



SOA, Web Services and The Global Delivery Model

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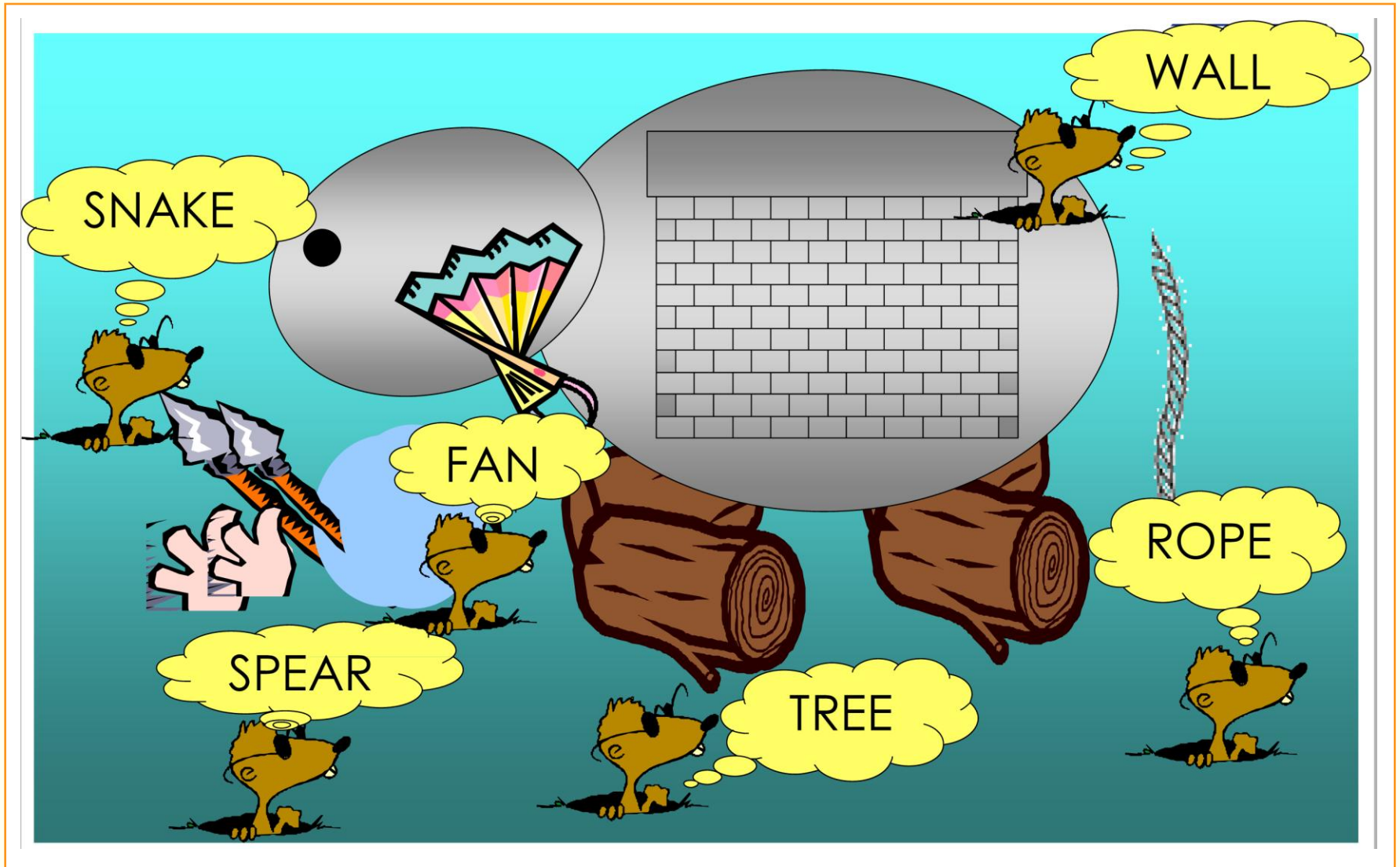
In This Presentation We Will Talk About

- 6 Blind Men and an Elephant
- SOA, Web Services and the Agile Enterprise
- Global Delivery Model
- SOA, Web Services, and GDM

