



IBM SOA Executive Summit – July 2007

Mission Critical SOA with Reuse and Connectivity

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Challenges for the IT Exec

Business Challenge

- How flexible and responsive to opportunities?
- What is your productivity rate on new projects?
- Can you show how IT adds value to business?
- Can you reduce the risk associated with projects?



Technical Challenge

- How is your IT budget being spent?
- What is your plan for using the latest standards?
- Are you reusing enough? How can you modernize existing assets?
- Can key business applications work across your business?

Personal Challenge

- How do you make the most of your current resources? What about future skills?
- How can you improve your Service Level Agreements?
- Can you demonstrate effective governance and control?

Mission Critical SOA

Take your SOA from Playtime...

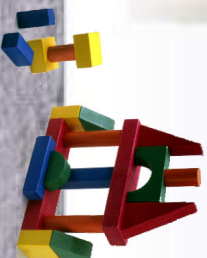
...to Showtime!



Mission Critical SOA

- Scalable
- Flexible
- Robust
- Connected
- Secure
- Governable
- Reusable
- Manageable

Can your SOA be described as Mission Critical if it can't match your business needs?
Will it stay as a toy in the sandbox?



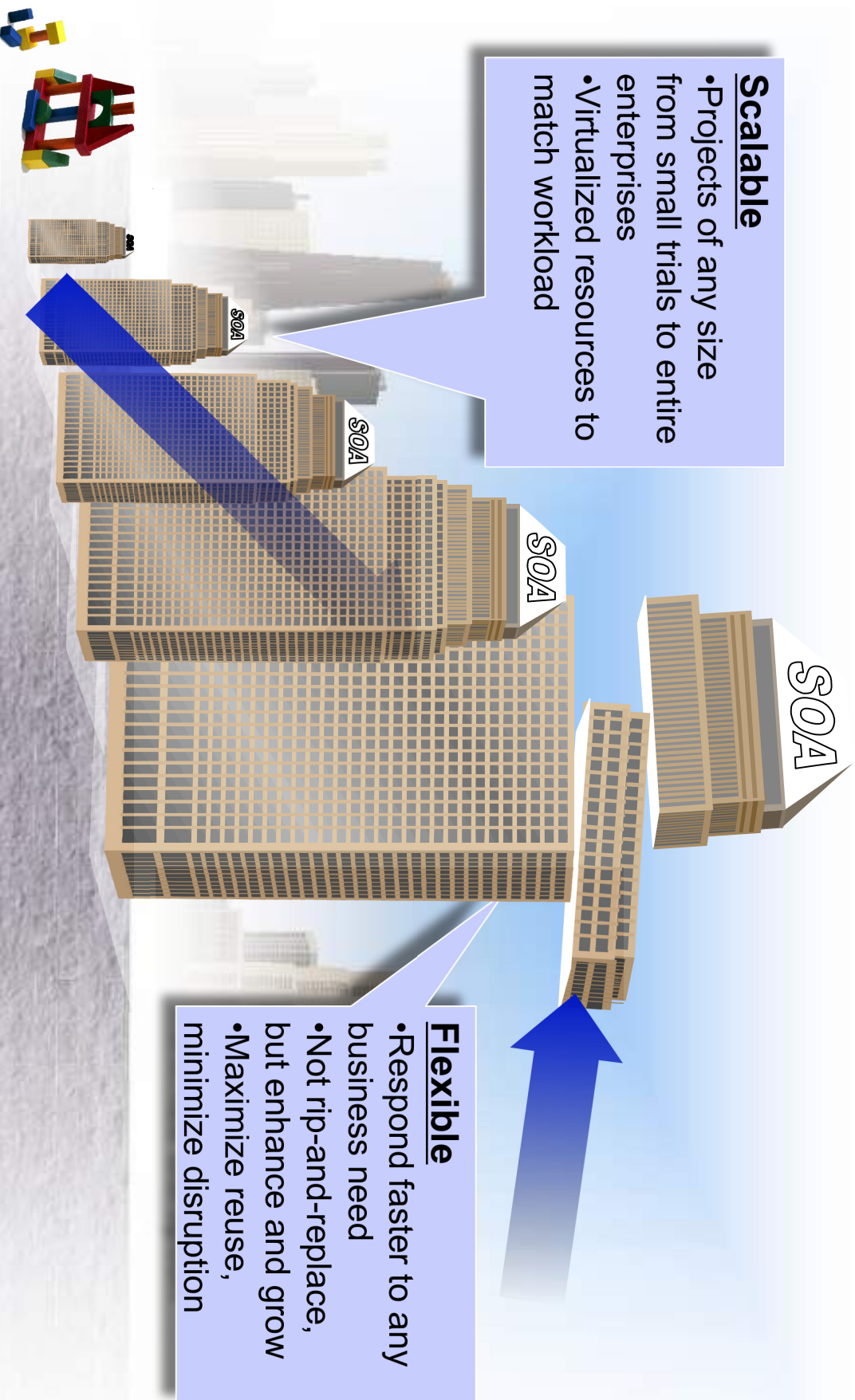
Mission Critical SOA

Scalable

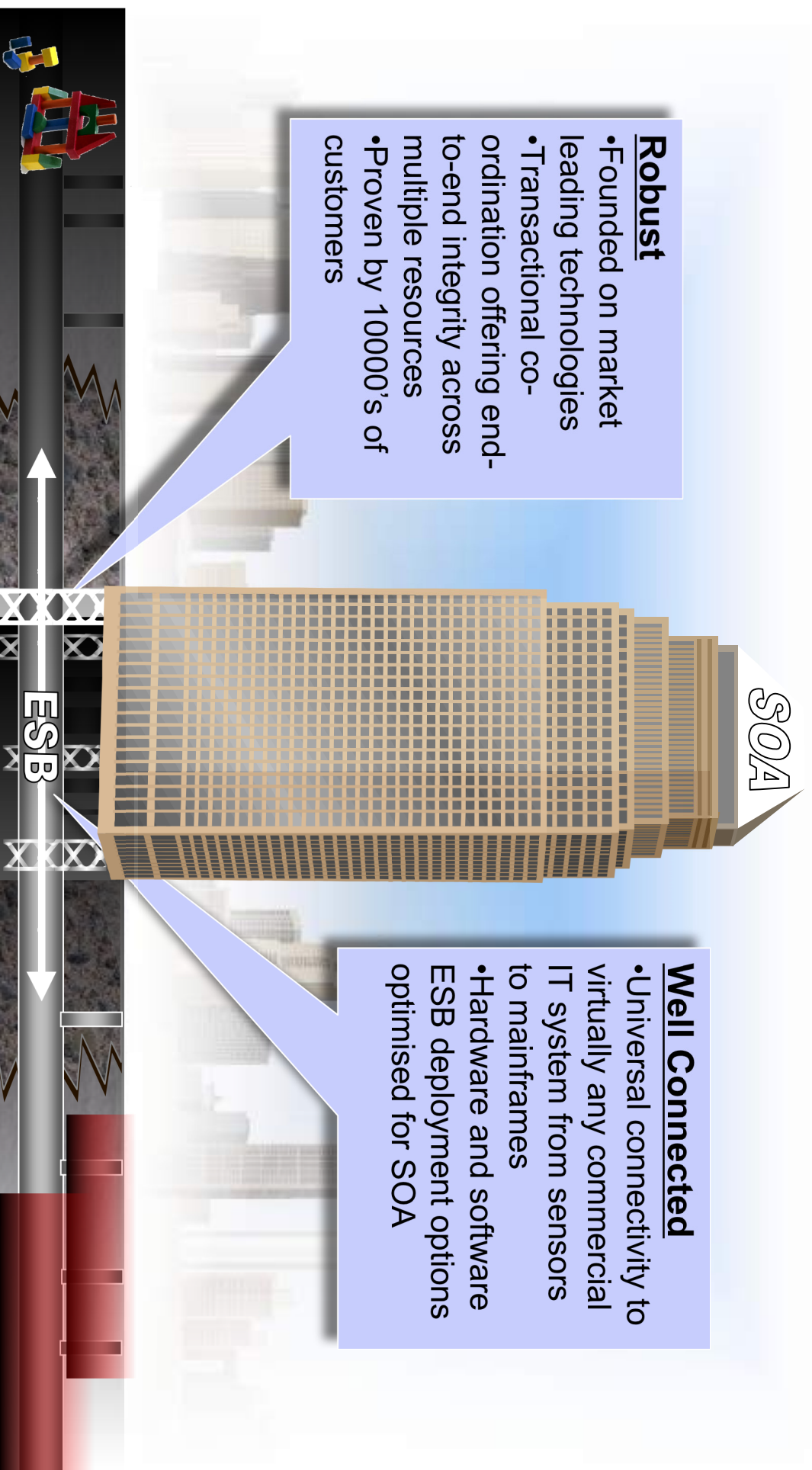
- Projects of any size from small trials to entire enterprises
- Virtualized resources to match workload

