

IBM Business Connect

Business Without Limits.

July 18 | Sandton Convention Centre, Johannesburg

Turning Opportunities into Outcomes with IBM Cloud and Smarter Infrastructure Solutions

Michael O'Mara

18 July 2013



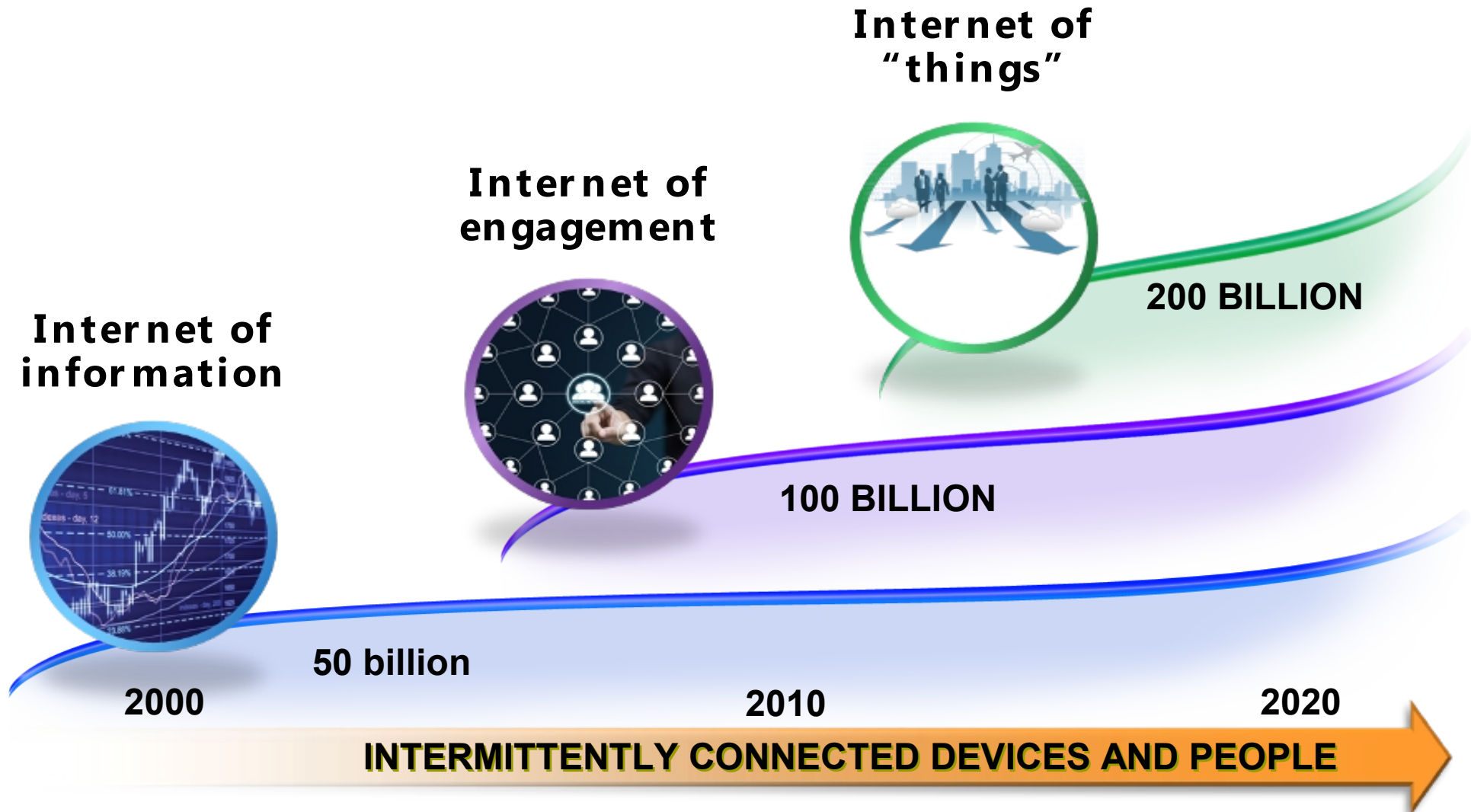
<https://www.facebook.com/IBMSouthAfrica/events>



#IBMBC2013



The convergence of technology is transforming the world into an Internet of things...



IBM Business Connect

Business Without Limits.



Fueled by Disruptive Technology Factors



IBM Business Connect

Business Without Limits.



Traditional Systems of Record are being extended via **New Modes of Engagement**...



Systems of Record

New Modes of Engagement

- Data & Transactions
- App Infrastructure
- Virtualized Resources

Next Generation Architectures

- Expanding Interface Modes
- Big Data and Analytics
- Social Networking

Data & Transaction Integrity

Smarter Devices & Assets



IBM Business Connect

Business Without Limits.



Today's infrastructures are smarter, interconnected, and virtually without limits...



Smarter Physical Assets



200 Billion

Connected physical assets & devices

Growing Mobile Access



1 Billion

Consumers have SmartPhones

Unpredictable Data Flows



62%

of workloads moving to Cloud

Expanding risk and cost



60,000

Cyber attacks every day

IBM Business Connect

Business Without Limits.



Smarter infrastructures provide new opportunities to deliver better business outcomes...



React

Achieve

Reduce

with agility to changing landscapes

outcomes from limited investments

unnecessary risk and cost

Increasing sales with new promotions from 15% to 75%

Speeding service delivery from 45 days to 20 minutes

Recognizing & repairing over 50% of issues before operations impact

IBM Business Connect

Business Without Limits.



The ability to balance Optimization and Innovation will be critical to success...



Drives need for continuous **optimization**

Optimization

Innovation



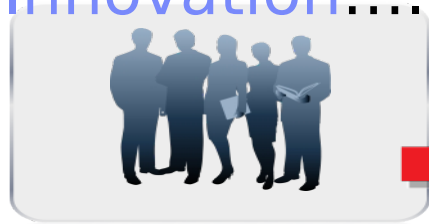
Fuels investments in **innovation**

IBM Business Connect

Business Without Limits.



However, organizations are challenged in **Optimizing** product & service delivery, and in turn, driving **Innovation**....



Customers



Business



Development



Operations

41%

experience
development delays

34%

experience
deployment delays

45%

experience
production delays



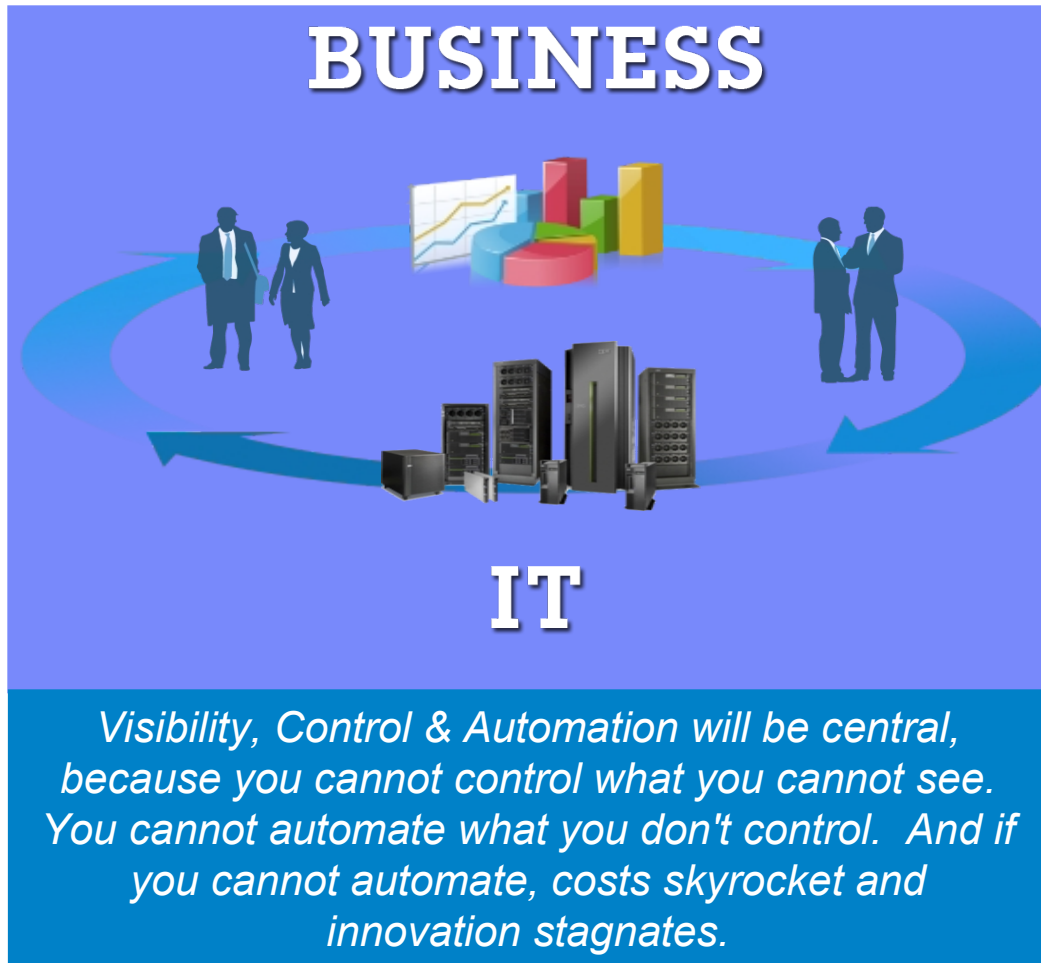
Source : A commissioned study conducted by Forrester Consulting on behalf of IBM, 4Q2011

IBM Business Connect

Business Without Limits.



A better approach to bridging business and IT is needed – one that balances Optimization & Innovation...



Visibility

to **see** and **understand** your business in **real time**



Control

to **transform** and **adapt** while limiting **risk & cost**



Automation

to **achieve** greater **efficiency** and **agility**

IBM Business Connect

Business Without Limits.



IBM clients are seeing the benefits of improved visibility, Control and Automation across their smarter infrastructures...



