Business Aligned IT Discovery Series 2010

Keynote: Optimize costs and increase business agility across the life cycle of your applications with a Dynamic Application Infrastructure

In today's business environment organizations must work smarter to remain competitive and respond to changing customer demands. Key to working smarter is business agility and cost optimization. Organisations need an application foundation based on Smart SOA. IBM's Dynamic Application Infrastructure solutions can help you to deliver on business objectives and reduce cost across mainframe and distributed applications and all interaction modes.

Jeremy Phuah
WebSphere Technical Consultant
IBM ASEAN

Smart Work for a Smarter Planet

Dynamic Application Infrastructure

*Optimize Cost and Increase Business Agility
across your application lifecycle*

IBM Vision at a Glance…

Smarter Planet

- instrumented
- interconnected
- intelligent

Green & Beyond
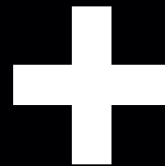
New Intelligence

Dynamic Infrastructure

Smart Work

Today's Imperatives Are

Cost Optimization

to slash operational and maintenance expense and maximize efficiency necessary for all economic climates
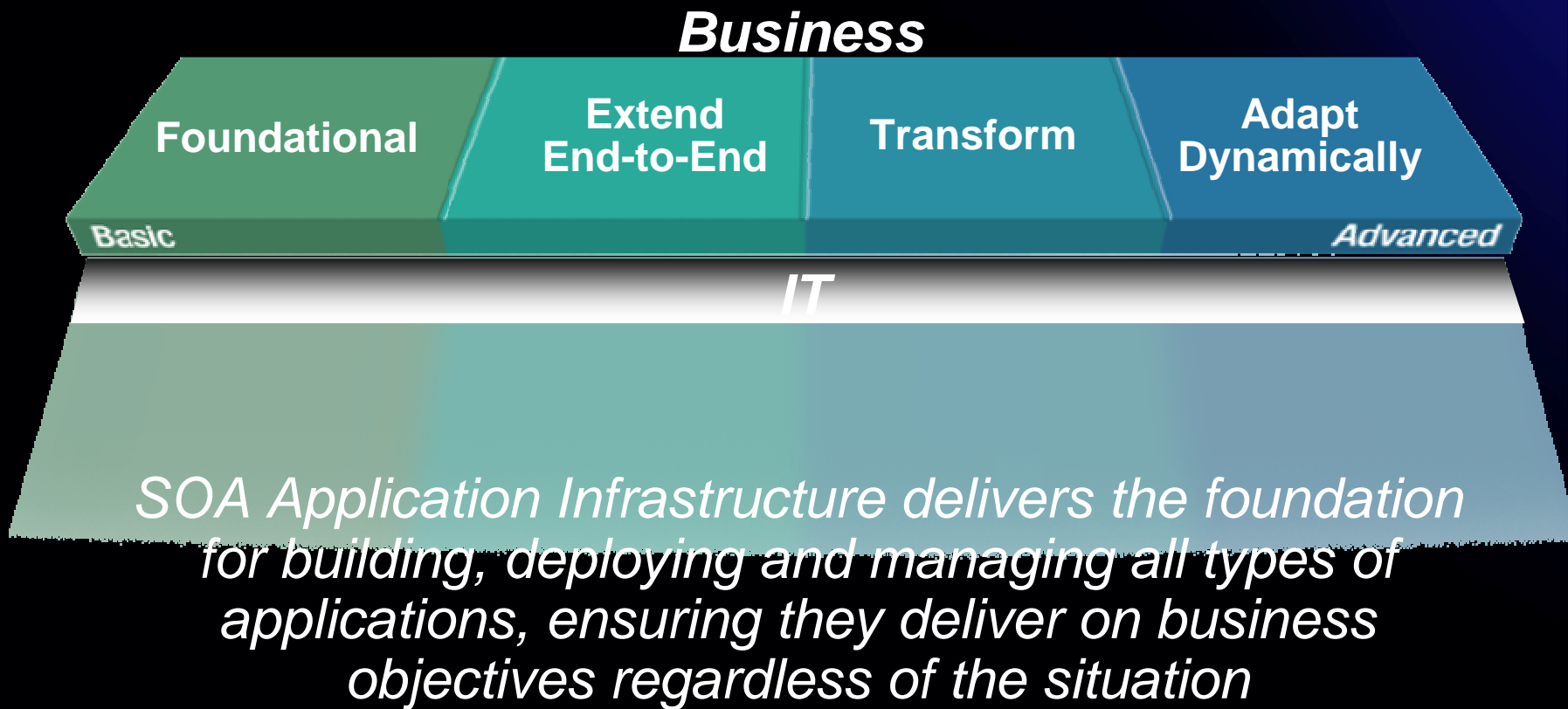
+

