Smart Work for a Smarter Planet:

Business Aligned IT Discovery Series 2009.

Get Instrumented, Intelligent, and Interconnected.
And Ready for a Smarter Planet.

Security Strategy within a Dynamic Infrastructure

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Deploying a Dynamic Infrastructure
## Security Priorities, Capabilities and Experiences

Agenda

- **An overview of Security**
- **How Security is being exploited in the market**
- **How ISM Group applies Security**
- **Business and IT priorities for Security**
- **How IBM is enabling Security with our clients**
- **Current Security capabilities**
- **Customer successes deploying Security**

Security delivers capability for a portion of infrastructure, applications and business services
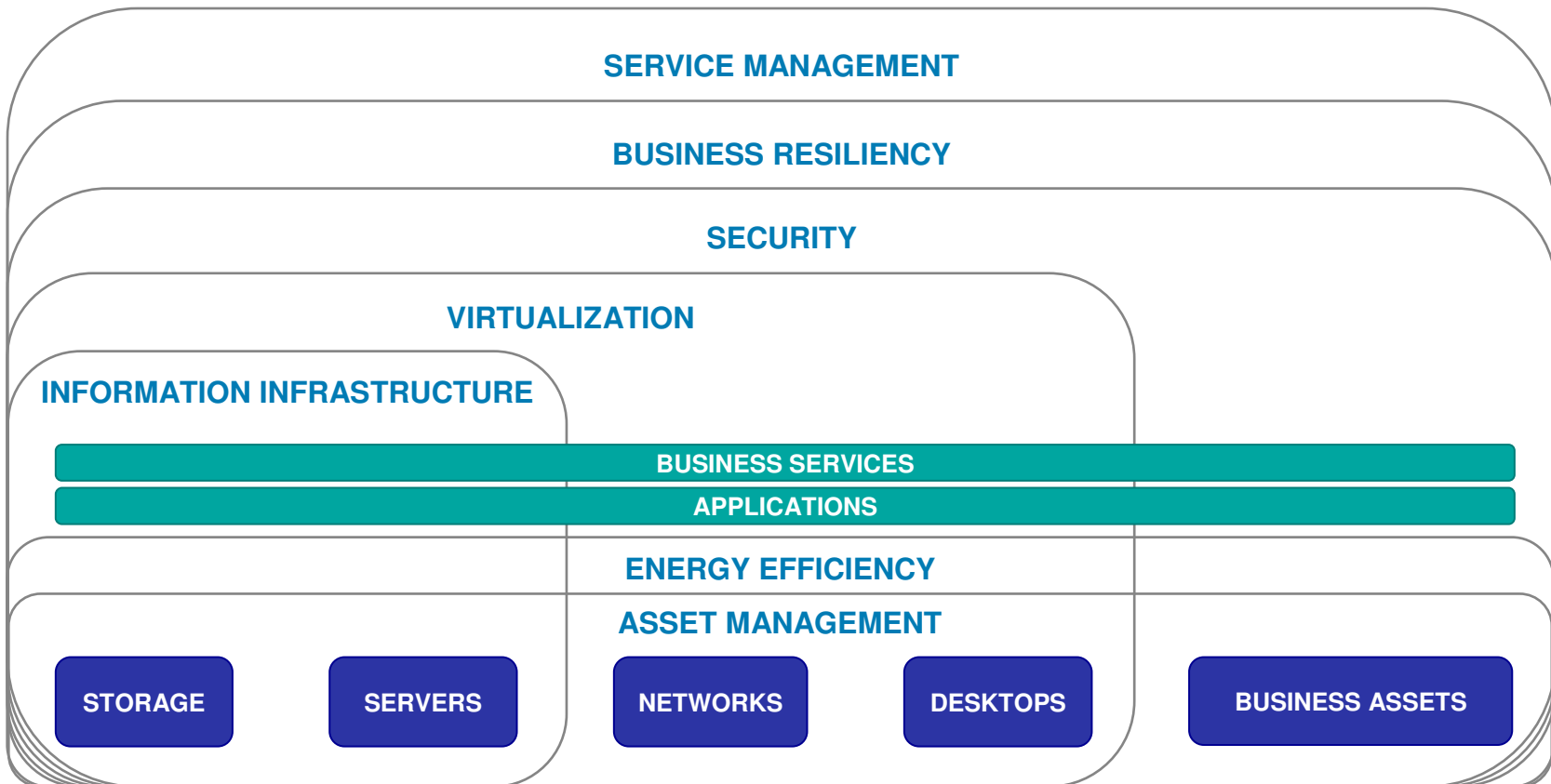
Security issues are raised by new business opportunities

Emerging technology

- Virtualization and cloud computing increase infrastructure complexity.
- Web 2.0 and SOA style composite applications introduce new challenges with the applications being a vulnerable point for breaches and attack.

