2011 IBM Power Technology Symposium

Power Technology for a Smarter Planet

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V.P. – IBM Integrated Supply Chain, Global Supply Management
THANK YOU !
1Q2011 IBM Business Results

Revenue $24.6B  +8%, 5% yr/yr @CC
Operating (Non-GAAP) EPS $2.41  +21% yr / yr

- 8% revenue growth driven by:
  - Double-digit growth in every hardware platform
  - Software growth of 10% excluding PLM
  - Outsourcing growth of 7%

- Momentum in growth initiatives
  - Growth Markets  +12% yr/yr @CC
  - Business Analytics  +20% yr/yr
  - Cloud Revenue  5X yr/yr
  - Smarter Planet  +20% yr/yr

- Continued margin expansion

- Returned $4.8B to shareholders

*Increasing 2011 Operating (Non-GAAP) EPS expectations to at least $13.15
2015 projection ➔ at least $20 EPS expected*
## 1Q2011 Systems & Technology Results

<table>
<thead>
<tr>
<th></th>
<th>1Q11</th>
<th>Rptd</th>
<th>@CC</th>
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</thead>
<tbody>
<tr>
<td>Revenue (External)</td>
<td>$4.0 B</td>
<td>19%</td>
<td>16%</td>
</tr>
<tr>
<td>Gross Margin (External)</td>
<td>37.8%</td>
<td>4.7 pts</td>
<td></td>
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<tr>
<td>PTI Margin</td>
<td>3.1%</td>
<td>8.6 pts</td>
<td>7.5 pts</td>
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<td></td>
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<tr>
<td><strong>1Q11 Revenue</strong></td>
<td></td>
<td></td>
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<tr>
<td>System Z</td>
<td>41%</td>
<td>38%</td>
<td></td>
</tr>
<tr>
<td>Power Systems</td>
<td>19%</td>
<td>17%</td>
<td></td>
</tr>
<tr>
<td>System X</td>
<td>13%</td>
<td>10%</td>
<td></td>
</tr>
<tr>
<td>Storage</td>
<td>10%</td>
<td>8%</td>
<td></td>
</tr>
<tr>
<td>Retail Store Solutions</td>
<td>18%</td>
<td>17%</td>
<td></td>
</tr>
<tr>
<td><strong>Total Systems</strong></td>
<td>18%</td>
<td>16%</td>
<td></td>
</tr>
<tr>
<td>Microelectronics OEM</td>
<td>23%</td>
<td>23%</td>
<td></td>
</tr>
<tr>
<td><strong>Total Systems &amp; Technology</strong></td>
<td>19%</td>
<td>16%</td>
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*Double-digit growth in every Brand*
Our Values

**IBMers Value:**

Dedication to every client’s success.
Innovation that matters—for our company and for the world.
Trust and personal responsibility in all relationships.
IBM Centennial – June 16th, 2011
(100th Anniversary as a Corporation of Innovation and Invention)

**Reinventing the modern corporation**
- 1911 Progressive Hiring
- 1953 Equal Opportunity Policy
- 2006 The Globally Integrated Enterprise
- 2011 Centennial Day of Service

**Making the world work better**
- 1937 Social Security IBM 077 Collator
- 1962 SABRE Airline Reservation System
- 1969 Apollo on the Moon
- 2010 Smarter Cities - Stockholm

**Pioneering the science of innovation**
- 1956 Hard Disk Drives
- 1964 DRAM
- 2011 Watson Computing System & Jeopardy!

In our second century, as in our first, IBM’s business model is based on continuous forward motion.
IBM’s Ongoing Transformation Journey

The “Smarter” phase of our transformation is underway

2002
Sharing & partnering
- Consistent set of processes worldwide
- Leverage best practices
- Standardize and reduce waste
- Governance and performance discipline

2006
Globally integrating
- Right skills, right place, right cost
- Rationalize support functions for greater efficiency
- Radically simplify processes
- Consistent set of processes worldwide
- Leverage best practices
- Standardize and reduce waste
- Governance and performance discipline

2010
Making things smarter
- Instrumented, interconnected, intelligent
- Enable growth and productivity
- Optimize the whole system
IBM’s Growth Initiatives

Growth Markets

Opportunity:
The emerging market GDP growth rate - expected to be 5 percent through 2015 - is more than double that of major markets.

- Economic expansion in emerging markets (middle class growth & economies joining global marketplace)
- IBM expanding branch locations in BRiC countries
- Other growth markets (Africa) leveraging our clients

Cloud

Opportunity:
Cloud is a new, highly efficient model for consuming and delivering IT-based services. It is made possible by virtualizing resources, automating processes, and standardizing tasks so they can be offered as easy-to-use services.

- Supporting diverse clients (banking, healthcare, & government) to build their own clouds or securely tap into IBM cloud-based business services
- Clouds enable our clients to better service their clients and business partners

Business Analytics

Opportunity:
Global data volumes are predicted to increase by 29 times over the next 10 years to 35 zettabytes.* (A zettabyte is a 1 followed by 21 zeros)

- Enable Enterprises to manage and mine the deluge of potentially valuable information

Smarter Planet

Opportunity:
The infusion of digital intelligence into industries, infrastructures, processes and cities can make them more productive, efficient and responsive.

