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IBM in the 21st Century: The Coming of the Globally Integrated Enterprise

"Global integration is the new game. Innovation is the way to win. We must be out there connecting across the world." —Sam Palmisano, Chairman and CEO

In April 2008, members of IBM's fifth Integration and Values Team (IVT5), were close to finishing their deliberations. This high-powered group of high-level executives included country general managers from India and Brazil as well as vice presidents from businesses and functions, chosen from a group of about 300 leaders convened by Chairman and CEO Sam Palmisano to view IBM holistically. Senior VP of Corporate Communications and Marketing, Jon Iwata, and the new head of Research, John E. Kelly III, were the executive sponsors. IVT5's focus was on "the global IBMer" defining and developing leaders for the global economy; making the "globally-integrated enterprise" relevant to all employees through global citizenship and the IBM values and culture; and ensuring market access in the form of a level playing field for IBM to compete globally. The scope was all 170 countries in which IBM operated.¹

Team members felt excitement and urgency. Palmisano expected recommendations in late May, as the next major part of IBM's transformation to a globally-integrated enterprise. Over its nearly 100 year history, IBM had moved from international (exporting from the U.S.) to multi-national (with subsidiaries in many countries) to global. Starting with the first IV team in 2002, convened to globally-integrate the supply chain (e.g., one global instrument for requisitions), teams had identified ways to integrate manufacturing (e.g., test engineering from anywhere in the world, to analyze and fix any line in any plant), create an integrated human capital supply chain (e.g., data bases with a common definition of skills and experience, global recruitment and on-boarding process), and create interconnected global solutions centers serving the world (e.g., centers for ERP (enterprise resource planning system) in Bangalore, the oil industry in Norway, banking in the U.S. and elsewhere). Other projects were underway. IBM realized considerable efficiencies from all of them.

IVT5's mandate was slightly different and more general, yet critical to making the rest of the transformation work in practice: the people and the culture that would produce many more global leaders and global citizens. The team faced the usual challenges of change – identifying the most important needs and barriers, thinking creatively about approaches that would take advantage of IBM's strengths while finding new opportunities, setting an inspiring theme that would attract support. In addition, there was the uneasy fact that globalization was misunderstood in many places, by the public if not government officials. Outside the U.S., IBM was still a "foreign" company even if staffed completely with local citizens, although IBM was able to operate as a trusted partner in

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various geographies. Internally, some IBMers in mature markets who saw IBM shifting attention to the rapidly-growing BRIC nations (Brazil, Russia, India and China) understood the rationale but feared the consequences. At the same time, some IBMers outside the U.S. felt that IBM was still too much of an American company making too many decisions in New York. So IVT5's mandate was not as simple as leadership development for a globalizing world; team members also had to focus on localizing IBM to connect its people not only with each other and with customers and industries but also with communities and nations.

IVT5 members had seen abundant facts and figures, such as IBM's existing efforts on leadership development and international assignments, its array of global corporate citizenship initiatives, and its extensive training and professional development. But to think creatively about the future, they would have to wrap their minds around the whole system (and ecosystem): IBM's business model, the implications of global integration, the IBM values, corporate citizenship as an approach and a set of partnerships, how people came to be IBMers and relate to such a diverse global population, and how people did their work in IBM. That was a great deal to review, the length of at least three, perhaps four, Harvard Business School cases.

As leaders who had risen to their positions because they were globally-oriented systems thinkers who reflected IBM's emphasis on innovation, they knew that it was necessary to stand back to look at the big picture – to see how IBM worked now, to view IBM at its best, but also to understand the gaps, dilemmas and opportunities.

Company Profile: The International Business of IBM

By 2008, IBM was a self-described "globally-integrated enterprise focused on innovation," with 386,000 employees working in 170 countries generating \$99 billion in annual revenues (See **Exhibit 1** for five-year income statement). Headquarters was in a sleek low building on a verdant park-like setting in Armonk, New York.

International Business Machines Corporation, founded in 1911 in New York State by Thomas Watson, was familiarly known as the Blue Giant or Big Blue after the color on its unchanging logo. That was all that remained unchanged during the information revolution of the second half of the twentieth century. Most of the machines IBM had produced through the years had disappeared, as IBM shifted its business mix to reflect changes in technology and to push the innovations that produced those changes. For example, IBM was credited with introducing the field of computer science, and the name, as a distinct academic endeavor. Though some considered it a lumbering giant, IBM was one of the few computer manufacturers to survive more than 25 years, and as IBM headed for its 100th anniversary, it had transformed into a technology solutions company rather than a maker of boxes.

"Big Blue" hit upon rough times in the late 1980s and early 1990s when profits from its mainframe and PC businesses started to tumble. Its resurgence began in 1993 under Chairman and CEO Louis V. Gerstner, Jr., who was a rare external hire. By the end of his nine-year tenure in 2002, IBM was transformed from primarily a manufacturer of hardware into a provider of software, services, and systems (See **Exhibit 2**), and it had embraced the Internet. In 1995, IBM acquired Lotus, a premier software development company based in Cambridge, Massachusetts, for \$3.5 billion.ⁱⁱ In 2002, IBM purchased PricewaterhouseCoopers to round out its consulting offerings, having already bought much smaller Internet-services companies. From 1993 to 2001, the last full fiscal year before Gerstner stepped down, IBM grew from \$63 billion in revenues with a loss of \$8 billion to \$82 billion with earnings of \$8 billion.

In 2002, IBM hired Samuel J. Palmisano as appointed Chairman and CEO (See **Exhibit 3** for a list of senior executives). Between 2003 and 2007 IBM spent \$16 billion to acquire over 50 smaller companies, mostly in software development.ⁱⁱⁱ In 2005, the company sold its PC business to Lenovo, a Chinese manufacturer and long-term IBM business partner. At the same time, the services business, particularly IT systems integration, faced strong competition from the explosive growth of the "outsourcing" industry in emerging countries, especially India.

IBM grouped its businesses into four main areas. **Global Services** included two segments – Global Technology Services (GTS), which focused on client IT infrastructure needs, and Global Business Services (GBS), which offered business consulting, systems integration, and application management expertise. Together, they accounted for \$54 billion in revenues – \$36 billion from GTS and \$18 billion from GBS. GTS grew by nearly \$4 billion in 2007, while GBS expanded by over \$2 billion. **Systems and Technology**, which offered more robust computing and data storage assistance for large clients, accounted for \$21 billion in sales, 45% of which was delivered directly to clients, while the remaining 55% passed indirectly through business partners. Sales in the latter area had fallen by \$600 million in 2007. The **Software** business provided middleware and operating systems to help customers integrate disparate IT applications within their organization. Industry-specific applications included information management and product lifecycle management programs. The area generated nearly \$20 billion in revenues and had grown nearly \$2 billion in 2007. **Global Financing** brought in \$2.5 billion by offering client and commercial financing. It also remarketed used products through sale or lease. A relatively small fraction of the total business, the unit grew by \$137 million in 2007.