Agility

to take advantage of new revenue opportunities and address competitive threats

To Survive… To Succeed!

Smart Work

Business

| Foundational | Extend End-to-End | Transform | Adapt Dynamically |

Basic

Advanced

IT

SOA Application Infrastructure delivers the foundation for building, deploying and managing all types of applications, ensuring they deliver on business objectives regardless of the situation

Smart Work

Major Airline Soars to New Heights Using Smart SOA Infrastructure

Major European Airline

Industry Pains

- Rapidly changing costs and uncertain demand
- Global competition
- Potential massive growth from European legislation

Smarter Business Outcomes

- Planned global rollout in 97 countries, 16 languages
- Meet needs of 480,000 users at peak times
- 20% annual growth projected

Why Smart SOA Infrastructure?

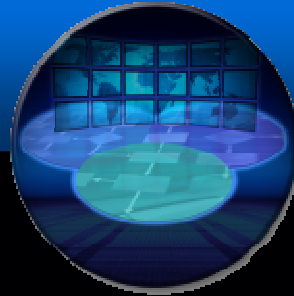Robust and agile next generation e-commerce site designed to meet global growth demands

Smart Work

A Dynamic Infrastructure
Leveraging a Smart SOA Application Infrastructure

Business Needs

Adoption Patterns

"Meet business objectives consistently, nimbly, cost-effectively"

