Generating Higher Value at IBM

2015 IBM Road Map
Each year IBM describes how the company manages its business and serves its shareholders in a detailed financial road map.
A long-term perspective ensures IBM is well positioned to take advantage of major shifts occurring in technology, business and the global economy. It also galvanizes the company to deliver superior performance.

2011 Performance
In 2011 IBM delivered record performance in revenue, profit, earnings per share and free cash flow.

$13.44 operating earnings per share*
up 15 percent, the ninth consecutive year of double-digit growth

$107 billion revenue
up 7 percent from 2010

$16.6 billion free cash flow
up for the ninth consecutive year

$16.3 billion operating net income*
up 9 percent from 2010

$18.5 billion returned
in share repurchases and dividends

Looking ahead to 2015, we will continue our transformation for growth…
IBM has built a record of leadership by pursuing the most transformational opportunities, inventing the breakthrough technologies to capture them and building an organization able to deliver superior results over the long term.

1. We continually change our business mix toward higher-value, more profitable technologies and market opportunities.

   IBM operations in more than 170 countries leverage the company’s global scale and expertise.

   Global integration of all our major enterprise functions—from service delivery to marketing—has enabled IBM to gain more than $6 billion in enterprise productivity savings over the past five years while improving quality.

   A globally integrated model allows us to focus resources on client-oriented work and enable rapid deployment of IBM capabilities to growth markets.

2. We have become a globally integrated enterprise, to capture new growth and improve productivity.

   IBM has a strong business model performance that has resulted in consistently strong free cash flow generation. In 2011 our free cash flow was $16.6 billion—an increase of nearly $10 billion since 2000.

3. By aligning our business model with our clients’ needs we generated superior financial results …
4. This delivers long-term value and high performance for all key IBM stakeholders—investors, clients, employees and society...

Our 2015 Road Map continues the drive to higher value—with the expectation of at least $20 operating (non-GAAP) EPS* in 2015.

Key objectives for 2015:
+ Software becomes about half of segment profit
+ Growth markets approach 30 percent of geographic revenue
+ Generate $8 billion in productivity through enterprise transformation
+ $70 billion of capital returned to shareholders
+ $20 billion in spending on acquisitions

--- Operating (non-GAAP) EPS*

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--- Operating (non-GAAP) EPS*

* Excludes acquisition-related and nonoperating retirement-related charges.
** 2000 and 2001 exclude Enterprise Investments and not restated for stock-based compensation. Sum of external segment pre-tax income not equal to IBM pre-tax income.

--- Key Drivers for 2015 EPS Road Map

Revenue Growth
A combination of base revenue growth, a shift to faster growing businesses and strategic acquisitions.

Operating Leverage
A shift to higher-margin businesses and enterprise productivity derived from global integration and process efficiencies.

Share Repurchase
Leveraging our strong cash generation to return value to shareholders by reducing shares outstanding.

--- Capital Expenditures — We have invested more than $50 billion over the past 12 years to advance our capabilities, including a global delivery center in Columbia, Missouri, advanced semiconductor manufacturing in Fishkill, New York, and a research facility in Ontario, Canada.

Acquisitions — Since the beginning of 2000, we have acquired 130 companies in strategic areas including analytics, cloud, security and Smarter Commerce. We expect to spend $20 billion in acquisitions over the 2015 Road Map period to support growth initiatives.

Share Repurchase and Dividends — We have returned $133 billion to our shareholders since the beginning of 2000. At the end of 2011 our quarterly dividend per share was six times higher than 2000. During this period we reduced shares outstanding by one third. We expect to return $70 billion to shareholders in our 2015 Road Map period—$50 billion through share repurchases and $20 billion in dividends.

--- Primary Uses of Cash Since the Beginning of 2000 ($ in billions)

- Capital Expenditures
- Acquisitions
- Share Repurchases
- Dividends

--- 70 billion in capital expected to be returned through 2015

... allowing us to invest in future sources of growth and provide record returns to our shareholders.
Our four complementary growth initiatives—business analytics, cloud, growth markets and Smarter Planet—target opportunities that are changing the global IT landscape. With strong contribution from these initiatives, IBM delivered 7 percent revenue growth in 2011.

