



**IBM ASEAN
Leadership Exchange**

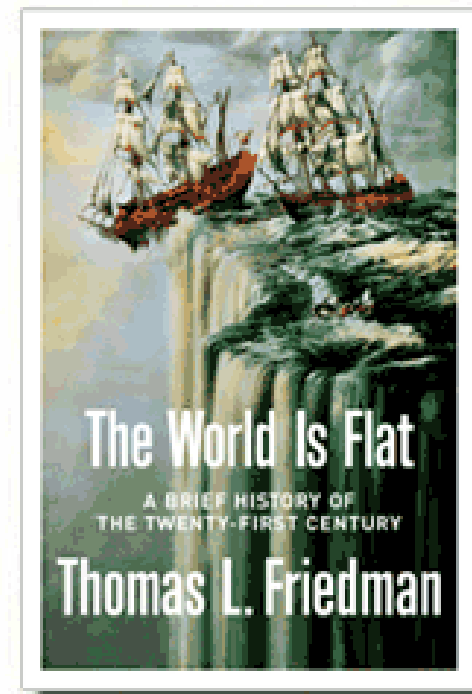


Smarter Business: Thinking differently about Infrastructure

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.

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.

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.

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

HOW CAN WE ADDRESS ...

HIGHER SERVICE EXPECTATIONS

Internet-savvy consumers and employees expect 24x7 access to quality services.

RISING COST PRESSURES

Staggering levels of complexity and inefficiency drive up cost and stifle innovation.

NEW RISKS & THREATS

The connected, collaborative world is also a more vulnerable world.

WHILE ALSO LAYING A FOUNDATION FOR ...

BREAKTHROUGH PRODUCTIVITY

Almost any person, object, or service can become digitally aware and connected creating new possibilities for change.

ACCELERATED VALUE CREATION

More adaptive capabilities like cloud computing create new opportunities.

INCREASED VELOCITY

The faster pace of business and society demands a more responsive, agile infrastructure.

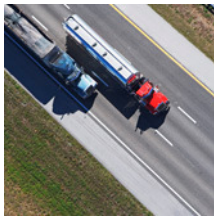


It's time to start thinking differently about infrastructure.

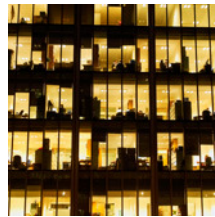
In this smarter world, we need our infrastructure to propel us forward, not hold us back.

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

**Mobility
Infrastructure**



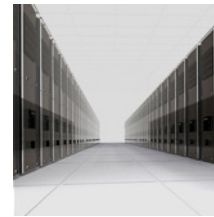
**Facilities
Infrastructure**



**Production
Infrastructure**



**Technology
Infrastructure**



**Communications
Infrastructure**



We need a dynamic infrastructure.



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.

Dynamic Infrastructure

Smart is: Improving Service



SMART IS

Winning industry recognition for excellent service.



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.

SMART IS

Increasing utilization of critical business assets while maximizing ROI.



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.

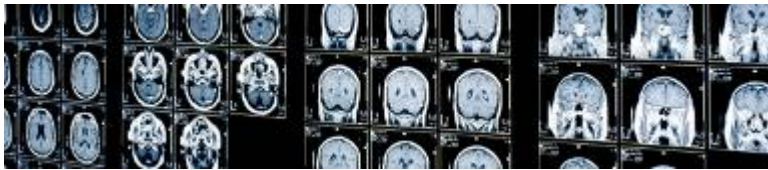
Dynamic Infrastructure

Smart is: Reducing Cost



SMART IS

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



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%.

SMART IS

95% reduction in cost per transaction.



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

Dynamic Infrastructure

Smart is: Manage Risk



SMART IS

Connecting to the world securely with 100% availability.



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.

