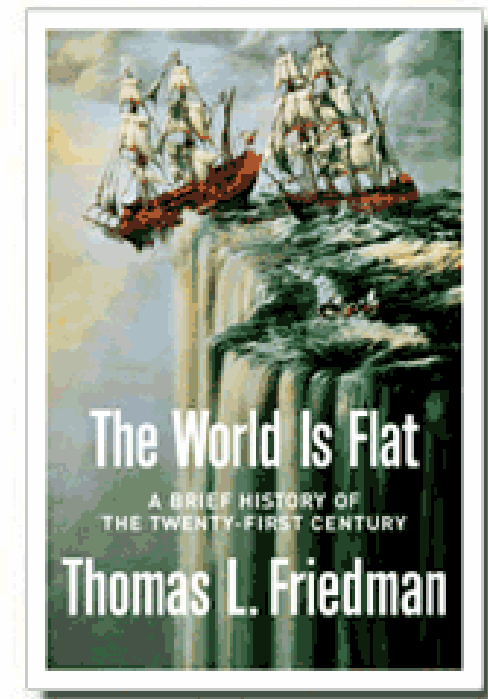# Smarter Business: Thinking differently about Infrastructure

Mitchell Young,
Director, Tivoli Software, Asia Pacific

# The world is smaller and flatter.

# Globally, systems and infrastructure are reaching a breaking point.

- Explosion of data, transactions, and digitally-aware devices strains IT infrastructure and operations.
- Exponential growth in communications, subscribers
  and services exposes bandwidth limitations.
- Supply inefficiencies and demand spikes tax energy and utility systems.
- Clogged and congested roadways impact productivity.
- Networks, supply chains, and borders face a proliferation of new risks and threats.

Meanwhile, customer expectations and competitive pressures are increasing.

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# The need for progress is clear.

## 85% idle

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

## 40 billion

Consumer product and retail industries lose about $40 billion annually, or 3.5 percent of their sales, due to supply chain inefficiencies.

## 70¢ per $1

70% on average is spent on maintaining current IT infrastructures versus adding new capabilities.

## 1.5x

Explosion of information driving 54% growth in storage shipments every year.

## 33%

33% of consumers notified of a security breach will terminate their relationship with the company they perceive as responsible.

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# The opportunity for progress is clear.

## Handles over 50% of global trades

**CLS:**
In partnership with IBM, CLS created the world's first and only global system for real-time simultaneous and irrevocable settlement of payment instructions and foreign exchange transactions, peaking at $5.4 trillion a day and growing.

## 1.5M new customers each month

**Bharti Airtel:**
Infrastructure integrates channel and customer facing processes - enabling a seamless customer experience, higher customer satisfaction - more profitable growth in the highly competitive mobile communications market in India.

## $75M annual operating cost savings

**DTE Energy Company:**
Projects US$75M in annual operating cost savings by undertaking a massive consolidation of business systems and standardization across all business units.

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# We must move past today's challenges to seize tomorrow's opportunities.

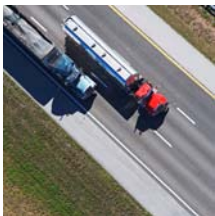| HOW CAN WE ADDRESS … | WHILE ALSO LAYING A FOUNDATION FOR … |
|---|---|
| **HIGHER SERVICE EXPECTATIONS**<br>Internet-savvy consumers and employees expect 24x7 access to quality services. | **BREAKTHOUGH PRODUCTIVITY**<br>Almost any person, object, or service can become digitally aware and connected creating new possibilities for change. |
| **RISING COST PRESSURES**<br>Staggering levels of complexity and inefficiency drive up cost and stifle innovation. | **ACCELERATED VALUE CREATION**<br>More adaptive capabilities like cloud computing create new opportunities. |
| **NEW RISKS & THREATS**<br>The connected, collaborative world is also a more vulnerable world. | **INCREASED VELOCITY**<br>The faster pace of business and society demands a more responsive, agile infrastructure. |

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It's time to start thinking **differently** about infrastructure.