- Smarter Cities initiative (integrating real-time information and processes across many city departments)
- Instrumented, Interconnected, Intelligent
IBM Research: Supporting IBM’s Growth Initiatives

IBM continues to make consistent and sizable investments in R&D

- 18 years at the top of the patent list
- 9 major IBM labs around the world + countless other R&D centers / partners
- 3,000 IBMers in Research
- ~5,900 patents in 2010 – exceeds Oracle, Microsoft, HP, EMC & Google combined

- 60% of Research applied to Growth Initiatives
  - ~1000 researchers globally focused on Services & Business Analytics → more than the total number of researchers at HP

- 40% of Research applied to Base Research
  - support current products and exploratory research such as the Watson System
Integrated Supply Chain

ISC (Integrated Supply Chain): Supporting IBM’s Growth Initiatives

- Become an optimized flexible Smarter Value Chain
- Enable pervasive predictive analytics
- Integrate, Simplify, Converge Processes and IT
- Transform our business to drive Client Value
- Drive End to End network optimization
- Build smarter processes
- Sell what we do; Become a Showcase for ISC & IBM
- Enable growth market expansion
- Collaborate & influence from sourcing, to development, through to delivery for competitive advantage
- Enable & optimize Solutions delivery
- Cultivate broad & deep skills
### Supply Chain Risk Management

<table>
<thead>
<tr>
<th>Financial Risk</th>
<th>Regulatory Risk</th>
<th>Environmental Risk</th>
<th>Strategic Risk</th>
<th>Operational Risk</th>
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</thead>
</table>

**Build Smarter Processes**
- Integrated process controls in logistics and operations
- Compliance programs with suppliers (Product Environmental Compliance)
- Supplier Financial Risk Assessment

**Become an optimized flexible Smarter Value Chain**
- Integrated risk strategies & mitigation policies in supply chain planning
- Single / Dual sourcing plans
- Pandemic Contingency Planning

**Enable pervasive predictive analytics**
- IT enablement to monitor and act on disruptive events (Cognos Technology)
- Impact Likelihood Model
- IBM ILog based instantaneous alert functionality and process
A 40 Year History of Commitment
To environmental leadership and corporate responsibility

“We accept our responsibilities as a corporate citizen in community, national and world affairs; we serve our interests best when we serve the public interest....We want to be at the forefront on those companies which are working to make our world a better place.“

…Thomas J. Watson, Jr., IBM chairman and chief executive officer, 1969

April 2010
HP, IBM Battle for Environmental High Ground
reference to: IBM Global Supply's Social and Environmental Requirements for Suppliers - Greentech Media

October 2010
Newsweek published its environmental ranking of the top international and US-based companies, and IBM is number one on that global list. Companies ranked on their overall "green score" based on an accumulated score of three components: Environmental Impact Score (EIS), Green Policies Score (GPS) and Reputation Survey Score (RSS).

November 2010
new Sustainability Funds name top companies, IBM #1 or at the very top in all three financial/investor reports re. "sustainability" performance. Gartner Survey looked at companies’ commitment to managing the environmental aspects of their internal operations and their supply chain
Relative Server System Performance vs. Hardware Generation

- Improvement due to collaboration within IBM and with our suppliers:
  - Increased efficiency of power converters
  - Improved power distribution
  - Implemented Power7 EnergyScale™

*Calculated on rPerf (Relative Performance) benchmark
Power Technology for a Smarter Planet

IBM Power Technology Innovation

- Energy Efficient Power Designs
  - Efficient Power Conversion Across All Operating Load Conditions
    - Efficiency: >95% at 50% load (> 91% at 20% thru 100% load)
    - Support power saving modes for low power consumption
    - Capable of running off of AC or High Voltage DC input power

- Highly Reliable Power Designs
  - MTBF of AC/DC Power Assemblies of > 3M Hours; > 10M Hours for POL DC/DC Converters
  - Meet IBM de-rating guidelines, power line disturbance, and anti-smoke requirements
  - Range of Redundancy Design Analysis and Test Verification

- Diagnostic and Telemetry Capabilities
  - 100% Error Detection / Fault Isolation diagnostics and monitoring via serial bus
  - Telemetry of Power Measurement, Voltage, Current, Temperature, Status
  - Diagnostics of Over Voltage, Under Voltage, Over Current, Short Circuit, Over Temperature, Current Sharing, Warnings

- Packaging Expertise
  - Reliable Packaging and Interconnect Solutions for high power densities
  - Common form factors
  - Reliable lead-free solder attach processes
CONGRATULATIONS !!

Outstanding leadership, innovation, and results in energy efficiency and conservation.

- Enhanced power management functions in new server POWER7® and x86 processors, memory and I/O subsystems
- Innovative data management such as Easy TierTM storage, data compression, data de-duplication, and thin provisioning supporting storage energy efficiency
- Low-power "sleep" mode for Retail Store Systems
- The first in the industry to qualify a 4-processor socket server to the new U.S. EPA ENERGY STAR® criteria for servers
- The IBM System Blue Gene® family of supercomputers achieved computing excellence with breakthroughs in energy efficiency, winning the National Medal of Technology
- Moved Measurement & Management Technologies (MMT) from Research to a customer service offering.
- Developed and offered Active Energy Management capabilities for IBM products.
Questions & Answers