

THE SMARTER PLANET: A mandate for CIO leadership in a radically changing world

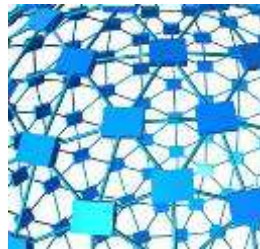


Our world is **changing ...**

**Global
integration**



**Networked
technologies**



**Bandwidth
explosion**



... it's getting a lot **smaller**

It's also getting a lot smarter ...

INSTRUMENTED

Digital technologies (sensors and other monitoring instruments) are being embedded into every object, system and process.

INTELLIGENT

All the data generated by digital technology is providing intelligence to help us do things better, improving our responsiveness and our ability to predict and optimize for future events.



INTERCONNECTED

In the globalized, networked world, people, systems, objects and processes are connected, and they are communicating with one another in entirely new ways.

The smarter planet doesn't just happen

60% of 2,500 trillion liters of water is wasted each year via global agriculture

Yet one in five people do not have access to clean, safe drinking water

820 million of the world's population are undernourished

Yet U.S. grocers throw away \$48 billion worth of food annually

In distributed data center environments, up to 85% of computing capacity sits idle

Yet it is estimated that the world's data centers produce more carbon in a year than the total electricity usage of 36 million homes

Smart solutions demand convergence between business strategy and IT strategy

Computational power and technology enable the smarter enterprise, but they are not enough ...



Business acumen and human cognition are needed to design IT-enabled business solutions that can truly drive the business forward