Data and information explosion

- Data volumes are doubling every 18 months.*
- Storage, security, and discovery around information context is becoming increasingly important.

Wireless World

- Mobile platforms are developing as new means of identification.
- Security technology is many years behind the security used to protect PCs.

Supply chain

- The chain is only as strong as the weakest link… partners need to shoulder their fair share of the load for compliance and the responsibility for failure.

Clients expect privacy

- An assumption or expectation now exists to integrate security into the infrastructure, processes and applications to maintain privacy.

Compliance fatigue

- Organizations are trying to maintain a balance between investing in both the security and compliance postures.

Source: Pyramid Research, October 2007

Security in the Market

Global market forces are impacting us all

Reality of living in a globally integrated world

- Widespread impact of economic downturn and uncertainty
- Energy shortfalls and erratic commodity prices
- New customer demands and business models
- Information explosion and risk/opportunity growth

Businesses are under increasing pressure to effectively:

- Manage operational cost and complexity
- Deliver continuous and high-quality service
- Address security risks intensified by innovation, emerging technologies, data/information explosion, etc.

According to a survey by SearchCIO, non-essential IT projects are being put on the backburner but security has a "1% or less chance of being affected by the economy."
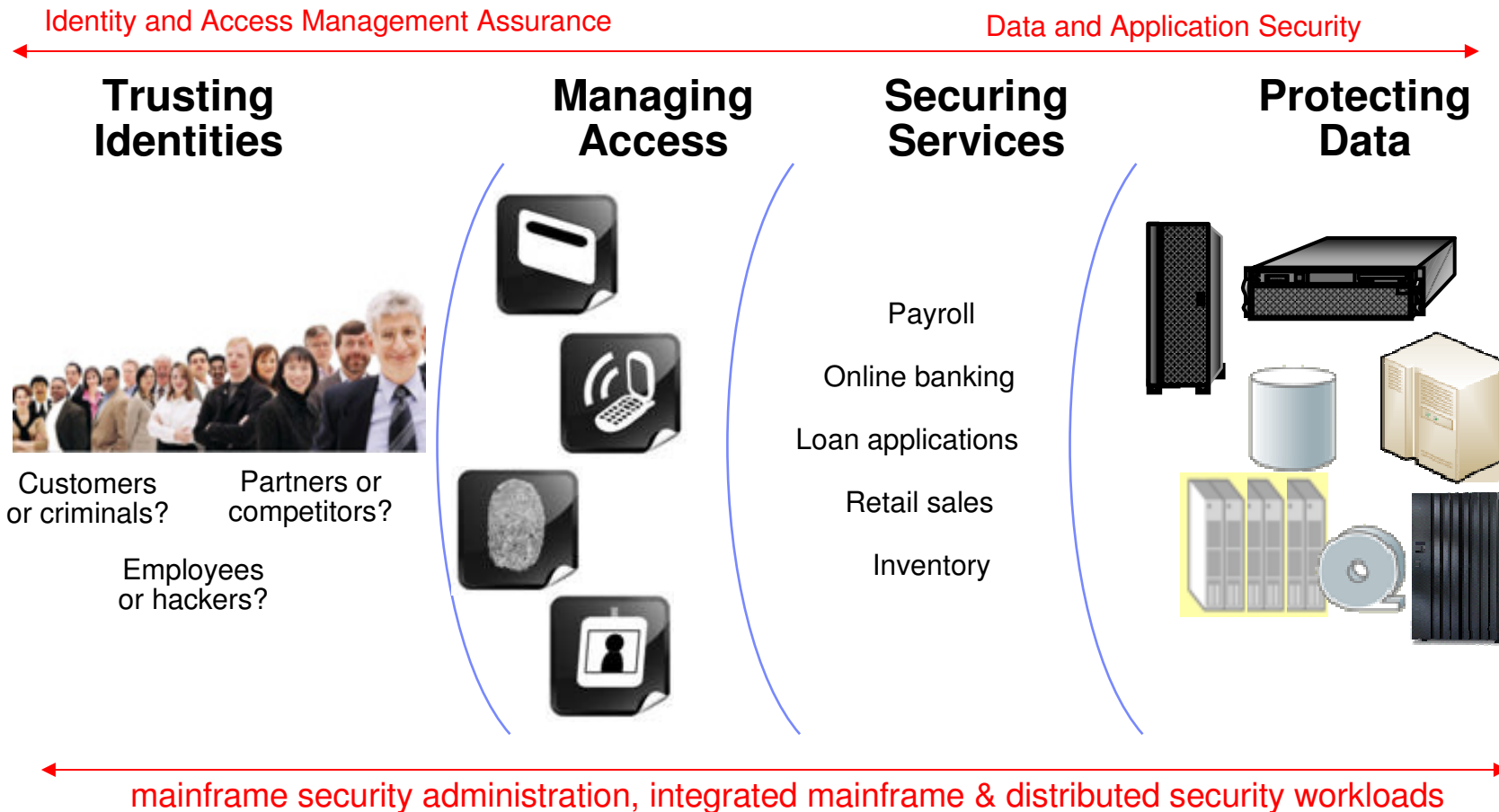
Security in the Market
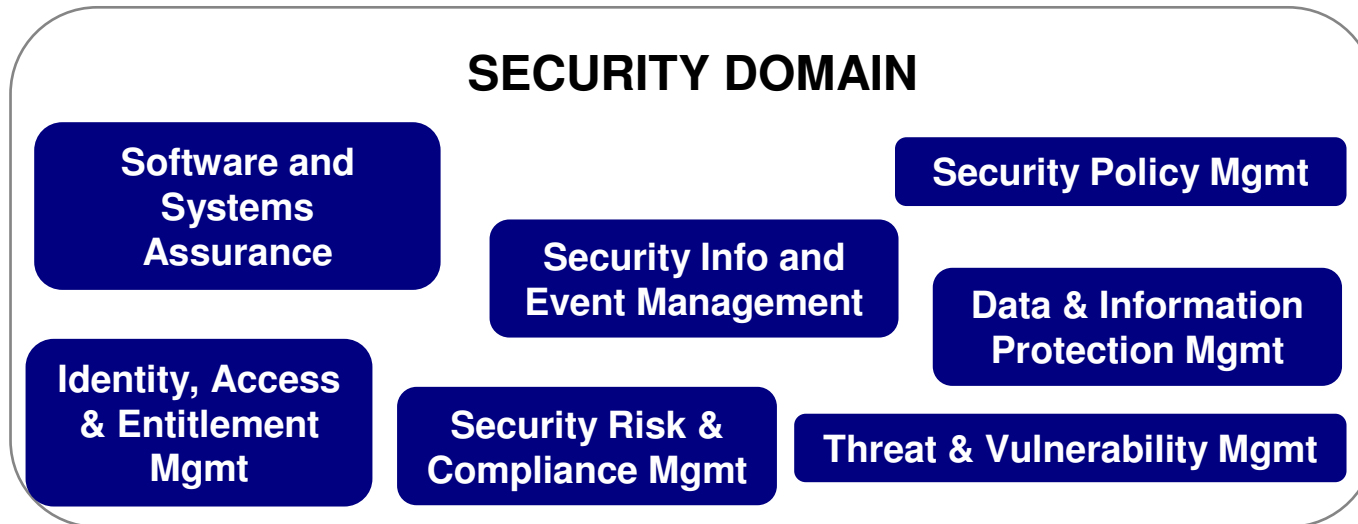
Threats and challenges

- **Web applications have become the Achilles heel of corporate IT security**

  – 54.9% of all vulnerabilities are Web application vulnerabilities, 75% of those have no patches available
  – Number of malicious Web sites in the 4th quarter of 2008 alone surpassed the total number seen in all of 2007   X-Force 2008 Trend and Risk

- **Threats continue to rise: mergers, acquisitions, layoffs. 59 percent of workers who left their positions took confidential information with them.**
  – 24% of these former employees responding to the survey said they still had access to their former employer's computer systems after they left,
  – 50% between one day to a week,
  – 20% more than a week.   study by Ponemon Institute

- **Weak passwords are easily compromised by insiders.**
  – Internal attacks cost 6% of gross annual revenue -- costing USD 400 billion in the U.S. alone.

- **30% of all help desk calls are password related.**
  – Password resets can cost as much as $20-$25 per call.