Application Foundation

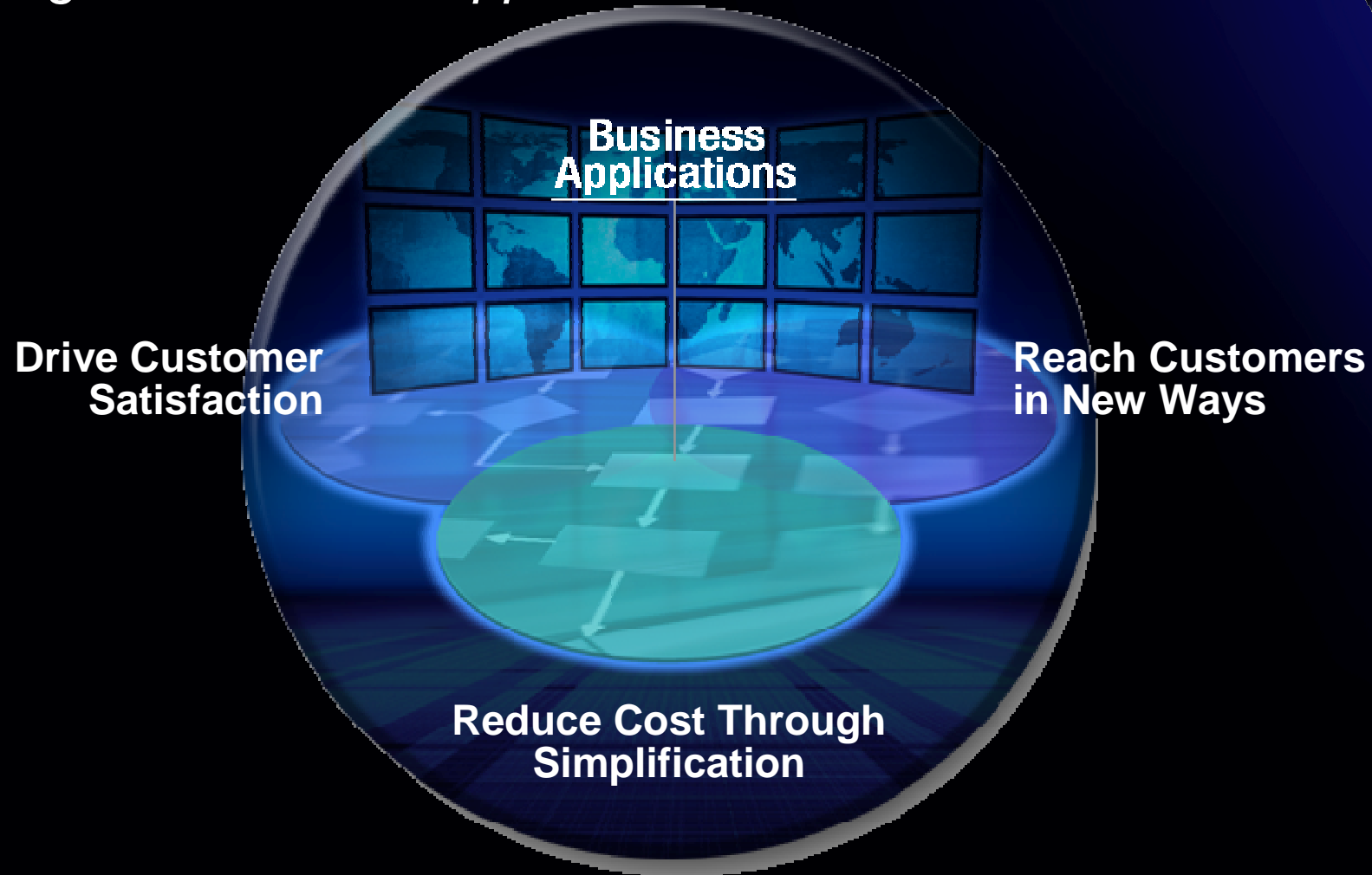"Enable applications to adapt to changing market conditions"

Intelligent Management

"Address extreme demands of clients & business models"
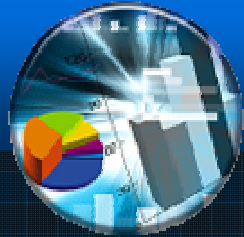
Extreme Transaction Processing

Smart Work

Address Your Critical Business Needs
Using a Smart SOA Application Foundation

Business Applications

Drive Customer Satisfaction

Reach Customers in New Ways

Reduce Cost Through Simplification

Smart Work

Leveraging a Robust and Agile Application Foundation
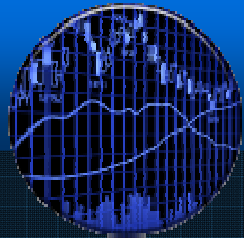
Modernize Applications

Expand client offerings using existing business data with Web 2.0
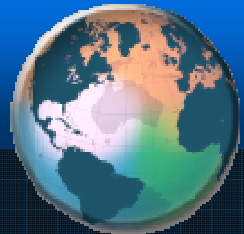
Execute high volume transactions

Reduce business risks with highly available, secure applications

Capitalize on dynamic situations

Timely insight with low cost situational applications

Manage worldwide operations

Rapidly introduce new capabilities throughout the business with centralized administration

Smart Work

Smart SOA Application Foundation
Addresses Customer Needs Across All Industries

Healthcare

- Reduced $30 million in capital & operating costs
- 150% increase in processing capacity
- 40% reduction in IT infrastructure floor space requirements
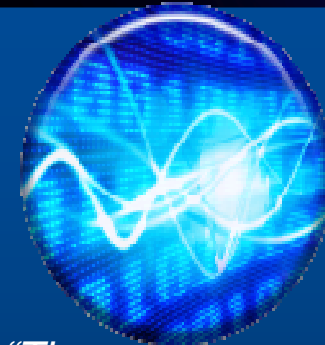- 67% reduction in number of physical servers