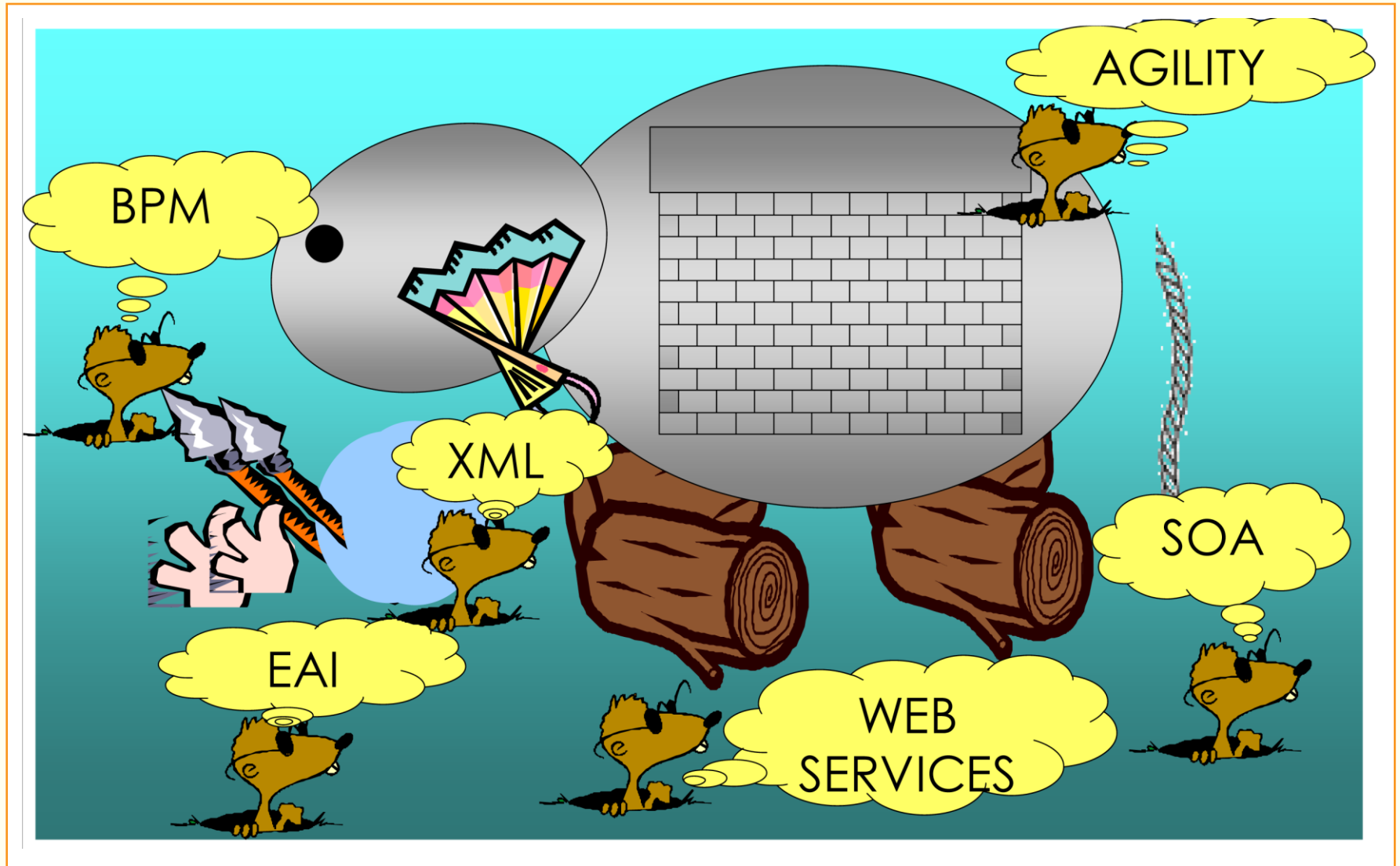
Some Terminology

BPO	Business Process Outsourcing
BPM	Business Process Management
ESP	Enterprise Service Provider
GDM	Global Delivery Model
SOA	Service Oriented Architecture
SODA	Service Oriented Development of Applications
SOBA	Service Oriented Business Applications
SOE	Service Oriented Enterprise
WS	Web Services

