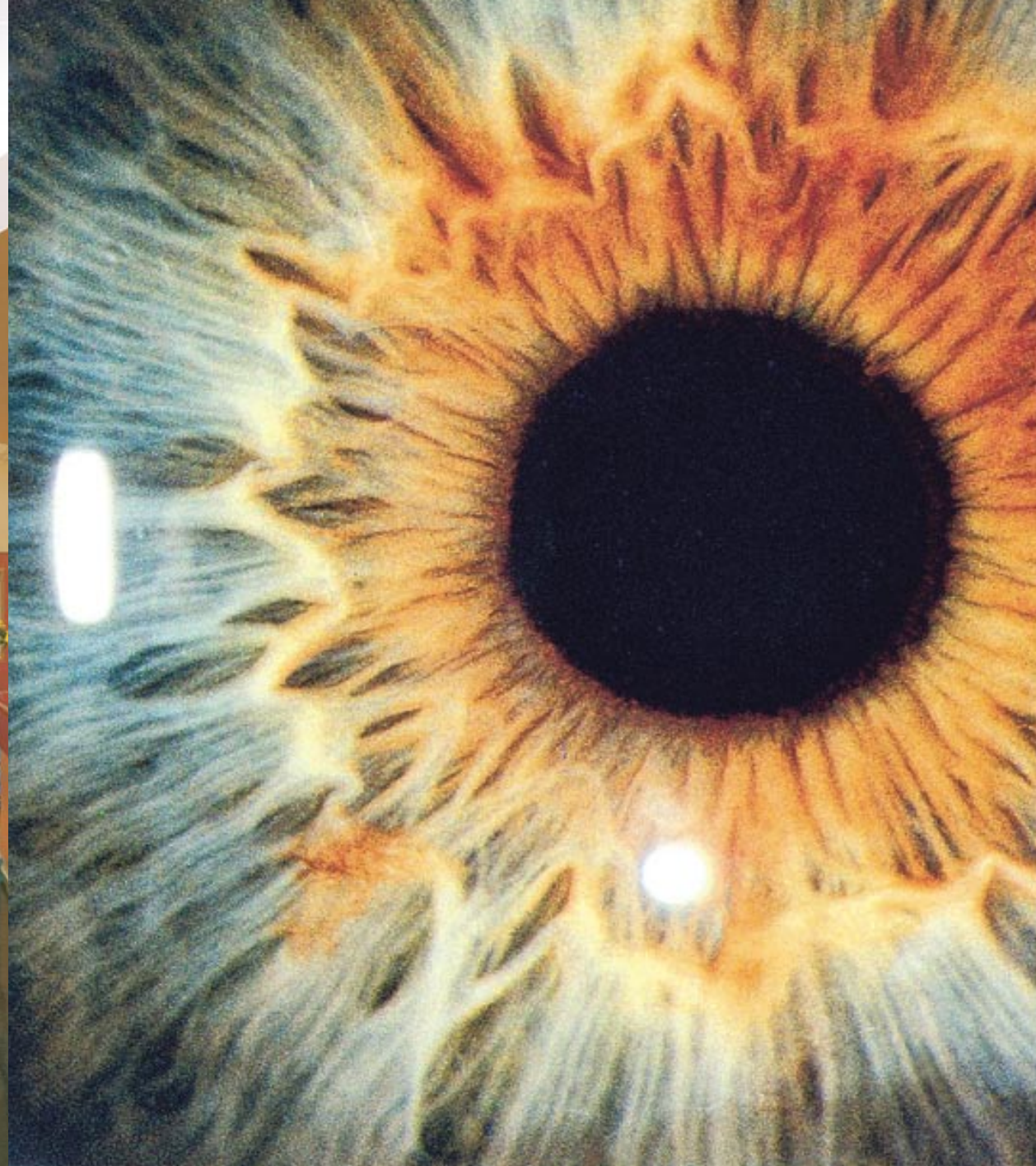
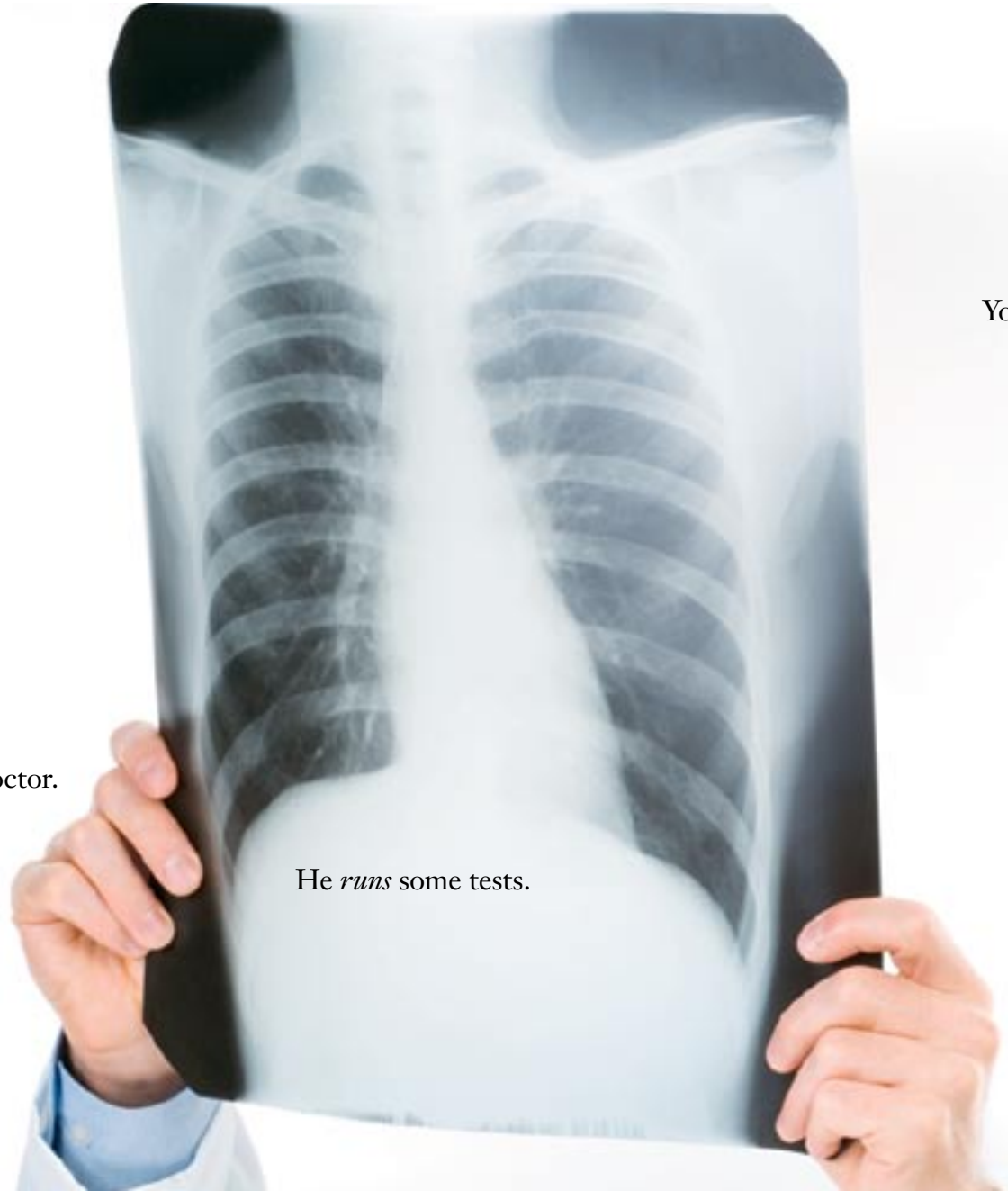
EXIT


To extract their full potential,
you have to understand how they
work in all their dimensions.

Aaaaachooo!

You *see* a doctor.



He *runs* some tests.

You *fill* a prescription.

You *pay* your bill.

You've just *interacted* with six industries that together account for 10.2% of the world's gross domestic product.

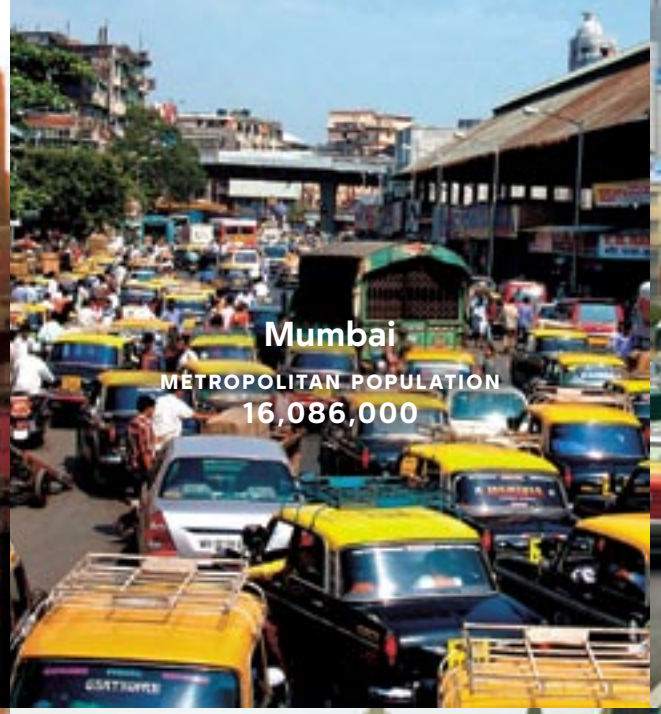
IBM PRODUCTS, TECHNOLOGIES AND INDUSTRY EXPERTS SERVE CLIENTS ACROSS THE MAJOR SECTORS OF THE HEALTHCARE AND LIFE SCIENCES INDUSTRIES: hospitals, health plan providers, public health agencies, governments, medical device makers, pharmaceutical companies and biotech firms. In addition, IBM researchers and consultants work with leading research institutions and governments—such as the government of Denmark, Duke University and Mayo Clinic—to pursue systemic improvements to the overall experience, economics and efficacy of healthcare. Areas of particular promise include integrated patient records and personalized diagnosis through genomics.