Global Scope

"International" continued to be IBM's first name and a reason for its success. About 60% of IBM's revenues stemmed from its non-U.S. operations and 65% of its employees worked outside the U.S. In 2007, the company divided its global operations into three super regions: Europe, Middle-East and Africa (EMEA); Asia Pacific; and the Americas. EMEA employed 25% of IBM's workforce while accounting for 36% of revenues. It had manufacturing plants located in Ireland, Hungary, and France. Asia Pacific had 30% of total employees and contributed 21% of sales. Production facilities operated in China and Singapore. The Americas accounted for 45% of the workforce and 43% of global revenues, with manufacturing sites in New York, Minnesota, California, and Mexico.^{iv} For 2007, IBM's profits were derived largely from Europe and emerging countries like India, China and Brazil. In 2006, the company moved its global procurement function from Westchester, New York, to Shenzhen, China, and integrated supply chain management into one global system.

A growing proportion of IBM's workforce and revenues had shifted outside the U.S. The BRIC (Brazil, Russia, India, and China) countries had expanded at twice the global rate, averaging 21% in 2006: 19% in Brazil, 21% in Russia, 38% in India, and 16% in China. To support this growth, IBM tripled the number of employees in these locations. Overall more than 90,000 employees were added to its emerging market workforce since 2003. By 2008, Russia employed an estimated 2,000 people, China and Brazil 13,000 each, and India 75,000, making it home to the largest number of IBM employees outside the U.S (See **Exhibit 4** depicting the extent of IBM's global workforce).^v

Historically, activities in the BRIC countries were hindered by unfavorable state regulations.^{vi} In 1918, an arm of IBM opened offices in Brazil. In 1971, it inaugurated a major manufacturing facility as protectionist law forbade the company from importing many products. But IBM stayed, partnering in Brazil's first information technology joint-venture in 1991, which gave it an important presence for the coming economic liberalization. IBM operated in India from 1951 to 1977, pulled out due to disputes with the government over equity participation and intellectual property, then returned in 1992 via a joint venture and, in 1999 as a wholly owned subsidiary. Although IBM had offices in

China before the Communist takeover it did not return until 1979, as the Cultural Revolution ended, when it installed a computer for the Shenyang Blower Works, the first of its kind since the founding of the PRC. With the deepening of economic reform in the mid and late 1980's, IBM set up offices in Beijing and Shanghai. In 1992, IBM officially announced the establishment of IBM China Company Limited, its first solely funded enterprise in China. In 1993, IBM China established offices in Guangzhou and Shanghai and by 2007 had 26 offices covering 320 cities in China. A Russian presence began in 1993, following the Cold War. By 2005, the company had taken advantage of state-sponsored efforts to promote a technology park in Akademgorodok, which rapidly became a "Silicon Siberia." Because it was an area of focus, Russia at 800 people had the full set of functions that a mature market possessed, as contained in the IBM Corporate Blueprint.

Investment expanded in other emerging markets. In December 2007, IBM announced plans to invest \$1.6 billion in developing countries in Asia, the Middle East, and Latin America.^{vii} In 2007, over 50 countries in the IBM family, including Poland, South Africa, and Mexico, grew more than 10% (See Exhibit 5 for geographical scope of growth).^{viii} Egypt, where IBM had operated continuously since 1954, was another growth target. "Egypt's growing like crazy," Sam Palmisano said, referring to the country's double-digit growth.^{ix} Services, such as call and data centers, had moved there. Egypt was also home to a large software laboratory and an expanding commercial export business, given its ideal positioning between Europe and the Middle East.

The Extended Family and Ecosystem Neighbors

IBM served every industry, with financial services, telecommunications, distribution (wholesale and retail), and government leading the list nearly everywhere, with other industries important to some regions, such as oil and gas in Russia. A similar set of competitors popped up everywhere: HP, Microsoft, Oracle, and Accenture. Sometimes competitors were also collaborators – for example, competing in software with Oracle but partnering with Oracle in business consulting; or competing with Microsoft in software but partnering with Microsoft in some regions to sell Intel servers. Cisco Systems was a long-time partner more recently entering domains where it competed with IBM. "This is the beauty of IT marketing," an IBM sales executive in an emerging market said. He also said, "IBM is very recognized as an IT company, but still not as a business consulting company. This is still a surprise for many customers."

IBM leaders counted its extended family as well as IBM employees and wholly owned subsidiaries when describing IBM's size. Corporate communications head Jon Iwata described IBM as also consisting of 33,000 companies in the global supply chain, 100,000 companies in the business partner network, and at least one million clients – we say the one million because it is difficult to assess," he explained.

Business partners included resellers, systems integrators, specialist software developers, trainers, even competitors with whom IBM could connect to offer an integrated solution to customers. Funds for training business partners came from channels enablement initiatives; there were screens, guidelines, and certification.

IBM relied on business partners everywhere, but in emerging markets even more strongly than in mature ones. Sheer geographic size and infrastructure development stage necessitated this, even if the company could have added employees fast enough. In Russia, with its 11 time zones and huge geographic extent, business partners were an important part of the go-to-market strategy. Business partners could also use lower-paid employees on smaller projects, making IBM's technology more affordable to more customers, while preserving IBM's position as a high-end services provider. In China, planned growth from operations in 22 major cities (such as Beijing, Shanghai, and

Guangzhou) at the beginning of 2007, to reach 300 second, third, and fourth tier cities in remote regions, would involve business partnerships with companies that already had a foothold in those cities and could provide local knowledge and local service. Large strategic partners were also critical in China, especially with the central and local governments; the executive for strategic partnerships, Liu Bo, came to IBM after having founded and headed Red Flag Linux and later served as VP of Microsoft China, thus bringing a wealth of connections.

Relationships with channel partners could be complex, not only because projects had differing requirements but also because of local political issues. Managers stressed the need to make a habit of collaboration and to have sufficient flexibility to play a variety of roles depending on circumstance. In Russia, there were instances in which a major government entity would want a Russian company as the prime contractor, even though the domestic company lacked relevant experience; IBM could bring its global experience to bear as a subcontractor. In other instances, IBM would include business partners as subcontractors instead of increasing the size of its delivery organization, solidifying the partner relationship by giving them the business.