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# In this smarter world, we need our infrastructure to propel us forward, not hold us back.

**Infrastructure that is instrumented, interconnected and intelligent. Infrastructure that brings together business and IT to create new possibilities.**

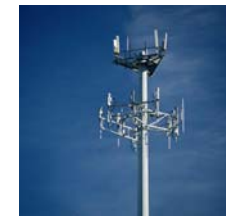**Mobility Infrastructure** + **Facilities Infrastructure** + **Production Infrastructure** + **Technology Infrastructure** + **Communications Infrastructure**

## We need a *dynamic* infrastructure.

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# A dynamic infrastructure addresses today's challenges *and* tomorrow's opportunities.

## IMPROVE SERVICE

Not only ensuring high availability and quality of existing services, but also meeting customer expectations for real-time, dynamic access to innovative *new* services.

## REDUCE COST

Not just containing operational cost and complexity, but achieving *breakthrough* productivity gains through virtualization, optimization, energy stewardship, and flexible sourcing.

**Dynamic Infrastructure**

## MANAGE RISK

Not only addressing today's security, resiliency, and compliance challenges, but also preparing for the new risks posed by an even more *connected* and *collaborative* world.

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# Dynamic Infrastructure
## Smart is: Improving Service

**SMART IS**
Winning industry recognition for excellent service.

**SMART IS**
Increasing utilization of critical business assets while maximizing ROI.

**SKY:** Network and service assurance solution monitoring 1000s of network devices and application services at over 1,200 exchanges, 24x7 availability to more than 1.6 million broadband customers.

**BP Angola:** Improves production efficiency through improved uptime, improves employee and environmental safety, to position BP for maximum efficiency and safety; shorter time to investment recovery.

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# Dynamic Infrastructure
## Smart is: Reducing Cost

**SMART IS**
Reducing operating costs by reducing physical servers up to 70%.

**SMART IS**
95% reduction in cost per transaction.

**University of Pittsburgh Medical Center:**
Reduces capital and operating costs by up to $30M, improves energy efficiency by reducing floor space 40% and physical servers 67%.

**Bank of Russia:** Improvements in operational and energy efficiency are saving apx $400million per year and allows dynamic response to business needs.

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# Dynamic Infrastructure
## Smart is: Manage Risk

**SMART IS**
Connecting to the world securely with 100% availability.

**SMART IS**
Protecting your customer... and your brand with no loss of data.



**Australian Open:** Securely, resiliently provides scalable resources 100x normal scalability, real-time analysis and prevention of attacks and achieves 23% reduction in energy consumption, with 100% website availability.



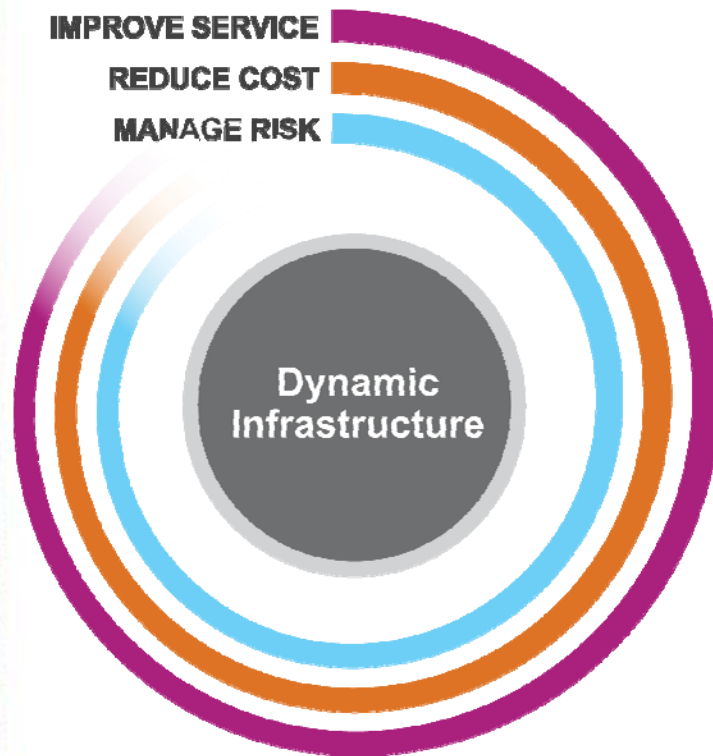**Bank of Montreal:** Providing a recovery point of zero and a recovery time of 2 hours helps reduce operational risk, increases client trust, improves availability, and meets stringent regulatory compliance requirements.