To advance healthcare, it's not enough to discover new medicines, assess risks, pass legislation, or promote wellness. As with any complex system, you need to analyze how work flows, how people interact and how processes can be more productive and human. You also have to integrate disparate fields of knowledge, and see patterns that underlie even the most commonplace activities.

Take driving...


Paris
METROPOLITAN POPULATION
9,693,000

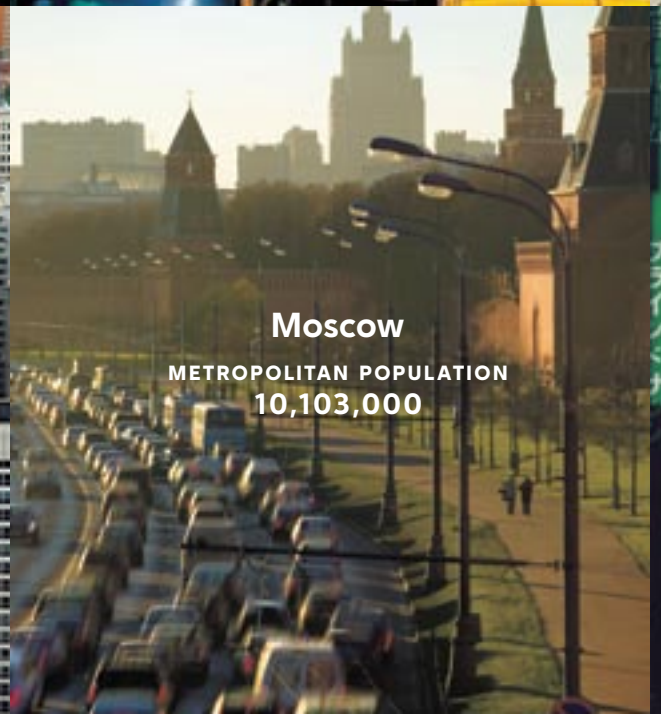

New York City
METROPOLITAN POPULATION
17,846,000

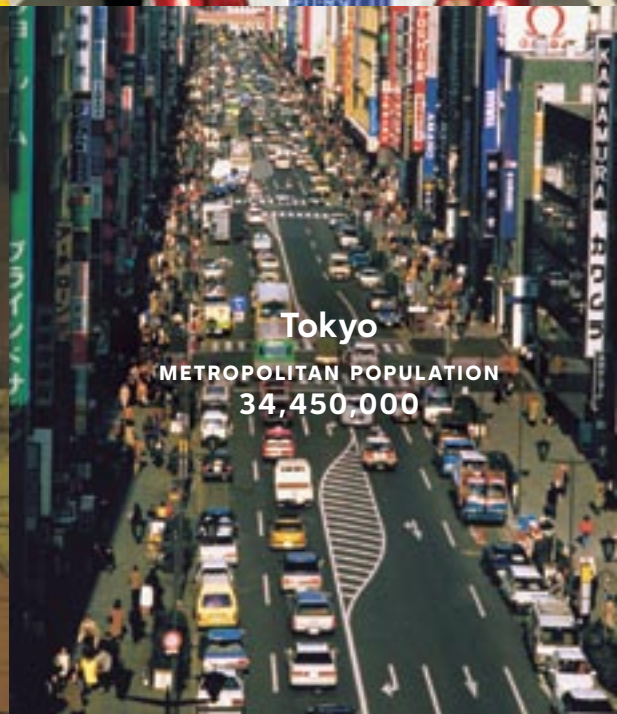

Mumbai
METROPOLITAN POPULATION
16,086,000


Shanghai
METROPOLITAN POPULATION
12,887,000


Buenos Aires
METROPOLITAN POPULATION
12,583,000


São Paulo
METROPOLITAN POPULATION
17,099,000


Moscow
METROPOLITAN POPULATION
10,103,000


Tokyo
METROPOLITAN POPULATION
34,450,000

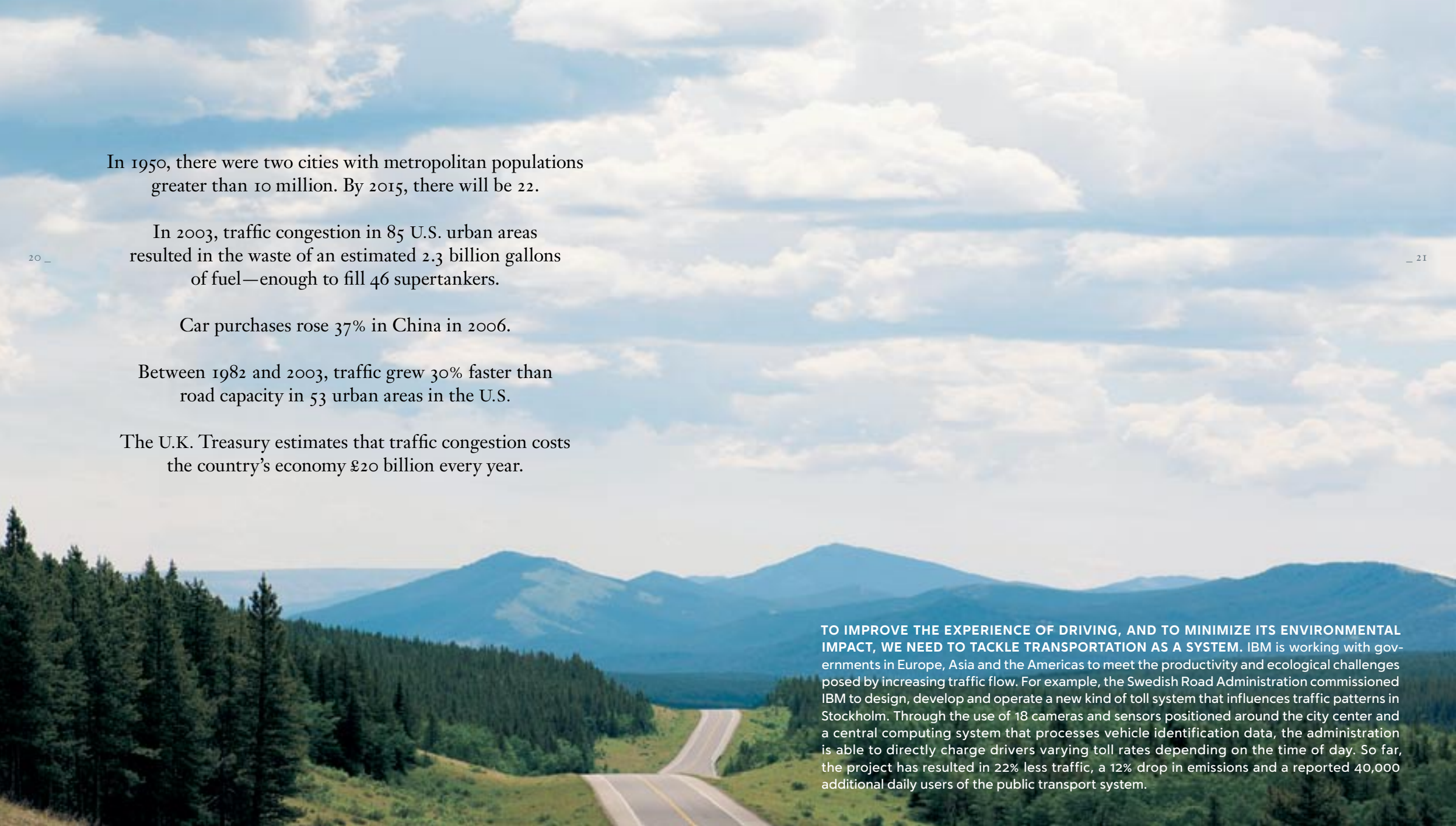
In 1950, there were two cities with metropolitan populations greater than 10 million. By 2015, there will be 22.

In 2003, traffic congestion in 85 U.S. urban areas resulted in the waste of an estimated 2.3 billion gallons of fuel—enough to fill 46 supertankers.

Car purchases rose 37% in China in 2006.