2011 Performance

**Growth Markets**
22% of IBM’s geographic revenue

**Business Analytics**
16% revenue increase from 2010

**Cloud**
3.8 times 2010 revenue

**Smarter Planet**
Nearly 50% revenue increase from 2010

Growth Markets

The world’s emerging markets will drive more than 60 percent of global GDP growth in the next four years. IBM is investing in more than 100 of these countries, which are building out critical infrastructure, developing strategic industries and responding to massive demographic shifts, such as rapid urbanization.

Geographic Gross Profit Growth

In 2011, growth markets generated nearly half of IBM’s geographic gross profit growth.

In 2011 we opened nearly 100 new branch offices to expand our presence beyond large cities and beyond the BRICs (Brazil, Russia, India and China), and to participate in high-growth industries.

We are creating hubs of expertise around the world. These include the Institute for Electronic Government and the Energy and Utilities Solution Lab in China; Natural Resource Solution Centers in Perth and Rio de Janeiro; Banking Centers in Singapore and São Paulo; and a Latin American micro-financing center in Lima.

In Africa, IBM is investing to bring expertise in areas like financial services. For example, we are working with five leading Kenyan banks on infrastructure projects and helping Safaricom, through a partnership with Vodafone, provide its M-PESA mobile money service to more than 15 million customers.
Business Analytics

Organizations are reaching far beyond the structured tables of databases. They are analyzing the streaming, unstructured data generated by events as they occur in the world, and acting upon those insights—from customer preferences or patient outcomes, to process inefficiencies or safety—in real time. They are integrating analytics into the way they work.

IBM has the world’s deepest portfolio of analytics solutions and software; a leading position in powerful optimized systems; and the business and industry expertise of almost 9,000 business analytics and optimization consultants, 400 researchers and eight analytics solution centers. IBM has acquired 28 companies to build targeted analytics and information expertise since 2005. We have generated hundreds of patents a year in analytics, and invented breakthrough technologies like IBM Watson, a learning system that answers questions in natural language, and InfoSphere Streams, software that can correlate and analyze thousands of real-time data sources.

Cloud

Cloud, which delivers business and IT services over the network, is transforming the way data centers are designed and software is developed, providing far more efficiency and flexibility. That has the potential to change the way many industries work. But it requires addressing important issues of security and privacy. So, enterprises seek not just clouds, but smarter clouds. IBM is helping them build private clouds in areas central to their business, while also enabling them, like consumers, to tap into cloud services provided by IBM and others.

IBM is focused on the enterprise cloud. We have more than 1 million enterprise application users working in the IBM cloud and analyze more than $100 billion in commerce transactions a year in the cloud. We monitor 13 billion security events every day and have more than 1,000 researchers and developers working on security and privacy breakthroughs.

The IBM SmartCloud portfolio addresses the full scope of enterprise client requirements:

+ IBM SmartCloud Foundation enables clients to build private clouds.
+ IBM SmartCloud Services offers cloud infrastructure services managed and run by IBM.
+ IBM SmartCloud Solutions offers software and business processes as a service.

Dutch Cloud, a service provider in the Netherlands, uses IBM SmartCloud technologies to build low-touch infrastructure-as-a-service for its small and medium-sized business clients.

Lockheed Martin uses IBM SmartCloud technology to develop mission critical applications and technologies and to support a broader evolution to cloud computing for the U.S. Government.

Lucky Brand, a designer clothing retailer, is using IBM cloud-based analytics to personalize customers’ online shopping experience, resulting in improved customer loyalty and increased sales.
Smarter Planet

The infusion of digital intelligence into the world’s systems is changing the way people, organizations and entire industries approach what they do—how they interact, organize and create value. Nowhere is the potential for transformation greater than in our cities. Around the world, city leaders are struggling with economic challenges, overtaxed infrastructures and dramatic demographic shifts. In more than 2,000 Smarter Cities engagements, we see forward-thinking leaders emerging with new approaches to make their communities smarter and to make them work better.

Smarter Law Enforcement

Memphis Police Department

30% decrease in serious crime

15% decrease in violent crime

Memphis Police Department precinct commanders start their day with data. A predictive analytics system looks for patterns in criminal activity that help the department see emergent trends in their communities in time to make a difference.

Inside the solution:

The system relies on IBM predictive analytics software that correlates historic data with the latest incident reports to create multilayer maps of “hot spots.”