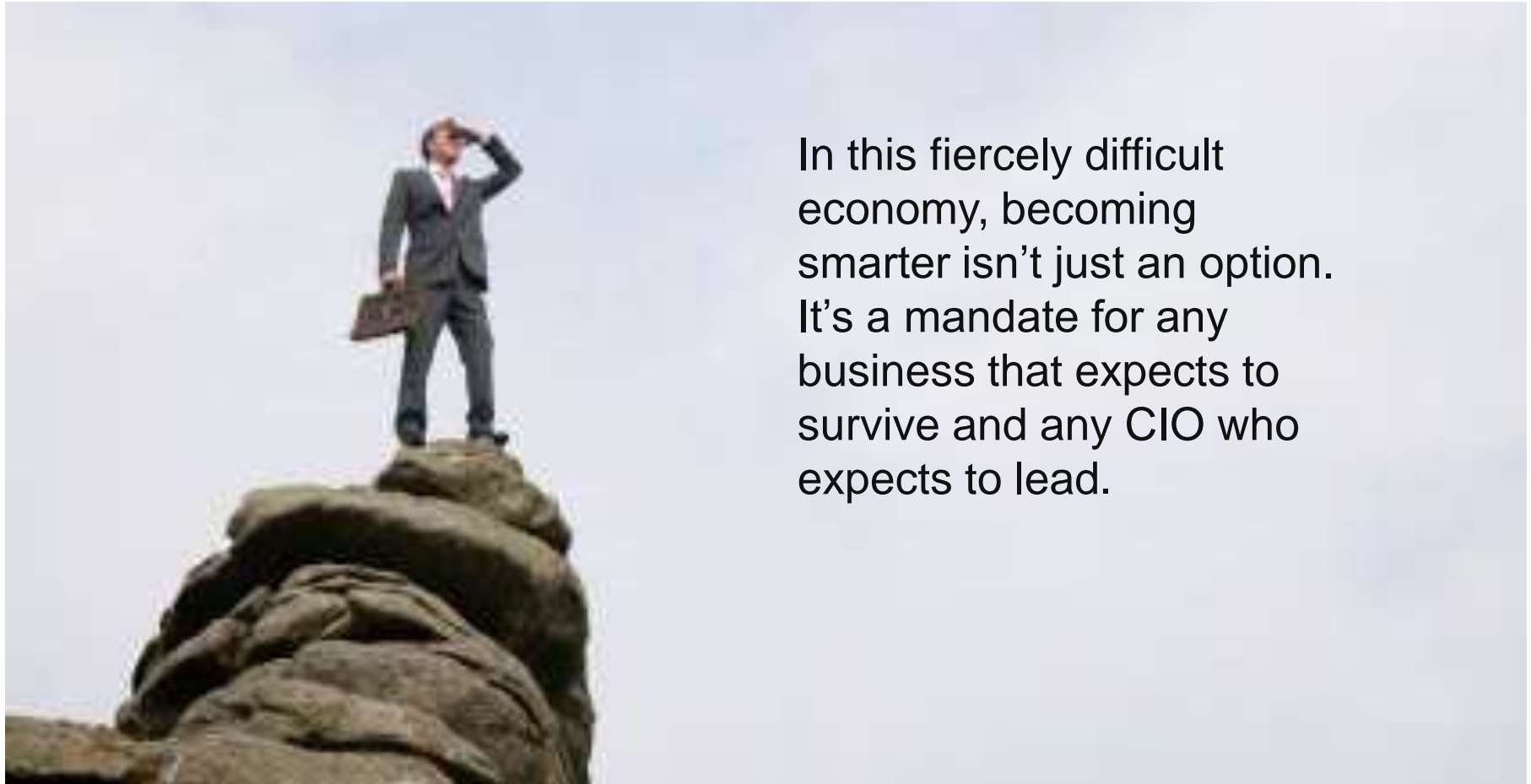


Enter the CIO ...

The organization's top technology expert and visionary business enabler is uniquely positioned to:

- Contribute to the smarter enterprise by creating a portfolio of IT-enabled integrated business services
- Develop systems, processes and infrastructures that are flexible and capable of responding to and enabling change
- Influence how the enterprise will leverage technology to accomplish its goals
- Assist the enterprise in achieving business operations efficiency to free capital for new investment
- Help transform the enterprise to deliver greater business value.

CIOs are on the threshold of opportunity



In this fiercely difficult economy, becoming smarter isn't just an option. It's a mandate for any business that expects to survive and any CIO who expects to lead.

Four pressing business needs point to opportunity for a smarter way

NEW INTELLIGENCE



To manage the mountain of information generated daily by increasingly connected systems, devices and people, while extracting richer insights and making faster, better decisions

DYNAMIC INFRASTRUCTURE



To provide the operational efficiency to drive down costs and the flexibility to assimilate change and drive competitive advantage

SMART WORK



To improve the agility of enterprise business processes and the organization's ability to benefit from and enhance the expertise and creativity of its people

GREEN & BEYOND



To support initiatives in response to escalating energy, environment and sustainability concerns, and stakeholder requirements for social responsibility

NEW INTELLIGENCE



To manage the mountain of information generated daily by increasingly connected systems, devices and people, while extracting richer insights and making faster, better decisions

We are seeing increasing amounts of data, which must be transformed into information to create new intelligence ...

Volume of digital data

- 57% CAGR for enterprise data through 2010
- Machine-generated data from a growing array of devices and objects

Variety of information

- 80% of new data growth is unstructured content
- E-mail, images, audio ...

Velocity of decision making

- Rapidly changing business climate
- Need to stay ahead and plan for future



New Intelligence is about gaining control of the information explosion

Less and less information is being effectively captured, analyzed and made available to the people who need it

***85% of CIOs do not believe
that their information is
well managed***

***59% do not have
access to information
across the value
chain that would be
most useful to them***



***70% do not get
predictions on future
opportunities and
problems***

Senior executives want to make better use of their information

Drive new revenue, profits and competitive advantage

Provide critical insight to identify changes in market behavior, improve relationships, identify new markets and develop new offerings that ensure maximum business impact

Optimize the allocation and deployment of resources and capital

Create cost efficiencies that align to business strategies and objectives

Lower business risk

Help reduce vulnerability and provide greater certainty in predicting, identifying and responding to threats