Between 1982 and 2003, traffic grew 30% faster than road capacity in 53 urban areas in the U.S.

The U.K. Treasury estimates that traffic congestion costs the country's economy £20 billion every year.

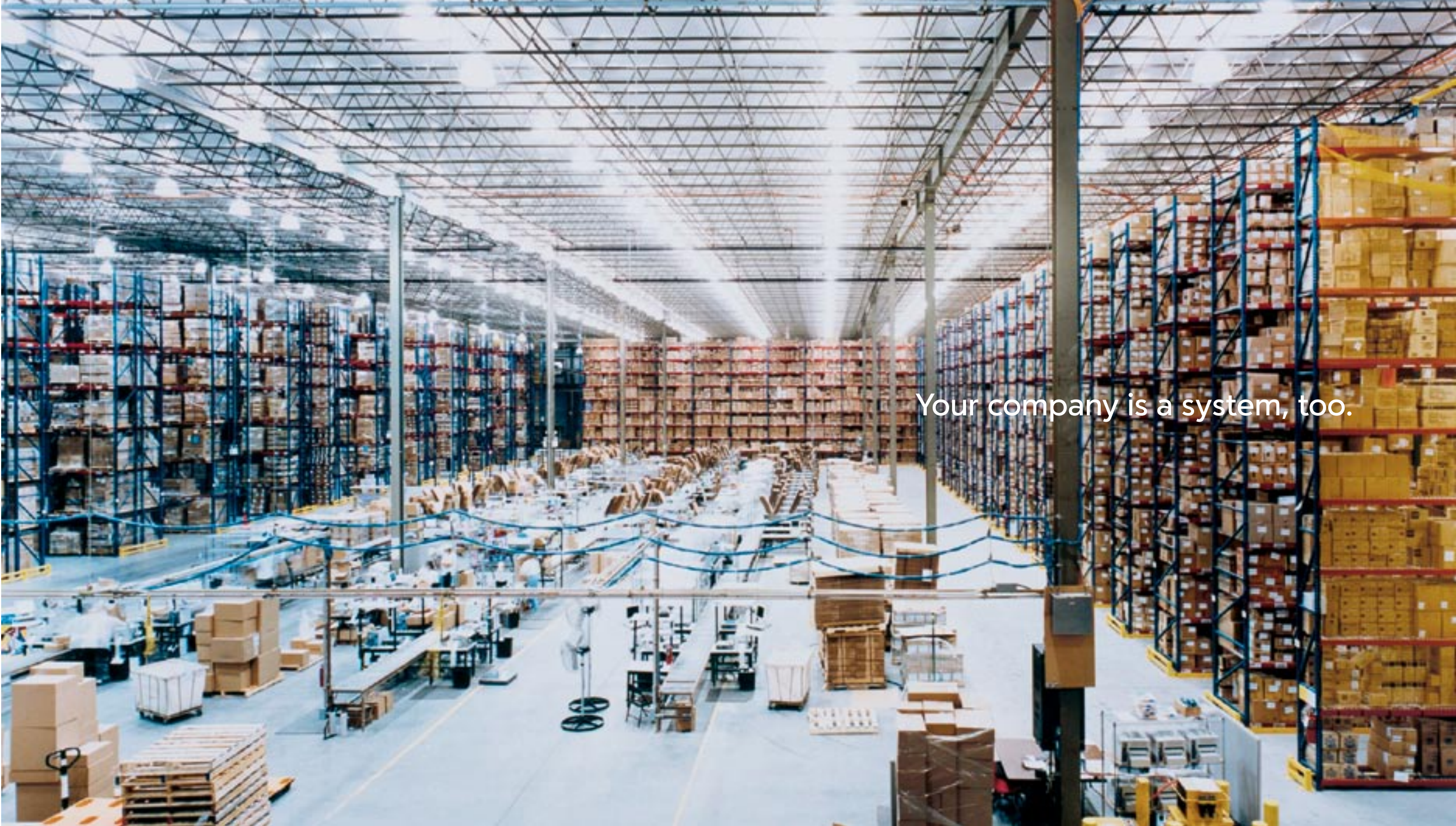


TO IMPROVE THE EXPERIENCE OF DRIVING, AND TO MINIMIZE ITS ENVIRONMENTAL IMPACT, WE NEED TO TACKLE TRANSPORTATION AS A SYSTEM. IBM is working with governments in Europe, Asia and the Americas to meet the productivity and ecological challenges posed by increasing traffic flow. For example, the Swedish Road Administration commissioned IBM to design, develop and operate a new kind of toll system that influences traffic patterns in Stockholm. Through the use of 18 cameras and sensors positioned around the city center and a central computing system that processes vehicle identification data, the administration is able to directly charge drivers varying toll rates depending on the time of day. So far, the project has resulted in 22% less traffic, a 12% drop in emissions and a reported 40,000 additional daily users of the public transport system.

GLOBAL WATER WITHDRAWAL HAS INCREASED SIXFOLD SINCE THE 1900s, TWICE THE RATE OF HUMAN POPULATION GROWTH. As fresh water is essential for all life, it is critically important that great river systems be managed, so that the plants, animals and people depending on them are protected. To create new ways to sustain major rivers and their tributaries, IBM is supporting The Nature Conservancy's Great Rivers Partnership by building a new computer-modeling framework. It will allow users to simulate the behavior of river basins around the world, helping set policy and management decisions that conserve the natural environment and benefit people. The project will launch using data from the Paraguay-Paraná river basin in Brazil, and is intended then to expand to the Yangtze and the Mississippi.

Energy is a system.

SUPPLYING THE WORLD'S ENERGY NEEDS DEMANDS A COMBINATION OF DISCOVERY, PRODUCTION, DISTRIBUTION AND ENVIRONMENTAL STEWARDSHIP — WITH INTELLIGENCE INFUSED INTO THE ENTIRE SYSTEM. IBM is actively engaged across that full spectrum. We're helping power companies, like Houston-based CenterPoint Energy, migrate toward digital networks that enable real-time monitoring, variable pricing and the use of integrated, energy-efficient appliances, equipment and processes. Smarter IT systems are transforming how petroleum companies manage oil sources and reservoirs. We're also helping our clients across most industries around the world achieve greater energy efficiency, lower costs and significantly reduce their carbon footprint — in part by reducing the cooling costs for data centers themselves. IBM's CoolBlue technology uses chilled water to lower dissipated heat emissions from servers by up to 55%.

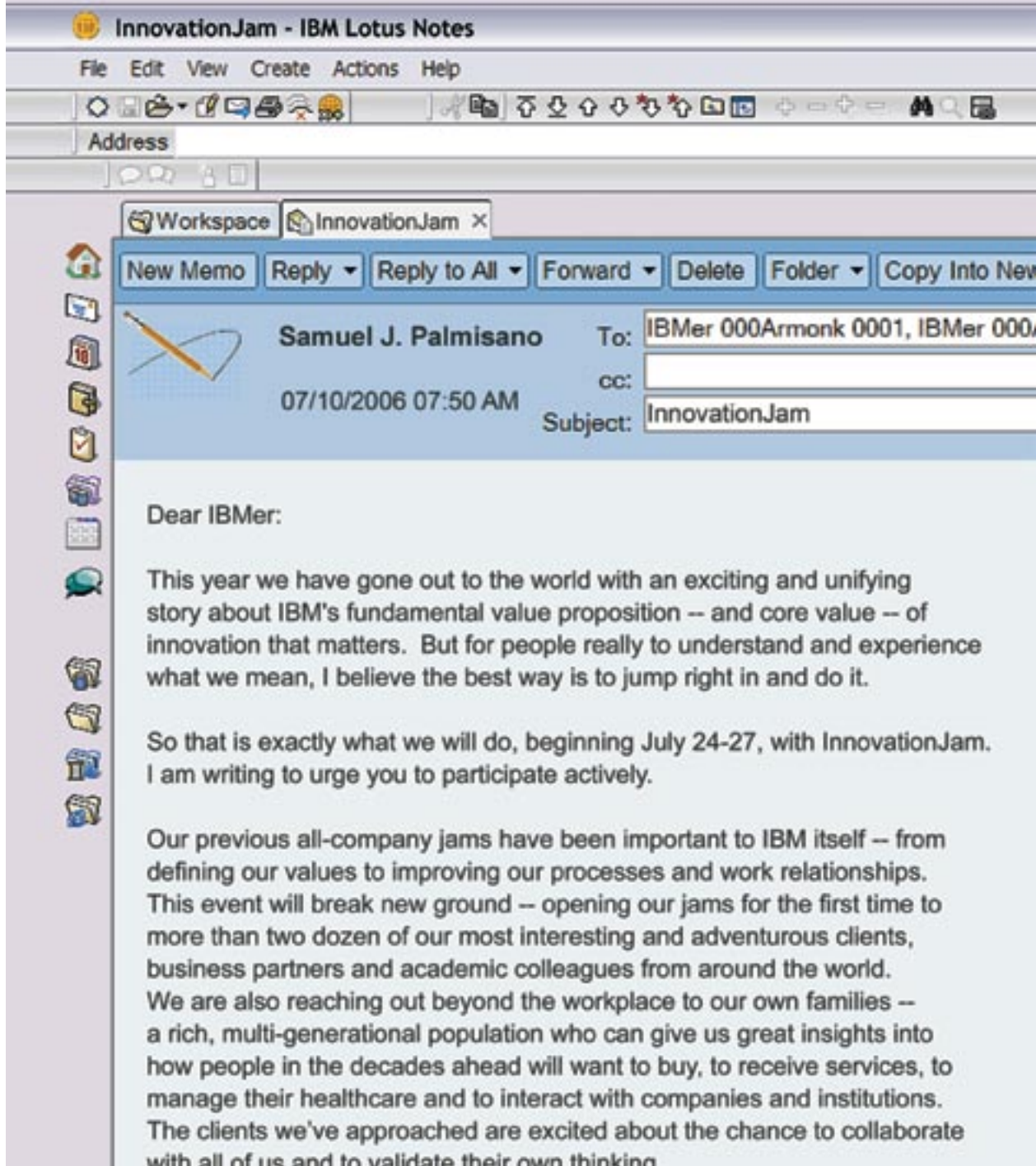

Your company is a system, too.

