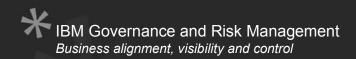


Governance and Risk Management Strategy and Overview

Kristin Lovejoy, Director IBM Tivoli Governance & Risk Management Strategy



IBM Governance and Risk Management Business alignment, visibility and control





Today's Reality...

Improve Performance

Reduce Complexity

Improve Visibility

Increase Accountability

Demonstrate Value



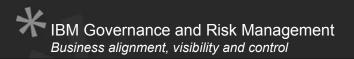
Cut Cost

Decrease Outages

Deliver New Services

Demonstrate Compliance

Assure Alignment





The "Big 3" Client Challenges



Proactively managing security across IT

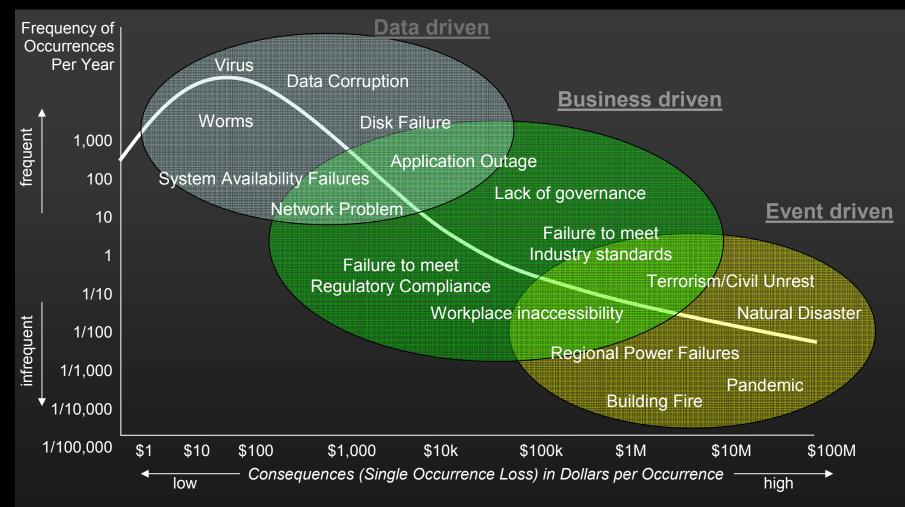
-17

Efficiently operating their data centers





The Impact and Frequency of Today's Risks.... Renewed focus on resilience, security & service management

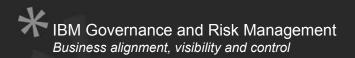




The Newest Challenge: Data Centers are at a Tipping Point

Increased Computing Demand **Changing Cost Dynamics Data Center** Lifecycle Mismatch

- In the next decade, growth in server shipments will be 6x and 69x for storage – IBM / Consultant studies
- Per square foot, annual data center energy costs are 10 to 30 times more than those of a typical office building.² - William Tschudi, March 2006
- Data centers have doubled their energy use in the past five years.³ - Koomey, February 2007
- US commercial electrical costs increased by 10 percent from 2005-06.⁴ - EPA Monthly Forecast, 2007
- "Eighty-seven percent of data centers were built before 2001"⁵
- "Twenty-nine percent of clients identified" data center capability affected server purchases "- Ziff Davis

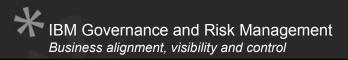




Creating a resilient, high-performing business requires...