“Memphis Police Department now has the invaluable insight all of our staff can use—from the commanders to the patrolling officers—to specifically focus investigative and patrol resources with the goal of preventing crime and making our neighborhoods safer.”

— Colonel James Harvey, Commander, Ridgeway Station, Memphis Police Department

Smarter Water and Sewer Systems

San Francisco Public Utilities Commission

70% increase in ability to track critical assets

11% improvement in the ratio of preventative to corrective maintenance

Drawing on usage data and many other variables, San Francisco is predicting and preventing breakdowns and reducing pollution from its sewer system’s 1,000 miles of pipes and three treatment facilities, which together process 500 million gallons of wastewater and storm runoff per day during the rainy season.

Inside the solution:

The system integrates IBM asset management and geographic information software to locate and monitor assets such as pumps, fittings and other parts of the water infrastructure.

“Not only can we solve most problems within 24 hours, but we’re able to use insights from the data to reduce water pollution.”

— Tommy Moala, Assistant General Manager, SFPUC Wastewater Enterprise

2011 Results:

Nearly 50% revenue growth from 2010

More than 2,000 Smarter Cities engagements

... and for the economies, cities and people of the world.
Smarter Government Services
Bolzano, Italy
Remote Patient Monitoring

80% of participants felt more secure
70% improved their mobility through exercises

As part of a pilot to extend healthcare services without increasing costs, elderly citizens in Bolzano, Italy, were given access to advice and medical attention from their homes, via mobile devices. In addition, wireless sensors monitored the environment within the homes, generating alerts delivered via sms text message, email and Twitter to family members and social services professionals.

“The monitoring network allows us to provide services with a human touch—but it’s now the right touch, at the right time.”
— Michela Trentini, Director of Social Planning, Bolzano

Smarter Operations Center
Rio de Janeiro’s Integrated Operations Center

30% decrease in emergency response times

Rio de Janeiro’s operations center provides a single dashboard of the city’s critical systems. Information on weather, traffic and medical services helps city agencies anticipate looming problems, engage citizens as part of the solution and plan for major events, like the upcoming World Cup and Olympic Games. A predictive weather forecasting system designed by IBM researchers helps model flooding patterns, identifying where events such as mud slides are likely to occur.

“Communicating with citizens about Rio’s day-to-day life is key. When people are well-informed, they act in ways that help the city work better.”
— Eduardo Paes, Mayor, Rio de Janeiro

Smarter Transportation
Singapore’s Land Transport Authority

80% reduction in lost transactions due to system issues
100% increase in performance capacity to 20 million fare transactions per day

Singapore commuters move easily among all forms of public transportation, thanks to a smart system that charges by distance, not by mode of transport. A highly intelligent algorithm constructs the ideal journey for each commuter across rail and bus lines. In the process, the Land Transport Authority gets real-time insight to anticipate capacity needs.

“The monitoring network allows us to provide services with a human touch—but it’s now the right touch, at the right time.”
— Michela Trentini, Director of Social Planning, Bolzano

Inside the solution:
The solution was created by IBM with the support of TIS Innovation Park, developed on an IBM application server, with data management and messaging software integrated with Android mobile devices.

Inside the solution:
The Intelligent Operations Center combines patented analytics technologies, created by IBM Research in collaboration with the city, and IBM collaboration, analytics and asset management software and systems integration expertise.

“By unifying our payment systems, we can build composite models of typical journeys, such as a person driving a car into the city, being charged for congestion, parking his car, catching the bus and then the rail.”
— Silvester Prakasam, Director of Fare Systems, Singapore Land Transport Authority

“Generating Higher Value at IBM” includes selected references to certain non-GAAP financial measures that are made to facilitate a comparative view of the company’s ongoing operational performance. For information about the company’s financial results related to (i) operating (non-GAAP) EPS and (ii) free cash flow for 2011, see the company’s Form 8-K submitted to the SEC on January 19, 2012 (Attachment II—Non-GAAP Supplementary Materials). For information about the company’s financial results related to (i) growth markets share of geographic revenue excluding divested PCs and printers and (ii) free cash flow, in each case for 2010, see the company’s Form 8-K submitted to the SEC on May 12, 2010 (Attachment II—Non-GAAP Supplementary Materials).