How could your company work?

How could the world work?

At IBM, we've always thought this way—from enabling U.S. Social Security in the 1930s, to the moon missions of the 1960s, to the modern global banking system. Today, we're seeing more opportunities for innovation than ever before—and new approaches to innovation itself.

It starts with *an invitation*.



How Can Banks Reach Emerging Markets?
While the economies of India, China and other emerging markets are exploding, these nations have among the most under-served retail lending markets in the world.... How can we develop innovative products and services -- designed for emerging markets -- to help financial services providers address their goals for growth along with the needs of the local population?

Bridget van Kralingen, IBM, United Kingdom

Hosting the exchange
I suggest that there may be a linkage between the ideas in the emerging markets stream on microfinance and this one. IBM could provide hosting of the exchange and include authenticated access via multiple channels, business process modeling to optimise the workflow and customer experience skills for ease of use.

Michael Aaron, IBM, Australia

Small banks/microcredit/bancarizacion
In Latin America banks of all types are looking to serve the underprivileged population. They want to increase the population with bank services from the 20%/30% current ratio to a lot bigger number. They want to be able to give out $100 to $3000 loans very fast and thru several distribution channels.... We can not let this opportunity pass us over.

Hugo Santana, IBM, Venezuela

Idea: Banking for the masses: caring for the customer
In order to get the services customized, the rich experience of micro finance institutions all over the world should be taken into account and combined with the possibilities new information and communication technologies offer. The big challenge, at my point of view, is to get mass outreach by making an intelligent use of technology without loosing the contact to the small customers and to their specific possibilities and needs.

Christiane Ströh, IBM family member, Germany

Idea: Platform to manage micro-financing remotely
At the lowest rung of the economic ladder...are people who would do well if they are given access to small chunk of money to develop and market their ideas and products...

A company which develops a platform for financing these people who can access it using a PC or a cell phone...would make it possible for these micro-entrepreneurs to access the finance without having to run to the cities several times which they can ill afford.

Alok Khare, IBM, India

Idea: capturing growth in rural markets
Smart card is a very good idea to capture data.. how about linking telcomcompanies penetration in rural market through their mobile phones.... How about using existing telecom services providers infrastructure for secured payments for rural India? Can a telecom company be a distribution arm of a bank & insurance company in rural markets?

Kumar Karpe, IBM, India

More than 150,000 IBMers, family members, clients and university and business partners, representing 104 countries and 67 companies, came together in 2006 in InnovationJam, an online conversation on IBM's worldwide intranet. They posted more than 46,000 observations and ideas for translating some of IBM's most cutting-edge technologies into economic and societal value.

As a result, we have allocated up to $100 million to explore 10 promising new business opportunities.

QUICK AND AFFORDABLE BUSINESS COMPUTING

The opportunity: With advances in computer systems and the delivery of increasingly sophisticated business services over the Internet, IBM sees an opportunity to integrate the two. We're working with multiple partners to combine a new type of system device with new, Net-delivered applications and business services, aimed at smaller businesses and departments of larger enterprises. An added bonus: It opens up possibilities for ongoing collaboration across a global network of users and solution providers.

No. 2

A NEW DIMENSION OF THE INTERNET

The opportunity: The text-and-pictures Web of the 1990s grew into the platform for global e-business. Now, interactive, graphics-rich, immersive environments such as those found in Second Life and World of Warcraft suggest a similar path. To accelerate the emergence of a "3-D Web" for business and society, IBM is working with clients and partners to explore new business models, new forms of collaboration and new go-to-market opportunities.

No. 3

REAL-TIME LANGUAGE TRANSLATION SERVICES

The opportunity: Despite global interconnectivity, language differences remain a significant barrier to expanded commerce and collaboration — in spheres ranging from healthcare to trade and travel. IBM will apply its market-leading automated translation technologies to a range of applications and environments that could be delivered seamlessly by many service providers over the Web.

No. 4

SMART ENERGY SYSTEMS

The opportunity: Utility providers are struggling with increased demands on power grids and infrastructure that cannot keep up. This is raising the cost of energy and requiring new investment: In the U.S. alone, about one new power plant would have to come on line each week to meet projected demand. IBM will work with utility companies to embed analytics and optimization technologies in their grids to monitor real-time activity and adjust output accordingly — aiming to drive down users' costs and increase system efficiency.

No. 5

MANAGEMENT OF YOUR DIGITAL SELVES

The opportunity: More and more of our records and identities are becoming digitized and moving online — from photos, videos and music, to health and financial records. To address the burgeoning market for management of our data and our electronic personae, IBM aims to work with leading consumer companies to create a secure, user-friendly service for individuals.

No. 6

MAKING HEALTHCARE DATA SECURE AND AVAILABLE

The opportunity: Most people's health records still reside in manila folders in their doctors' offices—handwritten notes, X-ray films and hard-copy reports. A standards-based infrastructure that transported health records securely and electronically would not only save the healthcare industry about $80 billion a year in the U.S. alone, but would let patients control their own care with far greater ease.

No. 7

MAKING HEALTHCARE PAYMENT SYSTEMS SMART

The opportunity: The healthcare industry's payment and reimbursement system is notoriously complex and inefficient, leading to billions of dollars in needless administrative costs. IBM is working on a system that enables a personal device, like a smart card, to trigger financial transactions and process insurance claims automatically—thus eliminating much of the healthcare system's paperwork.

No. 8

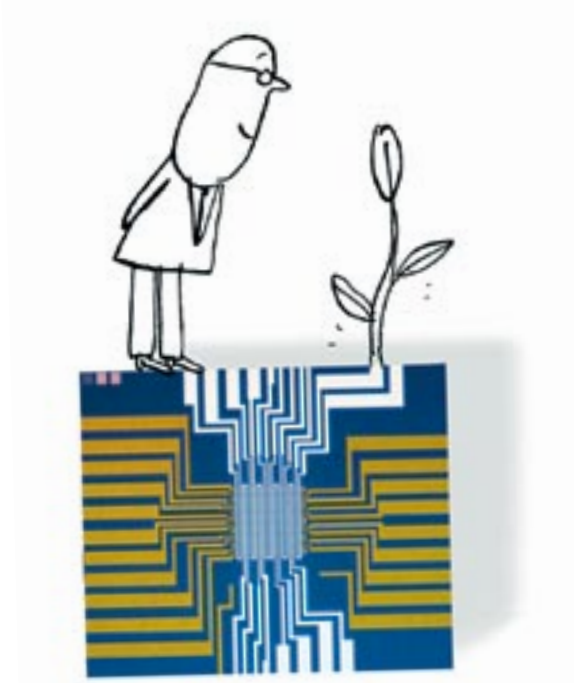
BRANCHLESS BANKING FOR THE MASSES

The opportunity: Half of the world lives on less than two dollars a day. Basic banking services like savings accounts and small loans could help them start to build new lives—for instance, providing capital for seed to plant next year's crops. But the credit risks and processing costs of "microfinance" remain too high for most financial institutions. IBM is looking to create a multi-party services model, focused on low-cost delivery through mobile phones and kiosks, which can expand economic opportunity and help large banks reach an enormous new customer base.

No. 9

TRANSIT SYSTEMS THAT FLOW

The opportunity: We lack a systems view of how traffic moves across all its networks—highways, railroads, bus routes, waterways and airlines. Because of their separate information systems, we're amassing enormous costs in congestion and environmental damage. IBM aims to make integration possible, using supercomputing, advanced modeling and analysis—technology that could also alleviate traffic jams by delivering information to drivers and passengers via mobile phones and computers.