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# A dynamic infrastructure…

IMPROVE SERVICE
REDUCE COST
MANAGE RISK

Dynamic Infrastructure

- Enables visibility, control, and automation across all business and IT assets.

- Transforms assets into higher value services.

- Highly optimized to achieve more with less.

- Addresses the information challenge.

- Leverages flexible sourcing like clouds.

- Manages and mitigates risks.

…delivers superior business and IT services with agility and speed.

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# A dynamic infrastructure
transforms assets into higher value services….



**DYNAMIC INFRASTRUCTURE**

**SERVICE-ORIENTED…**
- Rapid service deployment.
- Reusable service components.
- Secure and reliable processes.

**AND SERVICE-MANAGED**
- Integrated management across all assets.
- Service visibility, control and automation.
- Manage complex, rapid changes.

…implementing a service-oriented, service-managed approach to rapidly and dynamically deliver business and IT services.

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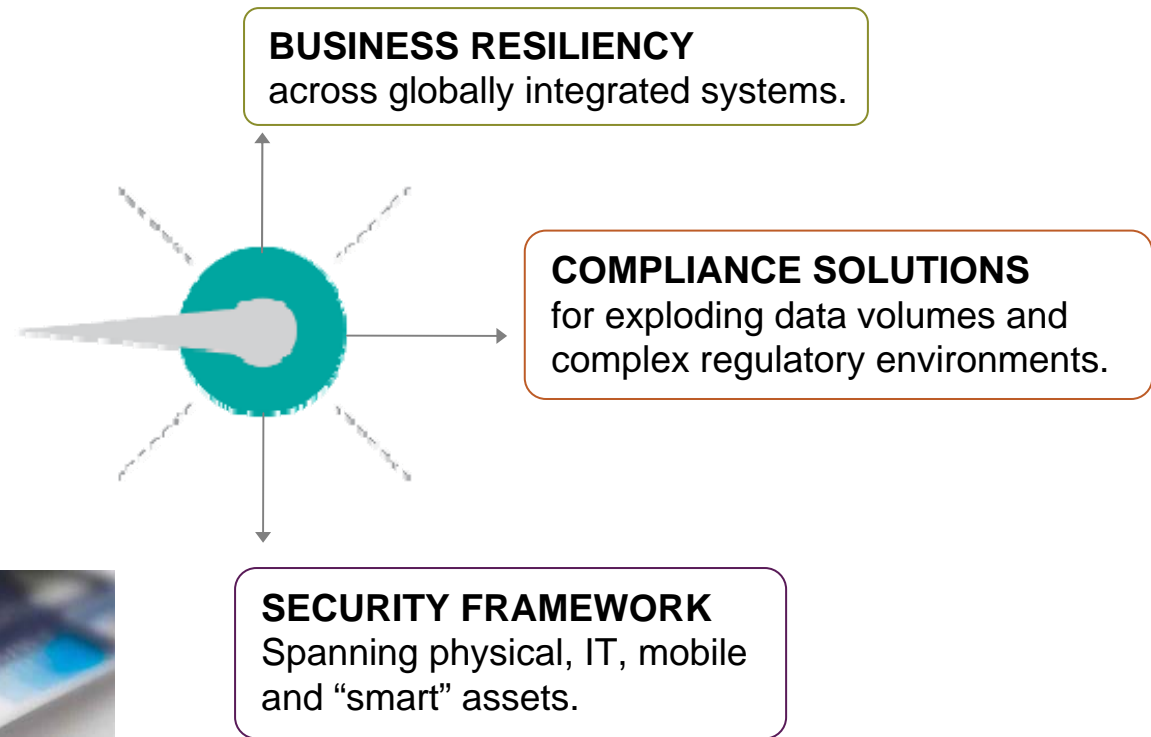# A dynamic infrastructure
addresses the information challenge….