IBM had long focused on technology education, e.g., at colleges and universities, which would help ensure technical competence for both future employee and in partner organizations. In emerging markets, IBM's role in educating business partners and raising standards was more especially important, and not just in technology but also in business practices, and particularly for small and mid-sized business partners. In Egypt, the country general manager dedicated a staff member to work with small resellers, to make sure that they had the right structure, skills, tactics to deliver to IBM standards; he put personal time into this as well. IBM Egypt offered role-playing courses that included how to speak to customers. Partners were also given customer leads.

Small and mid-sized businesses (SMB) were increasingly viewed by IBM as an important target. Not only were they business partners in strategic regions and even potential customers, but they were a focus of government economic development efforts. By training SMBs and improving their business practices, IBM could show, as a country general manager put it, "This is the way for me to say that I'm not just coming and taking money as some Western, some American company, and that's it. We develop the skills of the market. I am part of this project to contribute to the country's agenda - to develop the high-tech element of the national agenda." In 2006, IBM decided to help the SMB community in a philanthropic partnership with the International Finance Corporation of the World Bank to develop a Web portal with a range of business tools and resources. It was launched in India and South Africa in 2007 with content provided by local partners like ICICI Bank in India. Often, NGOs would serve as intermediaries to introduce the SMB toolkit to the market.

Technology and Innovation

IBM's classic emphasis on innovation captured in the famous injunction "Think" and the ThinkPad name on IBM's (now Lenovo's) laptop computers, was ratcheted up in recent years, well beyond research and development labs, which remained significant and a competitive advantage, especially if lab developments could be transferred quickly to customers for IBM services. IBM operated 61 technology research and development laboratories in 15 countries, including major research centers in the U.S., China, Israel, Switzerland, Japan, and India, with development or application centers elsewhere. Since 1993, IBM had registered more U.S. patents than any other company in the world.

Still, with the emergence of the Internet in the late 1990s and the opening of the World Wide Web in 1993, IBM was perceived by some as losing the innovation edge, the way some saw it had missed the move to client-server computing in the 1980s. But IBM was agile and adaptive. IBM embraced

Linux (photos of Linus Torvald could be found in offices in Brazil and elsewhere) and open source computing; in 2005, 500 IBM software patents were made available, free, to anyone working on open source projects. IBM moved functions to the Web. It built SOA – service-oriented architecture – that can integrate IBM hardware & software platforms to give customer an integrated system. (“We jumped all over that in a New York minute,” executive vice president of technology and innovation Nick Donofrio said). And IBM became a leader in machine-independent “on demand” computing.

IBM also made plans to introduce a new academic discipline, akin to its work in establishing computer science, called service science management and engineering (SSME). In 2005 IBM began to work with the Ministry of Education in China, responsible for over 1000 universities to deploy the SSME curriculum first in China, together with 40-50 Chinese universities; the director of the IBM China Research Lab and several senior researchers taught SSME courses at Peking University and Tsinghua University.

IBM wanted innovation to come from everywhere, inside and outside the company. IBM started a Global Innovation Outlook (GIO) research effort involving a hundred internal and external experts. “The whole purpose is to torture ourselves on each of our lines of business. What’s happening to it? Is it changing? What are the fundamental underlying technologies? Where are they going?” Donofrio said. Donofrio credited senior vice president for strategy, Bruce Herald, with forging strong relationship with venture capitalist, saying “Ten years ago, we were void of VCs. Now, they all love us, we know them all, we work with them to buy their companies, we help their companies, we sell off inventions we can’t commercialize within IBM. Because we don’t know everything.”

IBM defined innovation to include processes as well as products, and anyone could play. Employees could submit ideas and engage in dialogue about them through ThinkPlace, a site on the IBM intranet. The discussion eventually extended much further. In July 2006, IBM convened an Innovation Jam, billed as the “largest on-line brainstorming session ever.” Participants included IBM employees and their family, educational institutions and business partners, as well as clients from nearly 70 companies. The jam took place over two 72-hour sessions, involved 150,000 people in 104 countries, and resulted in 46,000 innovation ideas. In November 2006, Palmisano announced that the company would invest \$100 billion in initiatives resulting from the jam, ranging from healthcare and environment to traffic and social utility projects, and it would emphasize virtual worlds, social networking, and other recent developments.

Palmisano said: “We must be ahead of strategic shifts. We can’t miss a cycle and catch up. We announced a new platform, the on demand network, at the Museum of Natural History, in October 2002. People thought IBM was crazy when we announced it. Now IBM and Google are working together. They picked IBM as the only one with the right technology to be their partner.” In October 2007, IBM announced a partnership with Google for a cloud computing initiative (cloud computing was an offshoot of grid computing that could harness the power of multiple unrelated computers through the internet); the initiative would eventually donate 4000 computers to universities, from which students and researchers would have the resources needed to not only develop knowledge of parallel computing, an emerging industry, but create new and open software applications, ranging from data mining and social networking to climate modeling and gene sequencing.

To decrease lag time between technology innovation and customer orders, IBM sought way to demonstrate the potential for innovation to drive new solutions. Innovation Centers were strategically-located places that showcased new possibilities, running futuristic prototypes for various industries, such as the Innovation Center on the first floor of the China Technology Lab in suburban Beijing. An Innovation Center in Barcelona, Spain, focused on banks of the future. Because the realities of banking were different in Latin America (e.g., large population with no access to technology), an Innovation Center for financial services was established in Brazil, featuring solutions

such as payment through cell phones, or a system based on images from bank's digital cameras for managing large queues so that a bank could attend to a customer in 15 minutes, as required by a new Brazilian banking law. In addition, IBM also demonstrated new technology through public-facing projects contributing solutions to societal problems, such as scientific research on disease or K-12 public education, which also reflected IBM values.

In IBM's strategic planning process, the lines of business examined technology trends and responded. To think across the businesses, there were three global councils consisting of a cross-section of top leaders, for technology, strategy, and operations to help ensure that there was a flow, as technology became part of strategy, and strategy was implemented. Integration was among IBM's biggest challenges.

Management by Flying Around

When Sam Palmisano became CEO, he saw the company's fortunes tied to the reality of globalization and historic changes in technology. Web 2.0 moved more applications directly to the Web, and open standards-based computing was more prevalent, making it harder for companies to lock in customers to their standard. The Internet was making the world smaller and more connected, and freer trade meant that IBM customers crossed borders in numerous ways. Emerging nations were not only sources of market growth but also had a skilled population and were major producers of IT talent. These changes stimulated Palmisano to define a new concept of the corporation: that it must become a globally-integrated enterprise (GIE).

Trade liberalization, open source software, and a freer movement of people across nations were the main themes on the IBM public policy agenda in every country, coordinated by government relations staffs worldwide, and echoed in Palmisano's speeches as well presentation by IBM leaders everywhere. Palmisano told the world that IBM would make location decisions based not only on costs and the availability of talent but also on the openness of the environment.