No. 10

APPLYING INFORMATION TECHNOLOGY TO ENVIRONMENTAL CARE

The opportunity: Environmental innovation is one of society's most critical needs, and one of business's biggest growth opportunities. To help alleviate the stress of unsustainable environmental practices, IBM will target its expertise at certain key areas:

- **Advanced Water Modeling:** By 2025, at least 3.5 billion people will live in areas where the water supply is in jeopardy. Using modeling systems, sensors and actuators, IBM aims to better anticipate droughts, monsoons and snowfall that affect fresh water supplies, and to manage usage patterns, sending fresh water to areas in greater need.
- **Water Filtration:** Using nanotechnology previously applied to microchip scale and power, we are exploring new ways to "create" potable water by filtering and purifying existing sources.
- **Efficient Solar Power Systems:** IBM will draw on its chip design expertise to improve photovoltaics, and will take a systems approach to the storage and distribution of solar power, aiming to make it more viable worldwide.

Innovation in the 21st century is much more than invention. It's open, multidisciplinary and inherently collaborative—taking place with customers, across communities and among millions of people who will never meet. These new ways to work and think together generate not just products, but industries, not just new knowledge...

...but new ways of knowing.

Services account for 64% of the world's gross domestic product.

Universities today teach disciplines ranging from industrial and systems engineering, to computer sciences and information systems, to economics and business management, to operations research, organizational change and business anthropology.

Until two years ago, none taught the discipline of service science.

IBM IS COLLABORATING WITH NEARLY 75 UNIVERSITIES IN 24 COUNTRIES TO CREATE A NEW ACADEMIC DISCIPLINE. Our partners range from UC Berkeley and North Carolina State University in the U.S., to Helsinki School of Economics and the University of Pavia in Europe, to Tsinghua University and Sogang University in Asia. This field, Service Science, Management and Engineering (SSME), will incorporate business strategy, engineering, computer science and social sciences to create multidisciplinary thinkers and managers with the skills needed to run and advance a service-led economy.

"The world's current intellectual property systems are ideal for an era of isolated inventors creating, protecting and profiting from their novel ideas. But they are not as well suited for a new era in which innovation increasingly is driven by openness, sharing and collaboration. *When the world changes, our laws often have to play catch-up.*"

David Kappos

VICE PRESIDENT AND ASSISTANT GENERAL COUNSEL
INTELLECTUAL PROPERTY LAW, IBM

They can also reshape the idea of ideas.

"We need patents. *Without having rights associated with innovation, companies will not make the investment it requires.* At the same time, a system where the rewards are disproportional and are not really lined up with innovation doesn't serve society's interest."

Josh Lerner

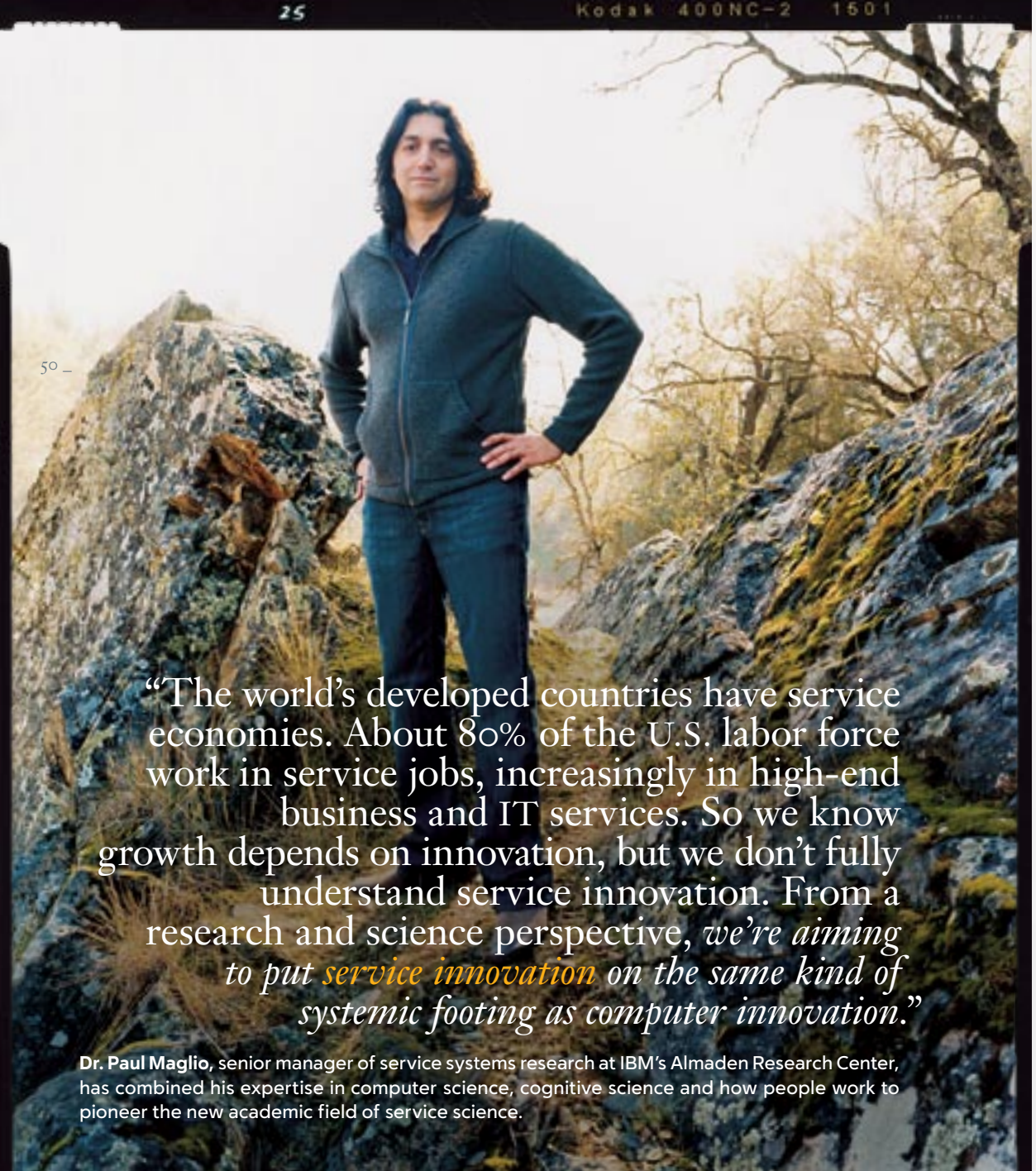
JACOB H. SCHIFF PROFESSOR OF INVESTMENT BANKING,
HARVARD BUSINESS SCHOOL

BUILDING A NEW IP MARKETPLACE. In 2006, IBM assembled a worldwide community of experts in law, economics and government to discuss the changing nature of intellectual property and identify the key characteristics of a healthy IP marketplace. For two months, the group collaborated online using a community-edited Website, or wiki, to debate some of the most significant challenges surrounding patents and intellectual property. The result was a document laying the foundation for a functioning marketplace supporting the creation, ownership and equitable exchange of intellectual property, based on the principles of patent quality and transparency. IBM formally embraced these principles in the company's first comprehensive corporate IP policy.

While the “wisdom of crowds” can complement the spark of genius, it can’t replace it. At IBM, we have always understood the importance of fundamental research and breakthrough thinking that spans technology, business and society. Which is why we attract people who devote entire careers to thinking about science and about its impact on our lives and work.

"Connecting different chips or even different cores on a single chip by means of optical signals could greatly increase their performance. *To do that*, we need the packets of information to flow at the right speeds. Think of optical packets as traffic at an intersection: We have to direct this traffic, to delay one arriving packet while another is passing through. *And for that, we have to be able to slow down the speed of light deliberately. Today, we can.*"

Dr. Yurii Vlasov, a researcher at IBM's Thomas J. Watson Research Center, is studying ways to "slow" the speed of light in order to make electronic systems work faster.



"The world's developed countries have service economies. About 80% of the U.S. labor force work in service jobs, increasingly in high-end business and IT services. So we know growth depends on innovation, but we don't fully understand service innovation. From a research and science perspective, *we're aiming to put service innovation on the same kind of systemic footing as computer innovation.*"

Dr. Paul Maglio, senior manager of service systems research at IBM's Almaden Research Center, has combined his expertise in computer science, cognitive science and how people work to pioneer the new academic field of service science.

Kris Pederson, vice president and partner in IBM Global Business Services, spearheaded IBM's leadership of the Open Standards Benchmarking Collaborative, and then envisioned and led a new type of business measurement system aimed at driving improved performance through collaborative innovation—the Open Innovation Index.

"Every business measures innovation in its own way—and that's the problem. Very little of it happens in isolation anymore. We haven't been able to measure the way work is really done today, because we've lacked *any common definitions or performance metrics that everyone can agree on—even those as straightforward as 'time to market' or 'inventory turnover.'* So businesses have basically been flying blind in this new world. To tackle this challenge, we tried something pretty radical: building business metrics through an open source approach."

"If you want to delve deeper into the secrets of the universe, you need to have the courage to take a big step and go for something completely new—and take a risk that you're entirely wrong, or start proving you're entirely right. We are stepping aside from the large dish antennas that most people have in their minds as radio telescopes, and we're replacing that massive amount of steel with electronics. We're not building one single very large metal reflector; *we're building a large number of very simple, very high-tech, small antennas.*"

Dr. Marco de Vos is the director of research and development at ASTRON, the Netherlands Foundation for Research in Astronomy. IBM's customized chips are helping this global research leader build the world's most powerful radio astronomy telescope.