| | |
|---|---|
| I have to store it: | **COMPLIANCE** |
| I want to store it: | **BUSINESS VALUE** |
| I can't store it: | **BUDGET** |

…achieving information compliance, availability, retention and security objectives.

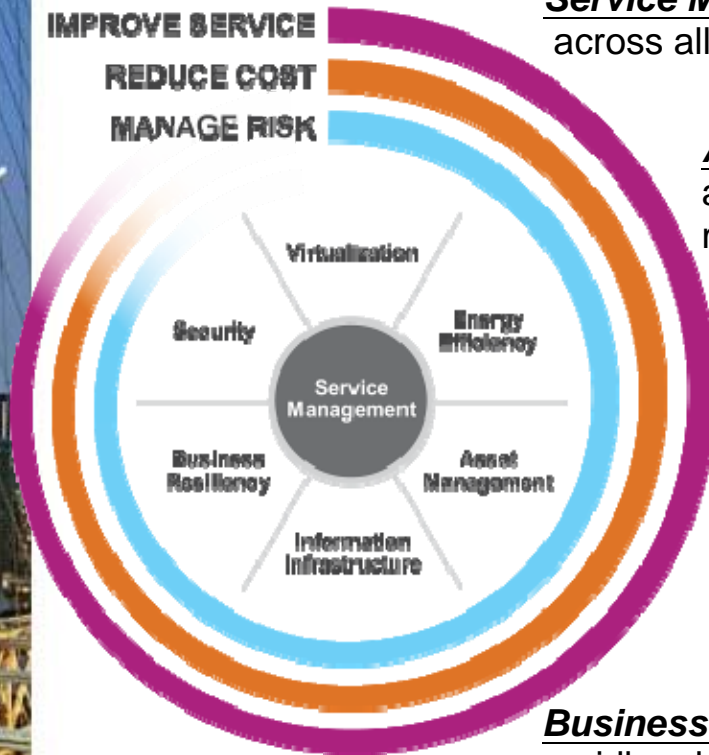# A dynamic infrastructure
helps you manage and mitigate risk….

**BUSINESS RESILIENCY**
across globally integrated systems.

**NEW POSSIBILITIES.
NEW RISKS.**

**COMPLIANCE SOLUTIONS**
for exploding data volumes and
complex regulatory environments.

**SECURITY FRAMEWORK**
Spanning physical, IT, mobile
and "smart" assets.

…providing the end-to-end approach needed in an
Instrumented, interconnected and intelligent world.

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# Building a dynamic infrastructure.

**IMPROVE SERVICE**
**REDUCE COST**
**MANAGE RISK**



*Virtualization*

*Security*

*Energy Efficiency*

*Service Management*

*Business Resiliency*

*Asset Management*

*Information Infrastructure*

**_Service Management_** – Provide visibility, control and automation across all the business and IT assets to deliver higher value services.

**_Asset Management_** – Maximizing the value of critical business and IT assets over their lifecycle with industry tailored asset management solutions.

**_Energy Efficiency_** – Address energy, environment, and sustainability challenges and opportunities across your infrastructure.

**_Virtualization_** – Leadership virtualization and consolidation solutions that reduce cost, improve asset utilization, and speed provisioning of new services.

**_Business Resiliency_** – Maintaining continuous business operations while rapidly adapting and responding to risks and opportunities.

**_Security_** – End to end industry customized governance, risk management and compliance solutions.

**_Information Infrastructure_** – Helping businesses achieve information compliance, availability, retention, and security objectives.