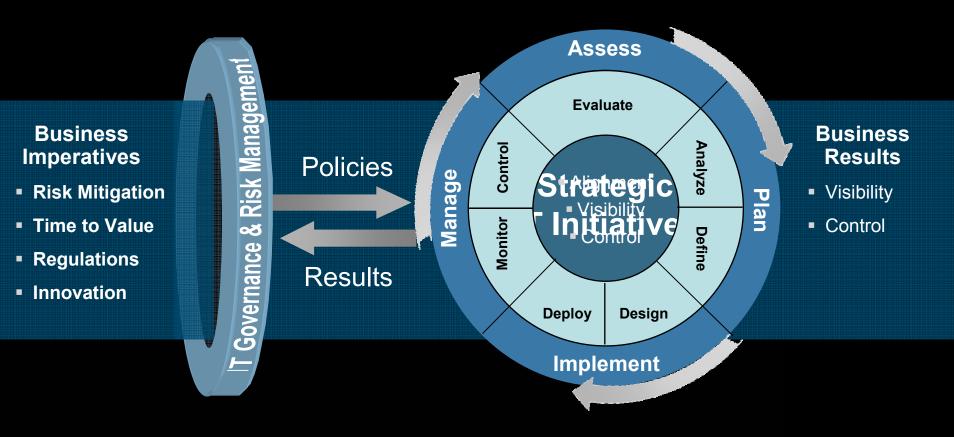


...synchronizing the business and IT requires a continuous Integrated Process for Governance and Risk Management



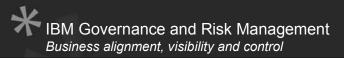


Supporting the Governance and Risk Management Lifecycle *Putting Policy into Practice*



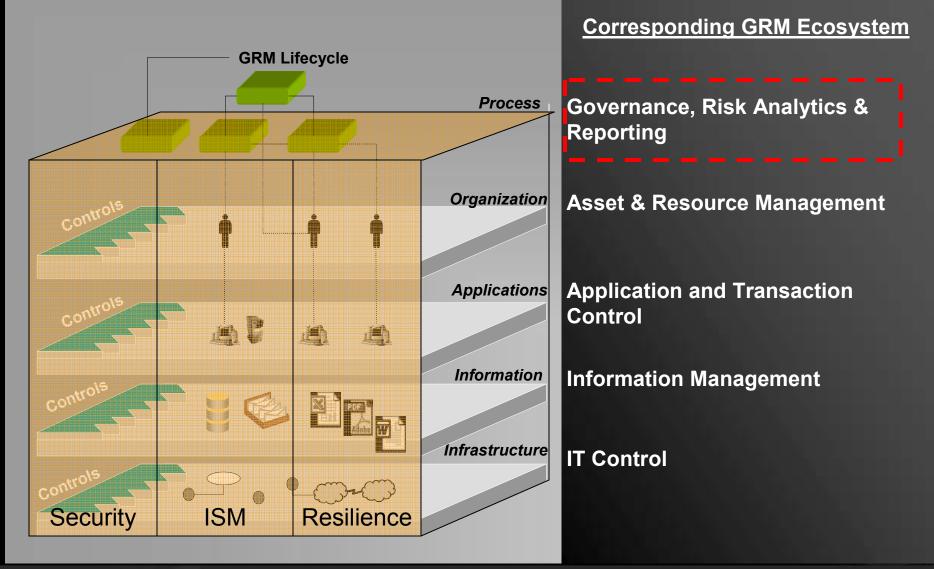
"Do the right things..."

"...and do things right"





Model of the business and IT environment



Business

Resilience



Your strategic initiatives are the starting point and catalysts for making improvements

- Availability Management
- Business Continuity
- Disaster Recovery



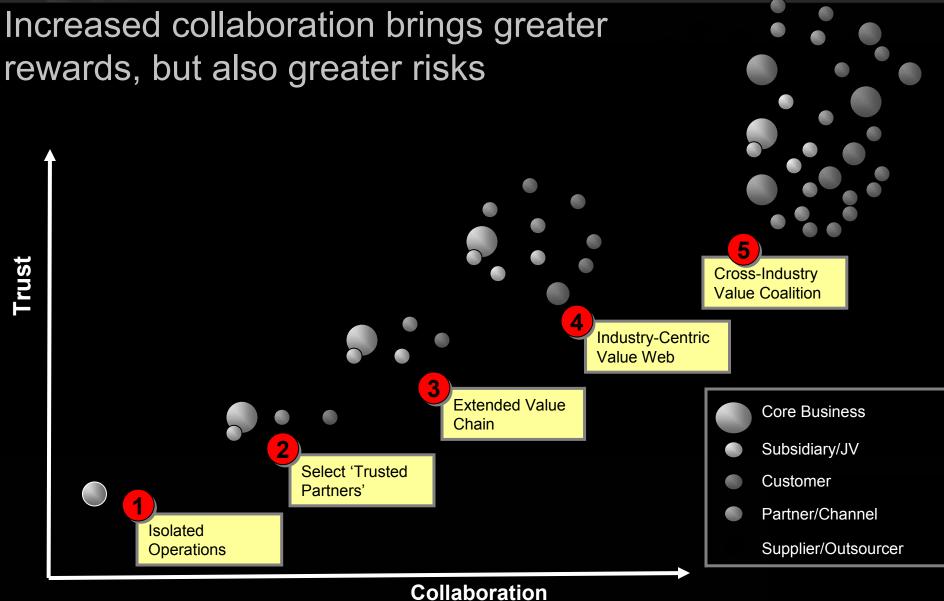
- Information Protection
- Foundational Control
- Policy Compliance