Flexible

- Respond faster to any business need
- Not rip-and-replace, but enhance and grow
- Maximize reuse, minimize disruption



Mission Critical SOA



Robust

- Founded on market leading technologies
- Transactional co-ordination offering end-to-end integrity across multiple resources
- Proven by 10000's of customers

Well Connected

- Universal connectivity to virtually any commercial IT system from sensors to mainframes
- Hardware and software ESB deployment options optimised for SOA

Mission Critical SOA

SOA

Secure

- Secure information end-to-end between applications and systems
- Visibility to security operations and management

Planned & Governable

- Assets located and accessible seamlessly anywhere in the enterprise
- Policy based definition and control of services



Mission Critical SOA



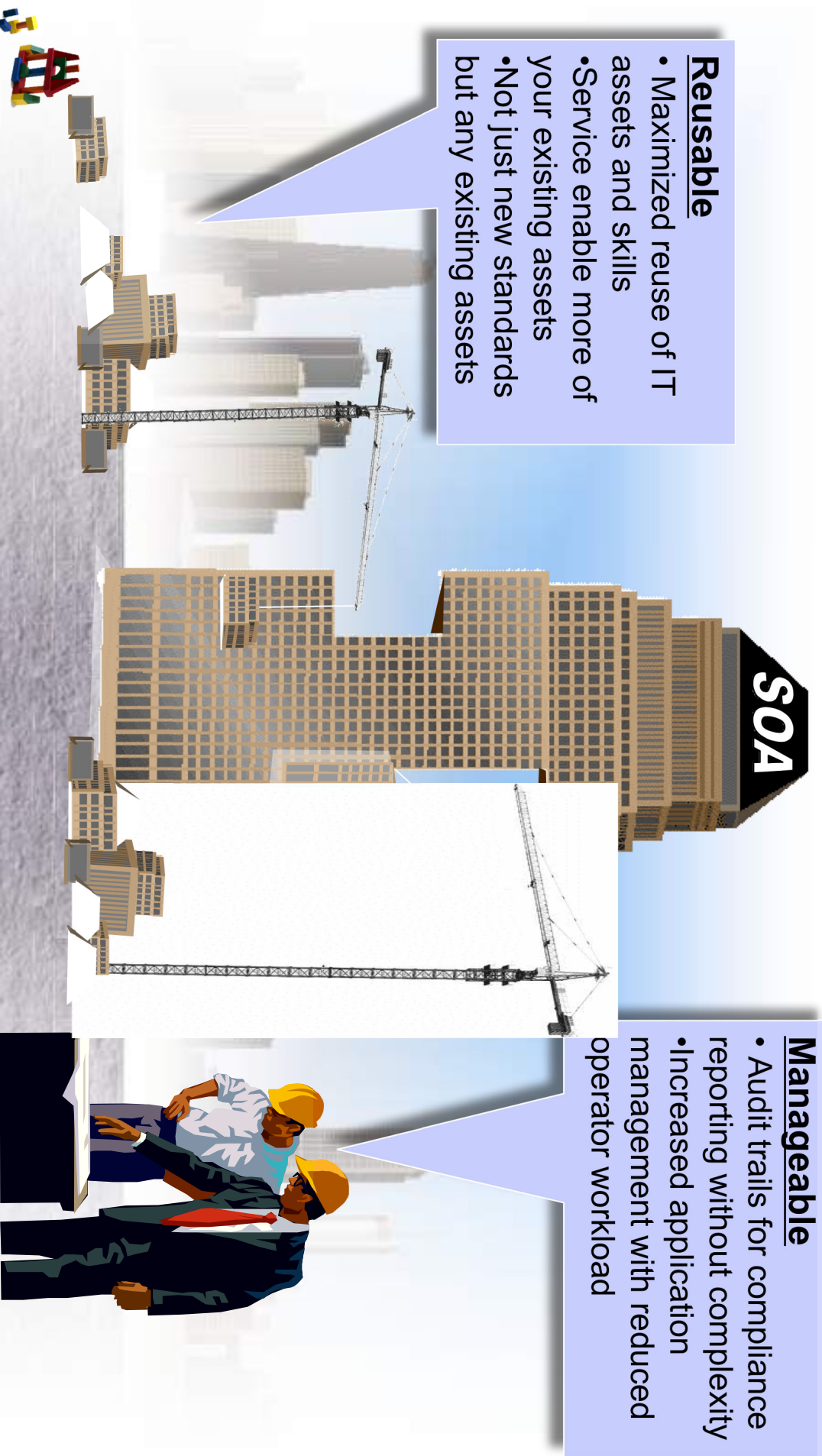
SOA

Reusable

- Maximized reuse of IT assets and skills
- Service enable more of your existing assets
- Not just new standards but any existing assets

Manageable

- Audit trails for compliance reporting without complexity
- Increased application management with reduced operator workload



Qualities of Service for Mission Critical SOA

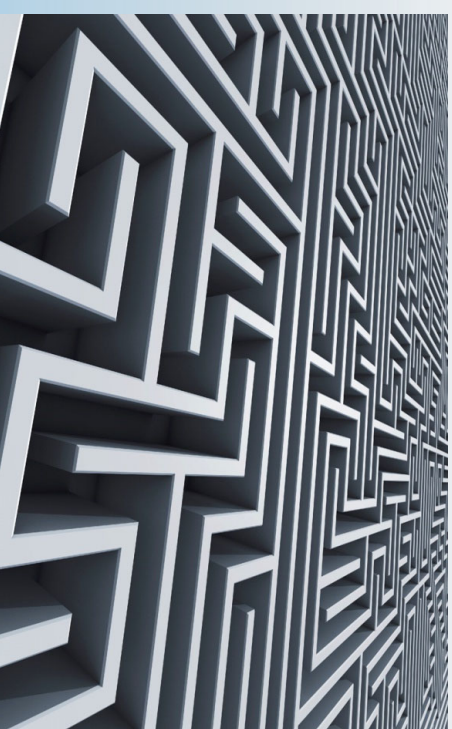
Key attributes for Mission Critical SOA using Reuse and Connectivity

- Ensure end-to-end integrity
- Simplify your applications by connecting using an ESB
- Grow your business by modernizing existing applications leveraging latest standards
- Match Workload to Resources with Virtualized SOA Infrastructure
- Qualities of Service matching the business need
- Flexible robust and secure infrastructure using best practices