GREEN & BEYOND



To support initiatives in response to escalating energy, environment and sustainability concerns, and stakeholder requirements for social responsibility

Technology is making the sustainable enterprise possible

Implementing a consolidated, virtualized infrastructure

Consumes less floor space
and requires fewer resources
for power and cooling

Increasing workforce collaboration

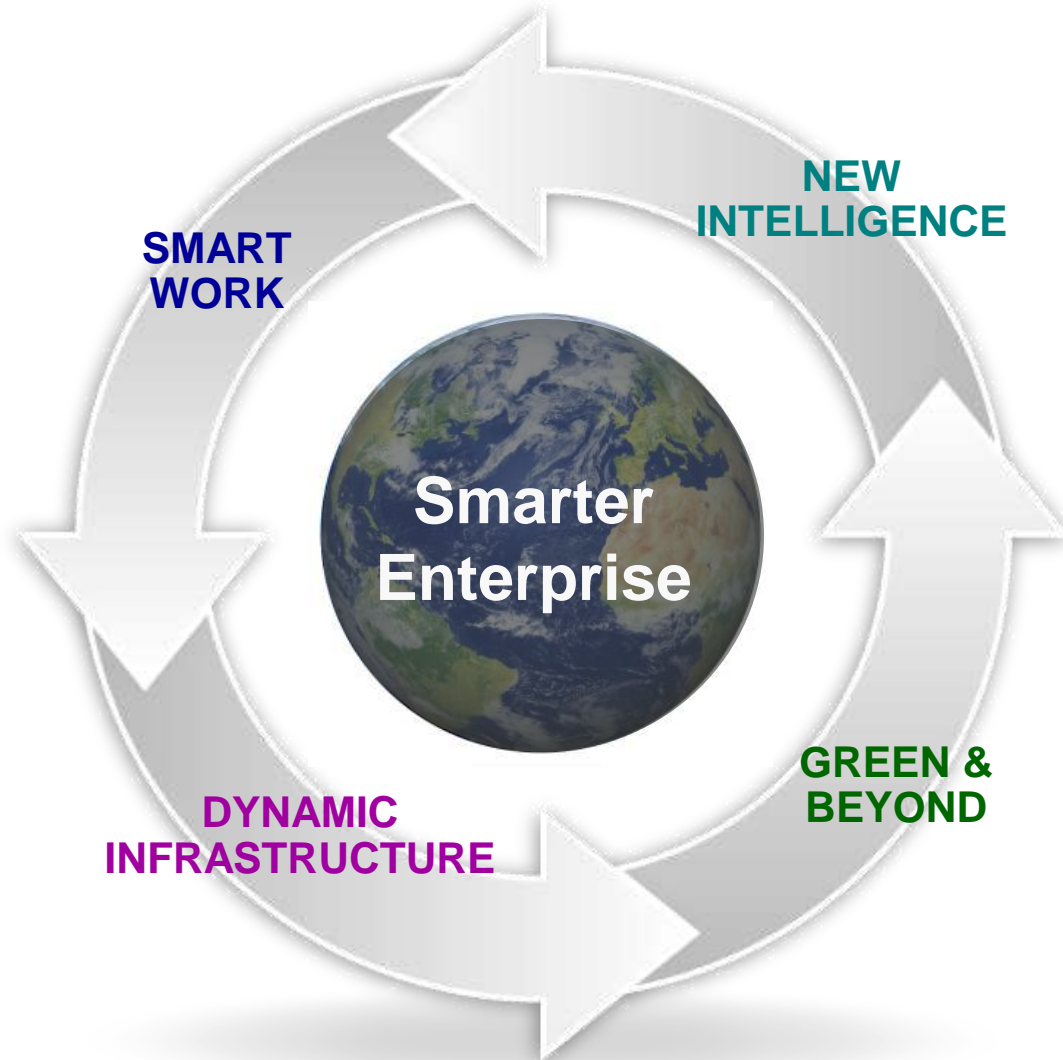
Reduces carbon emissions
by limiting the need for
business travel and
enabling more employees
to work at home

Turning information into real-time, actionable intelligence

Enables companies to manage
their environmental performance
autonomically and make better
use of scarce resources



Becoming smarter is an evolutionary process



IBM's own smart transformation has delivered results

IT consolidation

From 2002 through 2007, IBM's own IT investments delivered a cumulative benefit of approximately \$4 billion.