- Data Center Automation
- Service Quality Management
- Change Management

K IBM Governance and Risk Management Business alignment, visibility and control

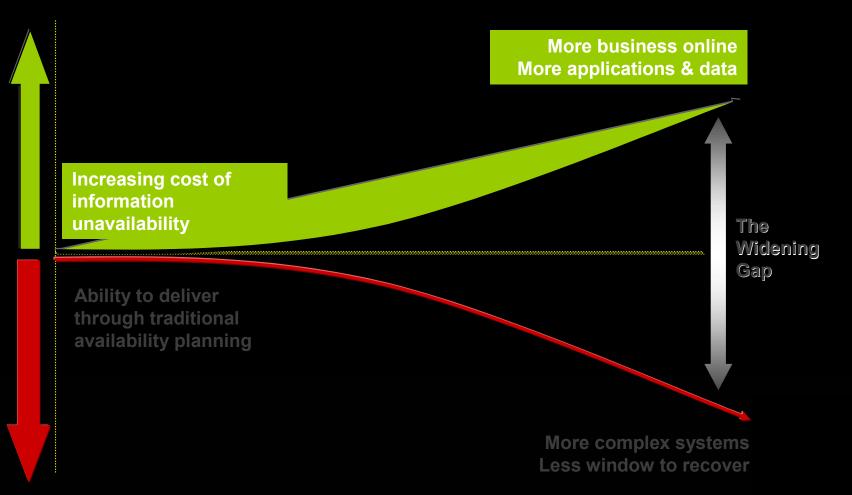




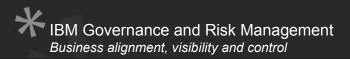
IBM Governance and Risk Management Business alignment, visibility and control



The need for higher levels of availability continues to increase as more business is conducted online.



Requires continuous information availability – BY DESIGN





The balance between Cost of Downtime verses Cost of Uptime becomes critical to the success of a company

Cost of Downtime

- Loss of revenue
- Lost productivity
- Damaged reputation & brand image
- Fines
- Rework
- Impaired financial performance
- Customer dissatisfaction



Cost of Uptime

- Cost of additional facilities (datacenters, recovery centers and workplace)
- Cost of additional technology (servers, network, storage, etc.)
- Organizational geographic diversity
- Process definition



To limit IT downtime, a company has to limit the three elements of downtime

Measurement Element

Frequency

Causes

Number of Outages

- System or Server Crash
- Subsystem and Application Terminations
- Human Errors
- HW Component Failures
- Recurring Problems
- Untested Changes
- Complexity

Outage Duration

- Unchecked Problem Determination
- Informal Recovery Procedures
- Other Secondary Contributors
- Initialization Design
- Indecision
- Lack of Back-up Capability

Number of Users Impacted

- System Design
- Application Design
- Data Design
- System Configuration
- Common Dependencies
- Unnecessary Re-initializations
- Unnecessary Server Reboots

Actions

Decrease Frequency

Robust system design Documented procedures Redundant hardware components Proactive Problem Prevention Effective Change Management Proactive Monitoring -Standardization

Reduce Duration

Post Incident Reviews Documented Back-up and Recovery Procedures •Automation Situation Management System and application design

Limit Scope

System Integration and Design Application Design Data Design Isolation of Vital Applications

Scope

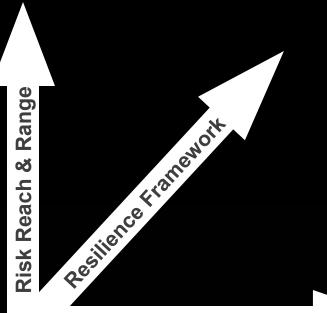
Duration



To accomplish this a methodical approach is necessary to ensure business resilience and reduced downtime.