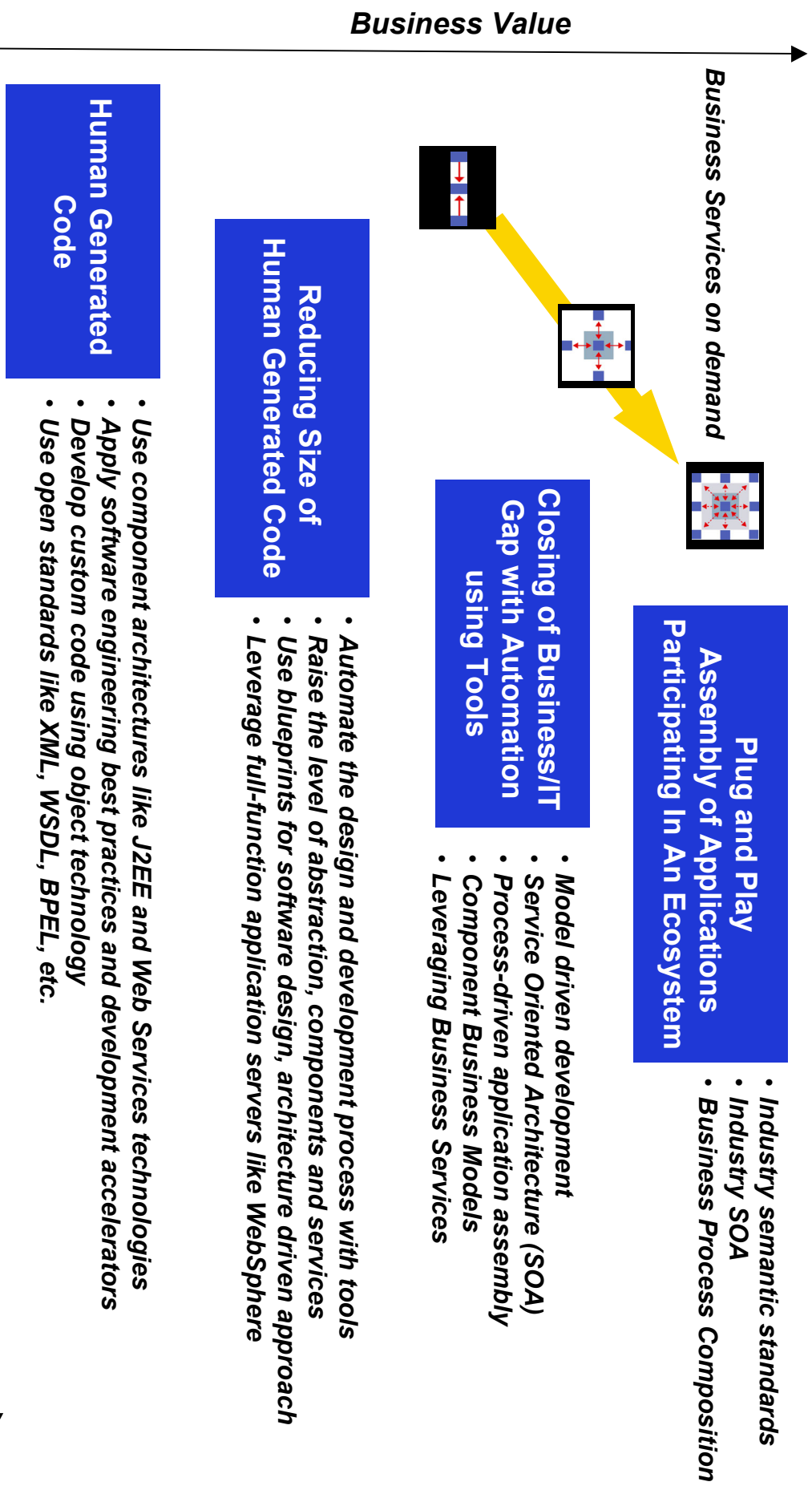
Build your SOA on poor foundations and your efforts could be wasted

How to find and reuse the hidden value of your IT assets?

- The key to SOA Business Flexibility is effective reuse of your core assets
- The challenge
 - Finding and analyzing your existing assets - 'treasure' is hidden
 - Extracting the value to enable reuse
- How best to proceed?
 - Plan then use/reuse of Knowledge and skills
 - Tools and methodologies for automated discovery and modernization
 - Software products to deliver reuse and connectivity
 - Skilled practitioners for implementing and deploying



Business Flexibility enhanced through evolving infrastructure and methods



Integrating Airport Operations

Malaysia Airports Technologies

Business Challenge:

Existing disparate solutions no longer sustainable with growth in passenger numbers, flight frequencies and carrier numbers
Need to flexibly roll out new applications to run alongside existing infrastructure

- ▶ **Solution:** Interconnected applications required to support their world-wide airport operations – without compromising security, reliability, or scalability.
- ▶ **Results:** Real-time information distribution from disparate sources; Unified employees across the entire organization
- ▶ **Implementation Details:** IBM Global Business Services – Application Innovation Services; IBM WebSphere and the SOA Foundation

“MAT can now distribute real-time information from disparate sources, communicating accurate and timely resource, planning, and operations information to essential departments.”
— YBhg Dato’ Azmi Murad, Senior General Manager

Mission Critical Begins with Reuse and Connectivity

IT focused entry points to enable Flexible IT

- Reuse creates new services from legacy assets to:
 - Extend the value of legacy systems by modernizing application infrastructure
 - Reduce development costs by reusing the decoupled services and connections
 - Leverage existing systems and infrastructure to provide new functionality



- Connectivity establishes links between applications and services using an Enterprise Service Bus to:
 - Deliver a robust and resilient connectivity infrastructure
 - Provide integration between different Lines of Business without adding complexity
 - Bring together new and existing IT assets with high performance, available everywhere



What is the Value of Reuse ?

- As SOA moves out of the sandbox, results become critical to business
- SOA results have been successful in early studies
 - 100% of customers show increased flexibility
 - 97% show reduced costs
- Reuse is key to benefits of SOA
 - Cost-savings multiply with ongoing reuse
 - Each reuse saves additional amounts

**24% Faster ROI
using SOA!**

24% Faster!