Palmisano spent about half his time externally focused. He was attuned to the external world, having started at IBM in sales and service, a market-facing job where the laboratory was the customer's office. His leadership was seasoned by postings in Japan, eventually assuming a top post in the Asia-Pacific region, which, he said, changed his perspective: If you live and work in a language that's not your native tongue, you learn a lot. I built relationships throughout Asia. That makes a difference. Our big strategic deals in Asia are all a result of personal relationships, some of which I established when I was there. You can't be transactional, Asia is relational. They want to know your company is sustainable, will be there in a hundred years, is committed to the society – not just selling PCs in stores." Thus, Palmisano spent a great deal of time talking with government officials about public policy and societal issues, especially in the developing world, combined with town hall meetings with IBMers in selected areas, judiciously-chosen speeches and occasional meals with major customers, such as a lunch in São Paulo with a few leading bank CEOs and Latin America general manager Rogerio Oliveira before addressing a major conference on innovation. Jon Iwata observed, "He is invited to talk with political leaders in a different way than in the past. It used to be about IBM investing in their country or as an employer. The discussion now is about national competitiveness – what will create jobs – policies on education, infrastructure, the environment."

In a typical week in the fall of 2007, he met with the Chancellor of Germany in Berlin and returned to New York to announce the initiative with Google to train future computer scientists. A year earlier, in November 2006, Palmisano stood with high-ranking officials in Beijing, China: to make three important announcements that signaled IBM's future directions; first, with the Chinese

Education Minister, about the pioneering introduction of IBM's SSME curriculum into the first 45 Chinese universities; second, with the Chinese Ministry of Culture on an important new partnership with the Palace Museum to digitize the Forbidden City and have an avatar of Sam Palmisano lead a tour through the virtual site; and third, to IBMers worldwide, the results of the Innovation Jam four months earlier.

Six or seven times a year, Palmisano circumnavigated the globe. The swing through Europe took ten days. Another circuit involved China, India, Australia, New Zealand, Singapore, Japan. There was a trip to Mexico, Brazil, Argentina. Or Russia and the emerging markets of Eastern Europe. The plane would pick key executives for certain legs. From the U.K. to Germany, Palmisano was joined by local executives. In Berlin, they met Chancellor Merkel, in Stuttgart held a town hall meeting, and had dinner in a third location. In Asia, Henry Chow, chairman of Greater China, or Frank Kern, head of Asia-Pacific (until a promotion in March 2008), might board the plane. Otherwise, Palmisano flew alone, absent communications specialists or executive assistants, sleeping every night on the plane, maybe after a plate of sashimi. "My entourage is my ThinkPad," he laughed.

Palmisano received about four or five requests a day for his time somewhere in the world, including many good causes and good opportunities for IBM. "I have to be disciplined about it. I say, you guys tell me," he said. He used some of these occasions to showcase other IBM leaders. "We want to extend this to other executives, it's good for their own development, and we can participate in more events. I want to use the entire team – get more participation and more development. To go to the level below as part of their preparation."

Consequently, many others in the senior executive ranks were also frequent flyers. They spoke at public events and universities, they met with government officials and major clients, they coordinated and integrated activities that had global rather than local or regional scope, they mentored and coached people in distant locations. Many IBM leaders stressed the continuing value of face-to-face interactions, even while remaining connected electronically 24/7/365. Coaching and mentoring was more effective face-to-face, and others echoed Nick Donofrio's observation that personal networks of people one had met or worked with were often better sources for key assignments than databases of resumes.

As IBM became more globally-integrated, managers and global team members at many levels accumulated air miles, especially those with global responsibilities or deployed on a global team that worked virtually for most of the time but traveled occasionally to meet other team members. For example, IVT5 held a kickoff meeting at headquarters in Armonk in January 2008 then met in Shanghai in February. Members of virtual teams creating new client applications from diverse bases around the world exchanged visits. A regional executive commented, "To achieve delivery excellence, we must have a team, not a group of people, and draw on best strengths working virtually. But client knowledge and cultural fit comes from the 'geos' [specific places], so we must make sure to be there." Even in a function once called "corporate community relations," a name that signaled its local focus (it was renamed "corporate citizenship and corporate affairs" in 2007), managers had global responsibilities to deploy innovations in other geographies, requiring an increase in management by flying around; for example, a manager from Australia with Asia-Pacific responsibilities who had coordinated a summit in Shanghai to exchange best practices regionally was in the air a few months later to see how a new initiative was being handled in the U.S.

IBM tools and technology were increasingly globally integrated and could support routine work and problem-solving (e.g., the test engineering system that could diagnose and solve problems in any plant from any location, remotely), but other kinds of trouble-shooting still involved management by flying around. A senior said, "If there's a problem or a critical situation, we darken the skies" – i.e., send people to the problem.

Changing the Center of Gravity

"It's not the process work that's hard about the work of integrating IBM. It is lowering the center of gravity." – CEO Sam Palmisano

Global integration was aimed at getting the best of IBM to customers quickly – bringing the best global resources, whether ideas, technology, initiatives, or people, to bear on any customer problem anywhere. That implied locating decision-making lower in the organization – lowering the center of gravity – and attempting to get decision-making out of the “verticals” and into the points of connection with customers. The goal was to create, in essence, an inverted pyramid. In this model, rather than having decisions flow to and from Armonk, they should ideally flow directly to and from those with the responsibility for getting solutions to customers. Moreover, those dealing with customers should be the ones to integrate IBM, taking innovation to apply to customer needs with a minimum of organizational or operational barriers, by requesting and negotiating for resources directly, without going up one hierarchy and down another. Circles of influence would replace chains of command, and people would be trusted to set priorities responsibly starting with the customer as the focus for integration, as stated in the IBM values.

Palmisano felt that the hardest tasks were on the ground, delivering IBM talent and technology to customers. But traditionally, IBMers saw opportunities as involving moves upward, to regional and global headquarters. “There is resistance to locating decision making lower in the organization. Talent is accustomed to be close to the top,” he said. So he proceeded to make some radical changes. In Europe, IBM had about 5000 people and 200 executives above the country level. He put them all in a country and out of European headquarters, and they became an IOT (integrated operating team). He also elevated the role of account manager to high-status, signaling its importance, by asking a few key executives to move from top positions to become executives for big accounts. He provided an example of a division president who had won the technology side of the Olympics for IBM: “I said to him that this is the biggest job you should do: an account that has 4,000-5000 IBMers on it and is worth \$1 billion a year. I said I need you as an example of what I’m trying to do, to demonstrate that this is every bit as important for the highest level below me, Band A. To show that we’re serious about our strategy, and here’s your role in it.” He said that compensation could be worked out, and that once people understood that these moves were important, “Most people will raise their hand and sign on.”