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# Dynamic Infrastructure – Service Management

**Smart is:** *Providing visibility, control and automation across all the business and IT assets to deliver higher value services.*

**Visibility -** See Your Business Services.



- Create an integrated, actionable, and insightful view into critical metrics.

**Control -** Manage your risk and compliance.



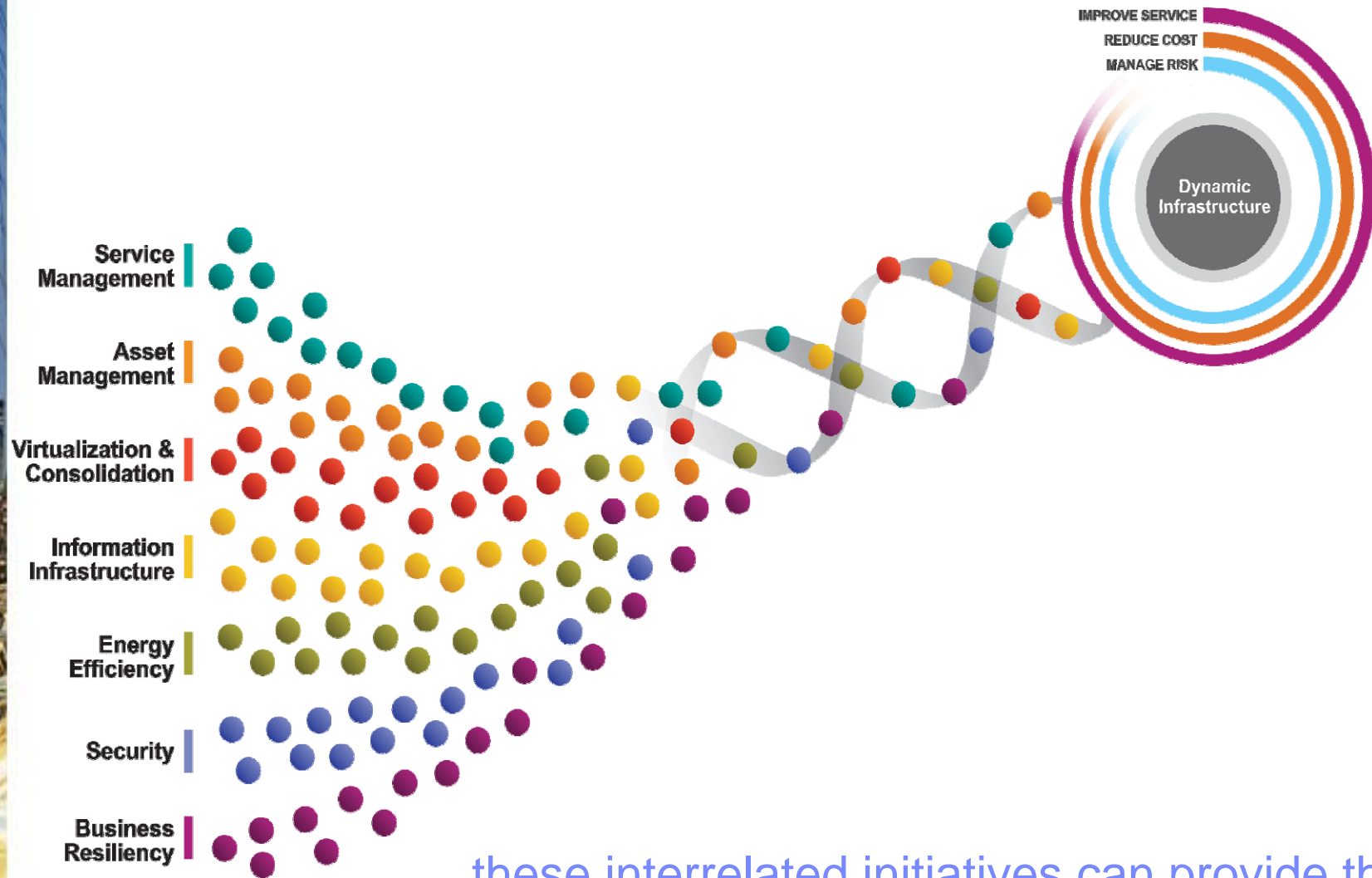- Improve process discipline while remaining effective while systems grow.