SOA

Non-SOA

Components Components

Source: The ROI of SOA. Poulin & Himler – LogicLibrary Inc White Paper 2006 - http://www.logiclibrary.com/pdf/wp/ROI_of_SOA.pdf

"I can guarantee there's a cheaper way to build your next product, but there's no cheaper way to build your next 20 products."

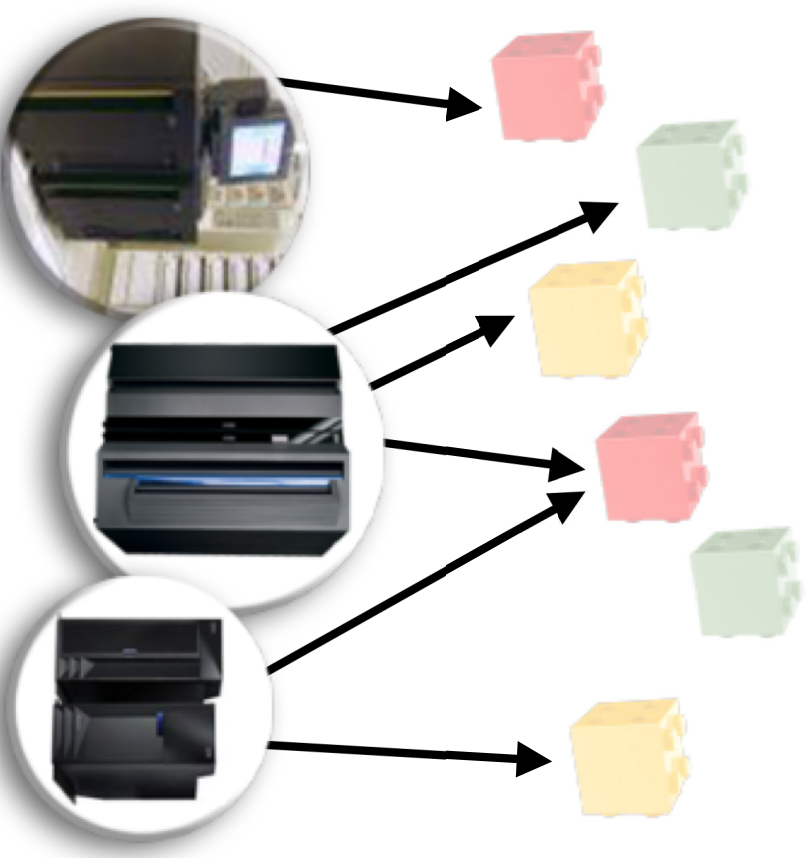
Christopher Crowhurst, vice president and principal architect at Thomson Learning.

Identify and Modernize existing IT assets using SOA

Making increased and effective use of past investments

Key Benefits of Modernization

- Eliminate expense, confusion, and risk associated with redundancy
- Make systems that previously required specialized skills accessible to a broader pool of users
- Combine functions that come from several sources and treat them as a single logical reusable service
- Automatically identify candidate assets for service-enablement



Creating New Services for Reuse

Fill gaps in your portfolio

- Use visual tools to simplify the design and construction of new reusable services
- Reduce complexity of managing deployed assets through virtualization



- Manage the entire service development process throughout the lifecycle
- Build it once & reuse widely in a robust runtime