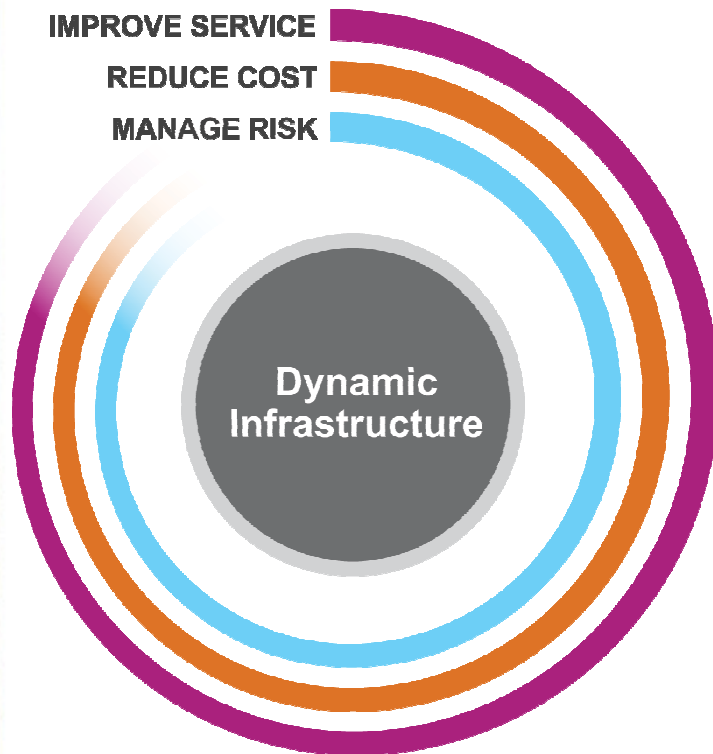
SMART IS

Protecting your customer... and your brand with no loss of data.



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.

A 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.

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.



A dynamic infrastructure addresses the information challenge....

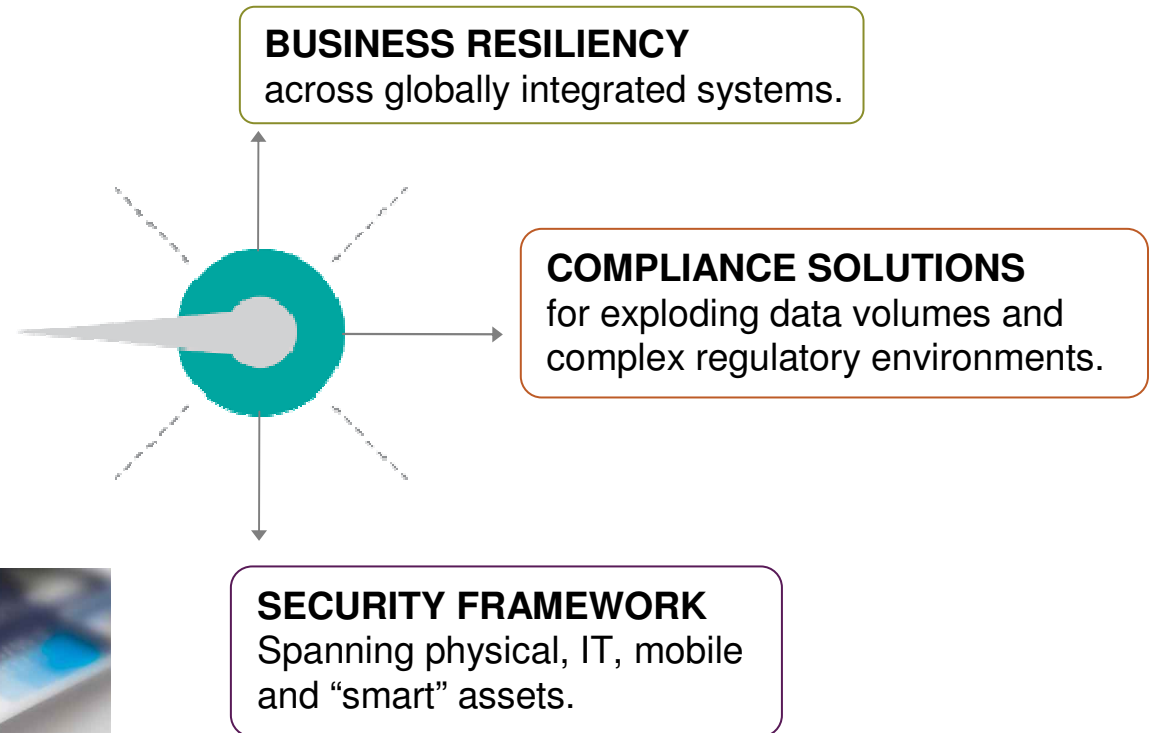
I have to store it:	COMPLIANCE
I want to store it:	BUSINESS VALUE
I can't store it:	BUDGET

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



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

**NEW POSSIBILITIES.
NEW RISKS.**



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

Building a dynamic infrastructure.