What types of risks does the company have?

What is the economic threat to our business?



Resilience Strategy

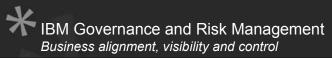
What are the specific areas of vulnerability?

What resilient capabilities must we have?

- Ability to predict
- Ability to prevent
- Ability to recover

What is the appropriate strategy?

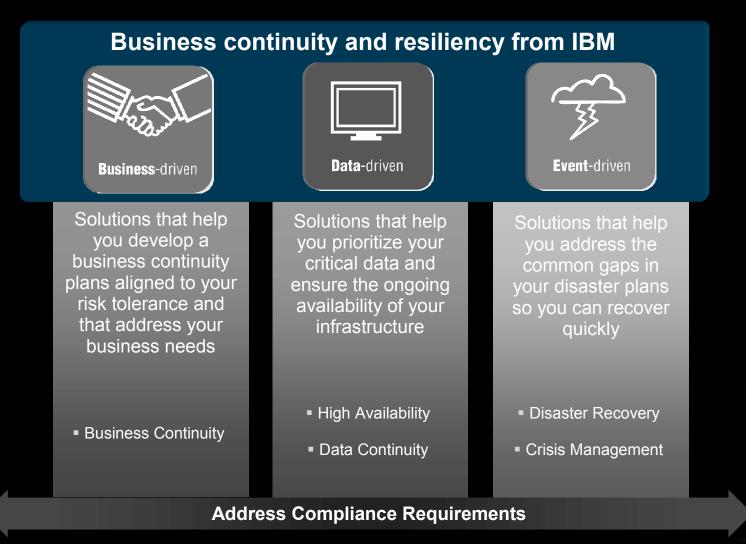
- Business-driven
- Data-driven
- Event-driven





IBM's portfolio of Business Resilience Solutions

Effective Business Resilience Supports Business, Data, and Event Driven Concerns

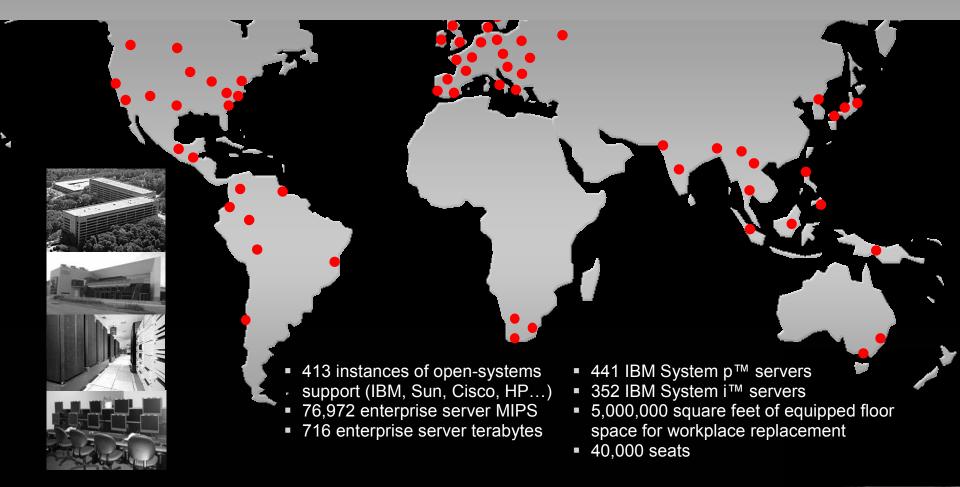


IBM Governance and Risk Management Business alignment, visibility and control



IBM Has Unmatched Global Presence

To Serve Your Heterogeneous Risk Mitigation Needs - 154 Global Resiliency Centers in 55 Countries





Your strategic IT initiatives are the starting point and catalysts for making improvements

- Business Resilience
- Availability Management
- Business Continuity
- Disaster Recovery