Visibility

Condition-based maintenance

- **99.15%** of trains within **6 seconds** of schedule
- **Improved** safety, reliability, asset utilization & asset life



Taiwan High Speed Rail

Control

Endpoint Management

- Improved endpoint coverage from 50% to **100%** with near real-time reporting
- **95%** reduction in servers, **6X** reduction in admin staff



Li & Fung

Automation

Dynamic provisioning

- Deployment times reduced from hours/days to **minutes**
- **2X** improvement in admin productivity



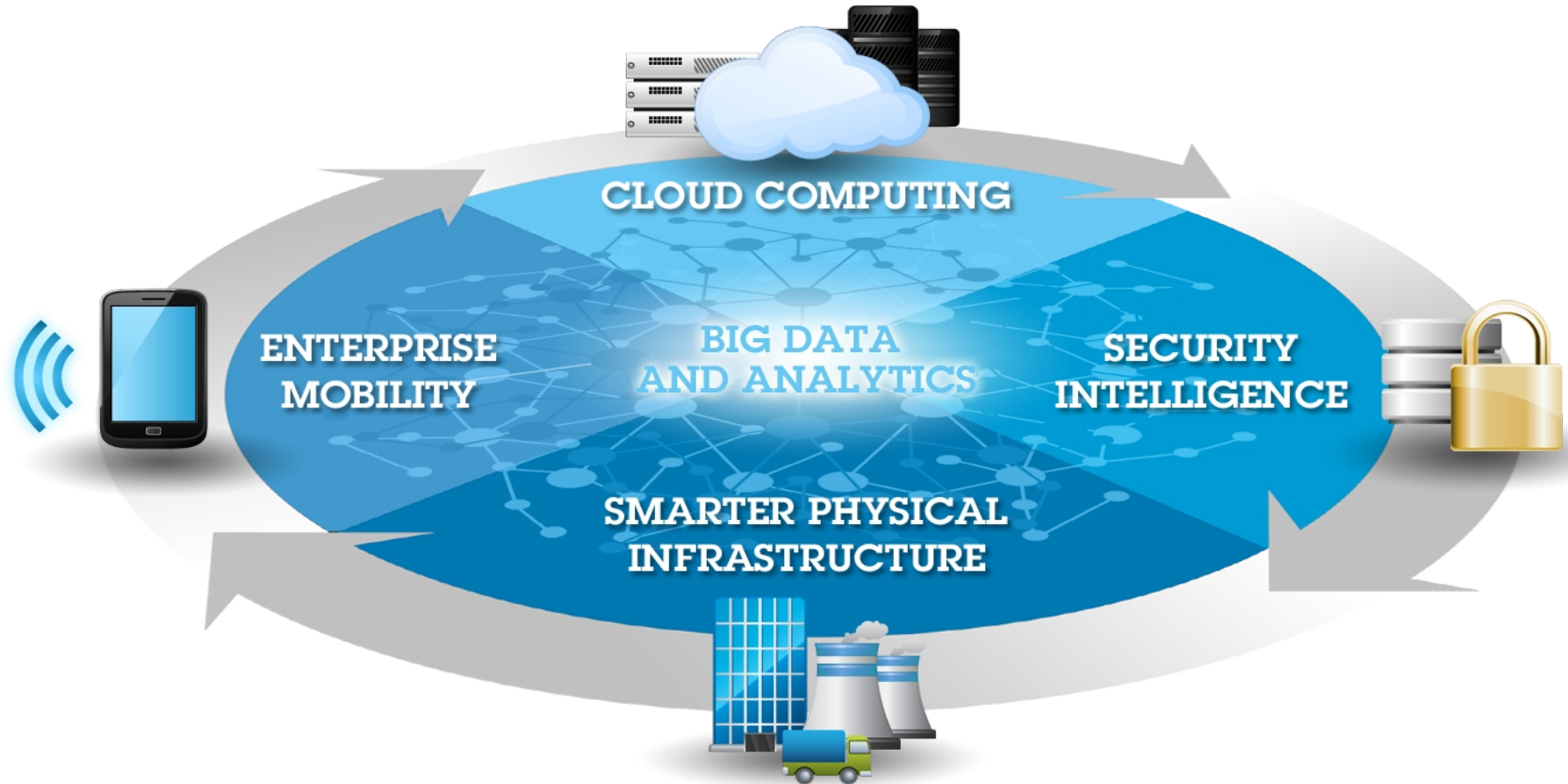
American Greetings

IBM Business Connect

Business Without Limits.



IBM provides an **open**, and **holistic approach** to managing delivery of products & services across smarter infrastructures...

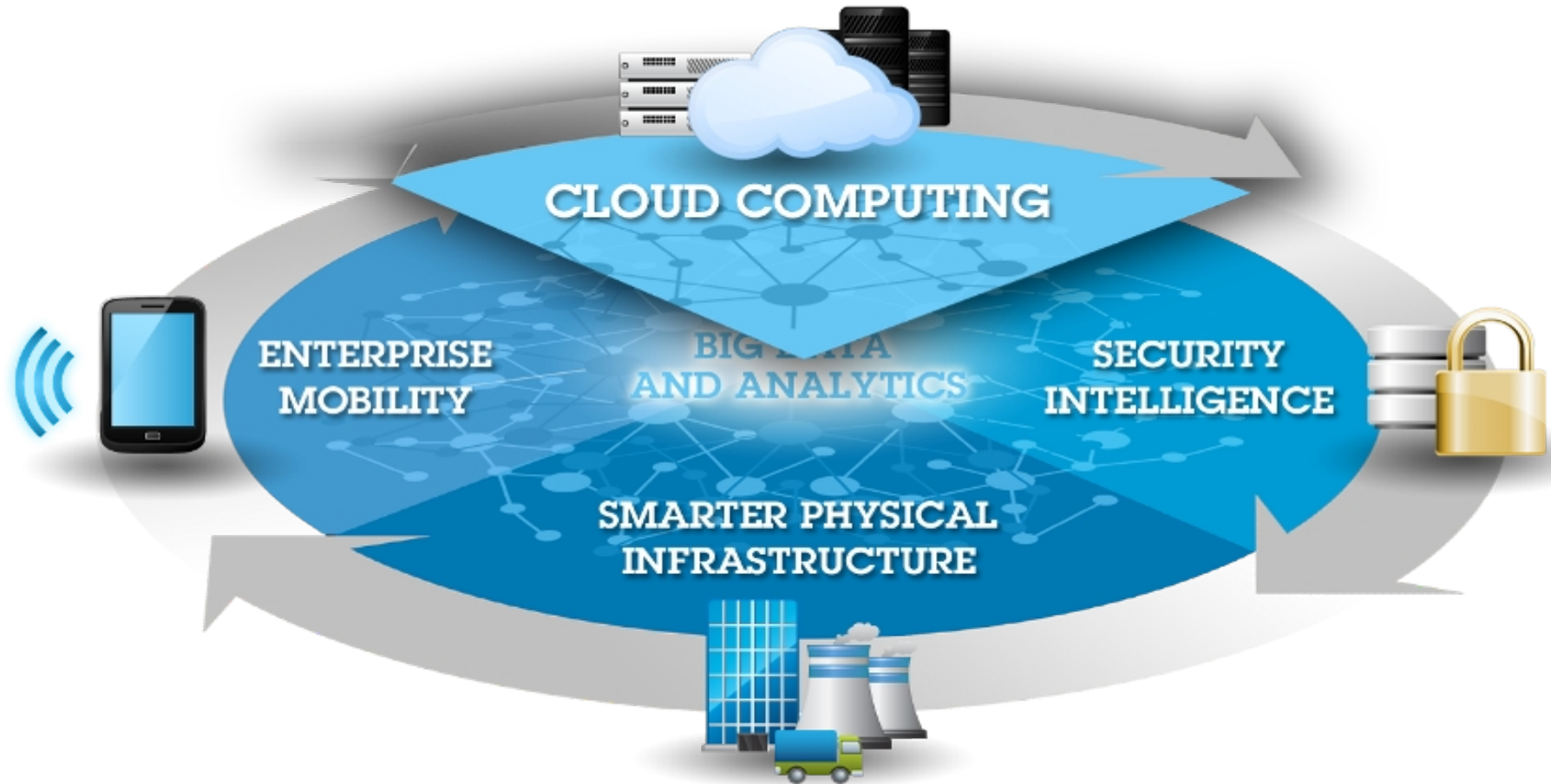


IBM Business Connect

Business Without Limits.



IBM provides an **open**, and **holistic approach** to managing delivery of products & services across smarter infrastructures...



IBM Business Connect

Business Without Limits.



Cloud Computing: IBM SmartCloud Foundation



An integrated set of capabilities for enabling private/hybrid clouds and the virtualization, automation and management of service delivery

- **Resilient** to the velocity of changing business needs
- Enables **choice & flexibility** in hybrid environments
- Provides **enterprise-class**, workload-aware services
- Built-in **analytics** for improved insight and decision making



IBM Business Connect

Business Without Limits.



Cloud Computing: A Next Generation Cloud Architecture



Workload Optimization

Patterns of Expertise

Dynamically Orchestrated Services

**Built upon a
Cloud standards
architecture**

IBM Business Connect

Business Without Limits.



Cloud Computing: Workload optimization that is truly workload aware...



Workload KPIs

Outcomes

Performance

Security

Resilience



Workload Awareness

- Dynamic policies
- Middleware dependencies
- Usage analytics



Workload Optimization

IBM Business Connect

Business Without Limits.

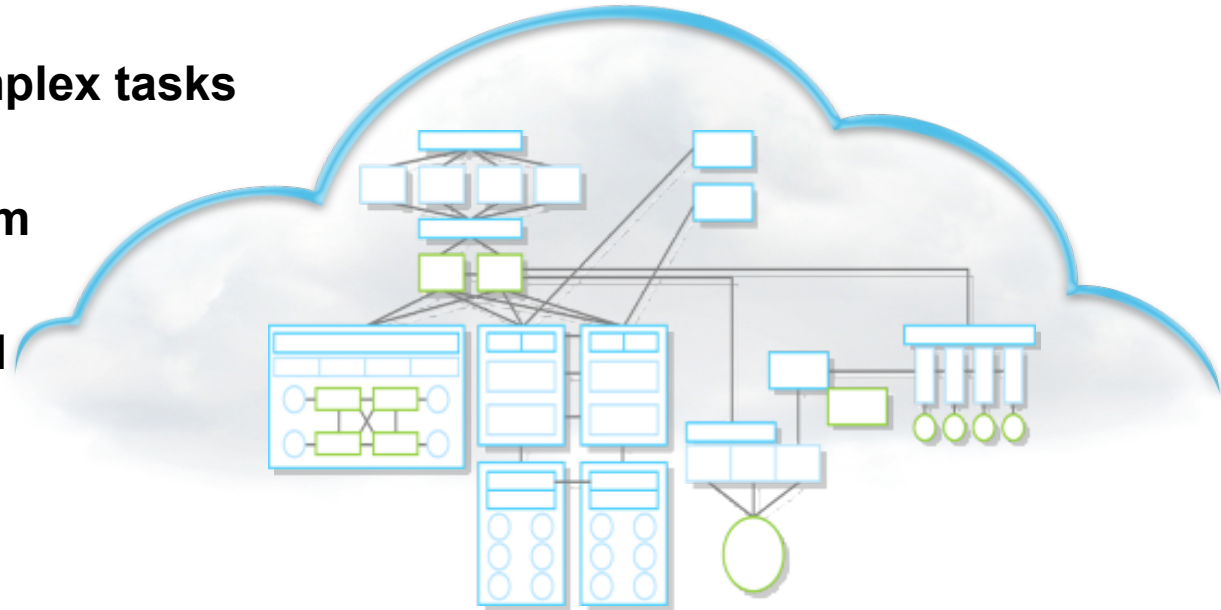


Cloud Computing: Patterns of expertise ensure **repeatability** ...