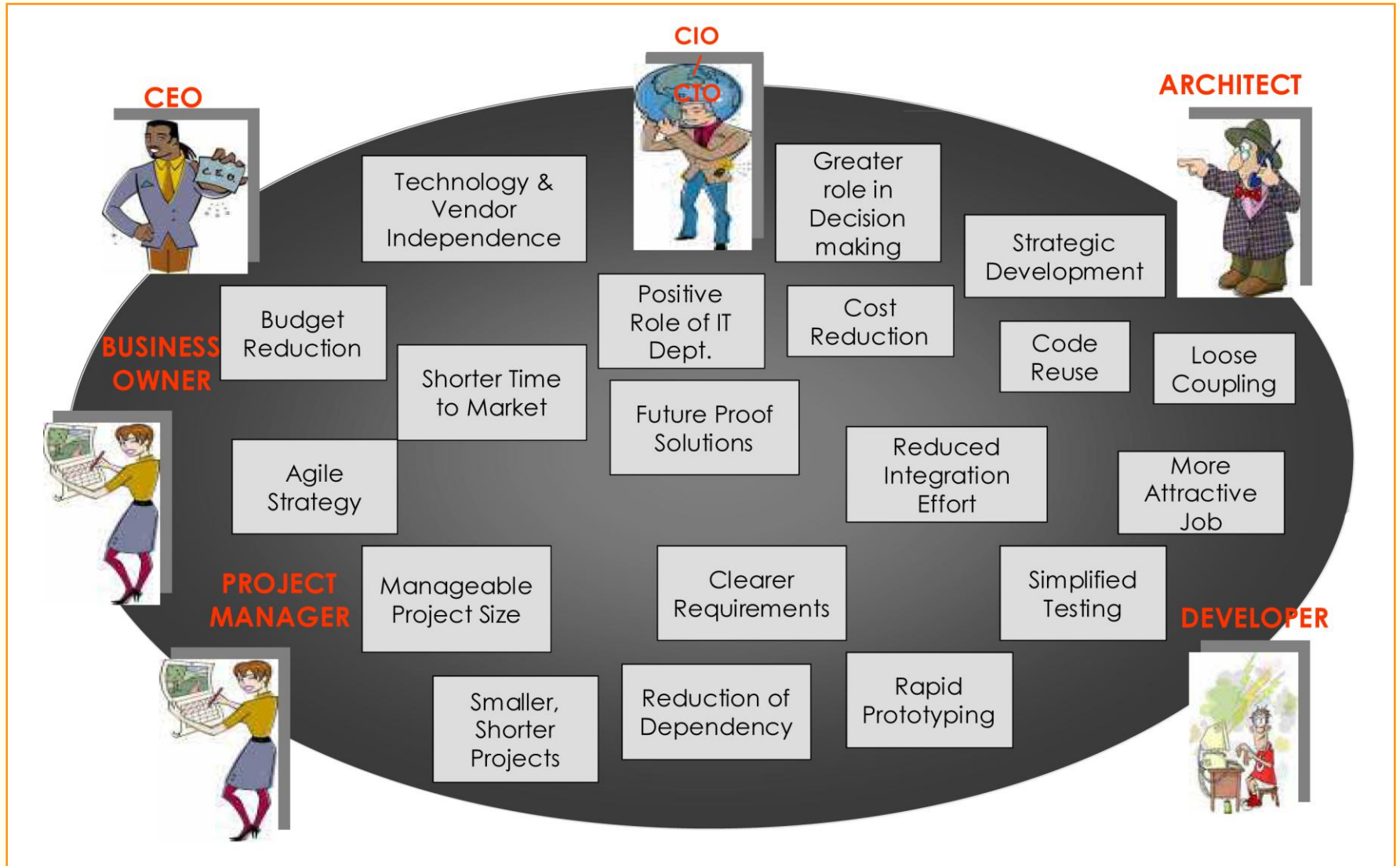
The Blind Men and the Elephant