Government

- 80% reduction in time to build new systems
- Improved ability to coordinate operations amongst multiple organizations

Manufacturing

- New level of collaboration via Web 2.0
- Reduced Total Cost of Ownership by 40%

"Three years ago, we set out to build a shared enterprise IT infrastructure that would allow MetLife to grow with agility…we now have a solid framework for integrating the systems of the companies we acquire."

Bob Fratangelo
Vice President of Distributed Systems
Metlife

Smart Work

Optimize Your Application Foundation

For Any Business Need

- **IBM WebSphere Application Server**
  - For business critical and key company-wide Java based applications
  - Delivering the highest qualities of service (e.g. security, scalability, manageability)

- **IBM WebSphere Application Server CE**
  - For Java apps where cost and simplicity are *the key* considerations
  - When security, scalability and manageability are less critical

- **IBM WebSphere sMash**
  - To quickly deliver dynamic apps based on Web 2.0 and mashups
  - Leverages the hottest scripting languages

- **IBM CICS Transaction Server**
  - For mission-critical applications on IBM System z
  - Provides industrial-strength, online transaction management and connectivity

Smart Work

Spotlight: IBM WebSphere Application Server v7

- Innovative foundation to improve customer satisfaction

- High Performance for 24 x 7, secure, business availability

- Simplified development and administration for insightful, adaptive business capabilities

| Enhanced Standards Support | Enhanced Performance | New Flexible Management | Enhanced Security |

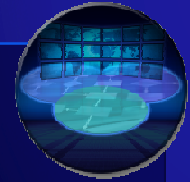| New Rational Application Developer for WebSphere V7.5 | Enhanced Administration | New Dynamic Provisioning | Feature Pack Strategy |

IBM WebSphere Application Server v7

Smart Work

WebSphere Application Server V7
Simplifies Development & Management

Metavante

Industry Pains

- Simplify app server management environment

- Respond quickly to changing market conditions

Smarter Business Outcomes

- Ability to anticipate and adjust to mission-critical issues

- Lower developer cost and increased return on investment

- Enhanced ability to comply with security regulations

Why Smart SOA Application Foundation?

"WebSphere Application Server, V7 gives Metavante confidence that the product is stable and secure. "It just removes that uncertainty that we'll have to spend prolonged testing cycles of the product," says Chavez. "WebSphere is a known quantity, and now it's even better."

Ty Chavez, Systems Manager for Middleware, Metavante

Smart Work

Thriving in a Dynamic Marketplace
Intelligent Management of Applications

- Reduce Rising Costs

- Deliver Superior Customer Service

- Roll Out New Services Faster
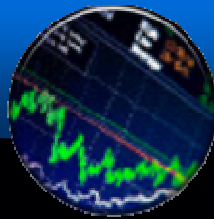
Anticipate and Adjust to Mission-Critical Issues

Disaster Relief — Increase application availability by reducing downtime

Online Banking — High quality of service for mission critical applications

Worldwide e-commerce Rollout — Increase utilization of technology

New Billing System — Quickly roll out new services to increase revenue and market share

Smart Work

Smart SOA Intelligent Management
Addresses Customer Needs Across All Industries

Insurance

- Anticipated cost savings of $15 million over three years
- Cuts support costs by 80%

Manufacturing

- Reduced system installation time by 80%, from one week to one day
- Single, real-time view of entire business

Banking

- 50% savings in licensing and maintenance costs

"The performance of our applications has been phenomenal. The speed of interactions has exceeded our expectations."

Marlin Clark
Director of Information Systems-Technology
Rotech Healthcare Inc.