Proven Best Practices Learned from Decades of Successful Client and Partner Engagements

- **Pre-defined architecture of an application or Cloud service**
- **Captures best practices for complex tasks**
- **Optimized into a deployable form**
- **Repeatable deployment with full lifecycle management**

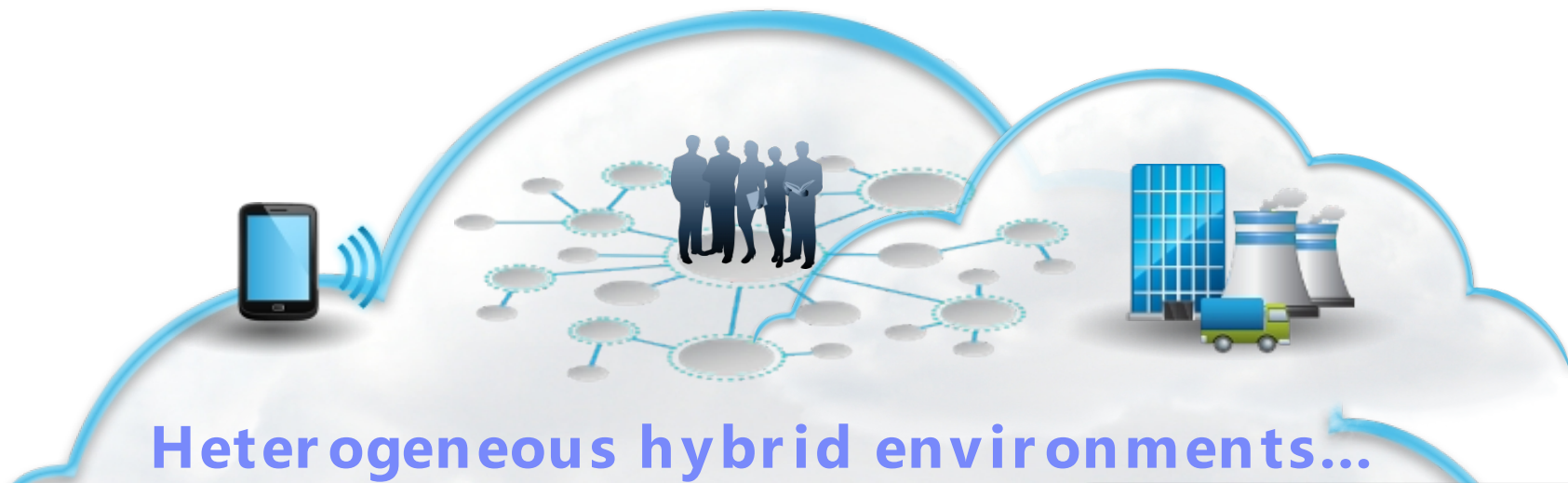


IBM Business Connect

Business Without Limits.



Cloud Computing: Beyond resource virtualization, enabling orchestration of complex services across hybrid environments...



Resource Orchestration
Onboard, provision, manage

Workload Orchestration
Dynamic optimization

Service Orchestration
Lifecycle of cloud services

IBM Business Connect

Business Without Limits.



Cloud Computing: Extending value & optimizing investments...



Intelligent Cloud Workloads

Virtualization

Cloud Service Delivery

Cloud Service Management

Cloud Orchestration

Computing Resources

Visibility • Control • Automation

Images • Patches • Threats

Services • Storage • Network



IBM Business Connect

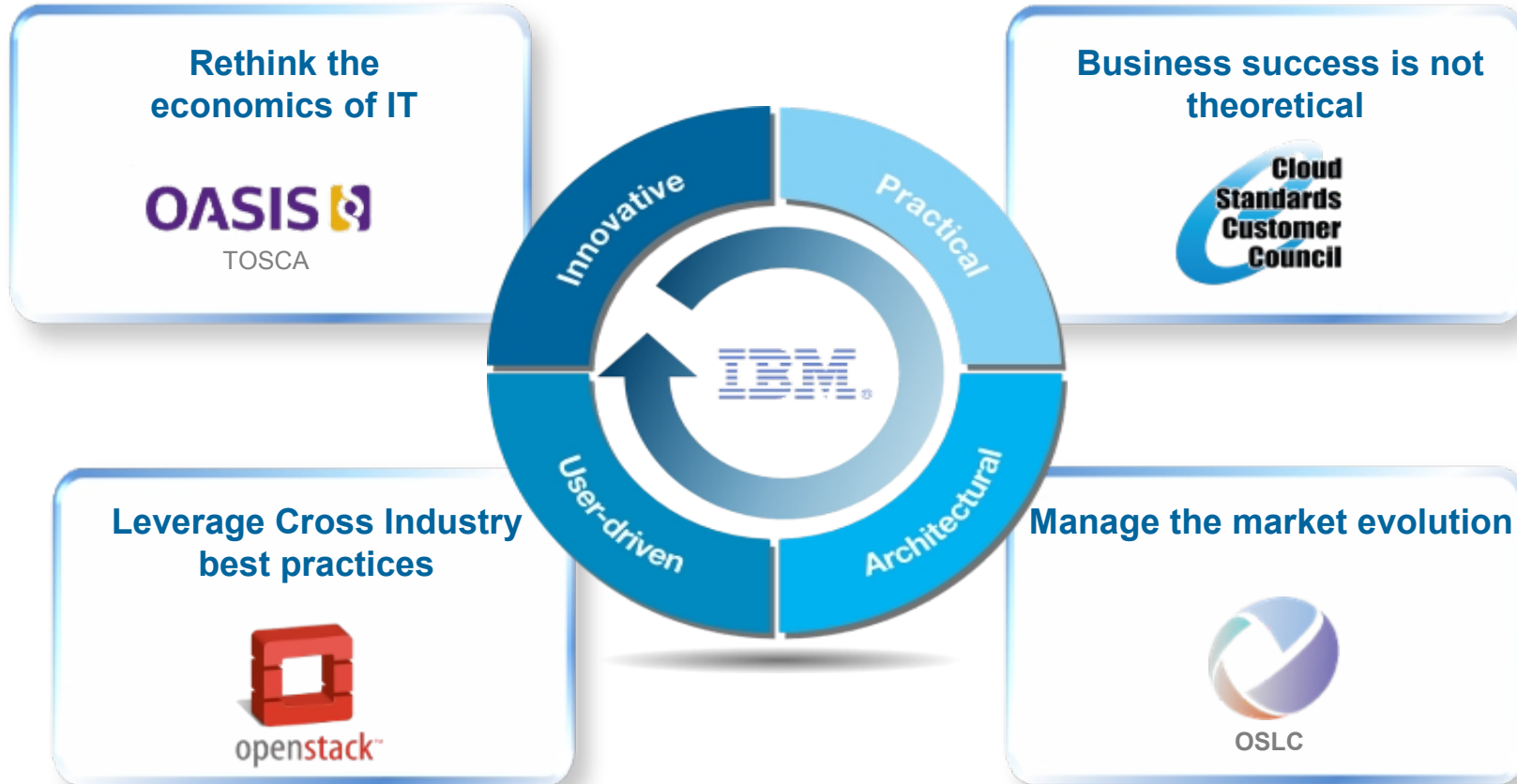
Business Without Limits.



Cloud Computing: A smarter approach to interoperability in the Cloud...



Standards-based. Flexible. Customer Driven.



IBM Business Connect

Business Without Limits.



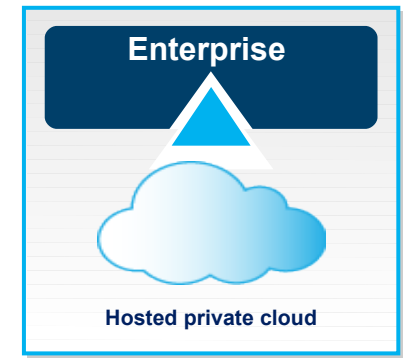
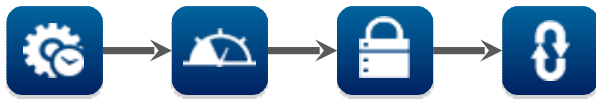
Cloud Computing: Flexibility in consuming & integrating hybrid clouds...