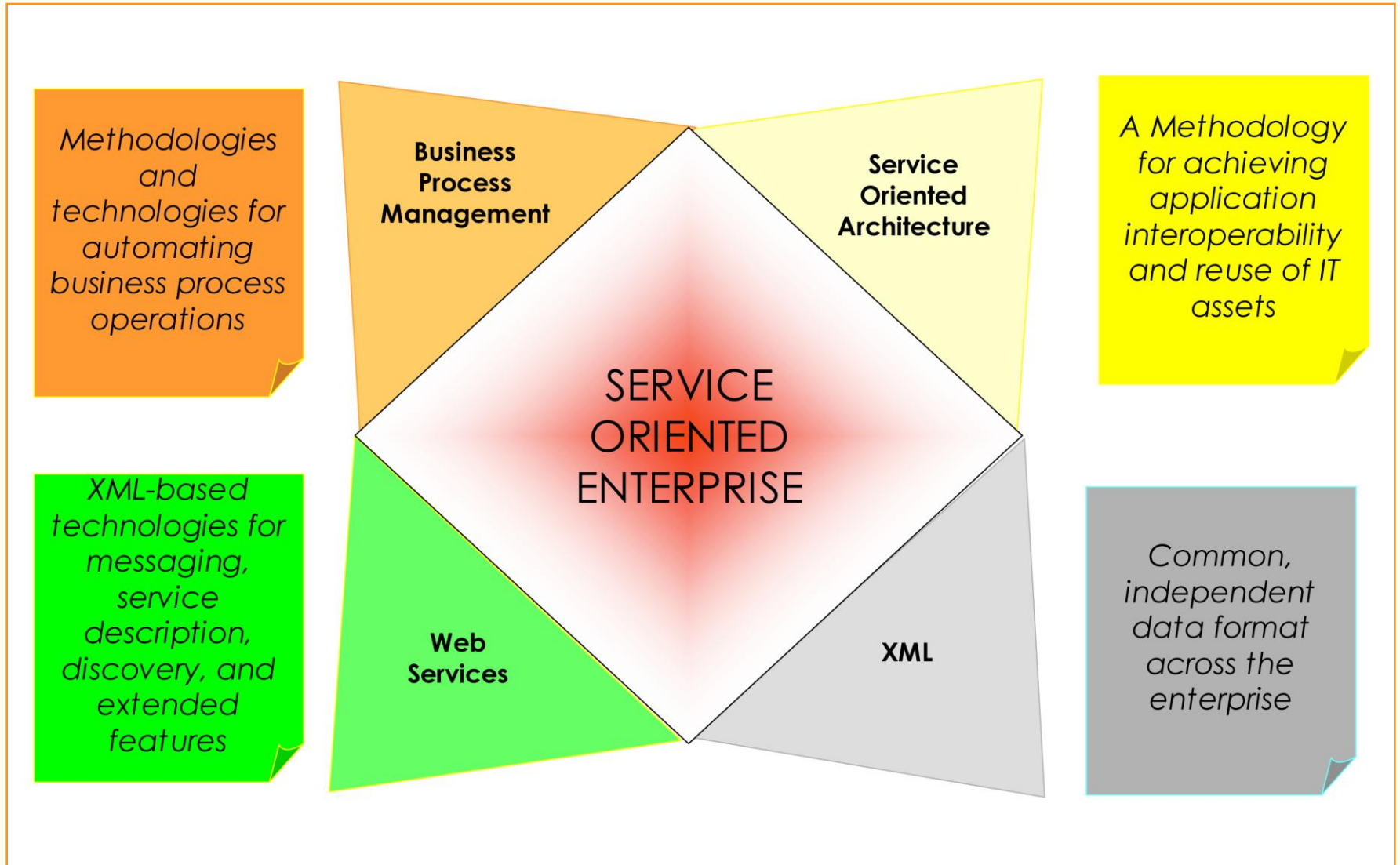
SOE: Service Oriented Elephant?