"The ability to flexibly add capacity wherever we need it changes the whole mindset of developers. It promotes out-of-the-box thinking, because the risk cost is so low. What virtualization really gives us is a strong foundation for innovation." **Manager, Insurance**

Smart Work

Intelligent Solutions Tailored to Client Needs

- **IBM WebSphere CloudBurst Appliance**
  - Secure appliance for deploying and managing SOA applications and services in a cloud

- **IBM WebSphere Application Server Hypervisor Edition**
  - Optimized to run in server virtualization environments

- **IBM WebSphere Application Server Network Deployment**
  - For your mission-critical applications that require high qualities of service

- **IBM WebSphere Virtual Enterprise**
  - Virtualizes application infrastructure to increase availability, improve performance and quality of service

- **IBM Problem Determination Tools for z/OS**
  - Modernize & transform System z applications into an SOA environment with integrated mainframe tools for debugging, performance analysis, simulation, and testing

Smart Work

Spotlight: WebSphere CloudBurst & WAS HV

WebSphere CloudBurst Appliance

- Secure cloud management appliance
- Reduce setup time for WebSphere environments
- Codify your infrastructure for reduced risk
- Simplified maintenance and management
- Dispenses WebSphere virtual image software

WebSphere Application Server Hypervisor Edition

- New edition of WAS optimized for virtualized environments
- Pre-configured, ready to run on a hypervisor
- Single image supported and maintained by IBM

Smart Work

Postal Organization Improves Service
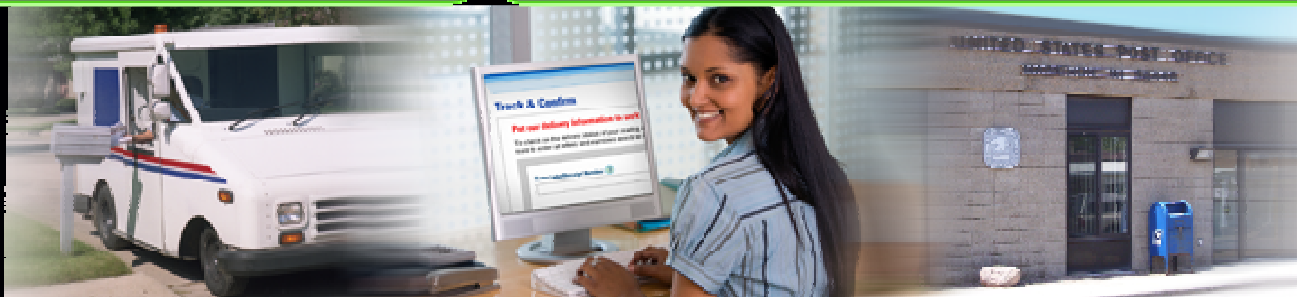## *And Reduces Costs with Intelligent Management*

Major Postal Organization

Industry Pains

- Growing competition from private firms

- Rising costs resulting in losses

- Adversarial labor unions

Smarter Business Outcomes

- 66% cost savings with consolidation of servers onto virtual environment

- Eliminated downtime resulting in higher availability of mission-critical applications

Why Smart SOA Infrastructure?

"Downtime is reduced dramatically because the automatic agents pick up the fact that an application has crashed and either restart the application server or take it out of use."
Enterprise Architect, Leading Outsourcer

Smart Work

A Smarter Planet Takes Transactions to the Extreme
The Need for Extreme Transaction Processing is Rising

- Explosive growth in the number of transactions

- Demand for real time responsiveness, each time, every time

- Volumes challenging your business lifecycle to keep up

- New business opportunities need scale globally from Day 1

Smart Work
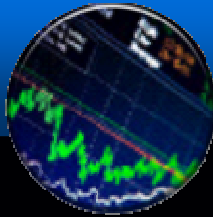
The Power of *Extreme Transaction Processing*

Interactive business solutions

Deliver business solutions like price quotes and inventory availability that are remain interactive as your global customer base grows