Closer connections between technology and customers were occurring in both directions. From his office in Sao Paulo, Marcelo Spaziani, VP for the financial services sector in Latin America (covering Brazil and the Spanish-speaking countries), supported Palmisano’s vision. He was responsible for the relationship between IBM and customers – pre-sales, post-sales, and continuing customer satisfaction. “It’s a difficult mission, but I like it. I like it because I believe that this is the most important position inside the company. Because we have to integrate the other organization, we have to put the customer interest in front.” For example, his group would determine the best platform for a customer (UNIX, Intel) and then persuade the hardware organization to supply it.

In Russia, from the technology community standpoint, research lab director Jennifer Trelewicz felt responsible for helping customer-facing teams and business partners leverage IBM research technologies; she regularly attended sales meetings with customers to add a technology perspective and wanted to send more lab experts out with client teams. To forge closer connections, she had been instrumental in encouraging IBM to locate a lab in Moscow, writing the proposal and spending six months in Armonk during the approval cycle. She made the case that a lab in Russia was part of a global ecosystem strategy, not just leveraging strong IBM skills but also technology experts on the ground who could collaborate with sales teams, clients, and business partners to answer questions,

learn, and bring back ideas for worldwide projects. Despite hearing other IBMers complain that the company was very hierarchical, she disagreed. For her, the center of gravity was already lower and more geographically diffused.

The other change in IBM gravity consisted of efforts to reposition the center of the world away from Armonk and a U.S.-first mentality. There were now many places that were the center of something. Centers of Excellence could be found in many locations. Major events moved around the world, such as IBM's Business Leadership Forum, a premier IBM event for CEOs of top IBM customers that was held in Rome, Italy, in 2006, St. Petersburg, Russia, in 2007, and was scheduled for Istanbul, Turkey, in late 2008. More than a third of IBM's corporate philanthropy resources were targeted outside of the U.S. and rising, the largest percent by any U.S. company. And national diasporas were returning home. Latin American headquarters moved out of Miami and into São Paulo in 2005. Talented IBMers born in emerging market countries who had successful careers in IBM in the U.S. were seeking to move back to their country of origin, and not only on reassignment because IBM needed them to help manage growth. A Brazilian executive who had significant responsibilities in the U.S. and could have moved further by staying in New York chose to return to Brazil, where he felt he could make a difference for his country.

IBM corporate leaders in Armonk tried to move away from a traditional bias toward the U.S. as the source of best practices and the first to get new ones. Randy MacDonald, senior VP of human resources, recalled the beginning of the transition in his function: "Six years ago, when my people would come to me with a full-blown intervention, it would always be launched in the U.S. The vast majority of resources and dollars would be focused on the U.S. In addition, the way it was designed tended to focus on U.S. culture. I think that there was probably an initial bias by pretty senior HR people that the U.S. approach would be used as the baseline. But we began to look at speed, sense of urgency, in other places. We found that there were sometimes better processes than we had in the U.S." Toward the end of 2007, the first rollout of a new project called Workforce Management Initiative and Opportunity Marketplace was in Eastern Europe. To get change in HR, he played one country off the other country, for example, challenging the Germans who said something couldn't be done with the commitment of the Austrians and the Dutch to get it done despite difficult labor environments. "I made it the World Cup of HR," he said. He also described a smoothly-handled layoff of 12,000 people in Europe.

Overall, as IBMers compared past to present, there appeared to be fewer people acting as "power-holders" monopolizing information or decision-making and more people serving as "integrators" using relationships and persuasion to get things done, a hallmark of a flatter organization. Broad guidelines for such areas as salary increases left more items to managerial discretion. But it was easier to move activities and relocate people than to move mindsets. IBM was still considered by some a company of engineers trying to design precise rules from the center. Many said that they felt empowered to execute, but Armonk still exercised gravitational force, making key decisions.

Moreover, though the organization was increasingly operating horizontally, many processes and controls were still based vertically. Nick Donofrio, technology and innovation leader, said, "We run by verticals, by line of business. It's in the measurement, the way we're plumbed, our profit and loss. Yet I measure myself and hold myself accountable for value delivered in a horizontal direction, and there is nothing we measure in the horizontal direction. So you have to buck the system in order to deliver the integration that real value is going to come from in the future."

Localizing

"What we want to be known for is first to be an employer of choice and next to be treated as a national asset." -- IBM India executive, describing Vision 2010 for IBM in India

One paradox of global integration was that it inverted the pyramid in another way: it was accompanied by a greater need for deep national and local connections in many more places. There were several reasons. First, governments were big IBM customers, especially in emerging market countries where the state owned or controlled more enterprises but also for a range of infrastructure and universal public services. Government officials were always wary of "foreign" influences, and they wanted to determine their countries' fate in what they considered the national (albeit occasionally their own) interest. Second, national and local policies affected IBM's business in the long run if not immediately, and IBM wanted to influence those policies or have a seat at the table where they were discussed. This was also true of other institutions, such as universities, whose practices shaped the pool of talent available in any country. Third, IBM needed public goodwill to attract talent and preferred business partners, and to the extent that there were fears about globalization or anti-American backlash, it was important to be identified as contributing in a positive way to the country's development. Fourth, deep connections with communities and cultures provided know-how about how to communicate with customers, valuable intelligence about needs and opportunities that could help IBM move quickly to innovate or apply innovations, and early warning of trends or threat.

So without at all diminishing the global character of one connected company -- one Blueprint, one IBM -- leaders in diverse parts of the world felt that IBM had to act like a local company fully committed to the success of the country and prove to the public that IBM cared about them. This was just as important in the U.S. as elsewhere; indeed, IBM made numerous high-profile national as well as community contributions, and Sam Palmisano led the National Innovation Initiative (NII) of the U.S. Council on Competitiveness -- a clear sign of commitment to America's future success.

Added to this general imperative experienced everywhere was the urgency felt by IBM leaders in countries where IBM had once reduced its presence. And then there was a natural human factor. The same national pride that made senior people in the geographies tout their human talents or special place in IBM's global strategy, a comment heard in India, Egypt and Brazil also made people genuinely care about the communities in which they were located -- the emotional pull of place.

Only a handful of IBM customers were as global in scope as IBM. While many spanned borders, they did so in a variety of geographic patterns, not always including the same set of places. Some key industries for IBM, such as banking, were still largely nationally-based in their operations (though not their ownership). Thus, in practice, localization did not detract from being customer-focused, and it sometimes helped.