IBMSmartCloud
Foundation

PureSystems

IBMSmartCloud
Services



**Evolving existing
infrastructure
to Cloud**

**Accelerate adoption
with expert
integrated systems**

**Immediate access to a
managed platform**

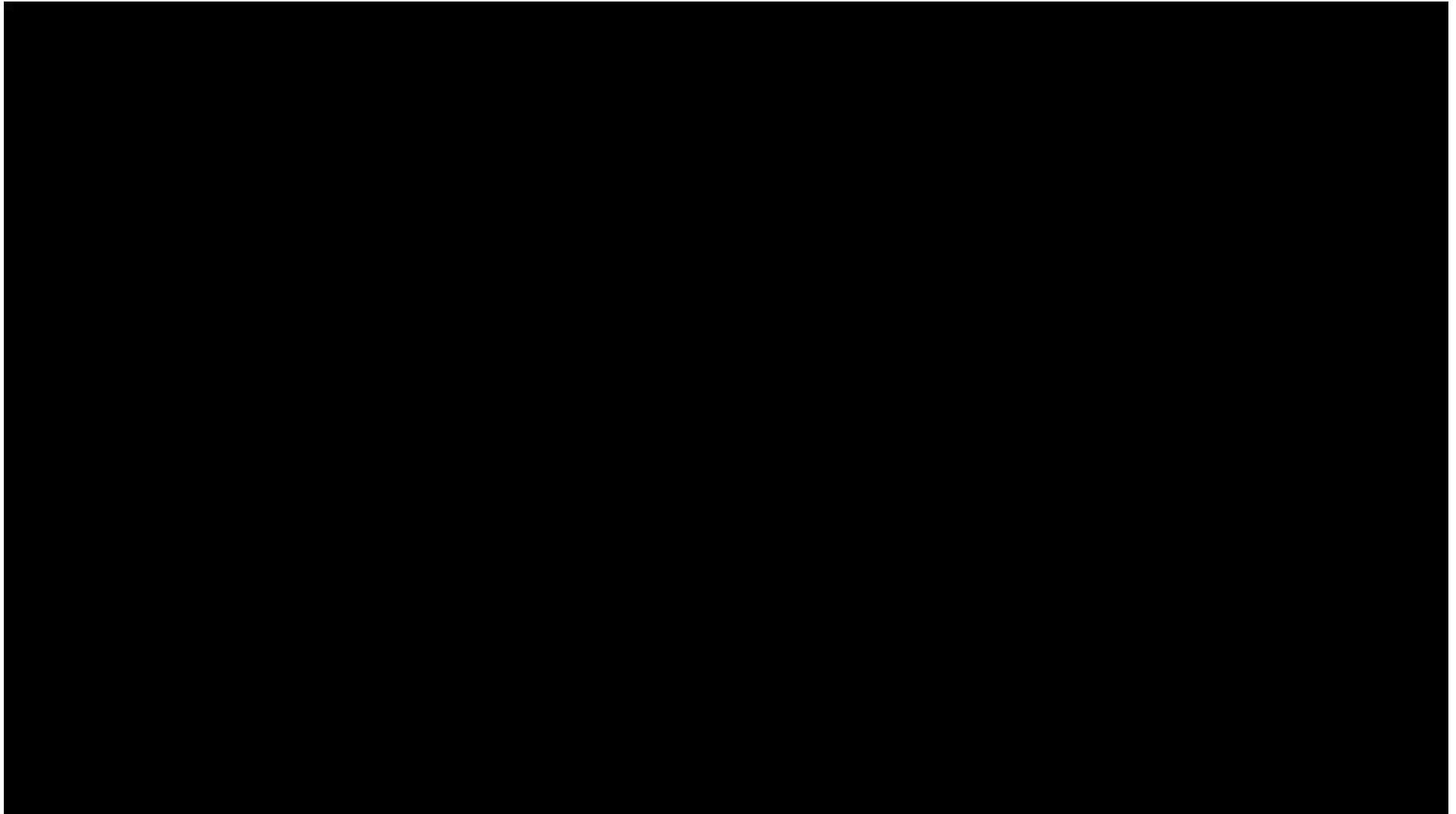
IBMSmartCloud

IBM Business Connect

Business Without Limits.



CxOs share their view on Cloud

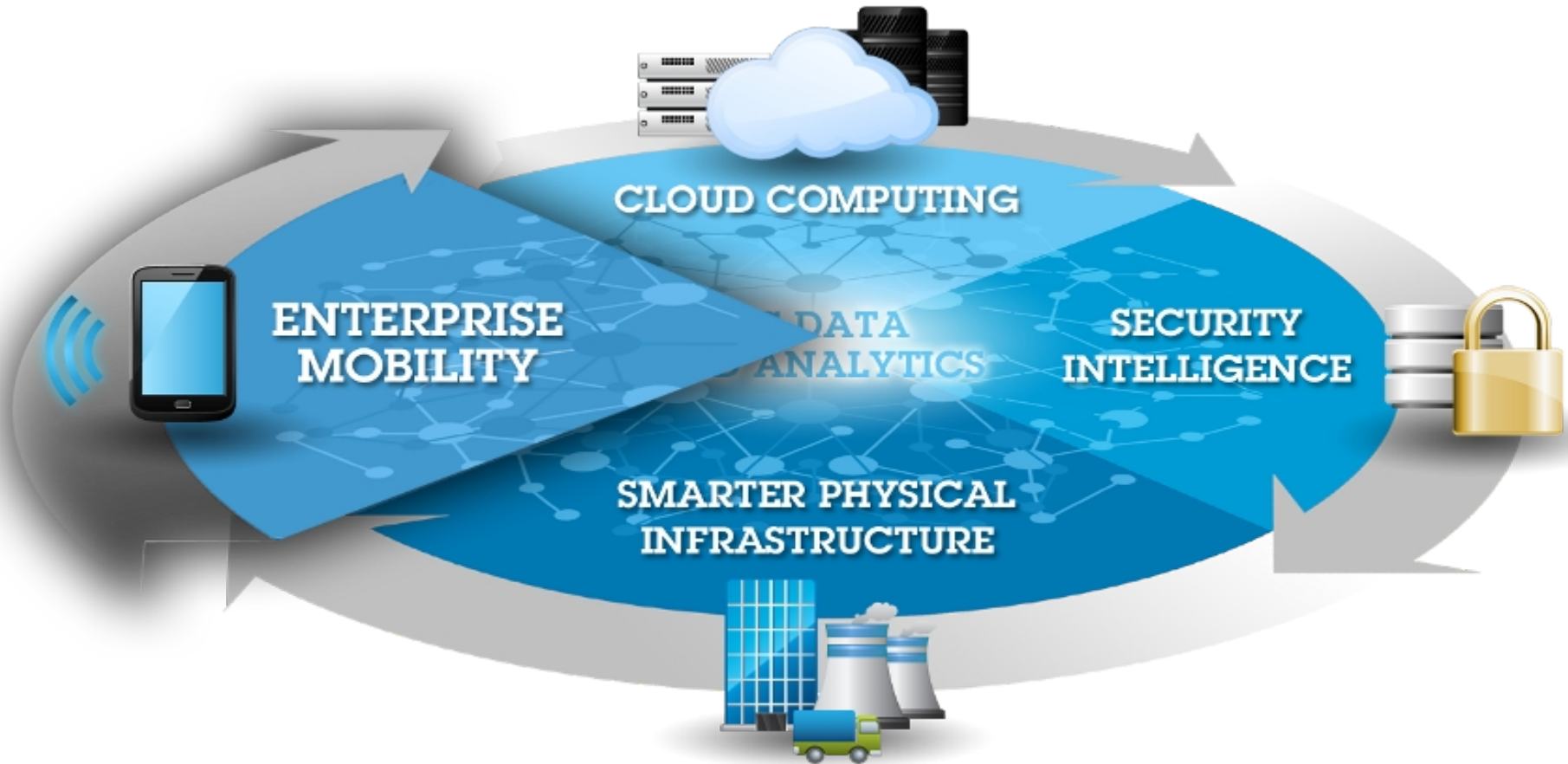


IBM Business Connect

Business Without Limits.



IBM provides an **open**, and **holistic approach** to managing delivery of products & services across smarter infrastructures...



IBM Business Connect

Business Without Limits.



Enterprise Mobility: The Industry's Most Comprehensive Mobile Portfolio



1

The Broadest Portfolio of Mobile Solutions

2

The Deepest Set of Services Expertise

3

New Industry Partnerships and Resources for Developers

IBM MobileFirst



Applications & Industry Solutions



Application Platform



Management



Security



Analytics



Cloud & Managed Services



IBM Business Connect

Business Without Limits.



Enterprise Mobility: Why take an **integrated** approach?



Speed time to deployment of enterprise mobile apps and updates, while improving quality



Reduce service desk calls, device replacement costs



Less total infrastructure for lower hardware, admin costs



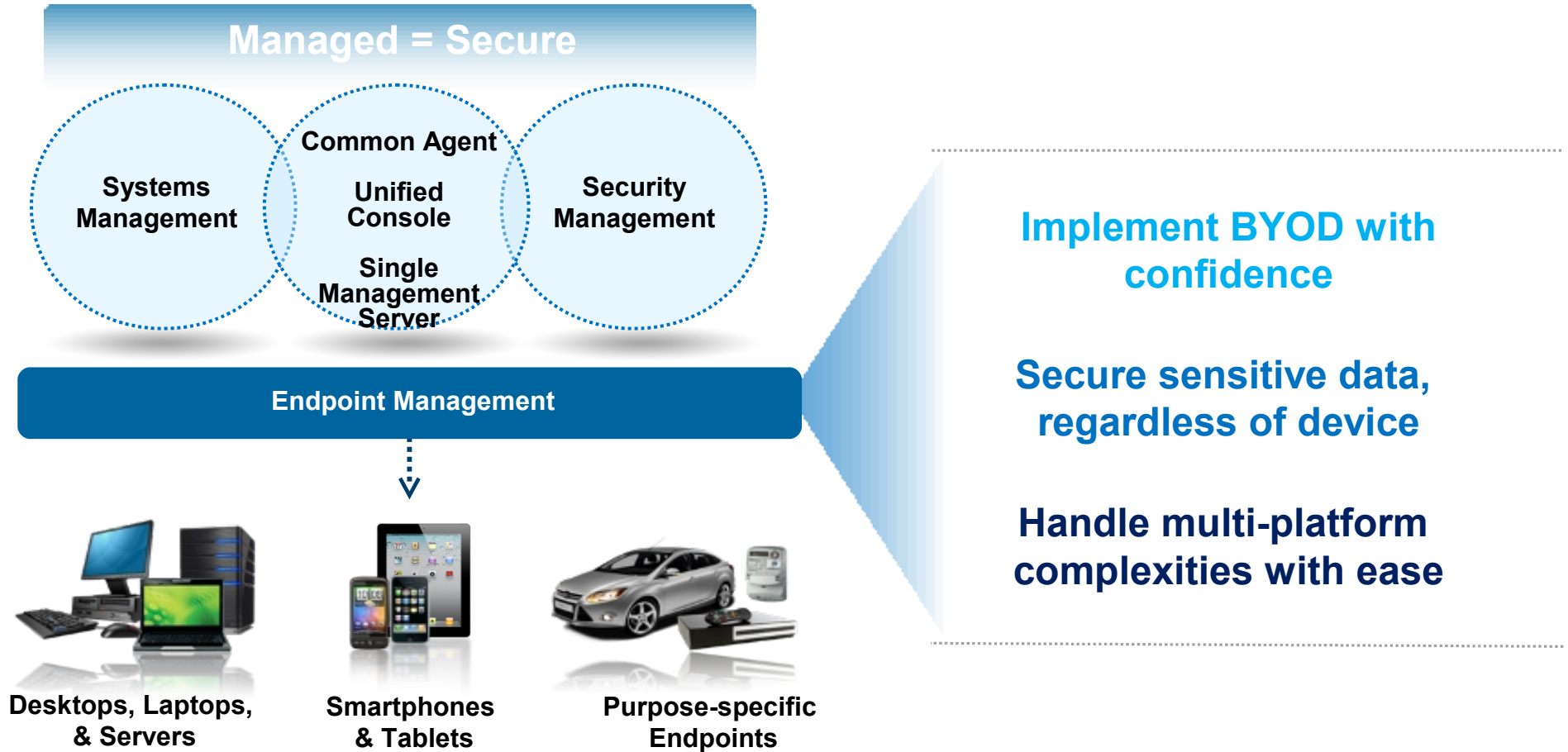
Enhance end-to-end security to help prevent loss of intellectual property and regulated data



Improve WiFi network management for greater reliability, employee productivity, and minimize business interruptions



Enterprise Mobility: Manage and secure **all your devices**



IBM Business Connect

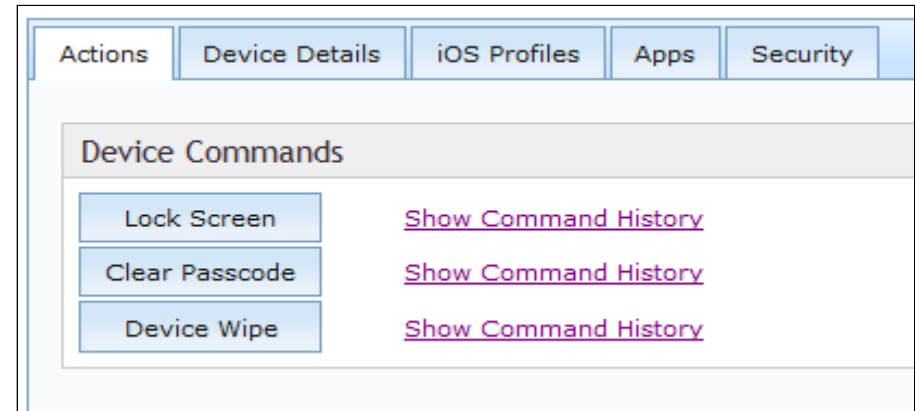
Business Without Limits.