	<u>1997</u>	<u>Today</u>
CIOs	128	1
Host data centers	155	7
Webhostingcenters	80	5
Network	31	1
Applications	15,000	4,700

Data center optimization

A major virtualization initiative is consolidating more than 3,900 servers onto approximately 30 IBM System z® mainframes. Additional virtualization initiatives leverage System p®, System x® and storage across enterprise.



Project Big Green

The new virtualized environment will use 80% less energy and 85% less floor space, while providing two times the existing capacity.



Service delivery

IBM's Research Cloud provides computing and other services on demand for 3,000 IBM researchers across eight countries.



Our transformation extends well beyond the data center

- Launched an enterprisewide program to deliver simplified, standardized global business processes, horizontally integrated across IBM geographies and business units
- Created globally integrated support functions for HR, IT, Finance, Marketing, Legal, Sales Operations, etc.
- Defined a new leadership framework that emphasizes business results and the employee experience
- Established an innovation agenda that drives global collaboration with clients, employees and society via numerous platforms, including portals and idea creation “Jams.”

IBM's Transformation Framework



Some lessons learned on IBM's own road to smart

On enabling productivity

- Don't automate a mess ... fix processes first, then automate
- Sunset legacy systems and tools as new ones are deployed
- Take an end-to-end, outside-in view of processes.

On enabling business growth

- Focus on high-growth customer segments and new markets
- Leverage business analytics to better align resources with opportunities and enable fact-based decisions
- Enhance the client experience end to end.

On enabling culture change

- Recognize that culture change is a journey
- Address the underlying drivers of behavior
- Think, act and optimize globally
- Create a sense of urgency that the organization can rally around.

For IBM, becoming smarter is not just an academic exercise ...

**Technology
know-how**



**Depth of
experience**



Vision

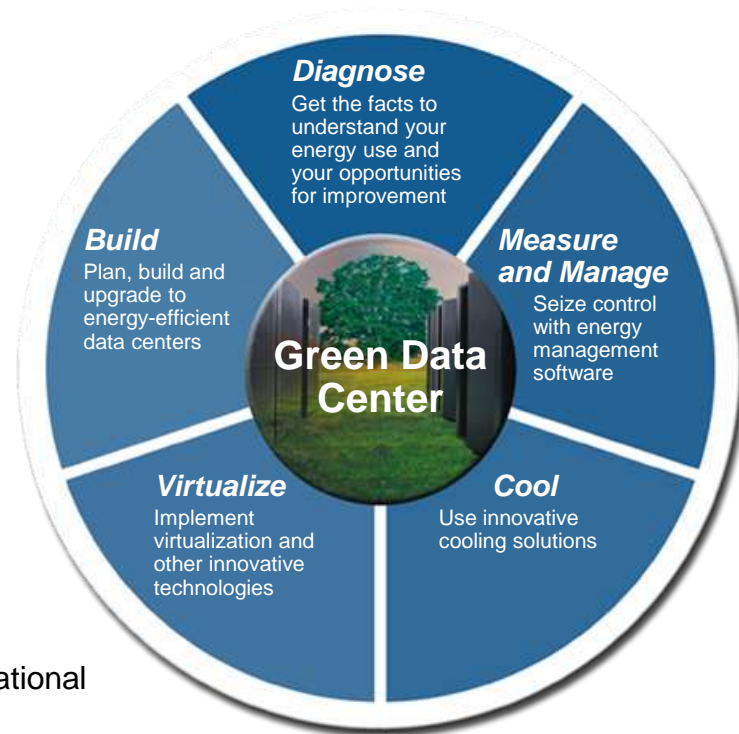


... it's about solving real business problems
beyond IBM's walls

Are you ready to build a
smarter enterprise?