Marcelo Zucenas, VP of Software for IBM Latin America, was convinced that being physically located in São Paulo instead of New York helped the business. He said, "I see a huge difference from the kind of meetings that we had when many people were 5000 miles or 8000 miles from the region. Not only do you understand better what's happening because you're closer, but also you understand the environment. IBM is not by itself; it's IBM within a context. I know people can study, can learn where Brasilia is, but it's not the same as having people inside to understand the political situation." He cited two examples, business risk and an opportunity. One was the potential risk to IBM from the impact of Bolivia nationalizing oil and gas on its customer, Petrobras, in Brazil -- was that too much of a small detail to be noticed in New York? The other example was the early intelligence he received by having an ear to the ground about a takeover that offered an IBM sales opportunity, something that would not be in the press in New York. A Spanish telecom that operated in three Latin

American countries was targeted by an Italian company; he quickly connected with IBM Spain, to make sure the Latin American group could propose something that made sense to the customer (they would have to merge their IT systems).

Country Connections

In the GIE, geographies were supposedly as deemphasized as verticals, and the role of country general manager, once a baron operating his or her own domain, was considered to be a role of diminishing importance. But the critical task of ensuring that IBM was locally embedded as an insider in the country, carried by the entire team at the top, remained vitally important. The country GM was an ambassador, as were the teams in key staff functions of government relations, university relations, corporate citizenship and corporate affairs (CCCA), and communications.

Country staff had to find the connections between a global agenda and national interests. In India, for example, a three-person shop (Bangalore, Mumbai, Delhi) focused on national and 70 state governments "to understand what's happening and to see our priorities, and then to work with the key thought leaders, getting the global practices to these individuals and help them to shape public policy," said Dravida Seetharam, government programs executive. He was part of a virtual team of 5-6 people from various geographies coordinated by IBM's Washington office. The agenda for India was derivation of the global one: open standards and open source software for collaboration and interoperability; data privacy and how to create a self-regulating mechanism, to avoid the costs of new regulation and law enforcement; trade liberalization; the movement of people – e.g. visas consultants to projects. Seetharam sought to help the Minister of Commerce see that this was the future, and that this state of issues would ensure India's competitiveness.

In Egypt, where IBM's population was almost without exception Egyptian, the challenge of proving commitment to the country's interest was a bit different from that of India. IBM had a long history in Egypt, had supplied many of the key IT executives in other companies as well as the retired IBMers crafting Egypt's national IT competitiveness strategy. Egypt had decided to actively seek foreign direct investment, IBM had close working relationships with many ministries. But all that still did not prevent questions about a "foreign" company. An insider reported, "We were working closely with the Ministry of IT, helping them, trying to convince them of the international view of Egypt as an investment destination. After the meeting of our chairman with the Minister of IT and the Minister of Industry and Trade, a task force was formed in order to see how we can take Egypt further to more liberalization. We gathered the stakeholders, and we tried to convince them of the pros and cons. And we discussed it openly and we tell them our view. But sometimes you will find them asking, well, what is it for IBM? What is the hidden agenda? Tell us, why are you doing this? Is it a kind of invasion? Is it a kind of flood?"

IBMers had to understand the underlying concerns and make the case diplomatically that the changes were in Egypt's interest. "Their worry comes on having a lot of expats working and taking the places of Egyptians, so the unemployment rate will increase. And our counter argument is that if a lot of expats will come, they will come in a profession that is not there in Egypt, so that is why we are asking to do this, to transfer the new know-how," the insider concluded.

It was a balancing act: to bring the perspective and expertise from outside Egypt while being Egyptian in other respects. There were numerous anti-American protests about the invasion of Iraq in 2003 (although also long lines at the U.S. embassy for visas, an IBM leader pointed out), and a boycott of American products and protests because of the Palestinian situation, targeting mostly consumer products. But IBM managed to remain above the fray. "IBM is not seen as a company that's tied to a specific government or works for a specific cause," commented Ahmed Tantawy, an

Egyptian who had returned from years of work for IBM in the U.S. to head the Cairo Technology Development Center. Communications manager Dina Galal had a telling example: "We asked a journalist, who said, no, you are perceived as a local company. However, you are an American company. So we chit-chatted with him that if we can as Egyptians get a better alternative than IBM products, then we should do it. We always give them the impression that we are Egyptians before we are multinational."

China

The vast population, strong central government power, and strategic importance of China made IBM's local embeddedness vital. U.S.-China relationships were delicate, and so corporate diplomacy had to be exercised at the highest level.

That was one reason for Sam Palmisano's travels to Shanghai and IBM's relocation of its Asia-Pacific headquarters from Tokyo to Shanghai. Former CEO Lou Gerstner had visited China a dozen or more times. In 1994, he met Chinese President Jiang Zemin. "He said that we bring not only our solutions but we also want to do something for China, especially for your education system," recalled Victor Kuo, CCA executive for China. In China, the powerful Ministry of Education was responsible for all levels of education, including universities. China's 11th five-year plan involved transforming itself into an innovation-driven service economy. This was compatible with IBM's own business strategy, and it permitted many points of intersection. "Our business development is based on society. We need generation after generation of the best qualified skilled people who can use advanced technology to develop society. Chinese students will benefit. This is IBM's vision for China," Kuo said.

IBM had many kinds of relationship with the central government, serving as suppliers, partners, and advisors on emerging issues where IBM's global experience could be useful. Leaders of IBM China were rarely asked questions that implied that IBM is a U.S. company and thus might have a different agenda for China when there are disagreements between the countries. But some indicated that they know such questions existed below the surface and that ideas were scrutinized through that lens – with IBM being valued as an essentially neutral expert whose word could be trusted not to be self-interested. "We talk about open standards and IP policy," an IBM China insider said. "Different companies in the industry have different views depending on the business model. Given that IBM has a very complicated business portfolio, IBM is in the middle. While the government will take into account the perspective of your company, that happens less for us. Given that IBM has been in China for two decades, our position is well received, and in many cases we are the sole company in policy discussions."

Liu Bo, who had worked for Microsoft before IBM, and in his role as strategic partnership executive dealt with local as well as central government officials and heard what they said about different companies, put the situation in a colorful way. "IBM has a good relationship with the Chinese government. In their mind, IBM is reliable. I always say Microsoft is like a beautiful lady. Is good to have as a lover. But IBM is a gentleman. Is good to have as a husband."

At the same time, another manager said IBM should not take its position for granted, and that it should continue to work hard at localizing rather than appearing too global: "I'd like to make a straightforward comment. There is a tendency for nationalism in China, among the general public and among government officials. Foreign enterprises are regarded as foreign, so they tend to exclude you from China's innovation system. The 11th five-year plan on innovation is talking about indigenous innovation, developing technology with China's own intellectual property. So whether companies like IBM will be included in China's national innovation system, we don't know. This is

why we did lots of things in the past years to show them that we are very committed, that we want to be China's innovation partner."