SOA Stakeholders



The Service-Oriented Enterprise



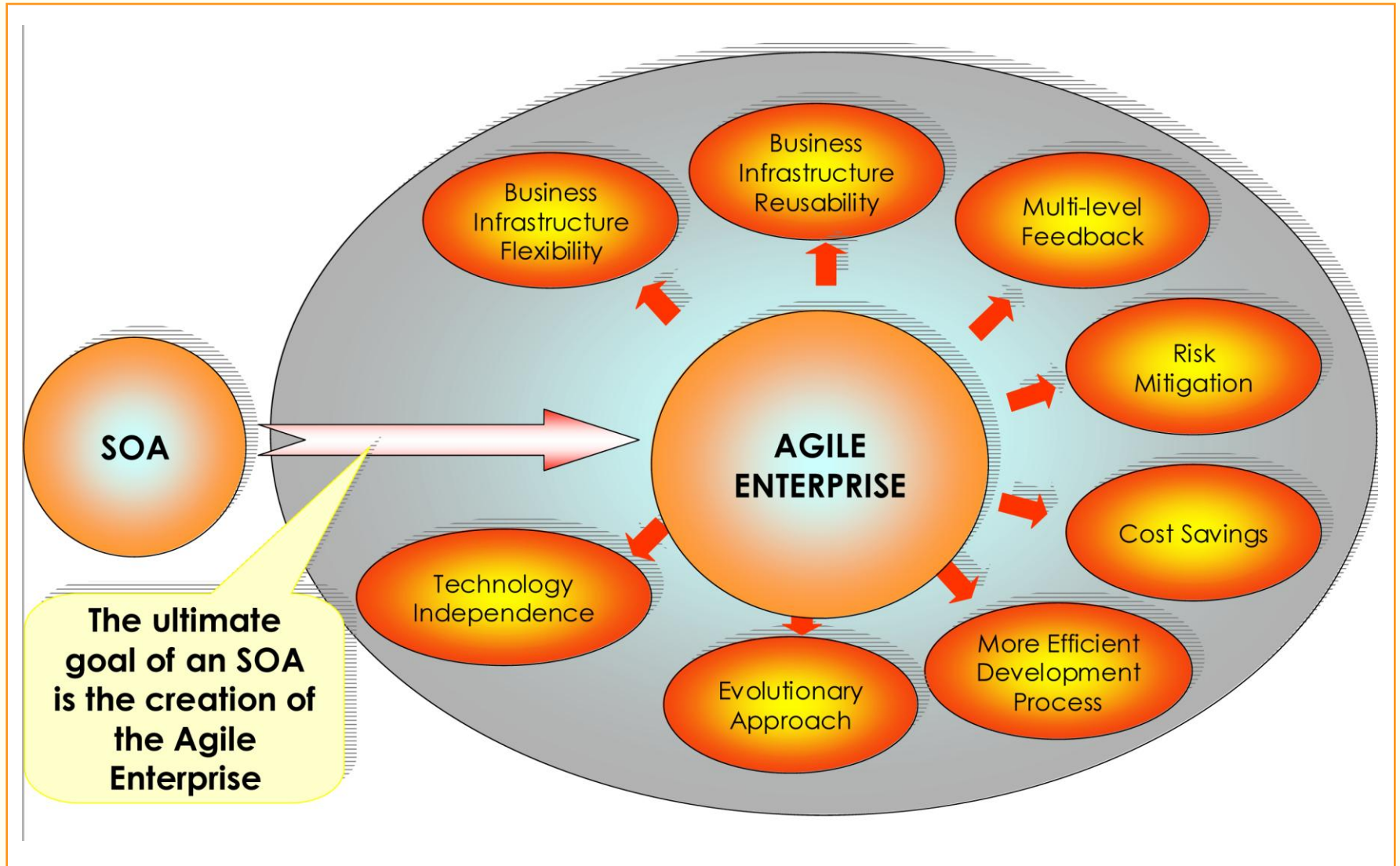
Business Agility – the need of the hour

*An enterprise needs to thrive in a continuously changing business environment by responding at **optimal cost and speed to business stimuli***



Requirements

- 1. Flexibility:** The ease of addition of new business models, services, functionalities in response to changed market conditions, competition etc. with minimal change in existing IT implementation
- 2. Ubiquitous Context Sensitivity:** The availability of context-sensitive information to all stakeholders at any location, irrespective of the channel or medium of interaction.
- 3. Virtualization and Standardization:** Standards based IT systems with virtual IT resources to provide abstraction from specialized Hardware and software

