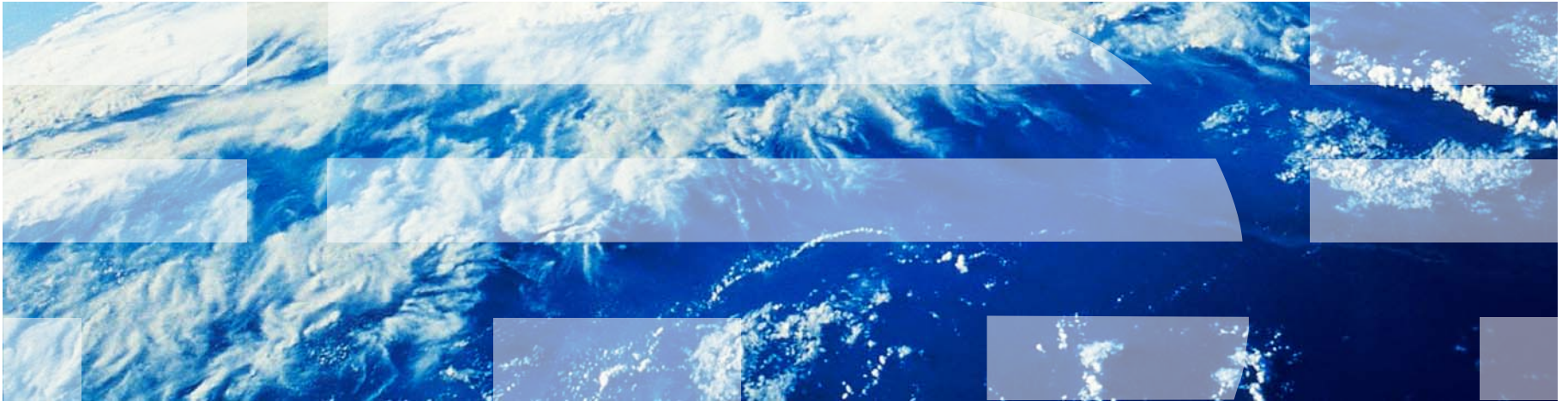
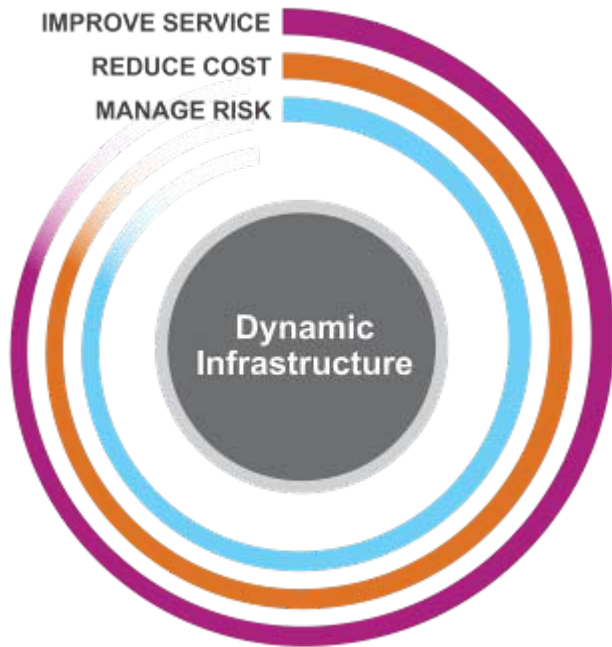




# Dynamic Infrastructure



# A dynamic infrastructure is required to address today's needs... and lay the foundation for the future.



Delivering superior business and IT services with agility and speed.

## ● IMPROVE SERVICE

High availability and quality of existing services today ...

... ***Providing for real-time, dynamic access to innovative new services.***

## ● REDUCE COST

Containing operational cost and complexity today ...