"We use cutting-edge methods and apply them to real problems. *We figure out how to squeeze every ounce of information out of the available data,* and can use it to solve everything from nursing shortages, to retail sales, to transportation."

Dr. Brenda Dietrich, director of mathematical sciences at Watson Research Center, devises algorithms with her team to tackle complex problems in business, science and the public sphere. Left to right: Dr. Baruch Schieber, Dr. Jayant Kalagnanam, Dr. Ching-Hua Chen-Ritzo, Dr. Anshul Gupta, Dr. Tracy Kimbrel, Dr. Andreas Wächter, Dr. Dietrich, Dr. Samer Takriti, Dr. Steve Buckley and Dr. Aleksandra Mojsilović.

"Doctors now have many weapons against HIV.
But it's challenging to put the drugs together, and if you give a patient the wrong treatment, the virus can change its genetic makeup and become resistant, often even to drugs different from those being used. So we are using algorithms and computers to learn from experience and to predict what will happen with a specific treatment. *If we succeed, there will be a tool that suggests the best treatment for each individual patient.*"

Maurizio Zazzi, professor of microbiology at the University of Siena School of Medicine, is working with IBM and the EuResist project to correlate clinical and HIV genomic data scattered across Europe. The goal of the partnership is to manage HIV resistance to drugs and optimize the treatment of infected patients.

"Almost all organizations suffer from something I call enterprise amnesia.
Their data is in multiple piles, often with unseen relationships. If they knew how it's related, they would make better decisions. What I do is help organizations see such relationships without revealing the data itself. It's an issue of privacy."

Jeff Jonas, chief scientist of IBM's Entity Analytic Solutions and an IBM Distinguished Engineer, creates technologies that let "the data find the data"—allowing organizations to share confidential information without revealing private details.

Dr. Yue Pan works at IBM's China Research Lab on projects that transform "Deep Web" into "Semantic Web," making any piece of data interoperable with every other piece of data.

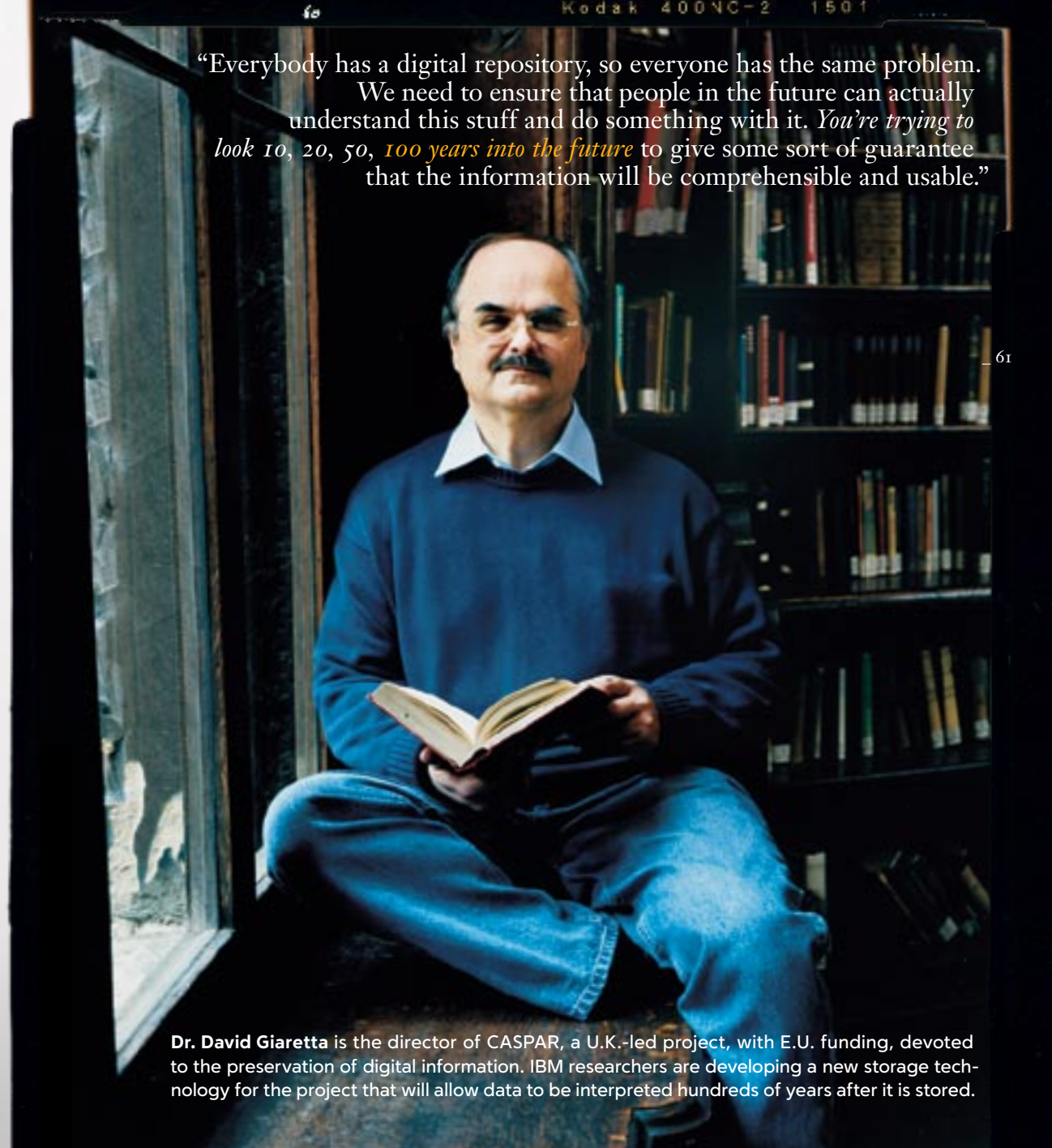
"The Enterprise Semantic Web is not going to use intelligent programs to replace human beings. It will instead provide a platform for people to manage data, and exchange information and knowledge more effectively. Instead of a traditional approach—trying to build smart machines that understand the data—*we are building smart data, so that even a stupid machine can process it.*"

"Others look at nanoelectronics and say, 'Forget about all we have done in the past with silicon. We need to reinvent everything.' We disagree. We wanted to make use of existing technology and add nanomaterials to it. *Nobody has actually built a circuit the way we did. That was the breakthrough.* But we are not yet at the finish line."

Dr. Joerg Appenzeller, an IBM researcher at Watson Research Center, is looking to replace silicon semiconductors with carbon nanotubes—dramatically decreasing the power consumption and increasing the speed of microprocessors.

"Young people who are entering the workforce communicate in different ways—for example, instant messaging, blogging and virtual communities. So we need to harness and support new forms of communication in business, because it's what tomorrow's workers will expect, and because *their behavior is going to effect change in our organizations.*"

Carol A. Jones, IBM Fellow, develops new uses of software to enhance people's collaboration with one another, enabling real-time interaction and changing the way both individuals and organizations work.



"Everybody has a digital repository, so everyone has the same problem. We need to ensure that people in the future can actually understand this stuff and do something with it. *You're trying to look 10, 20, 50, 100 years into the future* to give some sort of guarantee that the information will be comprehensible and usable."

Dr. David Giaretta is the director of CASPAR, a U.K.-led project, with E.U. funding, devoted to the preservation of digital information. IBM researchers are developing a new storage technology for the project that will allow data to be interpreted hundreds of years after it is stored.

Dr. Ajay Royyuru, IBM senior manager of the Computational Biology Center, is collaborating with The Scripps Research Institute to help predict and prevent flu pandemics.

"What if we were able to get ahead of a virus? What if we could tell that, of all its possible mutations, these few are the nastiest—and figure out how to tackle those with vaccines and therapies? *Then it's not a guessing game anymore.* We would actually have a solution that we could ramp up. And if the virus does make such a change, we're ready. That's a transformation."

Lars H. Thunell, head of IFC (International Finance Corporation), is leading its mission to promote sustainable private sector development. IFC, the private sector arm of the World Bank Group, is working with IBM to help small and medium businesses in emerging markets share ideas and solutions.

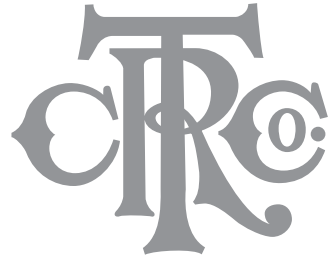
"A simple Web-based toolkit teaching basic management practices—including accounting, human resources and marketing—can reach millions of small and medium enterprise owners. *It's part of our vision for a world where people have opportunities to escape poverty and improve their lives."*

Dr. Franz-Josef Pfreundt, director of high-performance computing and visualization at Fraunhofer ITWM, is developing software optimized for the Cell Broadband Engine processor, an advanced Power Architecture chip particularly suited to 3-D rendering, in order to create new ways to depict and interact seamlessly with data.

"We are taking a huge step toward new, interactive visualization technologies. Our goal is to put images on everybody's desktop that have the quality of today's best animated films. Right now, graphics cards are the dominant source of images. But the coming generations of *multicore chips will give us the compute power for a very different way to generate stunning images* in everyday devices."