Enhancing Customer Service Operations

Shanxi Mobile Communications Company



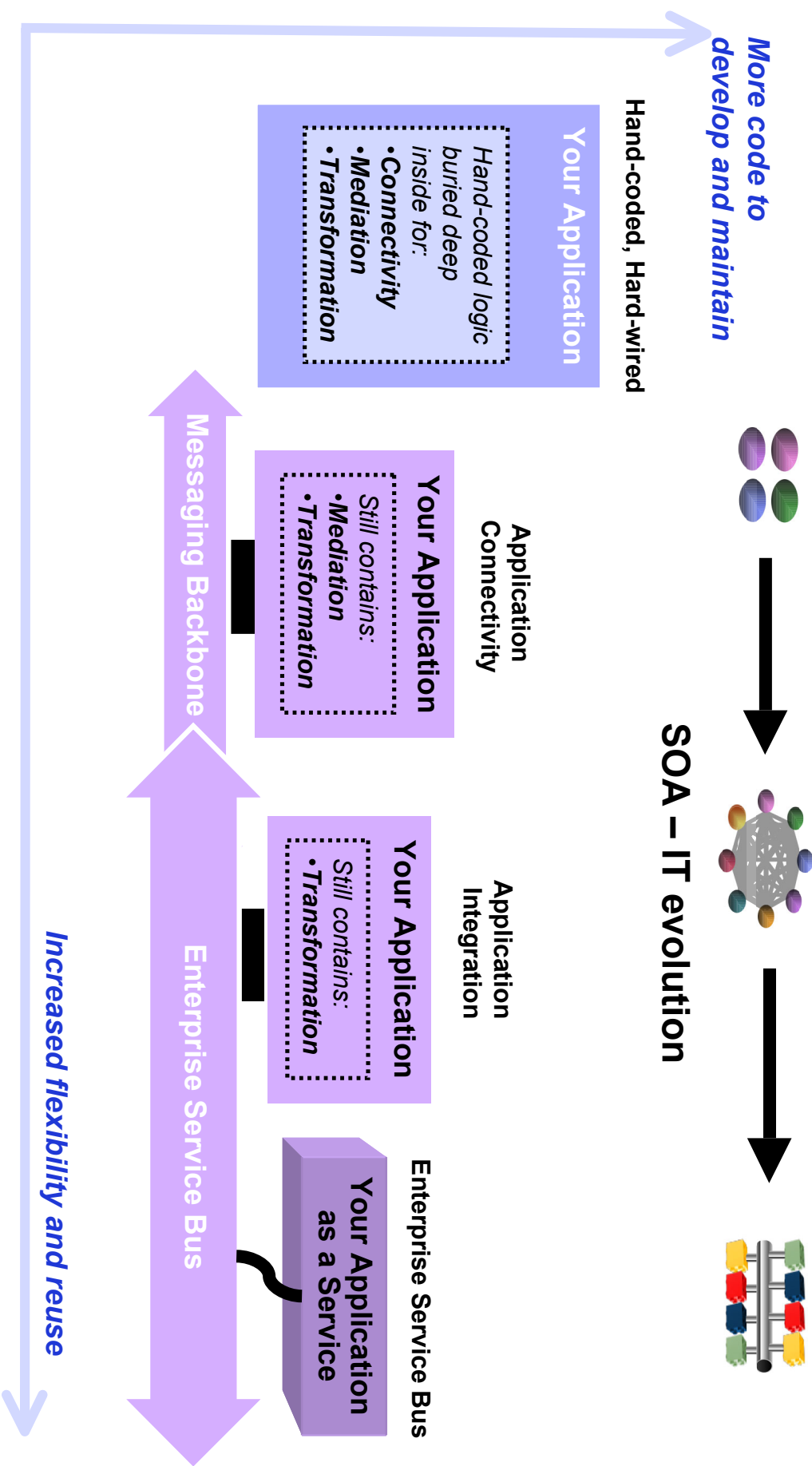
▼ **Business Challenge:**
Accelerate resolution of customer problems by integrating independent CRM, business analysis and billing systems
Improve business flexibility and employee productivity

- ▼ **Solution:** Deliver service-oriented architecture (SOA) that would serve as the basis for all business systems based on industry (telecom) standards
- ▼ **Results:** Cut average problem resolution time from two days to under one hour, boosting customer satisfaction. Simplified customer service operations, boosting productivity. Flexibility for future enhancements
- ▼ **Implementation Details:** WebSphere Process Server, WebSphere Adapters, WebSphere Message Broker, WebSphere MQ, Tivoli Access Manager for e-business, Tivoli Identity Manager;