Enterprise Mobility: Implement BYOD with confidence

How do I deal with the "consumerization of IT" and the business mandate that employees be allowed to "Bring Your Own Device"?

- **Selective-wipe** capabilities for iOS & Android
- Employee **self-service portal** to protect personal and enterprise data
- **Control access by OS version** to block devices that cannot be well secured
- Easily **extend BYOD to laptops** unified approach
- **Enterprise app store** directs employees to approved apps



A Self-Service Portal enables employees to locate personal devices and perform tasks such as lock, clear passcode, and device wipe

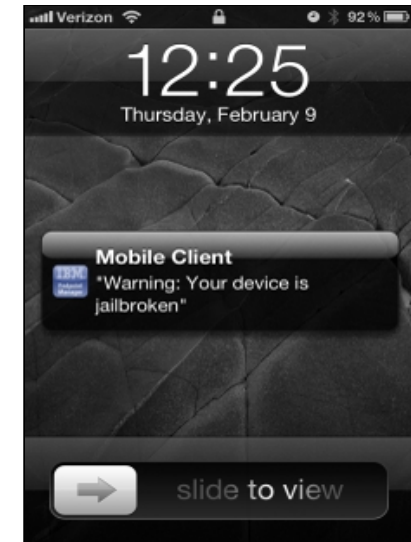


Enterprise Mobility: **Secure** sensitive data, regardless of the device



How do I ensure the security of mobile devices as they access more and more sensitive systems?

- **Unified compliance reporting** across devices
- **Configure security settings:** e.g. password policy, encryption, WiFi, iCloud sync
- Multiple **authenticated device enrollment** options
- **Loss protection:** Full wipe, remote lock, map device location, & clear passcode
- **Whitelist / Blacklist** apps, & automated alert & response
- **Detect jailbroken / rooted devices** to notify users, disable access
- **Integrate with mobile VPN and access management tools** for compliance



Multiple user communication and alert methods, including Google Cloud Messaging (GCM), enables users to be part of the security solution.

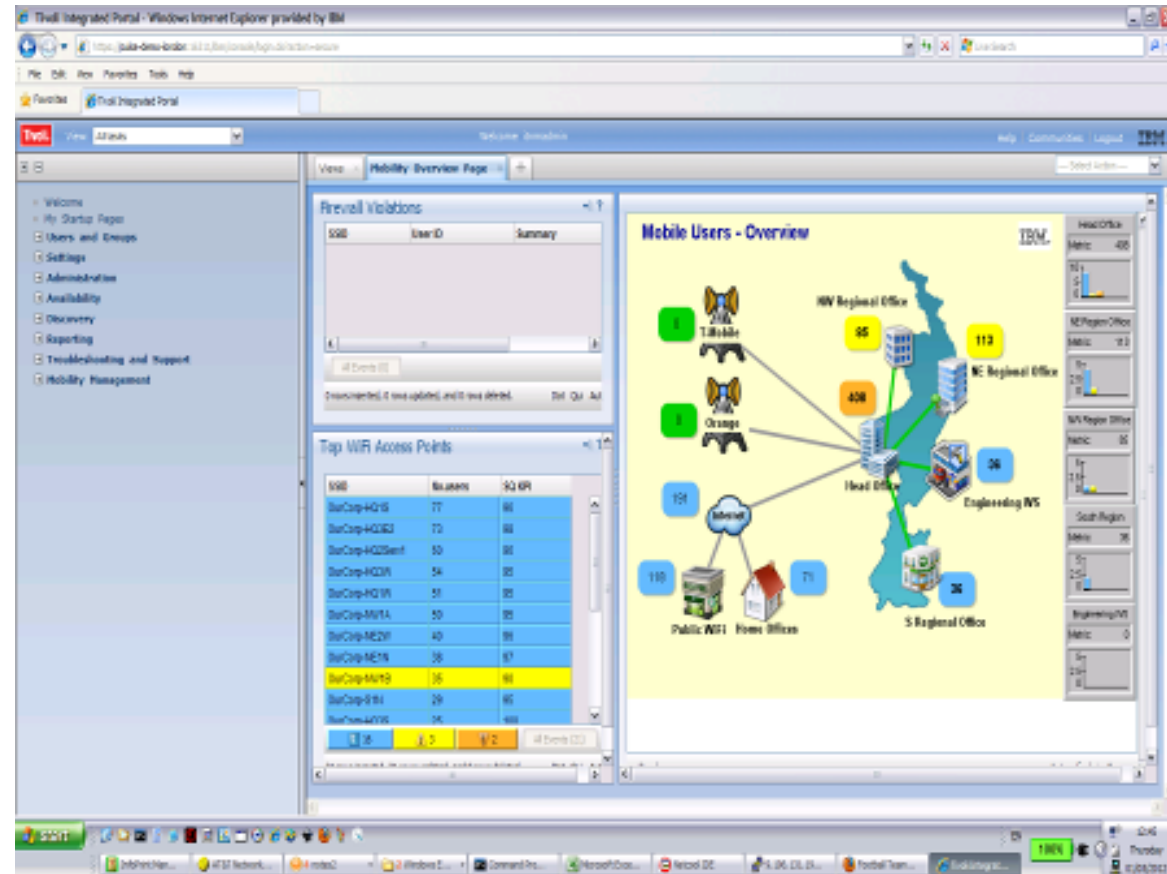


Enterprise Mobility: Assure enterprise wireless networks



How do I ensure WiFi service quality without sending technicians to “walk the halls”?

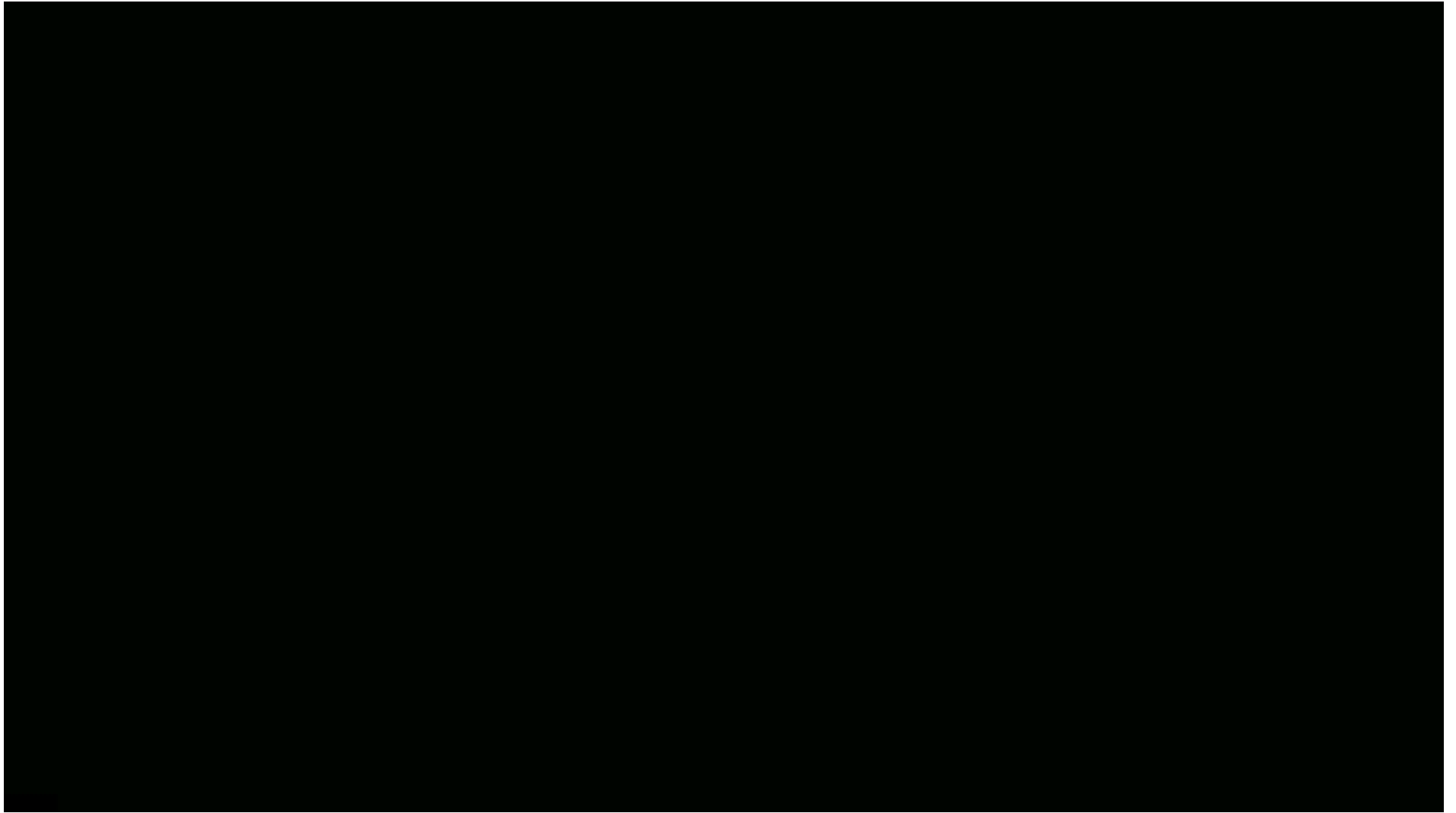
- Identify the **impact and cause** of any outages
- Highlight ongoing issues resulting from a lack of **capacity** or poor radio signals
- Gain visibility of the **service quality** experienced by mobile users
- **Manage exceptions** reported by mobile device and endpoint lifecycle management



IBM Business Connect

Business Without Limits.