Green Data Center – funding and asset disposal is part of the strategy

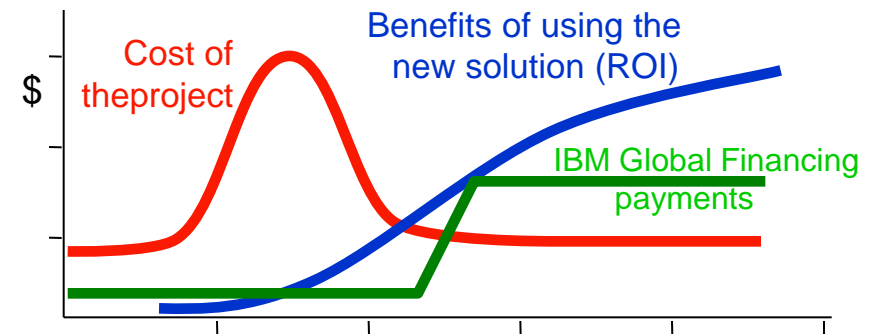
- Tailored to the five essential elements of a green data center, IBM Global Financing provides clients across the world with a holistic approach that includes competitive, customized financing of single components or an entire project covering hardware, software and services from IBM and other vendors; environmentally friendly asset disposal of retired IT equipment; and IBM Certified Pre-owned Equipment.
- **We can help clients:**
 - *Reduce total cost of ownership* of new IBM hardware by leasing vs. purchasing
 - Establish a *technology refresh cycle* that can ensure price/performance optimization while helping to manage operational costs and eliminating technology obsolescence
 - Finance *services and/or software projects* in any of the five elements
 - *Match cost to benefits* (improved ROI payback) by consolidating complex, multivendor virtualization or other green projects with large up-front costs into a single monthly payment
 - *Dispose of retired IT equipment* in a safe and secure way and in compliance with environmental laws and regulations
 - Reuse equipment by offering *used when new is not an option*



IBM Project Financing™

Customized, all-inclusive financial package for infrastructure solutions, services and business transformation projects

- Customized deal structures targeted at business benefits
 - Self-funding project based on anticipated benefits
 - Payments timed with project milestones



Client Benefits

- Turns up-front costs into affordable and predictable payments
- Aligns payments with anticipated benefits
- Speeds project approval, and preserves cash flow and credit lines
- Develops a tailored funding solution through our comprehensive financing facility for:
 - All project elements and phases
 - Both IBM and non-IBM hardware, software and services

Commercial Financing

Why IBM Global Financing

While credit is tight everywhere else, IBM Global Financing can provide your company with working capital and channel financing to support day-to-day operations or grow your business. Our innovative funding can help your business stay afloat, maintain a healthy balance sheet and minimize risk during today's economic environment.

What we offer

- **Inventory Financing**—Obtain up to 90-days worth of interest-free financing for acquiring products from your suppliers. We offer lines of credit with over 100 suppliers whose products and services cover the gamut in technology and information technology.
 - With Channel financing, you get relief from the cash crunch and an overall expansion of business credit, potentially yielding significantly greater volumes and profits.
- **Receivables Financing**—Open up cash flow by borrowing against available collateral such as accounts receivable and inventory. Choose the offering that best suits your company's needs and financial strategy:
 - Revolving Lines of Credit - Asset-based loans that use accounts receivable and inventory to secure cash advances to meet your working capital needs
 - Receivables Purchase - Get immediate cash from IBM Global Financing by selling your receivables from pre-qualified clients
 - Large Sale Receivables Financing - Obtain bridge funding to help you accommodate larger orders-for up to 100 percent of the order purchase amount and with no interest charges for up to 30 days. Structure your repayment terms to match your collection of the receivables`

Learn more at: ibm.com/financing/us/comfin

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