Today's Security Challenges

Identity and Access Management Assurance   Data and Application Security

Trusting Identities	Managing Access	Securing Services	Protecting Data

Customers or criminals?   Partners or competitors?

Employees or hackers?

Payroll

Online banking

Loan applications

Retail sales

Inventory

mainframe security administration, integrated mainframe & distributed security workloads

Security has to be applied within a Business context fused into the fabric of business and not as a bespoke solution to the next security threat

Security Domain Functional Groupings

SECURITY DOMAIN

Software and Systems Assurance

Security Info and Event Management

Security Policy Mgmt

Data & Information Protection Mgmt

Identity, Access & Entitlement Mgmt

Security Risk & Compliance Mgmt

Threat & Vulnerability Mgmt

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IMPROVE SERVICE
REDUCE COST
MANAGE RISK

Virtualization
Energy Efficiency
Security
Service Management
Business Resiliency
Asset Management
Information Infrastructure

Identity and Access Management Assurance
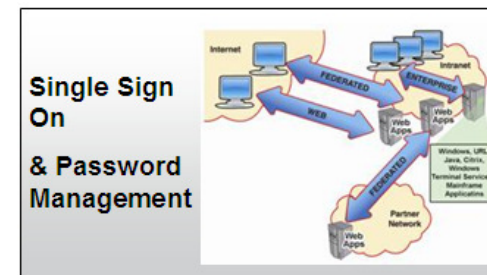
Improve Service

- Enable collaboration via role based portals with access to enterprise services and applications
- Increase market reach with federated business models leveraging trusted identity information

Reduce Cost

- Reduce help desk costs, password reset requests
- More efficiently manage restructuring
- ERP deployments / upgrades

Manage Risk

- Privileged & Shared IDs
- Failed audits,
- Insider breach
- SOA, SharePoint, cloud computing, Portal, DataPower
- Recertification, entitlements management
- National ID / Trusted ID – provisioning of strong / trusted credentials.
- Unauthorized IT change detection

Single Sign On
& Password Management

Access Attestation

User Provisioning / Role Management

Tivoli Identity Manager

HR Systems/ ID stores

Security log management & report
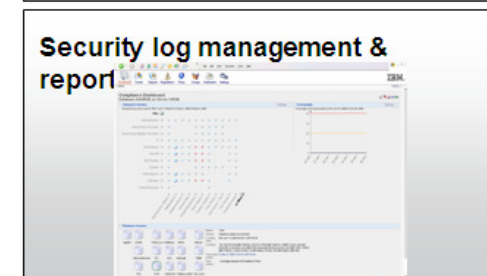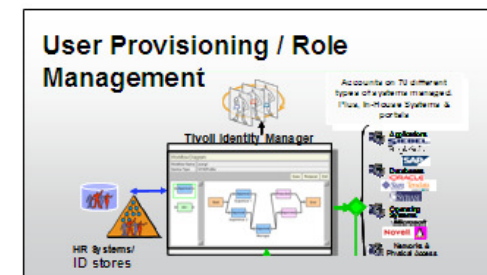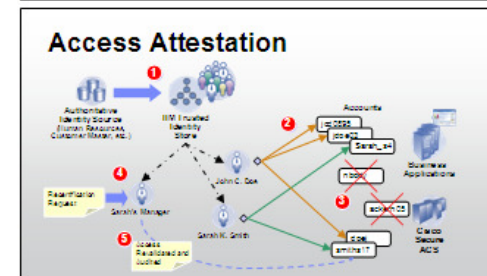
Data and Application Security

Data Disclosure and Privacy Compliance
- Comply with data disclosure and privacy regulations including PCI DSS, GLBA worldwide data privacy laws
- Reduce the cost of compliance
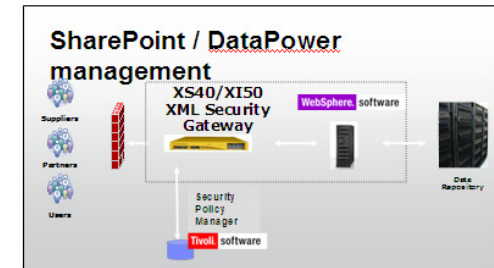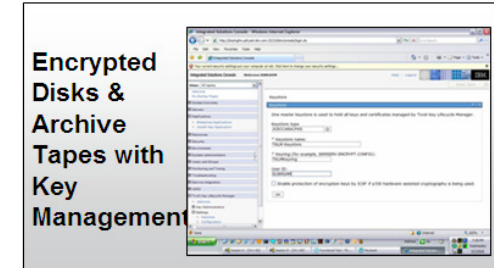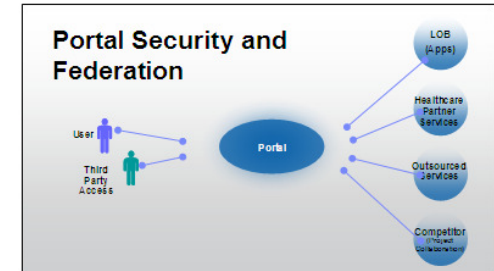
Application Security and Agility
- Secure 3rd party collaboration and outsourcing
- Simplify management and quickly implement policy changes to protect data in critical applications