Capital Region Health Care

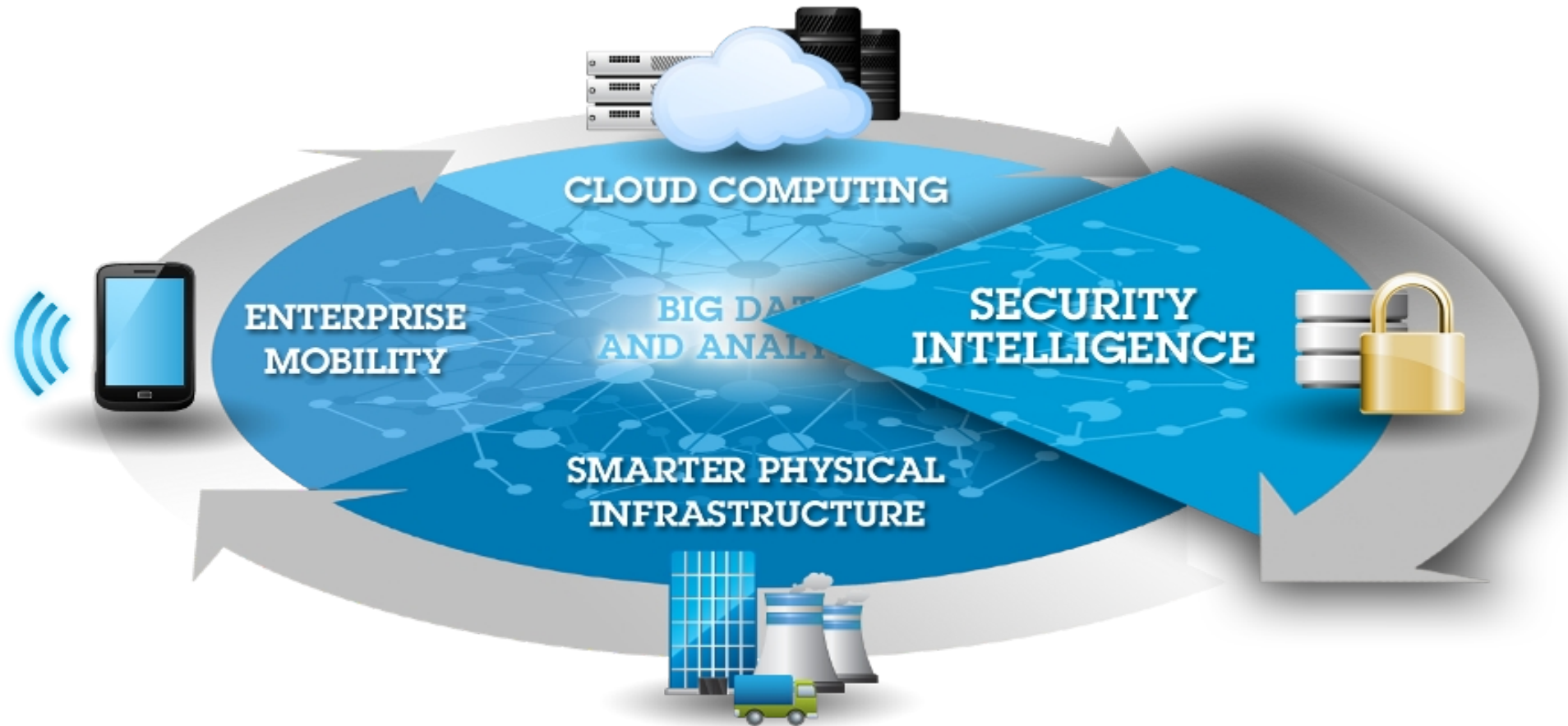


IBM Business Connect

Business Without Limits.



IBM provides an **open**, and **holistic approach** to managing delivery of products & services across smarter infrastructures...



IBM Business Connect

Business Without Limits.



Security Intelligence: Across big data, mobile & cloud



Security Intelligence with Big Data



Mobile Security



Cloud Security

IBM Business Connect

Business Without Limits.



Security Intelligence: *Analyze* Big Data



- Collect and report on logs
- Enhance compliance



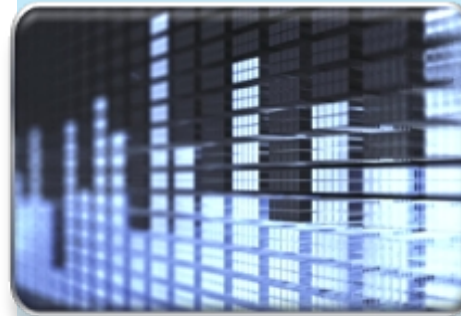
**Log
Management**

- Correlate broadly
- Prioritize and respond



**Event
Management**

- Anomaly detection
- Pre-exploit intelligence



**Security
Intelligence**

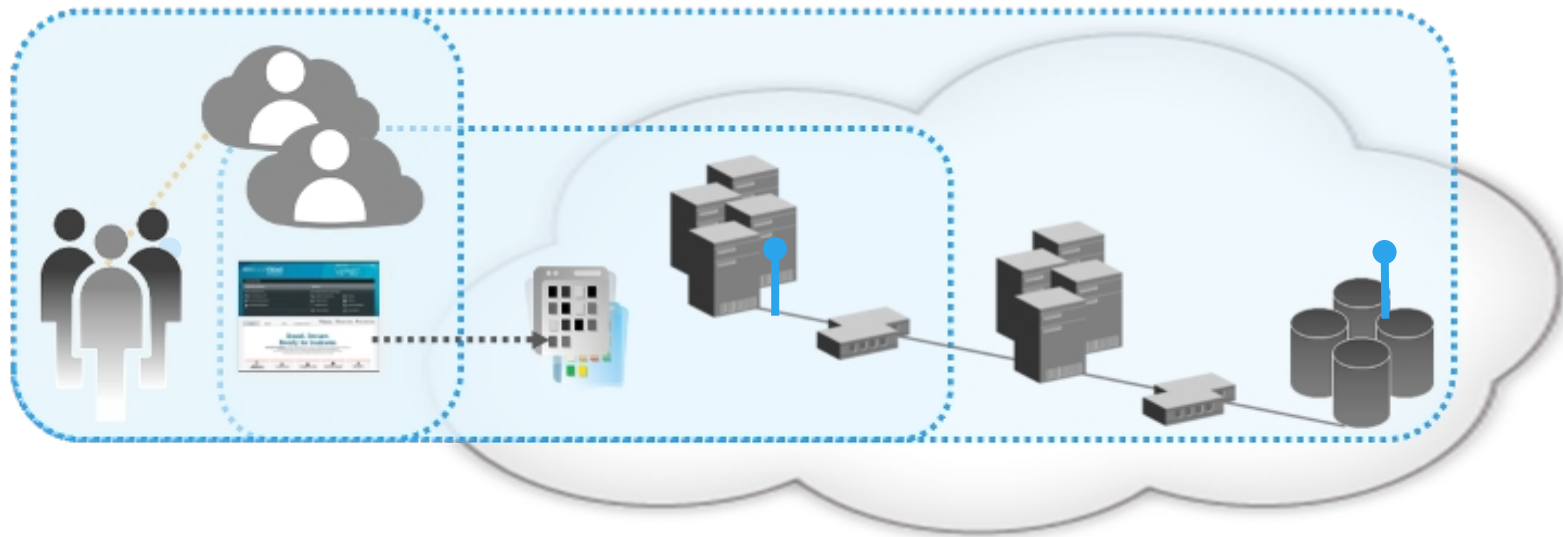
- Structured & unstructured data
- Visualization



**... with
Big Data**



Security Intelligence: Ensure cloud security



Identity Protection

- Administer, extend and help secure identity and access to / from the cloud

Data and Application Protection

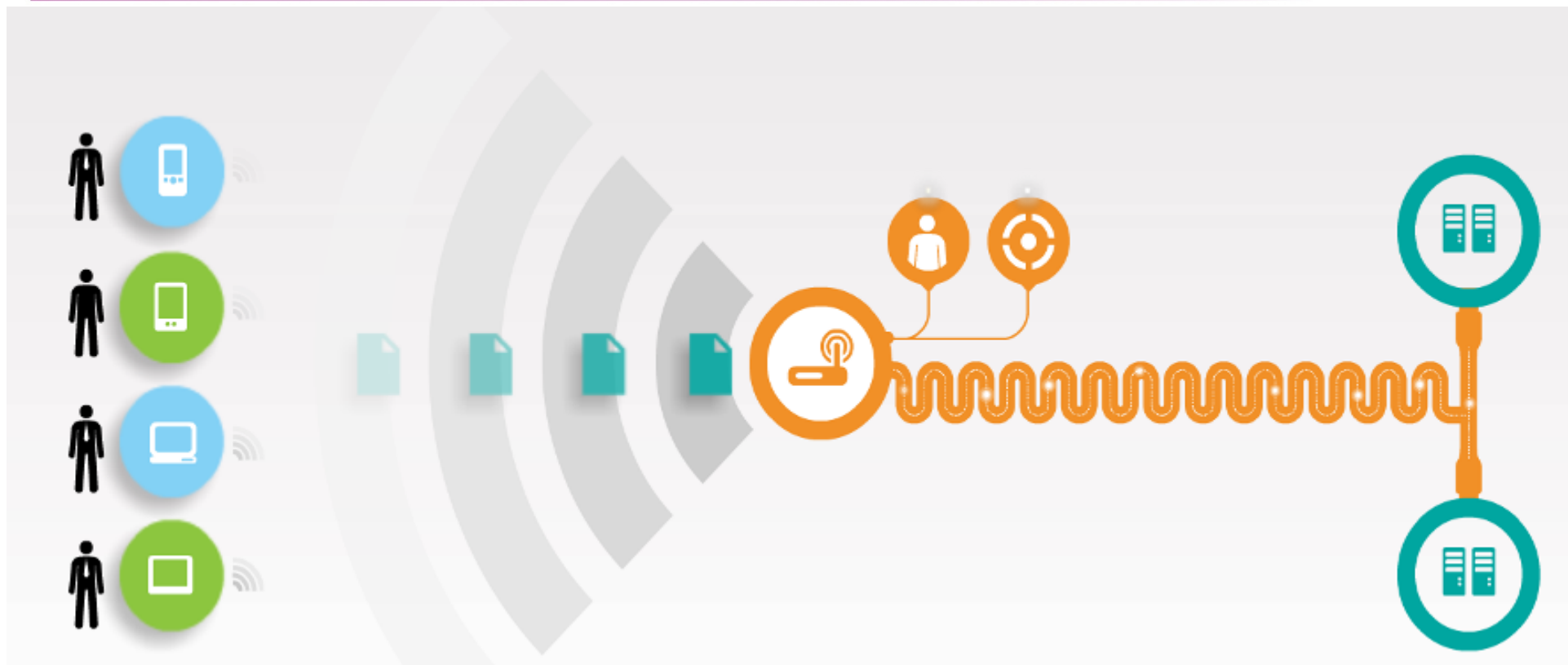
- Help secure enterprise databases
- Build, test and maintain cloud applications