From Beijing to Washington: Bridging Local and Global

In the GIE model, IBM should be locally-embedded and customer-connected but also tapping the value of all of its global resources to bring to customers and countries, not remaining isolated national islands. IBMers were in a position to do unique things as cosmopolitan citizens of the world while also remaining committed to social and economic progress as residents of the countries and communities in which they worked. Those places were often not their countries of birth or passports, because in the senior ranks, international relocation was very common. Increasingly, a sprinkling of expatriates on international assignments was all it took to build capabilities around the world, and even then, some were Egyptians, Brazilians, Chinese, or Russians returning from North America or Europe to their ancestors' nations.

By emphasizing global integration, IBM leaders could be helping knit the rest of the world together, carrying ideas and influence from place to place. One story involving the U.S. and China was striking and illustrative.

In May 2007, Henry Chow, chairman of IBM Greater China, headed to Washington, DC. He had previously visited Washington on executive trips organized by the American Chamber of Commerce before China was admitted to the World Trade Organization, after which the trips stopped. But Chow wanted to use his experience as a Chinese executive for IBM to facilitate positive development of the U.S.-China relationship and find areas of collaboration, such as environmental issues. With the help of IBM's government relations office, Chow spent four days calling on Senators and Congressmen, both those who supported China and those with grave concerns. He met a Deputy Secretary at the White House and gave a number of speeches. Discussion remained very high level. "There were no specific agenda and topics, otherwise it would get too sensitive and political. Nonetheless it was still very meaningful to understand more how the U.S. government works and the sentiment of officials," he said. Chow felt that the trip was so productive that he considered going again in 2009, after the 2008 U.S. elections.

Next Steps on the GIE Journey

"The art of management of IBM is to balance, like walking on the rope. It is not one successful strategy all the time." – Kirill Korniliev, general manager, IBM Russia

A globally-integrated enterprise aimed to bring global resources to bear quickly and effectively to produce value for customers, and to find ideas and opportunities anywhere in the world that could produce innovations to enrich and change the whole enterprise. The essence of a globally-integrated enterprise lay in being deeply connected (in order to provide value for customers and society) and yet above the fray (to avoid divisive controversies).

The leadership skills necessary to manage the balancing act were becoming clear to IVT5: systems thinking, initiative-taking, persuasion and diplomacy, a cosmopolitan outlook with a concern for collaborative solutions good for many people. Many IBM leaders had these skills, but were there effective ways to develop them in more people faster?

IBM was well along on the journey, but could still be easily trapped between models. The company was shifting many of its activities outside of the U.S. but many decisions were still made in

Armonk whose initiatives were deployed with the U.S. in mind. Its control systems, while changing, were still aligned on a vertical dimension upward while the center of gravity was shifting downward and outward – horizontal and multi-directional.

In early 2008, comments were solicited from large groups of employees and managers worldwide about the implications of IBM becoming a globally integrated enterprise. There were questions about go-to-market strategies and organizational structures in geopolitically/culturally different regions, about whether the GIE involved more than integrating support functions, and about risk management when local crises could have much broader impact on global activities that were no longer duplicated in several geographies. There were questions about proof of concept: verifying that the GIE concept worked to drive IBM success and bring value to clients (one responder pointed out that many companies were reverting back to local call centers, for example, to respond to the needs and preferences of their customers).

People from Germany, Korea, and the U.K. asked about new career opportunities, what could be offered to long-term professionals for a brighter future, and how behavior should change. They were looking for guidance about how to meet expectations and succeed, seeking the upside potential for employees. But there were also numerous questions, heavily from Europe and North America, about the downside: local job losses and outsourcing to emerging nations, whether the GIE differed from offshoring or a "race to the bottom," and about who would be the ultimate losers, or whether there were job creation strategies for mature markets. Respondents from France asked how a GIE could communicate effectively with country stakeholders who are very country-centric, whether the GIE implied standardization (language, culture, business with local SMBs, relations with local governments), and how a GIE could commit to be a long-term business player in a country and contribute to the country's development. A Swiss respondent asked about whether cultural heritage would be lost. From Australia came questions of whether a GIE has a separate responsibility in each nation in which it does business, or whether nations are irrelevant.

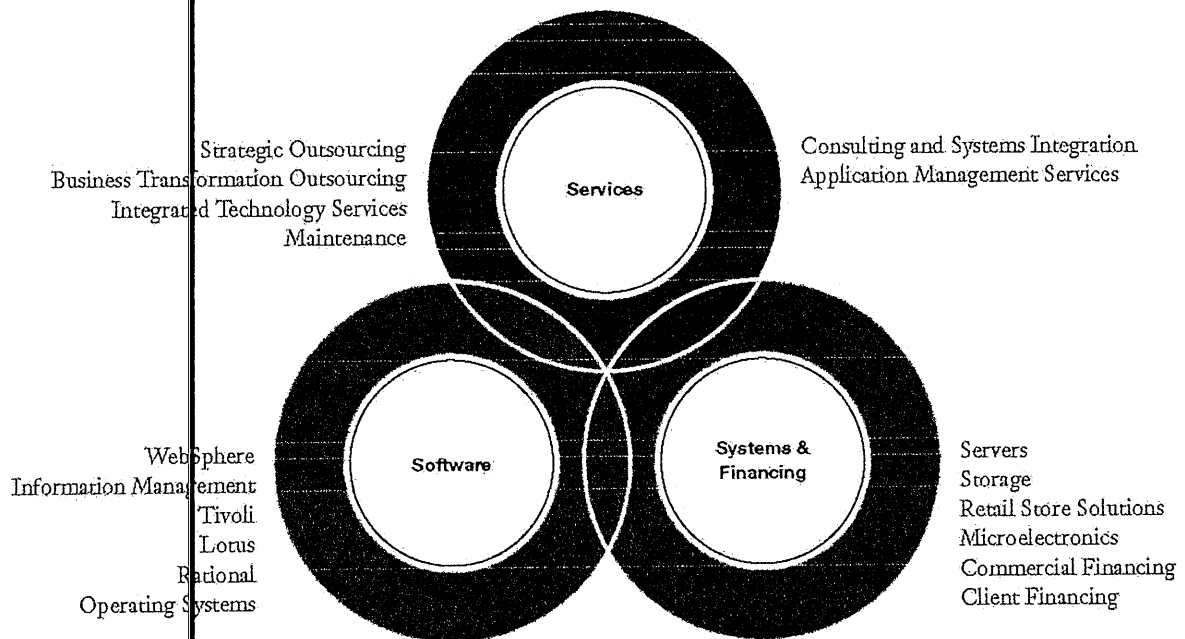
And these questions were raised: Is IBM no longer a U.S. company? Do we all have to learn Chinese now?