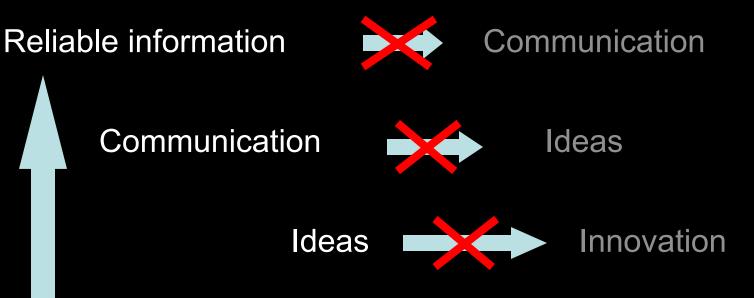
- Information Protection
- Foundational Control
- Policy Compliance



- Data Center Automation
- Service Quality Management
- Change Management



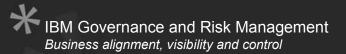
Security assures delivery of reliable information





"The central truth is that information security is a means, not an end. Information security serves the end of trust. Trust is efficient, both in business and in life; and misplaced trust is ruinous, both in business and in life... As an end, trust is worth the price. Without trust, information is largely useless." - Dan Greer

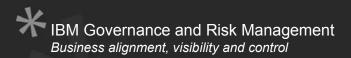




Security assures shareholder confidence

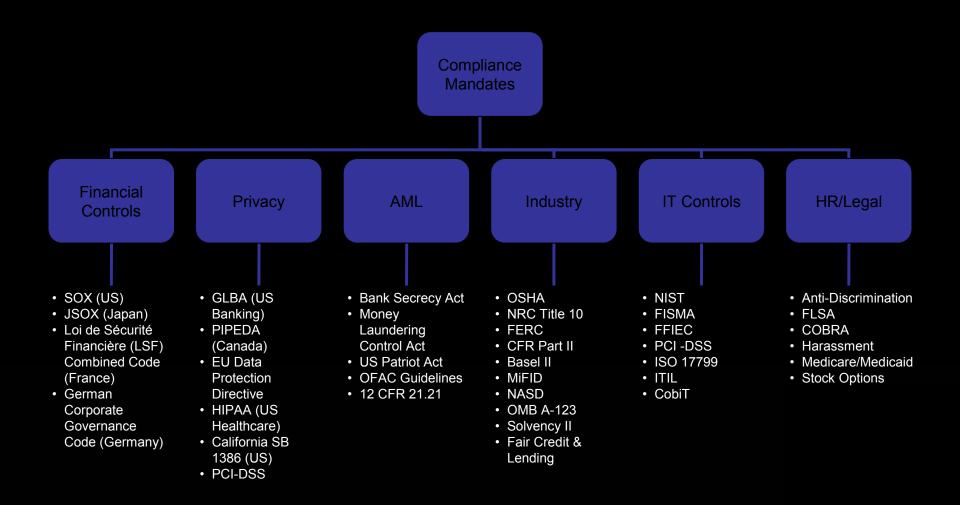
- Accurate reporting of the returns, effectiveness, and productivity of the enterprise
- Availability and reliability of services
- Demonstrated due diligence with respect to protecting against malicious attacks (internal and external) and accidents that can be anticipated
- Ensuring only authorized access to enterprise information

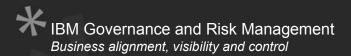






Security enables compliance



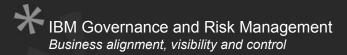




Security protects against possible liability



- Negligence is defined as the failure assert a due care (level of care that a reasonable person would have used under similar circumstances [Westby 04], [Braun 04].)
- Leaders who make their decisions with due care may receive protection
- Taking action to protect critical information assets is a way for leaders to demonstrate that they are acting in a reasonable manner.





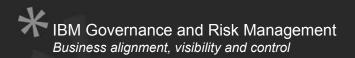
Security assures customer confidence

- 44% of respondents feel their information is safe when engaging in e-commerce.
- 50% avoid making purchases online because they are afraid their financial information will be stolen.
- 94% say identity theft is a serious problem.
- Only 24% say businesses are placing the right emphasis on protecting information systems and networks.