Threat Protection

- Help prevent advanced threats with layered protection and analytics



Security Intelligence: Control mobile access



Device Management

Security for endpoint device and data

Network, Data, and Access Security

Achieve visibility and adaptive security policies

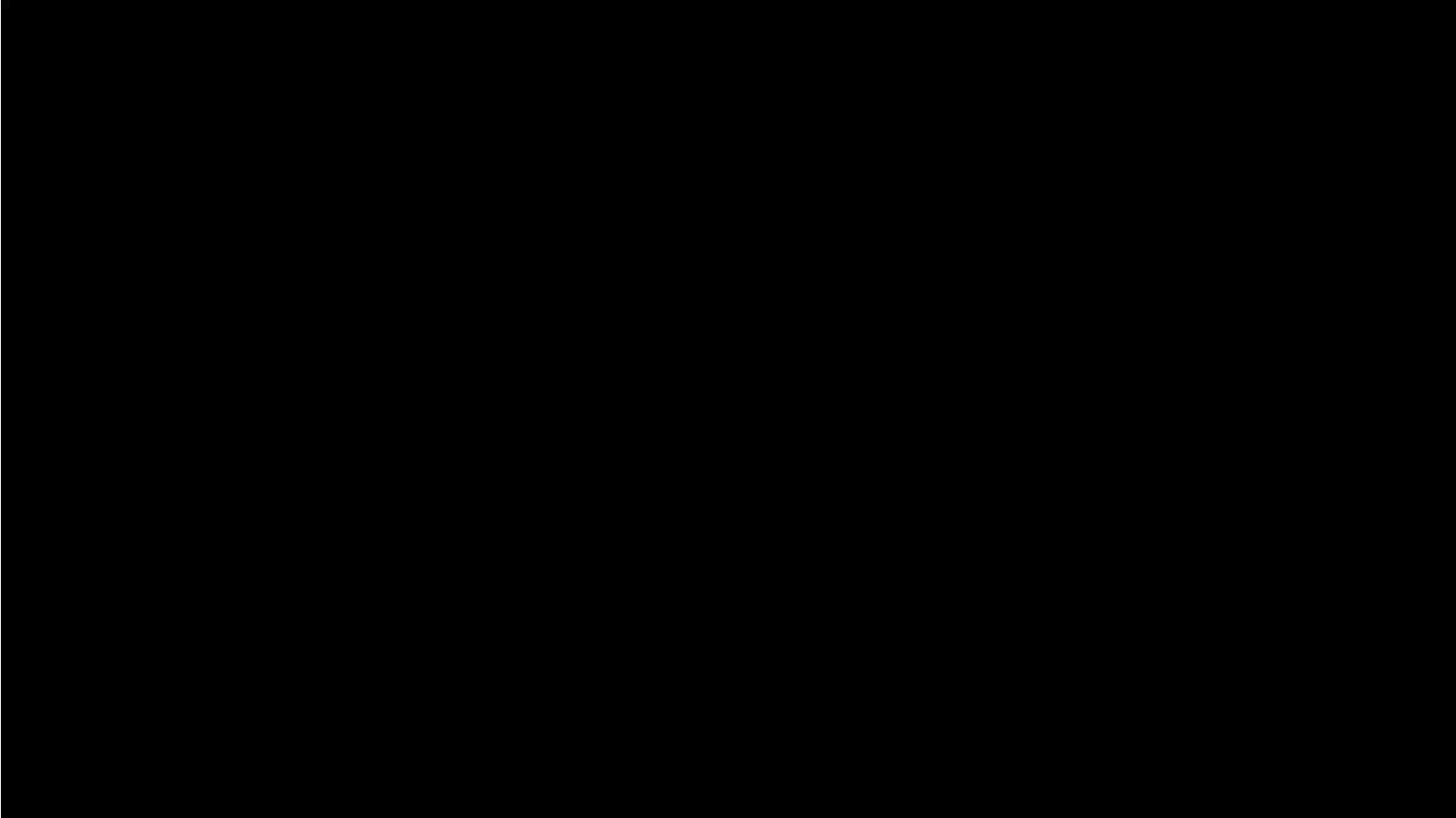
Application Layer Security

Develop and test applications

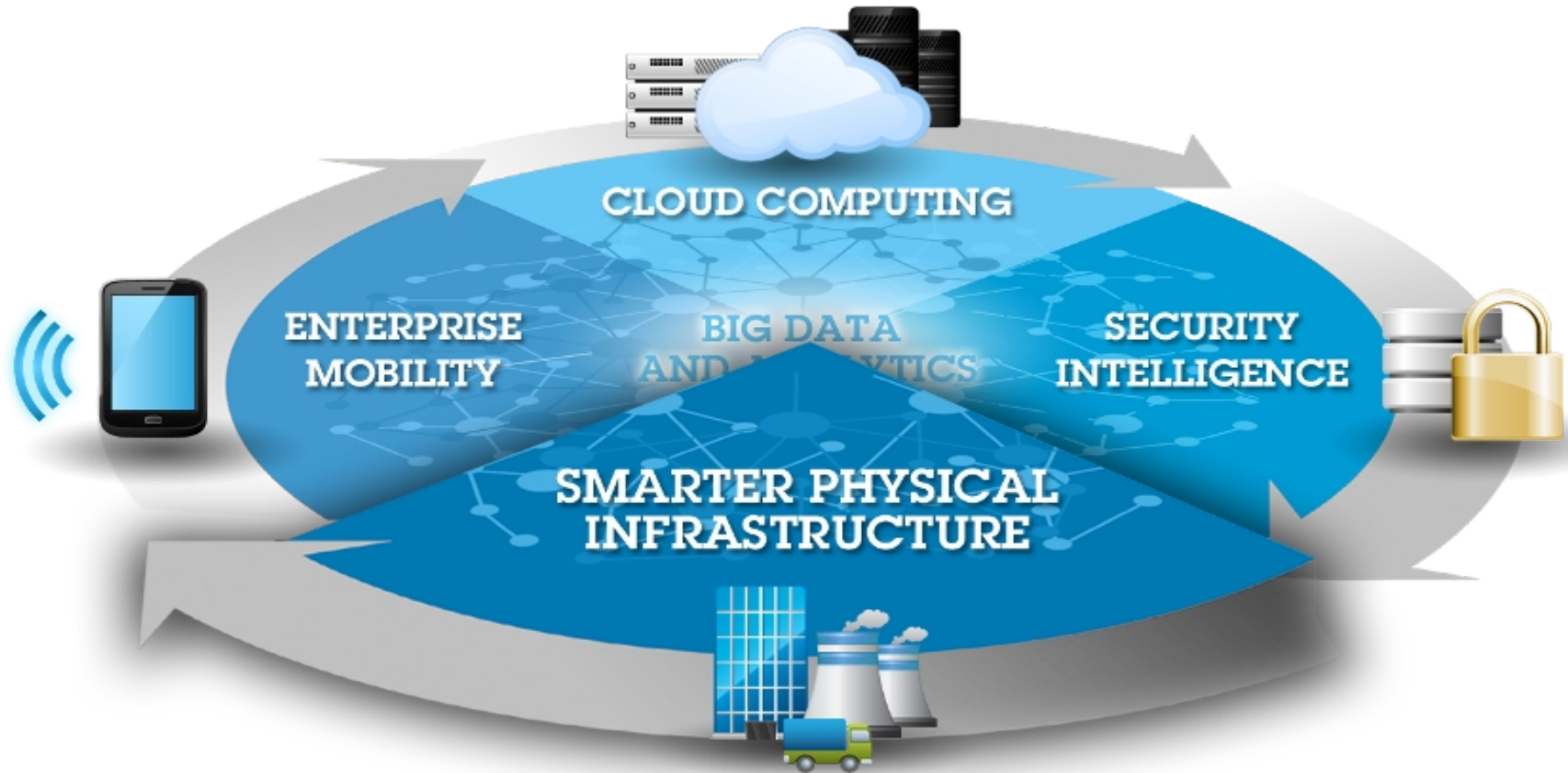
IBM Business Connect

Business Without Limits.





IBM provides an **open**, and **holistic approach** to managing delivery of products & services across smarter infrastructures...



IBM Business Connect

Business Without Limits.



Smarter Physical Infrastructure: Instrumented, Interconnected, Intelligent



A comprehensive set of integrated enterprise capabilities that help organizations to keep plants, facilities, data centers, or cities operating effectively.

- Dashboard views of **service health**
- Predictive **analytics** & reporting
- **Mobile** workforce support
- Asset, work and inventory management
 - **Complex & embedded systems**
 - **IT & Enterprise assets**
 - **Facilities & real estate**
- Event filtering and correlation
- Process & workflow **automation**, and rules management
- Enterprise content management



IBM Business Connect

Business Without Limits.

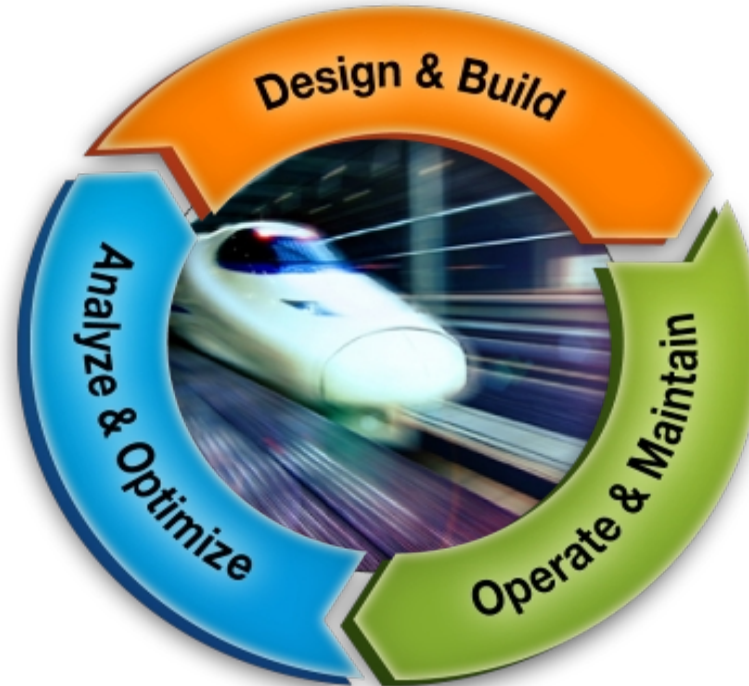
Smarter Physical Infrastructure: An **integrated lifecycle** approach



Traditional Approach



Lifecycle Approach



IBM Business Connect

Business Without Limits.