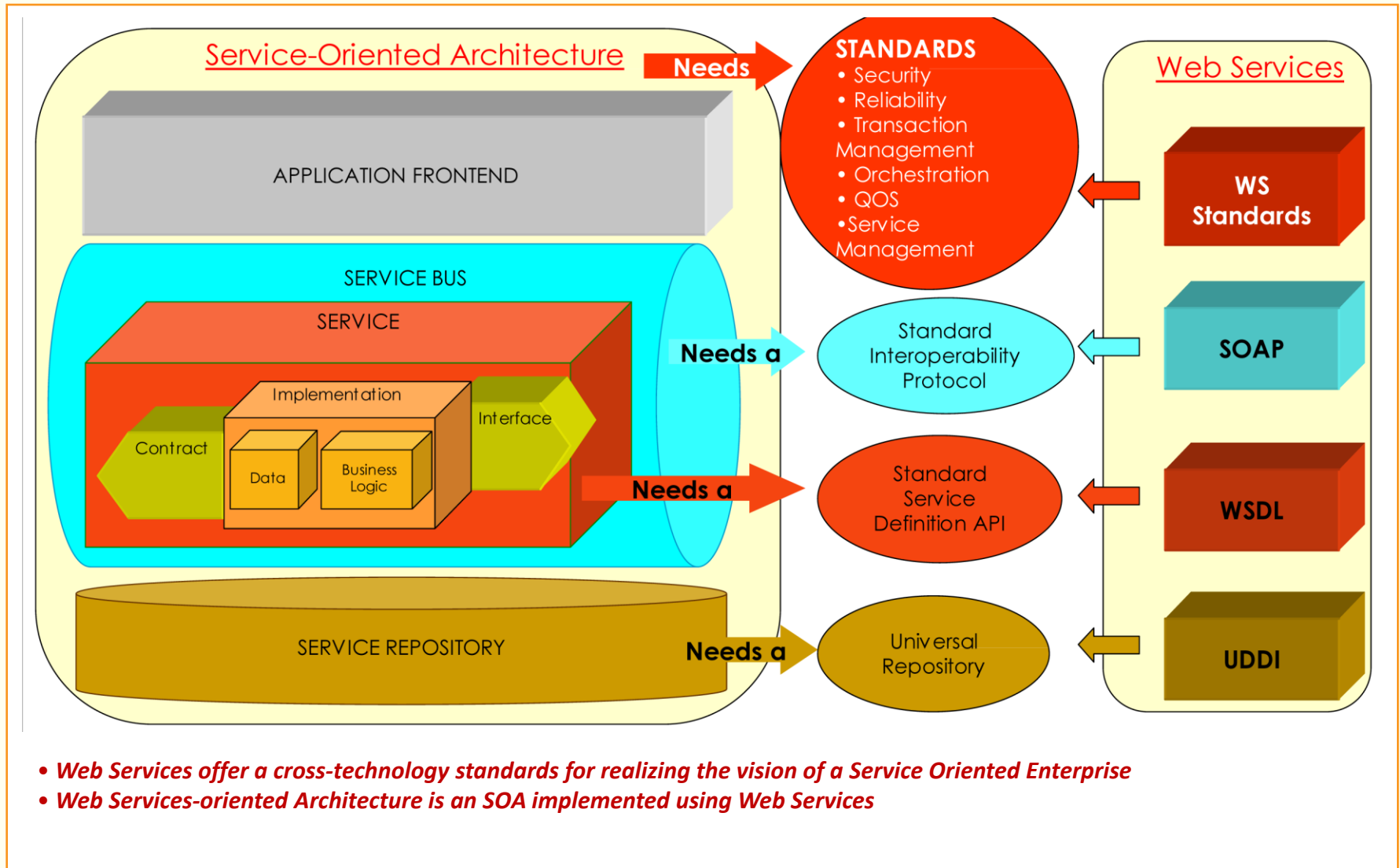
The Agile Enterprise



Let us recap

- Business needs An **Agile Enterprise**, which requires
- **Service Orientation**, which needs 
- a **software platform**, which is 
- flexible, technology agnostic, ubiquitous, so that the enterprise can
- sense changes and respond optimally

Web Services-Oriented Architecture



- **Web Services offer a cross-technology standards for realizing the vision of a Service Oriented Enterprise**
- **Web Services-oriented Architecture is an SOA implemented using Web Services**

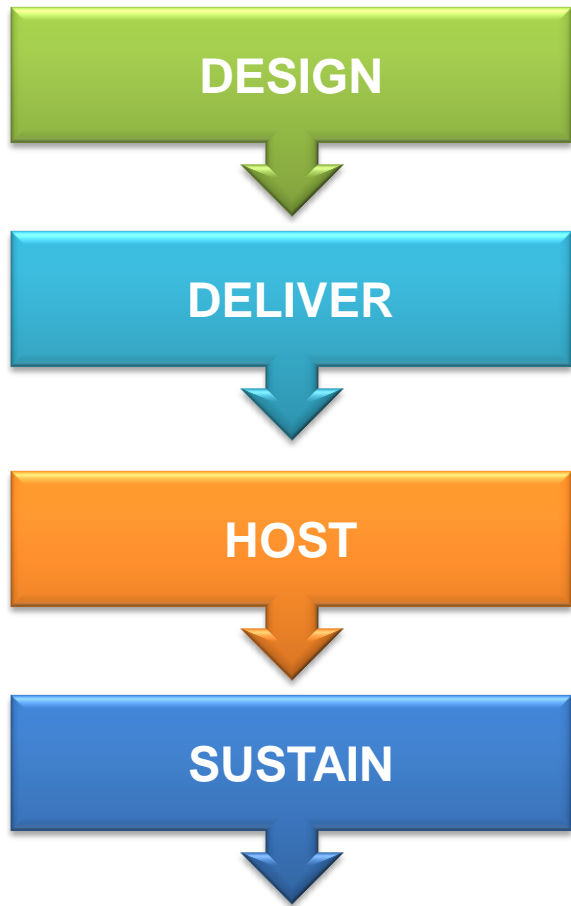
So far we have talked about

the problem space
and
the tools

What has not been discussed

The mechanism to
deliver, host, and sustain
services
for the
Service Oriented Enterprise