IMPROVE SERVICE
REDUCE COST
MANAGE RISK



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.

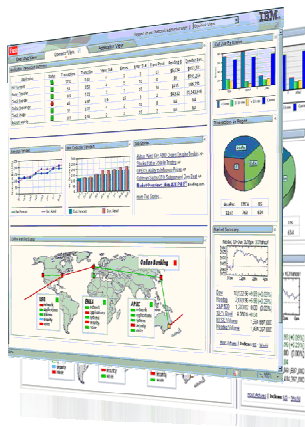
Security – End to end industry customized governance, risk management and compliance solutions.

Information Infrastructure – Helping businesses achieve information compliance, availability, retention, and security objectives.

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.



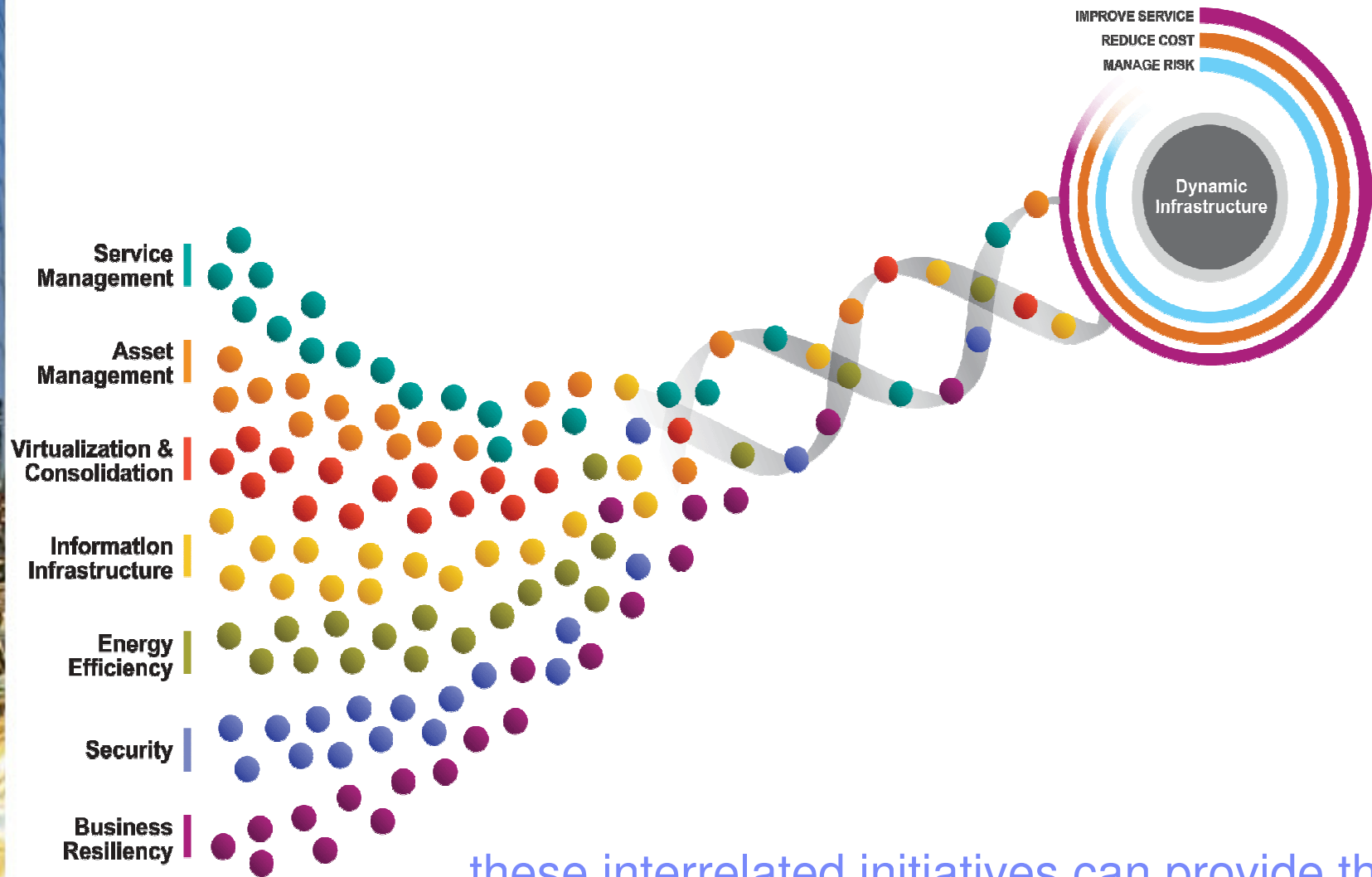
- Improve process discipline while remaining effective while systems grow.