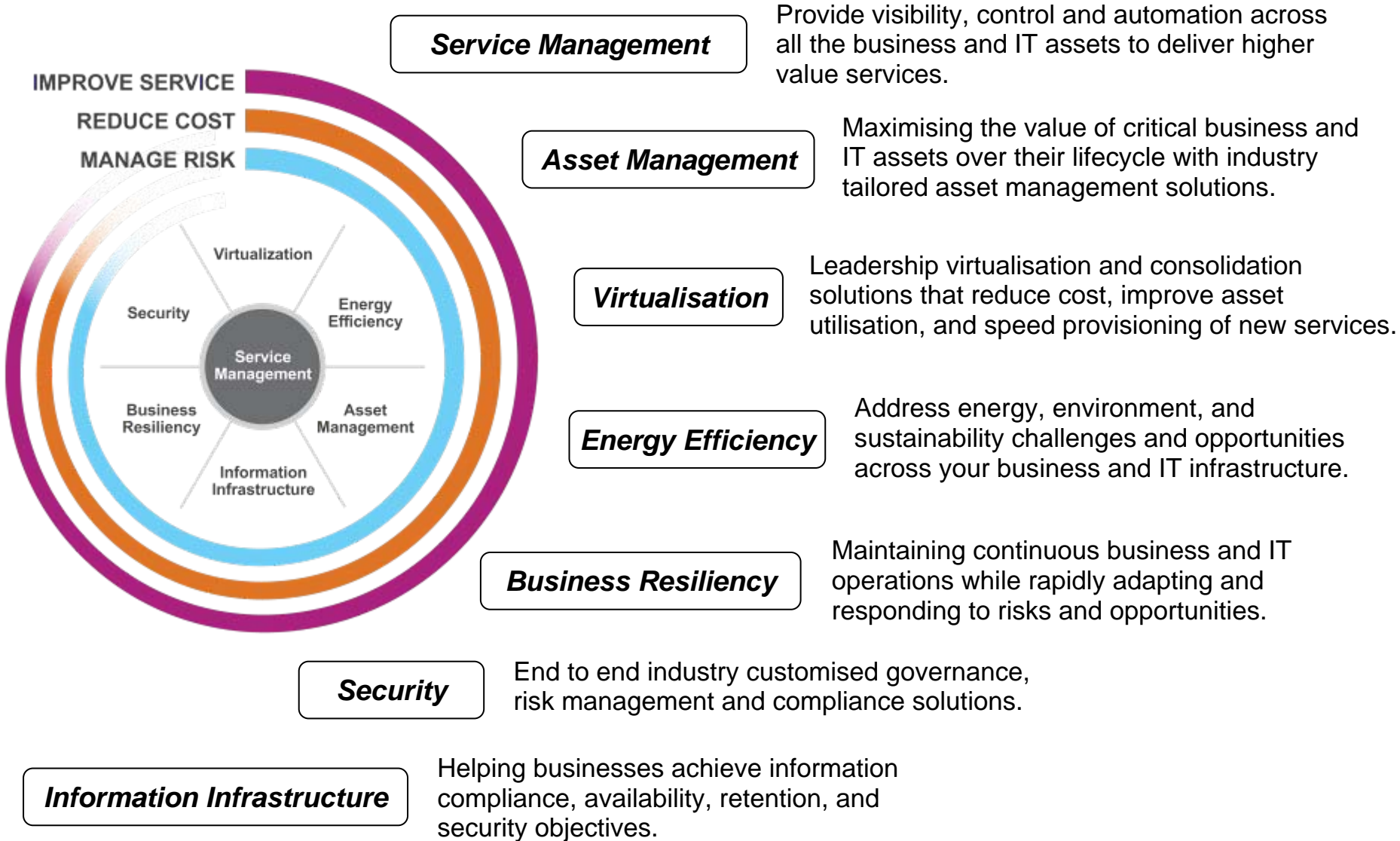
... ***Achieving breakthrough productivity gains tomorrow.***

## ● MANAGE RISK

Addressing today's security, resiliency, and compliance challenges ...