**Automation -** Build Agility into your Operations.



- Improve quality and reduce costs through operational and workflow automation.

# A dynamic infrastructure is a journey…

IMPROVE SERVICE
REDUCE COST
MANAGE RISK

Dynamic Infrastructure

Service Management

Asset Management

Virtualization & Consolidation

Information Infrastructure

Energy Efficiency

Security

Business Resiliency

…these interrelated initiatives can provide the DNA needed to thrive in a smarter planet.

# Important considerations when building a dynamic infrastructure.

## How to get started
- Proven tools, assessments and workshops by key initiatives to measure business impact.

## Flexible sourcing options
- Tools, Technologies and Project-based Services
- Managed Services
- Outsourcing
- Cloud Computing Options

## Collaborate with our experts
- Skills & Expertise
- IBM Worldwide Client Centers
- Extensive access to online resources

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# Deploying a Dynamic Infrastructure
## Priorities, Capabilities and Success Planning Workshop

**Understand the benefits to be gained from deploying a Dynamic Infrastructure**

Learn how Dynamic infrastructure helps turn challenges and opportunities into positive business outcomes

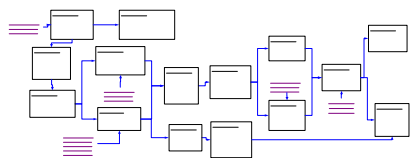**Baseline and Compare Business/IT Priorities and Capabilities**
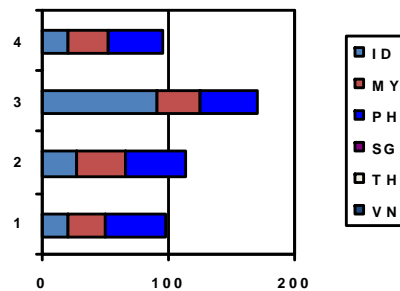
What are you focused on, and what are other participants focused on
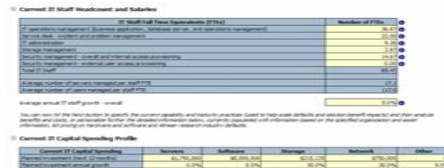
**See how businesses are delivering value**

Real solutions to exploit real opportunities

**Understand how IBM collaborates with you to define a plan for success**

Prioritize and Sequence Design and Implementation Initiatives

**A follow up session delivers outcomes and next steps**

A baseline comparison with action plan
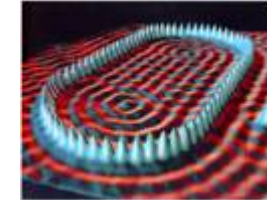
**Team with IBM to Implement Your Plan**

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# In the last 5 years, IBM has invested over $50 billion to advance Service Management

## Investment in our People

- Service management excellence programs to improve understanding and skills
- More than 38,000 customers in 170 countries
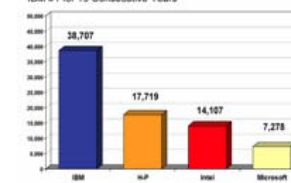- Training and education of over 7,000 practitioners

## Investment in Service Management Technology

- $29Billion, 5-year research and development investment
- $20Billion in acquisitions of over 60 companies
- 15 consecutive years of patent leadership

## Investment in Service Management Best Practices

- Development, Contribution or Support for best practices and standards—ITIL, COBIT, VAL-IT, eTOM
- Establish robust portfolio shared, collaboratively developed, service management IC assets
- Drive service science into the public sector and academia – improve professional qualifications for service management
- Publish more intellectual capital & open standards



U.S. Patents: IBM vs. the competition 1993-2007
IBM #1 for 15 Consecutive Years

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