Many long-established institutions and forms of work are being reshaped in fundamental ways. Not least among them: the corporation.

Every business starts small and local...



...*before it* grows.

The *multinational* created versions of itself all over the world.
But that wasn't the end of its story.

Global integration isn't just a new economic model.
It's a new way to think.

Today, small companies can be global, and established businesses can be more agile. Developed nations can market their unique skills, and developing regions can dramatically raise their standard of living.

Why? The Internet, free trade and more open societies have allowed work in all its forms to flow—from anywhere, to anywhere.

That, in turn, is giving rise to new institutional forms. One of those—the globally integrated enterprise—can organize work based on the right costs, the right skills and the right business environment, integrating deeply with its partners, suppliers, customers and society.

The forces reshaping societies and institutions are also transforming our daily lives. Consider the combined impact of the Internet—on its way to linking millions of enterprises, billions of people and trillions of things—and of embedded technology, which is infusing many of those objects with intelligence. We see the result every day, when we...

...shop for groceries,

THE AVERAGE SUPERMARKET HAS 45,000 PRODUCTS ON ITS SHELVES. The Shopping Buddy helps you find what you want. Working with U.S. grocery chain Stop & Shop, IBM developed a computer-equipped shopping cart that understands your buying patterns, enabling it to inform you of personalized offers based on your location in the store. Checkout is also simpler. You scan and bag your groceries as you shop; then simply pay and go.

...communicate,

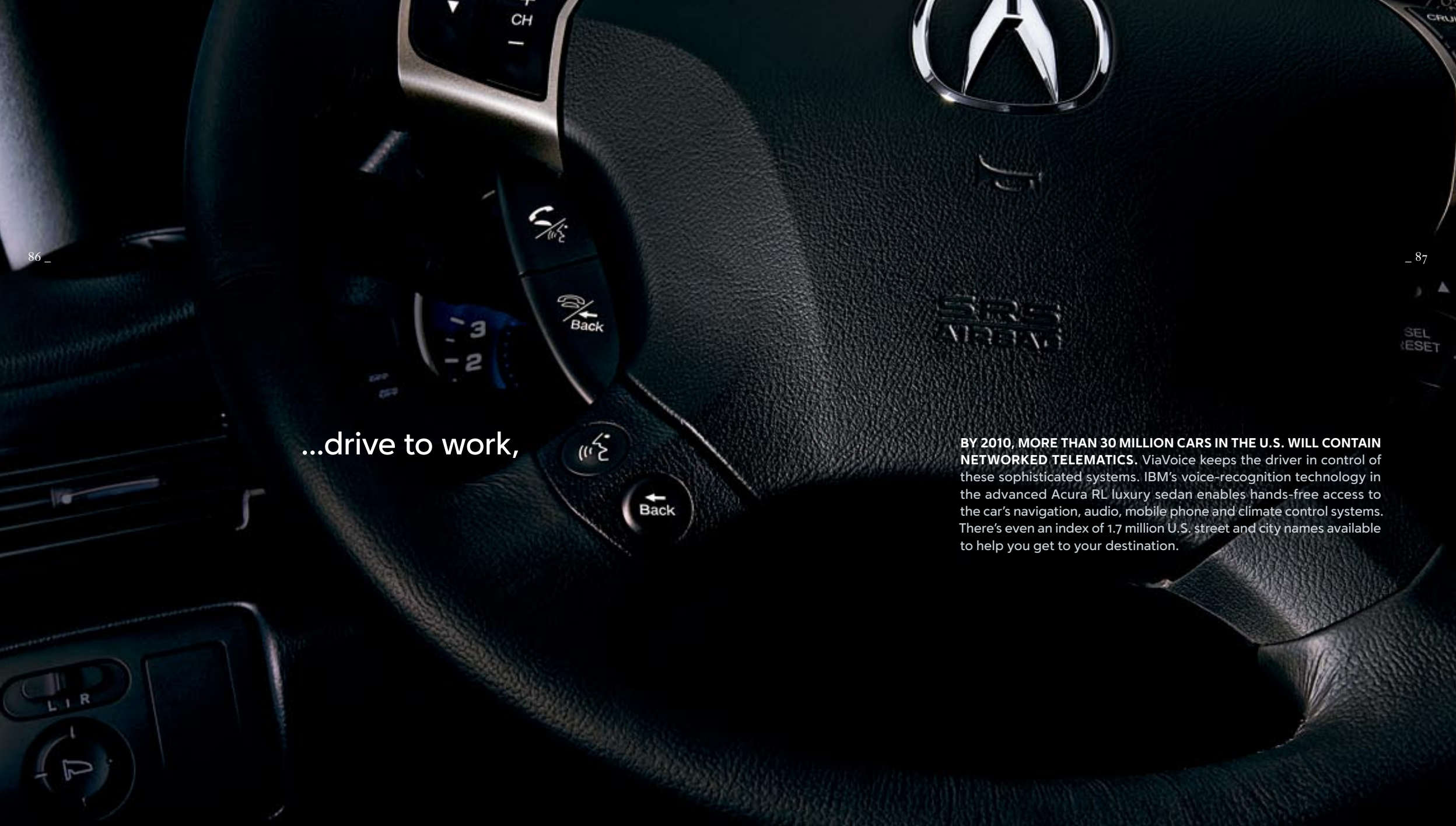
BY 2050, IT IS EXPECTED THAT NATIVE ENGLISH SPEAKERS WILL MAKE UP ONLY 5% OF THE GLOBAL POPULATION. Multilingual Automatic Speech-to-Speech Translator (MASTOR), a real-time translation system developed by IBM researchers, is currently being prototyped with United States armed forces personnel stationed in the Middle East.

...check in for a flight,

IN 2005 ALONE, AIR TRAVELERS COULD HAVE SAVED A COMBINED 55,000 YEARS BY AVOIDING THE CHECK-IN COUNTER. Self-service kiosks cut passengers' check-in time by half, and in 2006 nearly 27% of North American travelers used them—up from just 18% in 2004. IBM is the self-service kiosk industry leader.

...play a game,

THE VIDEO GAME INDUSTRY IS GROWING MORE RAPIDLY THAN NETWORK TV AND FILM COMBINED. In 2006, 42% of Americans purchased one or more video games, and 69% of self-described gamers are adult heads-of-household. More than 11.5 million gaming consoles were sold in the U.S. last year. IBM supplies the microchips powering all three "next-generation" consoles.



...drive to work,

BY 2010, MORE THAN 30 MILLION CARS IN THE U.S. WILL CONTAIN NETWORKED TELEMATICS. ViaVoice keeps the driver in control of these sophisticated systems. IBM's voice-recognition technology in the advanced Acura RL luxury sedan enables hands-free access to the car's navigation, audio, mobile phone and climate control systems. There's even an index of 1.7 million U.S. street and city names available to help you get to your destination.

...monitor a heartbeat,

IN THE U.S., PACEMAKERS CONTROL 30 MILLION HEARTBEATS EVERY MINUTE. St. Jude Medical, Inc., and IBM collaborated to develop a specialized portable computer that programs implanted devices that pace, monitor and, when necessary, defibrillate human hearts. Doctors can quickly analyze diagnostics and fine-tune these lifesaving devices.

...mail a letter,

THE AVERAGE TIME IT TAKES FOR SOMEONE TO LOSE PATIENCE WAITING IN LINE IS 17 MINUTES. The U.S. Postal Service's Automated Postal Centers — engineered, built and maintained by IBM — are reducing wait times at the post office. Most are accessible 24 hours a day, and these self-service kiosks handle more than 6 million transactions each month, a number that is growing rapidly.