1. Data security

- 2. Global Warming
- 3. Terrorism
- 4. Job loss
- 5. Disease or epidemics
- 6. Natural disasters

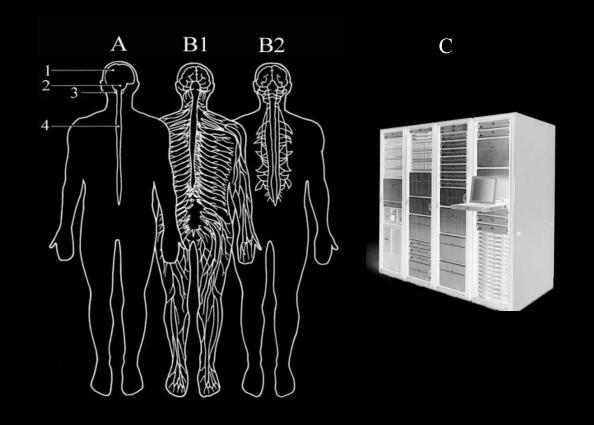
Source: Cyber Security Industry Alliance survey of consumers, 2007 Assure brand position with recognition of trusted partner and trusted provider status

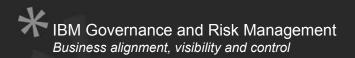




Security assures ability to transact businesses

- Enable new and improved types of products and services
- Enable new types of staff, customer or supplier interaction
- Conduct secure transactions, ensuring customer and partner confidence and satisfaction





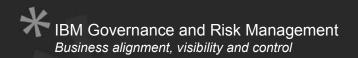


In Sum: Security offers tangible benefits





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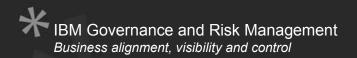
SECURITY - The problem...





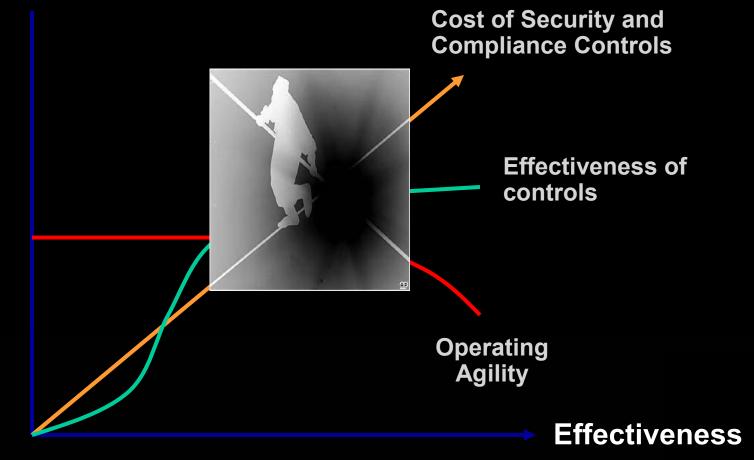
Too much security inhibits performance

Too little security stops the business





The security challenge: Balance cost and control Cost





Where will we begin? Focus on foundational controls

- Pareto principle, often referred to as "the 80-20 rule," applies to IT controls.
 - The Pareto principle states that for many phenomena, 80 percent of the consequences stem from 20 percent of the causes.
- After three years of research, ITPI discovered that a small percent of IT controls, also known as **foundational controls**, provide a disproportionately high amount of coverage.
- The Basics:
 - Threat and Vulnerability Management
 - Identity Management & Access Management,
 - Change Management & Configuration Management,
 - Release Management,
 - Incident Management,
 - Content Management

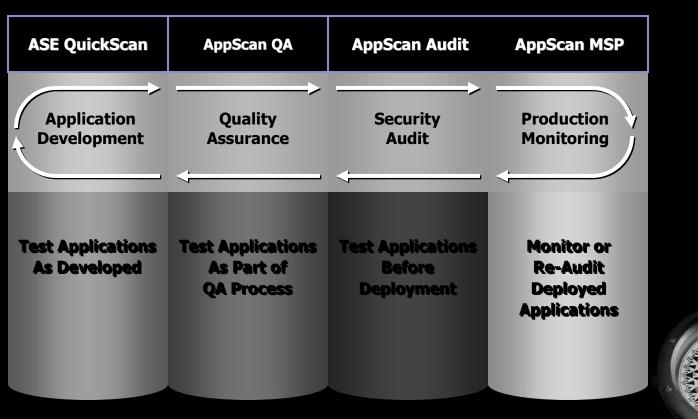
Our focus: automate, monitor, measure and enforce foundational controls