Smarter Physical Infrastructure: **End-to-end** asset management



Facilities & Real Estate



Offices, Warehouses, Retail Stores,
Land, Hospitals, Schools, Military
Bases

Transportation & Fleet



Airports, Airlines, Seaports, Fleets,
Railroads, Transit

Linear Assets



Runways, Roads, Tunnels,
Electric/Gas Distribution, Telecom,
Water

Plant & Production



Industrial, Mining, Chemical,
Petroleum, Electronics, CP, Life
Sciences, Power Gen

IT & Network Equipment



Laptops, Desktops, Servers,
Networks, Routers, Software,
Licenses



Smarter Physical Infrastructure: Enabling smarter buildings



Environmental & Energy Management

- Real-time energy & operating analytics
- Event filtering & correlation
- Utility consumption tracking
- Carbon measurement
- Environmental investment analysis

Achieve Sustainability Goals

Facilities Management

- Space utilization
- Capacity planning
- Move, add, change
- Reservations
- CAD integration

Increase Utilization of Facility Assets

Facilities Maintenance

- Asset management
- Work management
- Inventory management
- Supply chain
- Key management
- Condition monitoring
- BMS integration

Extend the Life of Critical Assets

Capital Project Management

- Condition assessment
- Capital planning & budgeting
- Construction estimating & project management

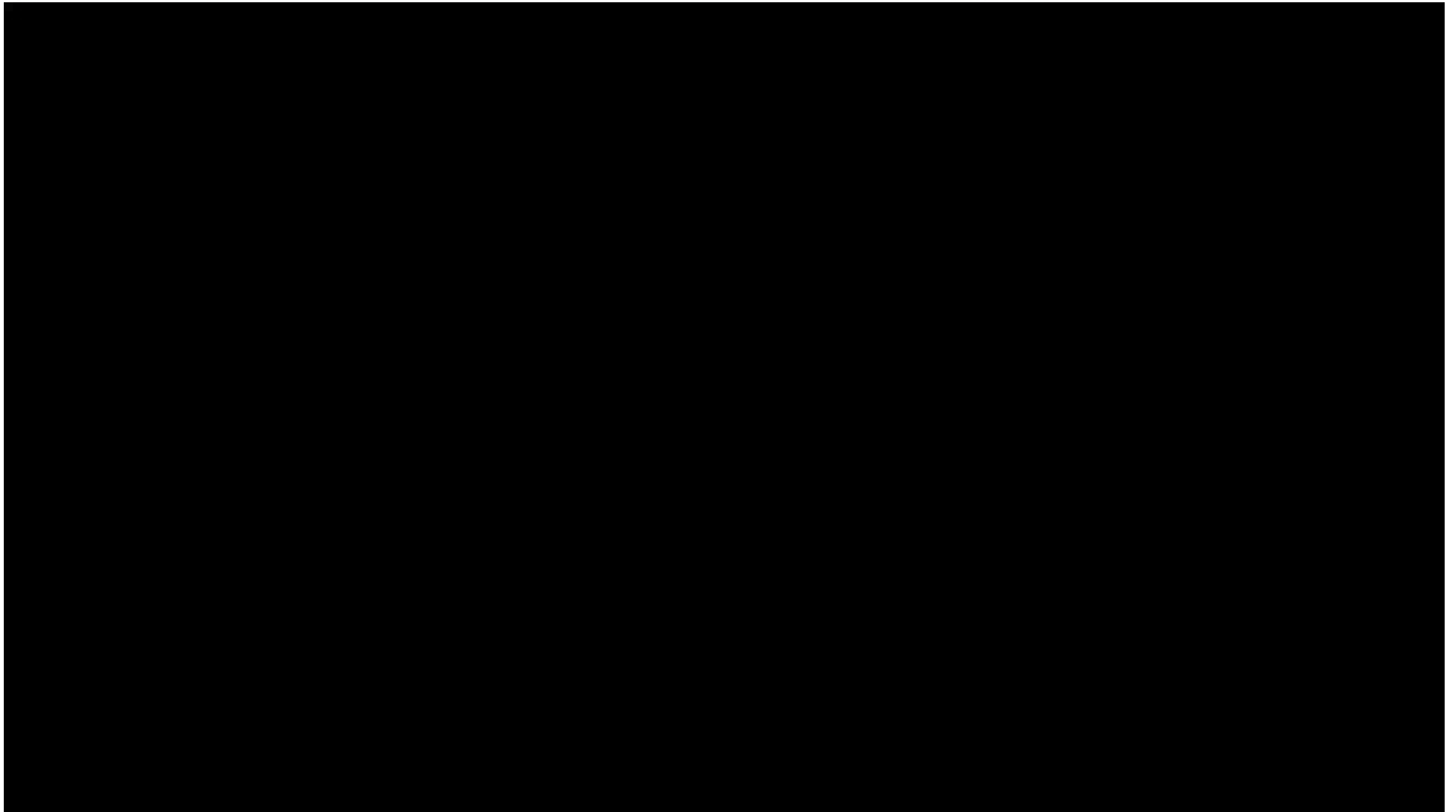
Generate Highest Return on Invested Capital

Real Estate Management

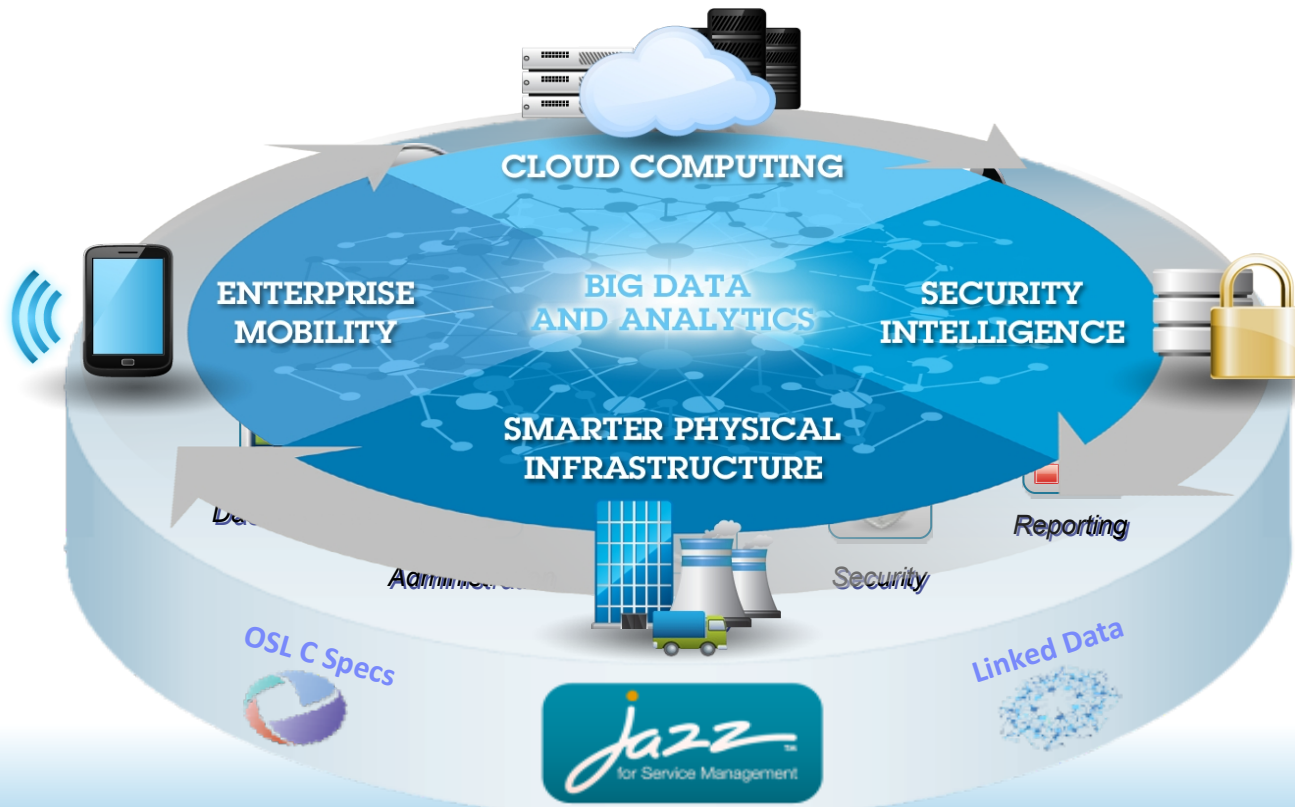
- Strategic portfolio planning
- Budgeting and forecasting real estate expense
- Lease & contract admin

Build More Effectiveness into Real Estate Operations





Visibility, Control & Automation across smarter infrastructures...



React

with agility to changing landscapes

Achieve

outcomes from limited investments

Reduce

Unnecessary risk and cost

IBM Business Connect

Business Without Limits.





IBM Business Connect

Business Without Limits.





Technical University of Munich

Cloud Platform, Orchestration & Monitoring

- Reduced manual workload by about 40% and provisioning time for SAP systems **from 3 days to less than ½ day**.
- Replaced 150 servers with just four IBM systems, **cutting 13 full racks** to only four half-full racks.
- **Reduced energy consumption by 80%** for the SAP application landscape. Data storage reduction by 40%.



Aetna

Cloud DevOps and Orchestration

- DevOps enables **better, faster product development** via self-service automation
- **Anytime, anywhere access** to healthcare services for clients using mobile & cloud
- **Removed siloes** by creating single role of cloud engineer that spans domains.





Halifax International Airport Authority

Preventative Asset Monitoring, Management & Reporting

- Corrective maintenance on assets **reduced from 80 percent to only 10 percent**
- Number of work orders the service department can handle increased from 450 to 1,000, **a 55 percent increase**
- Airport is **better prepared for weather events** and track costs more effectively; Improved regulatory reporting.



Akita City

Predictive Facilities & Energy Management

- Real-time sensors, & 3D color-coded views allow city to **predict energy use**, and immediately reduce consumption to meet targets.
- Expected **6 percent reduction in energy** consumption through better visibility and control over city facilities' energy usage
- Improve preventive maintenance, and **compliance with Revised Energy Saving Law.**





CenterBeam

Unified Mobile, Desktop, and Server Management

- Can now support PCs, Macs, servers, and virtually every flavor of mobile device, **increasing compliance over 20%** to 98%
- Now manage 20,000 endpoints across 49 countries and six continents, **a 10x increase, with just one engineer**
- Mitigating client risk with **strengthened endpoint security**



North American Public Utility

Mobile Device and Endpoint Management

- **Support 20,000 mobile devices** - corporate and employee owned - with mixed platform and OS versions
- **Add mobile devices in just days**, while adhering to internal security policies and external regulations.
- Solution is **scalable to 250,000 endpoints** without adding infrastructure





BlueCross BlueShield of North Carolina

Securing Big Data

- Directly supports **HIPAA compliance** by controlling access to client member data
- **Saves 5,000 hours** of staff time by removing manual steps and automating security processes



Flemish Government

Securing Digital services

- Authentication flexibility ensures **compatibility** with future access requirements including cloud and mobile services
- Significantly **reduces the time and cost** to introduce new applications across 100 government sites
- Provides **six million citizens** with seamless access to all Authorities' services with context-aware digital identities