... ***Preparing for the new risks of a more connected and collaborative world.***

# Building a dynamic infrastructure.





## Dynamic Infrastructure- Reduce Cost Through Virtualization

<u>Client Pain</u>	<u>Client Profile</u>	<u>Scenarios</u>	<u>Value Statements</u>
Reduce cost	Large numbers of servers most of which are far underutilized. Look for clients who have incrementally increased their computing capacity by adding new servers or storage	Server Sprawl	On track to save more than <b>\$15M over 3 years</b> , including 50% Web infrastructure cost and 80% floor space reductions - <b>Nationwide</b>
Reduce cost	Large numbers of storage devices, most of which are far underutilized. Look for clients who have incrementally increased their storage capacity by adding new servers.	Escalating Storage costs	"The use of tiered storage architecture helps to reduce the overall cost of storage; non-disruptive data migrations enabled by SVC reduce maintenance windows from hours to minutes, which helps improve application availability .." National Retailer
Reduce Cost	Large numbers of (Java / Web) app servers most of which are underutilized, or unabated growth in the number of application servers (growing workloads). Look for clients that continually add application infrastructure which impacts costs and efficiency, or for clients who have availability or performance issues that impact costs via downtime or missed customer opportunities.	Application Infrastructure Inefficiencies	<ul style="list-style-type: none"> <li>▪ "WebSphere Virtual Enterprise understands the behavior of the whole Web environment. So it gives us the ability to optimize resource planning. We can <b>cut hardware purchasing costs significantly</b> by letting the IBM product <b>do more with less server capacity</b>. IBM helped us realize this kind of value with its detailed knowledge and guidance." – <a href="#">Osaka Gas</a></li> <li>▪ "The performance of our applications has been <b>phenomenal</b>. The speed of interactions has <b>exceeded our expectations</b>" - <a href="#">Rotech</a></li> </ul>
Reduce Cost	Seeking to reduce TCO and complexity of PC mgmt, boosting productivity while protecting access to information by implementing centrally managed environment which provides anytime, anywhere access to apps, info and resources.	Desktop sprawl (IBM only)	Reduce infrastructure, end user support and energy costs with virtual desktops, hosted in highly secure and green datacenter and accessed anywhere, any time from any internet enabled device...with an estimated TCO savings potential of 30 to 40 percent.



# Dynamic Infrastructure – Information Infrastructure

## Client Pain

## Client Profile

## Scenarios

## Value Proposition

### Manage Risk

Customers in highly-litigated industries such as Insurance, Banking, Transportation, Automotive. Customer who need to minimize risk for compliance and eDiscovery activities. Client Size: Large Enterprise and Mid-Market

Improve Information  
**Compliance**

An enterprise-wide information compliance architecture built with IBM technology and expertise can help you improve overall regulatory compliance, minimize operational risk and reduce legal costs respond promptly to regulatory audits, and legal requests  
Proven to manage over 1 million emails/day  
Reduces e-mail system storage 50 – 80 %

### Improve Service

Customers experiencing increasing digital data growth (>50%) as a result of WEB 2.0 and other applications (SAP). Client Size: Large Enterprise and Mid-Market clients

Improve Information  
**Availability**

Customers are able to exploit their data, maximize its value, and deliver valuable information to the right people at the right time.  

- XIV restores disk volumes in as little as 15 minutes, compared to hours with other storage solutions, SVC improves storage administration productivity by up to 2x, DS8000 can sustain up to 4.9 million IOPs from a single system

### Reduce Cost

Clients Increasing need to retain data for compliance and business warehouse purposes. Exploding storage costs, including management, energy and cooling. Client size: large enterprise and Mid Market

Improve Information  
**Retention**

Achieve operational efficiency by leveraging a tiered retention model, coupled with policy-based management that automatically moves less active information to more cost-effective storage systems. Evolutionary in-line data de-duplication - Squeeze 25 TB of data onto 1 TB of storage in 8 hours ; Up to 9x faster than competitors, Leverage blended disk and tape and cut TCO by up to 50%

### Manage Risk

Clients who want to improve the information security posture or establish an overall information security strategy and implement solutions in support of an improved approach. Target: CIO, CISO, CSO, COO Business executives, IT Directors, compliance officers, IT executives, Client size: Large enterprise and mid market

Improve Information  
**Security**

IBM offers an array of hardware and software security offerings and capabilities, as well as world-class security and data privacy services from which customers can create holistic security strategies across their entire organizations. With an extensive portfolio and the uncommon ability to address both immediate security challenges as well as end-to-end holistic solutions, IBM stands alone as the premier information infrastructure security vendor.