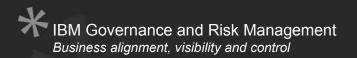
Introducing: Watchfire Application Security Testing Products

AppScan Enterprise

Web Application Security Testing Across the SDLC

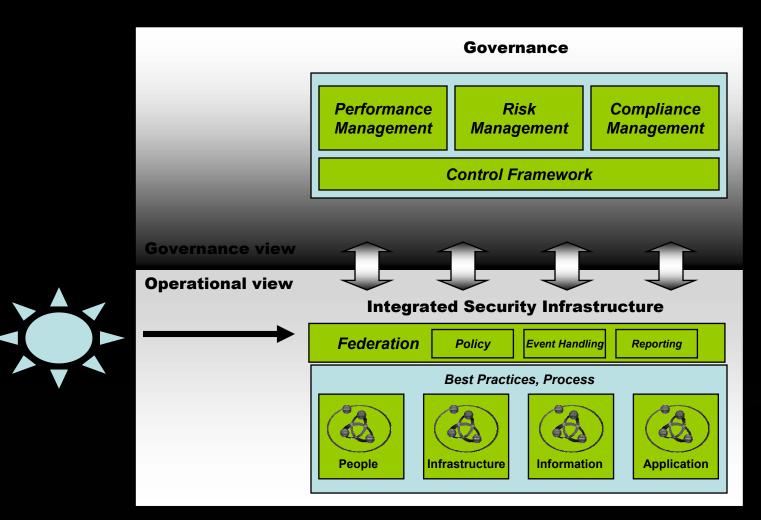


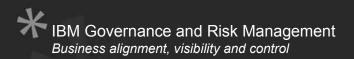
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Corporate Security Strategy







IBM Internet Security Systems Protection Platform

- Prevent attacks before they occur
- 24/7 outsourced security management
- Improved uptime and performance
- Guaranteed protection services
- Single security view



Protection Platform



Your strategic IT initiatives are the starting point and catalysts for making improvements



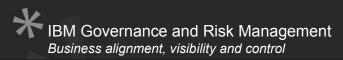
- Availability Management
- Business Continuity
- Disaster Recovery



- Information Protection
- Foundational Control
- Policy Compliance



- Data Center Automation
- Service Quality Management
- Change Management





Enabling Innovation with IBM Service Management



Visibility: See your Business



Automation: Optimize your Business



Control: Govern your Business



AAAAAAA



Visibility: See your Business

Challenge:

 Business and IT audiences lack the visibility and insight needed to directly support and deliver against business objectives

Solution: Targeted real-time dashboards from IBM Service Management

 Dashboards at each stage of the service lifecycle leverage existing assets and provide the real-time insight to help manage against business objectives

ROI Examples:

- Golf manufacturer reduced costs by 20%
- Networking company reduced project costs by 20%





Risk, Security, & Compliance Dashboards

Portfolio and Project Management Dashboards

> IBM Service Management Dashboards across the service lifecycle

Automation: Optimize your Business

Challenge:

- The business is driven by growth and frustrated by service development and delivery organizations inability to reliably introduce new services on a timely basis
 - Cost of operations continues to increase at 10%
 CAGR, twice the rate of the IT budget*

Solution: IBM Service Management solutions

 IBM solutions help increase efficiency and reliability with an integrated approach that includes task and process level automation across the service lifecycle

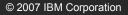
ROI Examples:

- Retail firm cut recovery times by 50%
- Financial services firm increased the ratio of autoclosed events by 59%



"The more we can simplify, streamline and automate processes, the better we can manage the growing complexity ... we must handle business growth with our existing resources. IBM technology helps us achieve greater levels of efficiency at a lower cost."

Erwin Schaefer, Swiss Reinsurance





Control: Govern your Business

Challenge:

 Business and IT struggle to address compliance needs on time, and help minimize risk and protect the brand

Solution: IBM Service Management solutions

 Improve governance, maximize control & minimize risks effectively across the service lifecycle with a service management implementation that delivers service priority and context, bridge's silo's and leverages best practices

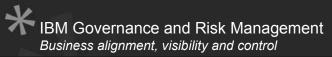
ROI Examples:

- Federal agency reduced reporting times by 10-15%
- Global IT services company achieved a 6 month payback



45% of CIOs say that they are very or extremely effective at governing IT performance.