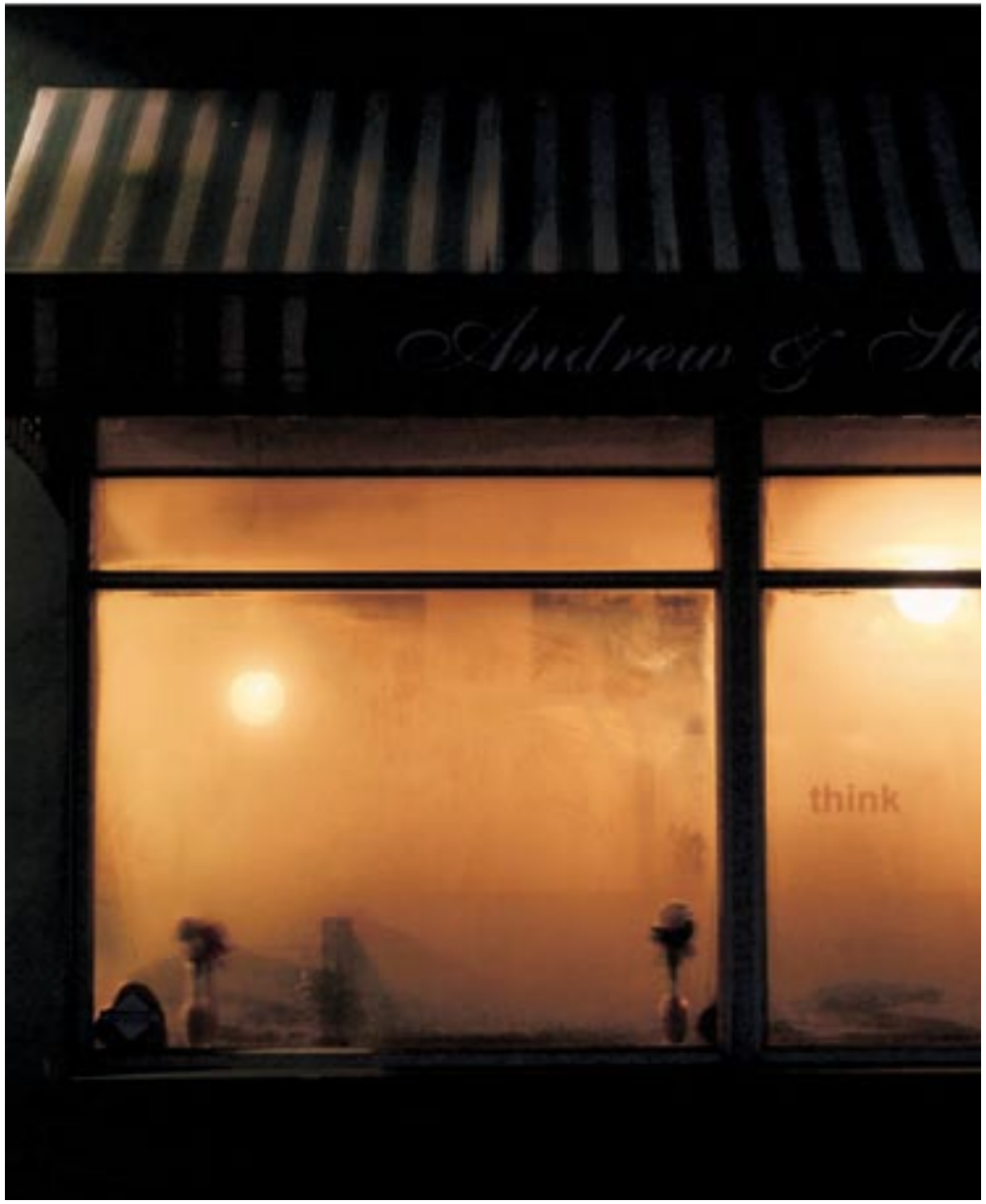
...or sing for our friends.

EACH YEAR, 47 MILLION PEOPLE IN JAPAN PAY A COMBINED ¥740 BILLION TO SING KARAOKE. IBM and Xing Inc. developed a new, handheld controller for karaoke bars and restaurants, with advanced search that provides instant access to tens of thousands of song titles. The device even places food and drink orders.

Thinking is a lot more than intellect and logic, more than wit and cleverness. When we think, our brain doesn't just assess the here and now. It filters the facts of the present through the prism of our imagination. We do this whenever we're reasoning, judging, intuiting… or even remembering.

There's something inherently hopeful and forward-looking to that. When we think, whatever else we're doing, we're constructing a future.

The question facing any organization or society—that is, any collective effort of thought—is whether the future it constructs together is grounded in something that fades with time, or in values that will endure.



How can we ensure that our thinking will stand the test of time?

Strategies, technologies, products, management systems—all will come and go. What does it take to build and sustain an enterprise, a culture and a lasting purpose?

How do we capitalize on the abundance of new innovation capabilities?

We're surrounded by powerful and affordable new technologies, global connectivity and novel business models. How should we use these tools? How does a business take advantage of the access they give us to a world of ideas, relationships and markets? What are the new "rules of the road" for innovation?

How do you maintain trust when you're no longer in control?

To access the world's best skills and achieve the greatest flexibility, a company's products and operations will increasingly be handled by multiple organizations in many countries. What new models and policies will be needed to ensure transparency, privacy, security and quality in such a distributed business model?

How do you differentiate yourself in a global economy?

Whether you're a company, a nation or an individual, how can you be special, in all the world?

How will we identify and prepare a new generation of leaders?

The demand for continual innovation, the global integration of economies and society's changing expectations of business all require completely new skills, experiences and acumen. Where will this next generation of leaders come from?

What does it take to change
the way the world works?

For nearly a century, when people have sought a relationship with IBM—whether as a client, employee, partner or neighbor—what have they been seeking?

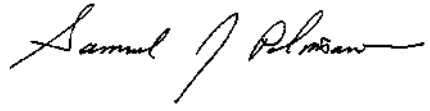
Perhaps it was deep expertise in science and technology. Or a partner with broad understanding of their industry or sector of society. It might have been long-standing presence in their market, their community or around the world. Or perhaps they hoped to learn from a company that itself had undergone continual change.

There are, however, certain kinds of aspirations that can't be achieved through organizational capabilities, global reach or technology—or by applying the lessons of the past. To capture the biggest economic opportunities or to tackle society's most daunting problems—to imagine what the world might be, and actually to build it—people have sought something more fundamental: a unique ability to conceptualize opportunities, to analyze developments, to tackle and overcome grand challenges.

In my view, the defining value that IBM has provided over the years has been the way we think. Today, as in the past, when people turn to our company, I believe they are looking for how IBMers approach problems, as well as for the types of problems we choose to approach. They seek a kind of relationship, in addition to the outcomes of that relationship. And they are drawn to a set of values that reflect their own.

Most companies aim to satisfy their customers. Some go farther, dedicating themselves to their clients' success. A few define success as bringing to the world innovations that make a lasting difference. A handful build trusted, long-term relationships with their owners, employees, partners, neighbors and the world at large.

For nearly a century, IBM has chosen to live at the intersection of these values. This choice has enabled our company to prosper, to create value for our clients and owners, to provide rewarding careers for millions of people, and to be a progressive force in the societies in which we do our work.



Samuel J. Palmisano
Chairman, President and Chief Executive Officer

Sources

PAGE 14 Standard and Poor's, April 2006. *Global Industry Classification Standard (GICS)*. Online. // The World Bank Group, 2006. *World Development Indicators*. Table 2.14. Online.

PAGES 18 AND 19 United Nations, Department of Economic and Social Affairs, Population Division. *World Urbanization Prospects, the 2003 Revision*. Page 90.

PAGE 20 United Nations, Department of Economic and Social Affairs, Population Division. *World Urbanization Prospects, the 2003 Revision*. Page 11. // Texas Transportation Institute, Texas A&M University, May 2005. *The 2005 Urban Mobility Report*. Pages 6, 43. // ChinaDaily.com, January 2007. "China Now Second Largest Vehicle Market." Online. // Economist Intelligence Unit, 2006. *Driving Change: How Policymakers Are Using Road Charging to Tackle Congestion*. Page 5.

PAGE 23 United Nations, 1997. World Water Development Report 2. *Water a Shared Responsibility*. Page 177.

PAGE 37 U.S. Department of Energy. National Energy Policy, May 2001. *Report of the National Energy Policy Development Group*. Online.

PAGE 38 *Health Affairs*, 24, no. 5, 2005. "Can Electronic Medical Record Systems Transform Health Care? Potential Health Benefits, Savings and Costs." Page 1103.

PAGE 39 The World Health Organization. *2002 World Health Report: Reducing Risks, Promoting Healthy Life*. Chapter 4, page 2.

PAGE 40 World Resources Institute, 2000. *Pilot Analysis of Global Ecosystems: Freshwater Systems*. Page 26.

PAGE 43 The CIA, 2007. *World Fact Book*. Page 6.

PAGE 75 Originally published by *The Financial Times*, June 12, 2006. "IBM Chief Wants End to Colonial Companies."

PAGE 80 Food Marketing Institute. U.S. Department of Labor. U.S. Department of Agriculture. Progressive Grocer Magazine. U.S. Census Bureau. *FMI: Supermarket Facts: Industry Overview 2005*. Online.

PAGE 82 Graddol, David. 1999. *AILA Review*. "The Decline of the Native Speaker." Milton Keynes: AILA/Catchline. Pages 57-68.

PAGE 84 Airports Council International, 2007. *Global Traffic Forecast 2006-2025, Executive Summary*. Page 1. // J.D. Power and Associates, June 2006. *J.D. Power and Associates 2006 North American Airport Satisfaction Study*. Online.

PAGE 85 PricewaterhouseCoopers LLP, 2005. *Global Entertainment and Media Outlook: 2006-2010*. Page 21. // Entertainment Software Association, May 10, 2006. *Essential Facts About the Computer and Video Game Industry: 2006 Sales, Demographic and Usage Data*. Pages 2, 11. // The NPD Group, 2006. Market Research.

PAGE 87 Telematics Research Group, Inc., December 2006.

PAGE 88 The Encyclopedia of Surgery, La-Pa, 2007. Online.

PAGE 89 Ipsos in North America, May 2006. *The Associated Press Impatience/Waiting Study*. Page 2.

PAGE 91 IBPC Osaka Network Center. Japanese Market News, *Karaoke 2007*. Online.

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