Exhibit 1 IBM Income Statement

	2003	2004	2005	2006	2007
Global Technology Services	-	-	-	32,322.0	36,103.0
Global Business Services	42,635.0	46,283.0	47,407.0	15,969.0	18,041.0
Systems and Technology	28,239.0	31,193.0	24,343.0	21,970.0	21,317.0
Software	14,311.0	16,141.0	16,830.0	18,161.0	19,982.0
Global Financing	2,826.0	2,608.0	2,407.0	2,365.0	2,502.0
Enterprise Investment	1,120.0	-	-	-	-
Other	-	68.0	147.0	637.0	842.0
Total Revenue	89,131.0	96,293.0	91,134.0	91,424.0	98,787.0
Cost of Sales	-	-	-	53,129.0	57,057.0
Global Services	32,304.0	35,078.0	35,093.0	-	-
Hardware	20,453.0	22,008.0	15,803.0	-	-
Software	1,943.0	2,489.0	2,534.0	-	-
Global Financing	1,249.0	1,046.0	1,091.0	-	-
Other	-	103.0	81.0	-	-
Enterprise Inv.	635.0	-	-	-	-
Sell./Gen./Admin.	-	-	-	20,259.0	22,060.0
Research & Development	5,314.0	5,874.0	5,842.0	6,107.0	6,153.0
Restructuring	-	-	230.0	-	-
Total Operating Expenses	80,499.0	86,677.0	81,988.0	79,495.0	85,720.0
Intell./Devel. Inp.	1,168.0	1,169.0	948.0	900.0	958.0
Other Income	-238.0	23.0	-	766.0	626.0
Foreign Currency Trans. Losses	-	-	-218.0	-	-
Loss on Derivatives	-	-	-4.0	-	-
Interest Income	-	-	307.0	-	-
Realized Gains on Sec. Sales	-	-	111.0	-	-
Gain from Real Estate Activities	-	-	179.0	-	-
Lenovo/Microsoft Gains	-	-	1,883.0	-	-
Other	-	-	93.0	-	-
Interest Expense	-145.0	-139.0	-220.0	-278.0	-611.0
Net Income Before Taxes	8,632.0	9,616.0	9,146.0	9,416.0	10,419.0
Provision for Income Taxes	2,829.0	3,172.0	4,232.0	3,901.0	4,071.0
Net Income After Taxes	6,588.0	7,497.0	7,993.0	9,416.0	10,419.0
Net Income Before Extra. Items	6,588.0	7,497.0	7,993.0	9,416.0	10,419.0
Discount. Ops.	-30.0	-18.0	-24.0	76.0	0.0
Accounting Change	0.0	0.0	-36.0	-	-
Net Income	6,558.0	9,492.0	7,933.0	9,492.0	10,419.0

Source: Company documents.

Exhibit 2 IBM Core Capabilities



Source: IBM 2007 Annual Report.

Exhibit 3 Selected IBM Senior Executives (2007)



Sam J. Palmisano
Chairman of the Board,
President and Chief Executive Officer



Rodney C. Adkins
Senior Vice President,
Development and Manufacturing,
IBM Systems and Technology Group



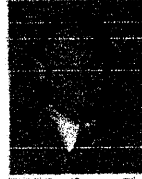
Michael E. Daniels
Senior Vice President,
Global Technology Services,
IBM Global Services



Nicholas M. Donofrio
Executive Vice President,
Innovation and Technology



Doug T. Elix
Senior Vice President & Group
Executive, Sales and Distribution



J. Bruce Harreld
Senior Vice President
for Marketing & Strategy



Dr. John E. Kelly, III
Senior Vice President and
Director of IBM Research



John C. Iwata
Senior Vice President,
Communications



Mark Loughridge
Senior Vice President &
Chief Financial Officer



J. Randall MacDonald
Senior Vice President,
Human Resources



Steven A. Mills
Senior Vice President and
Group Executive
IBM Software Group



Robert W. Moffat Jr.
Senior Vice President
Integrated Operations



Virginia M. Rometty
Senior Vice President,
IBM Global Business Services



Linda S. Sanford
Senior Vice President,
Enterprise On Demand Transformation &
Information Technology



Robert C. Weber
Senior Vice President,
Legal & Regulatory Affairs, &
General Counsel



William M. Zeidler
Senior Vice President & Group Executive,
IBM Systems & Technology Group

Source: <http://www.ibm.com/investor/corpgovernance/cgmgmt.phtml>, accessed March 19, 2008.

Exhibit 4 IBM Global Workforce



Source: Reprinted from January 17, 2008 issue of *BusinessWeek* by special permission, copyright © 2008 by The McGraw-Hill Companies, Inc.

Exhibit 5 IBM Global Scope of IBM's Revenue Growth

IBM operates in 170 countries and enjoys an increasingly broad-based geographic distribution of revenue. Our non-U.S. operations generated 63 percent of IBM's revenue in 2007. Last year our revenue increased 26 percent (18 percent in local currency) in the BRIC countries—Brazil, Russia, India and China. But our global footprint extends much farther. Consider more than 50 countries—

including Czech Republic, Poland, Malaysia, Singapore, South Africa, Venezuela and Mexico—in each of which we grew more than 10 percent in local currency in 2007. In aggregate, IBM's business in this group grew at a rate of more than 20 percent in local currency last year, and comprised 15 percent of our geographic revenues.

Strong Geographic Growth



Source: IBM 2007 Annual Report.

End Notes

ⁱ More information and frameworks related to this case can be found in Rosabeth Moss Kanter, *SuperCorp: How Vanguard Companies Create Innovation, Profits, Growth, and Social Good* (New York: Crown Publishing, 2009)

ⁱⁱ *Economist*, "Blue is the colour," June 4, 1998

ⁱⁱⁱ *Economist*, "Hungry tiger, dancing elephant," April 4, 2007

^{iv} Data found in company documents

^v Steve Hamm "International isn't just IBM's first name," *BusinessWeek*, January 17, 2008

^{vi} Individual data on subsidiaries were found in company documents and provided during interviews

^{vii} Richard Waters, "IBM in Dollars 1.6bn emerging markets drive," *Financial Times*, December 13, 2007

^{viii} IBM 2007 Annual Report

^{ix} Quoted from interview with Sam Palmisano, found in *Wall Street Journal*, "Spinning a Global Plan: Why IBM's Chief is Betting Big on Developing Countries," February 14, 2008