Manage business risk by protecting business information / IP
- Protect access to data in use within applications and data at rest including confidential employee, customer and financial data, and IP

Secure Storage
- Protect data at rest, on disk and tape

Portal Security and Federation

Security log management & reporting

Encrypted Disks & Archive Tapes with Key Management

SharePoint / DataPower management

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REDUCE COST
MANAGE RISK

Virtualization

Energy Efficiency

Security

Service Management

Asset Management

Business Resiliency

Information Infrastructure

ISM Company: Security Implications

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How would you rank Security as a business priority?

Select the most appropriate answer

1. Our primary business focus is Control: access to data, applications & environments
2. Our business focus extends to Visibility: monitoring incidents and events
3. Our focus extends to include Compliance: audit and prove performance
4. Security Management is a key business directive and is given extreme focus from both and IT and an overall business perspective

How would you rank Security as an IT priority?

Select the most appropriate answer

1. Our Security focus is primarily on Identity & Access Management

2. Our Security focus extends into Application Security

3. Our Security focus extends into securing information without negatively impacting service quality

4. We have an extensive Security program incorporated into our IT and business governance

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How IBM enables security

SECURITY OFFERINGS FROM IBM

- Identity and access management services
- Privileged user services
- Information security and data loss prevention offerings
- Application security offerings
- Policy management and enforcement solutions
- Network, server and endpoint security offerings

- Security compliance and risk management offerings
- Security assessment, planning and implementation services
- Managed security services
- Physical security solutions
- Security education and training offerings

IBM LEADERSHIP

- Virtually the only security vendor in the marketplace with comprehensive coverage of the security foundation through products, consulting, and managed services
- 15,000 researchers, developers and subject-matter experts on security initiatives
- More than 3,000 security and risk management patents
- $1.5 Billion security spend in 2008

- One of the industry's only "guaranteed" protection service level agreements for managed security services
- Managed security reach in more than 133 countries
- Managing more than 4 Billion security events per day
- Certified assessments and remediation solutions for all 12 Payment Card Industry Data Security Standard requirements
- Products and services backed by the IBM Internet Security Systems X-Force® research team

Security adoption

Provide comprehensive risk management
Adopt a business-driven strategic approach to security

- Start with a security risk assessment
- Leverage IBM's leading security offerings and distinctive expertise combining business and security know-how
- Implement security controls to holistically address compliance requirements

Reduce the cost of security
Meet changing business needs

- Start with total cost of ownership challenge offering, security standards, and process assessments and design
- Deploy products and outsourced services to reduce cost and risks from people and identities, data and information, applications and infrastructure

Help ensure security-rich service delivery
Effectively manage risk for key business services

- Start with security policy, standards and procedures development
- Implement threat and vulnerability management solutions
- Automate security and compliance administration, management and reporting

Respond with speed and agility
Gain control over risk posture and incident response

- Start with a regulatory compliance assessment
- Deploy automated incident response products or services
- Implement SIEM products or managed services to drive improved insight

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What best describes the current level of security integration?

Select the most appropriate answer

1. Security acts as a silo and sometimes negatively impacts service quality and process efficiency.

2. Security is integrated with several processes and focuses on securing information without negatively impacting service quality.

3. Business and IT Security are addressed in a cohesive fashion

4. External partners (as well as internal business and IT groups) are included in all security considerations

Which best describes your current Identity & Access Management capability?

Select the most appropriate answer

1. Users sign on to individual applications, minimal infrastructure exists for security monitoring and auditing.

2. Multiple user registries and access control policies are defined in multiple places.

3. A consistent practice and infrastructure for access control is implemented. Provisioning of account information is policy-based and consistently applied.