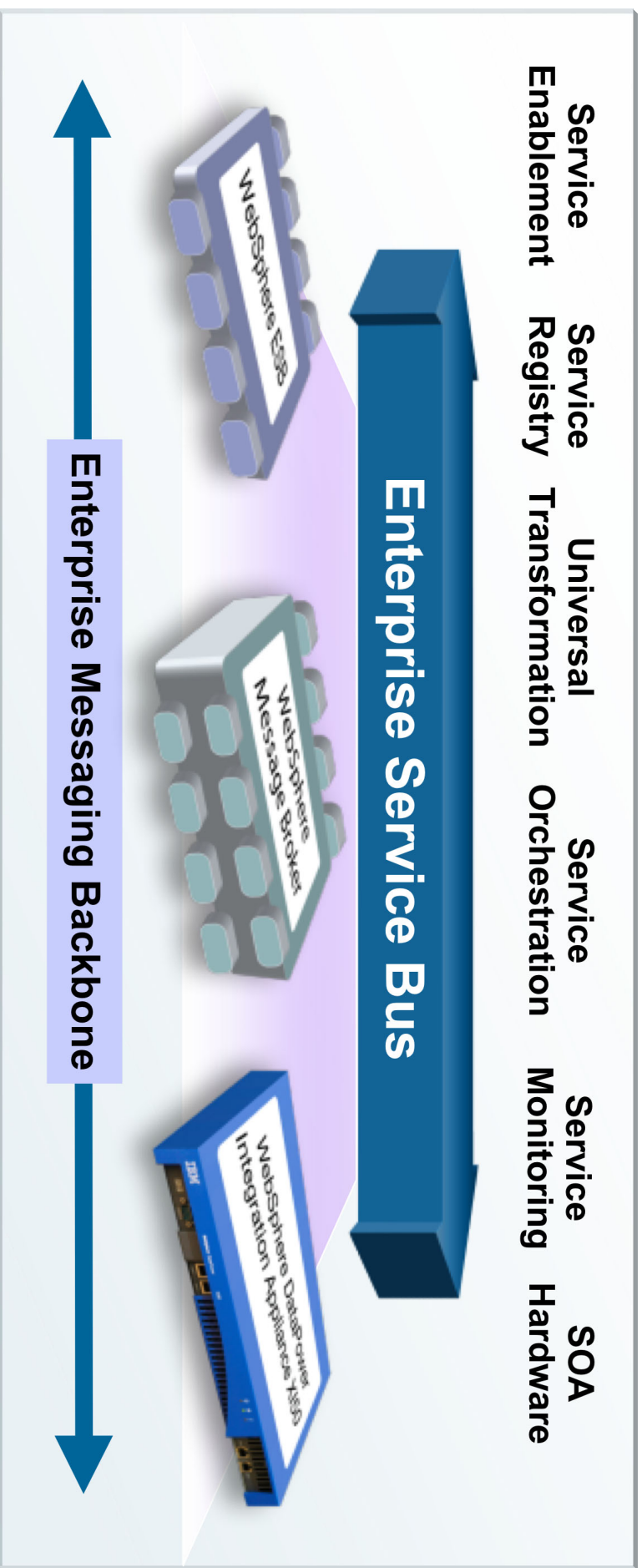
“Establishing an SOA based on IBM WebSphere software has allowed us to serve our customers more efficiently and effectively by enabling total integration between our multiple business systems.”

— Chen Gang, director, Shanxi Mobile Communications Company

SOA and ESB – Connecting your Business



Extending Connectivity for Mission Critical SOA



An **ESB without limits** breaks down the barriers by providing a solution with greater...

- Breadth: Three ESB product offerings optimized for various connectivity scenarios
- Depth: Complete set of connectivity capabilities beyond those delivered by an ESB

Connecting Systems, offering new services Hypo Vereinsbank AG (HVB)



Business Challenge:

Improve ability to offer new services to customers
Lack of a standard approach impacted response time to new market opportunities and customer demand

- ▶ **Solution:** Deliver a cost-effective ESB-based environment to simplify the trading process and gain a competitive advantage through time to market
- ▶ **Results:** Achieved 35% reduction in time to implement integration scenarios linking new and existing applications. Implementation and operational costs reduced driving ROI up.
- ▶ **Implementation Details:** WebSphere Application Server on z/OS, WebSphere Message Broker, WebSphere MQ, WebSphere MQ for z/OS; Tivoli Monitoring for Business Integration

“The ESB provides a flexible infrastructure for HVB’s agile investment banking. Our business is changing very fast, and the ESB enables us to support upcoming business opportunities immediately by connecting new market places and new dealing systems to our existing system landscape. The ESB accelerates the adaptation of new business processes and the launch of new products and services.” Michael Dietze, Head of Business Development

Act Now: Understand how Reuse & Connectivity can drive your SOA project

- Make the most of your time today
- Learn how other organisations here today have approached the area of reuse & connectivity
- Understand how it can benefit you and your organisation
- Leverage the expertise and tools available to you from IBM and its Business Partners
- Enjoy the day, ask questions and give us your feedback
- Key items available to you and your teams, via our website - www.ibm.com/itsolutions/uk/idc :
 - Norwich Union video on how reuse powered their SOA project
 - IBM SOA Entry Points brochure & SOA workshop series



Questions?

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