## Dynamic Infrastructure – Green Infrastructure

<u>Client Pain</u>	<u>Client Profile</u>	<u>Scenarios</u>	<u>Value Proposition</u>
<b>Reduce Cost</b>	Customers who want to reduce IT energy costs and improve operational efficiency via energy efficient approaches	<b>IT Efficiency</b>	<ul style="list-style-type: none"> <li>Optimize server and storages for 30%-70% savings. System x3950 M2 up to 67% less, BladeCenter up to 24% less, and Power6 as much as 65% less energy than competitors</li> </ul>
<b>Reduce Cost</b>	Customers who want to reduce capital and operating costs by extending the life of their data center or defining a revised data center strategy	<b>Data Center Facilities</b> (IBM only)	<ul style="list-style-type: none"> <li>Reduce time to deploy new technology from months to weeks, Defer 40%-50% of capital and operating costs with Enterprise Modular Data Centers, Save up to 20% in capital costs for Scalable Modular Data Centers,</li> </ul>
<b>Reduce Cost</b>	Customers who want to measure and control energy usage to reduce IT energy costs and facilities energy costs	<b>Energy Management</b>	<ul style="list-style-type: none"> <li>Gain insight into energy and thermal info for IT equipment, data center facilities, and infrastructure equipment and enable the optimization of the monitored enviro from a centralized point of control with historic and trending energy and thermal metrics stored in a common repository</li> </ul>
<b>Reduce Cost</b>	Customers who would be interested in a benchmark of their operations versus industry best practices and who want to establish an IT environmental strategy	<b>Environment Leadership</b> (IBM only)	<ul style="list-style-type: none"> <li>Understand areas of strengths and weaknesses to define most effective green strategy and actions to address energy, environment, sustainability challenges and opportunities.</li> </ul>



# Dynamic Infrastructure- Service Management

<u>Client Pain</u>	<u>Client Profile</u>	<u>Scenarios</u>	<u>Value Statements</u>
--------------------	-----------------------	------------------	-------------------------

**Reduce cost**

Organizations across all industries with significant investments in production equipment & tooling, fleets, facilities, or IT and need to transform their infrastructures to improve productivity, lower operating / capital asset costs and deliver new business services.

**Converge business and IT infrastructure management**

Was able to unify management of all airport assets, from facilities to IT, which reduced costs and improved service quality and increased revenue through accurate charge-back information.  
-- McCarran Airport.

**Reduce cost**

Large enterprises across all industries targeting CIOs or IT Directors who have silo-ed service management processes and redundant, down-level vendor tools and need to align with standards like ITIL or Cobit to improve service delivery, time to market, operational efficiency and staff productivity.

**Automate IT processes**

Saved \$250,000 annually through streamlined processes. Gained 33% increase in end user satisfaction and improved the efficiency of business operations.  
-- 3i Group PLC

**Improve service**

Large organizations across all industries targeting Director and Mgrs of IT operations and LoB that need visibility of key services and metrics and need to drive higher availability & performance of business services and the underlying infrastructure.

**Manage business services**

Improved overall quality of service by reducing system failures by 58 percent, IT interruptions by 39 percent, and downtime by 80 percent.  
--- Japan Airlines

**Improve service**

For Financial Services, Public Sector Telecommunications, Retail and Insurance organizations who have already deployed or are about to deploy a SOA environment and need to ensure application availability, manage change and implement security.

**Manage SOA environments**

63% of clients expect SOA-based applications to impact their service management investments.  
--- 2008 IT Service Infrastructure Management Survey, Enterprise Strategy Group