4. Identity management and access management are tied to the employee life cycle in the organization. Automated policy-based administration of users' accounts streamlines administration across the organization.

Which best describes your current level of authentication capability?

Select the most appropriate answer

1. Users sign on to individual applications, and minimal infrastructure exists to facilitate security monitoring and auditing.
2. Users can sign on and access multiple applications within their Line of Business
3. Automated policy-based administration of users' accounts is employed to streamline administration across the organization.
4. Policy-based provisioning of account information is performed using cross-organization service invocations with partners in the value net.

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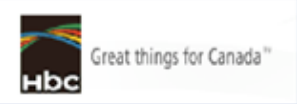
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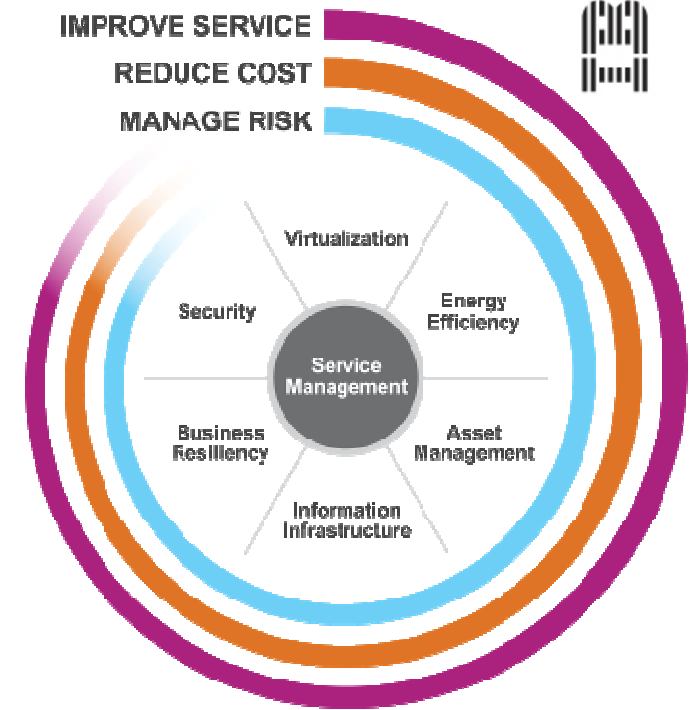
# IBM is helping our clients advance their business objectives through Security

Hudson's Bay Company	DTCC	Community Medical Centers	Allianz Seguros
Anticipates, tracks and mitigates security threats before they cause harm to data or the IT infrastructure Provides professional management of network devices	Security features are designed and built into more than 225 new applications per year Help improved developer productivity Reduced time to market for each new service	Reduced costs with fewer password resets and simplified administration Enhanced security through HIPAA support Improved staff productivity with single sign-on support	Applied proven data masking techniques to protect privacy and support compliance with country regulations.
"IBM provided us with more than just compliance. Sensitive data is secure, systems are monitored closely for performance issues, and our IT staff can focus more mission-critical activities."	*"The real key is that we have the education in place and now implement security early in the application development lifecycle, so we have less overall vulnerabilities to manage."*	*"Tivoli Access Manager for Enterprise Single Sign-On provides our users with one secure password to our applications and flexibility to manage how users access applications, something other vendors have not easily been able to provide."*	*"After attending a demonstration, the members of our evaluation team agreed that Optim provided the capabilities we needed to improve application development and testing processes and protect privacy,"*

Welcome to the **smarter planet**

Globalization and Globally Available Resources

Billions of mobile devices
accessing the Web
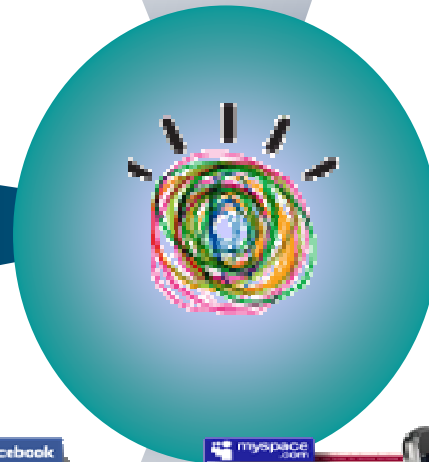
Access to streams of
information in the Real Time

New Forms of
Collaboration

New possibilities.
New complexities.
New risks.