*The McKinsey Quarterly, 2007





Introducing: IBM Energy Efficiency Initiative Built on four core principles that target the needs of today's data center

1

Energy usage in the data center has a significant impact today and will have an even greater impact in the future.



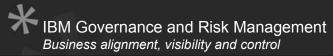
Real solutions are available now that can reduce data center energy usage.



To meet the challenge, collaboration is a must—across IT technology vendors, data center design and build businesses, infrastructure technology providers, energy utilities and governments.

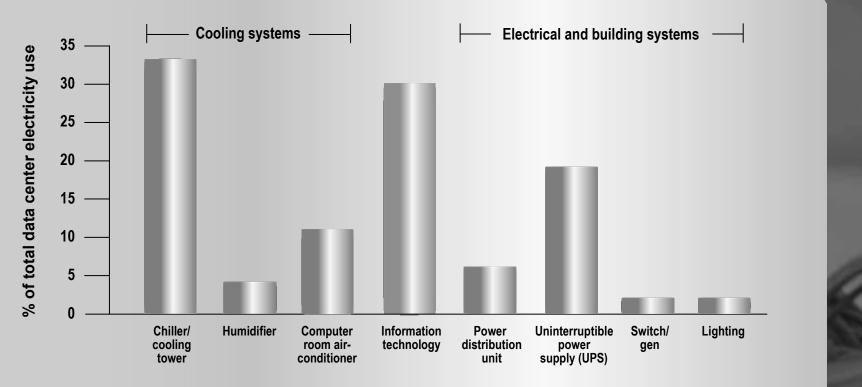


Think green. And think ahead. Understanding your energy usage is key. Expert advice can help make savings real.





Where does the energy go? The data center energy challenge affects both the physical data center and the IT infrastructure

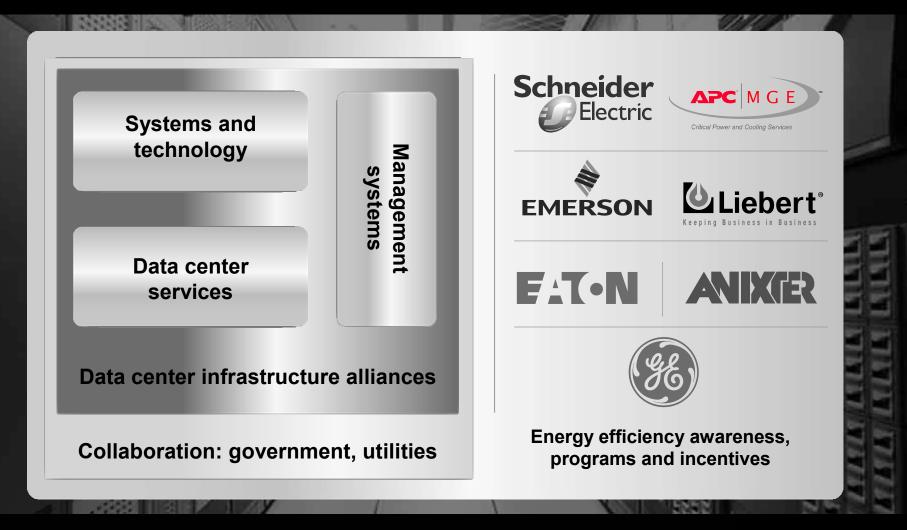


Power use

IBM Governance and Risk Management Business alignment, visibility and control



The IBM Energy Efficiency Initiative is a comprehensive set of capabilities from IBM, our alliances and the communities in which we live.





IBM makes Reducing Risk to your business Actionable

Improve business resilience

Reduce risks and protect confidential intellectual property
 Minimize and control impact of planned and unplanned disruptions

2 Enhance security across your IT

Protect critical assets and reduce costs by preempting threats

Achieve efficiency in your data center
 Optimize efficiency by automating key IT processes
 Reduce cost by consolidating locations and establishing standard technologies globally.