Automation - Build Agility into your Operations.



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

A dynamic infrastructure is a journey...



...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

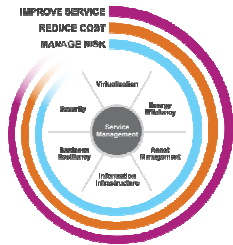
Collaborate with our experts

- Skills & Expertise
- IBM Worldwide Client Centers
- Extensive access to online resources

Deploying a Dynamic Infrastructure

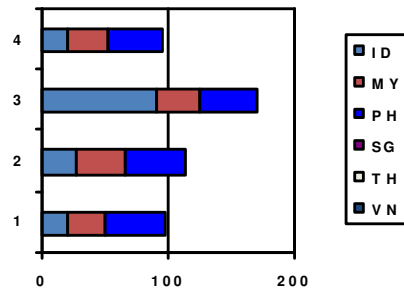
Priorities, Capabilities and Success Planning Workshop

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



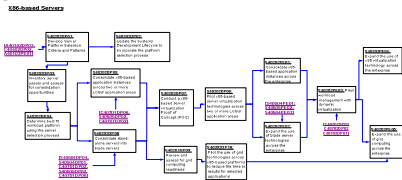
What are you focused on, and what are other participants focused on

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

Current IT Staff Headcount and Salaries

Category	Number of FTEs
IT operations management (business, database, server, and security management)	2,121
Service desk, centers and problem management	2,100
IT infrastructure	2,275
Storage management	2,873
Security management - central and external access processing	1,478
Security management - external user access processing	1,078
Cloud IT staff	16,247
Average number of servers managed per staff FTE	17.3
Average number of email messages per staff FTE	132.6
Average annual IT staff growth - overall	0.05%

Current IT Capital Spending Profile

Category	Hardware	Software	Managed	Network	Other
Current IT Capital Spending	\$1,760,000	\$2,300,000	\$215,125	\$750,000	\$0
Hardware investment as a percent of total	0.24%	0.31%	0.03%	0.10%	0.00%

A baseline comparison with action plan

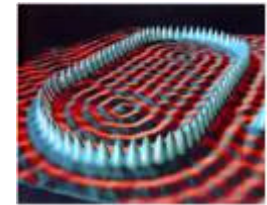
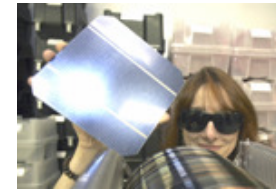
Team with IBM to Implement Your Plan



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

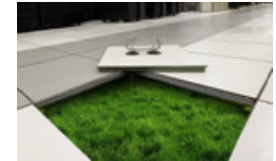
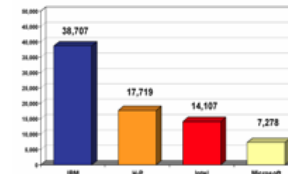


Investment in Service Management Technology

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



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



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