Adaptive Financial systems

Provide financial products that dynamically adapt to changing market conditions
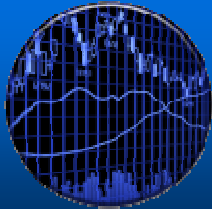
Worldwide Real time solutions

Offer on-line services that operate in real time, not limited by data volumes and transaction workloads

Dynamic Supply Chains

Build dynamic supply chains using live data and interactive supplier transactions

Smart Work

Smart SOA Extreme Transaction Processing
Presents New Business Opportunities

Finance

- Processing performance improved from 24k events/sec to 350k events/sec

Insurance

- 1 million records processed per minute - 5x faster than previous version

Entertainment

- Handle 5 billion requests per day, while reducing response times by 90%

Telecommunications

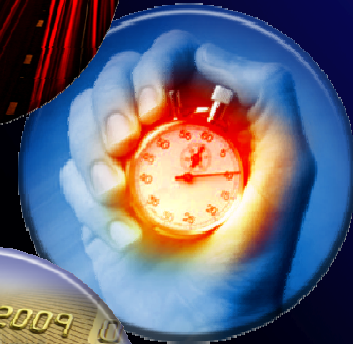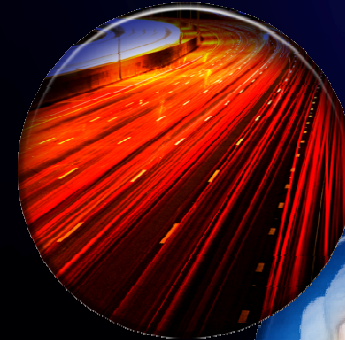- Latency lowered from 500ms to 30 ms, eliminating network storms caused by unpredictable response times

" High-performance computing will come out of the specialty quant shops and into the mainstream."

Pete Johnson. SVP and manager of the Enterprise Architecture and Web Services group at The Bank of New York

Smart Work

By Supporting Your Most Demanding Business Apps

- Support Transaction-Intensive Services

- Deliver Consistent, Predictable Responses

- Reduce Transaction Lifecycle Costs

- Take action on Extreme amounts of Business Events

Smart Work

Extreme Solutions Tailored to Client Needs

Extend your capabilities to be able to process explosive growth in business activity

- IBM WebSphere eXtreme Scale
  - An in-memory data grid that dynamically processes, partitions, replicates, and manages application data and business logic across hundreds of servers

Integrated Batch and On-line Transactions
- IBM WebSphere ComputeGrid
  - Handles the entry, execution and management of Java batch jobs to enable simultaneous execution with online transaction processing

Delivering fast and predictable responses
- IBM WebSphere Real Time
  - Execute high-value Java business transactions in real-time for fast and predictable response

Smart Work

Spotlight: WebSphere eXtreme Scale V7

- Dynamically adapt to the size and shape of your infrastructure

- Optimize cost by dynamically balancing the server configuration

- Improve performance by getting data close to the transaction that needs it

- Improved Reporting and Monitoring and Ease of Use

- Plug-in access from WebSphere Application Server

Smart Work

Delivering a Solution You Can Count On

A Leading US Brokerage

Industry Pains

- Increasing volumes of order execution requests

- Require predictable and consistent response times and throughput

Smarter Business Outcomes

- Processing Orders in Real Time: Transaction times < 3.5 MS

- Handling today's Market Event volumes: Throughput > 16,000 per second

- Delivering round the clock service: 24 X 7 Availability

Why Smart SOA Extreme Transaction Processing?

- The linearly scalable solution from IBM delivers the business solution needed for today's financial marketplace

Smart Work

Smart SOA for a Smarter Planet

Largest Customer Base!

- **7022 Customers**
- **512** SOA-focused Customer Success Stories; **113** on ibm.com

Strongest Ecosystem

- **7420** SOA community business partners

Unparalleled expertise, and level of investment

- **Trained IBM SOA community** over 100K
- **13,000+** assets in the SOA business catalog (90% from business partners)
- **Broadest, Deepest** portfolio of offerings

Smart Work