Challenges in delivering the SOA for an SOE



- Economies of scale
- Complexity
- Resource crunch
- Management
- Operational Support
- Governance
- SLA management
- Maintenance
- Licensing

SOA Design needs

- A well-planned IT Strategy for SOA
- An iterative roadmap for SOA adoption
- Robust service identification, location, packaging, orchestration, routing, governance, and proliferation

SOA Development needs

- Cost-effectiveness
- Resource-scalability
- Effective change management
- Reliable deployment and maintenance
- Long term sustainability
- Risk mitigation strategy – distribution of eggs into different baskets
- Modular development of services

SODA – Service Oriented Development of Applications

SOA and Web Services **Hosting** needs

- Cost-effective and flexible infrastructure
- Robust operation
- Security and reliability
- Trust relationships
- Application service management
- Infrastructure virtualization, such as grid computing

SOBA - Service Oriented Business Applications

Hosting in the SOA context is more loosely coupled than the infrastructure-based ASP model that was in place for the B2B markets

SOA and Web Services **Sustenance** needs

- Scalability of services
- 365X24X7 operation
- Customer and application support
- Autonomous operation of External Service Providers
- Efficient Change Management
- Service lifecycle management
- Effective governance

Service-orientation and outsourcing

*Through 2008, enterprises, **outsourcing vendors** and software vendors that recognize the value of **governance and disciplined development**, and that define value in the service-oriented era, will excel*

Source: Gartner - "SOA Has Impact on Application Development Outsourcing," Whit Andrews, 2004

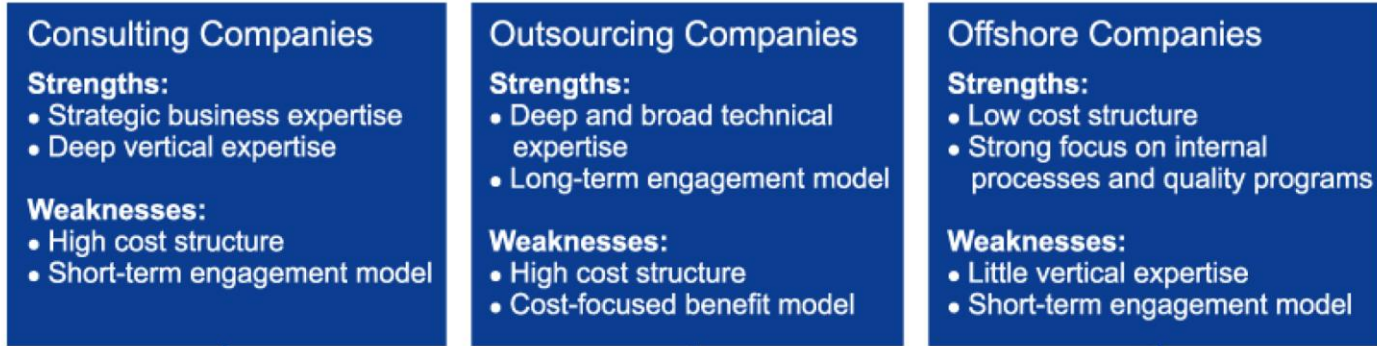
Introducing the **Global Delivery Model**

- A business model based on outsourcing IT services
- Key focus is on getting appropriate talent across the globe to deliver solutions
- Key benefit is development cost reduction
- Modular Global Outsourcing (MGO)

Source: ZapThink ZapNote - "Infosys Global Consulting Powerhouse," Ronald Schmelzer, 2004

Convergence of GDM vendors

Source: AMR



Challengers: BearingPoint, Deloitte, CSC, EDS, HP, HCL, Patni, Satyam, TCS

Leaders: Accenture, Capgemini, IBM, Infosys, Wipro

Integrate capabilities to become...

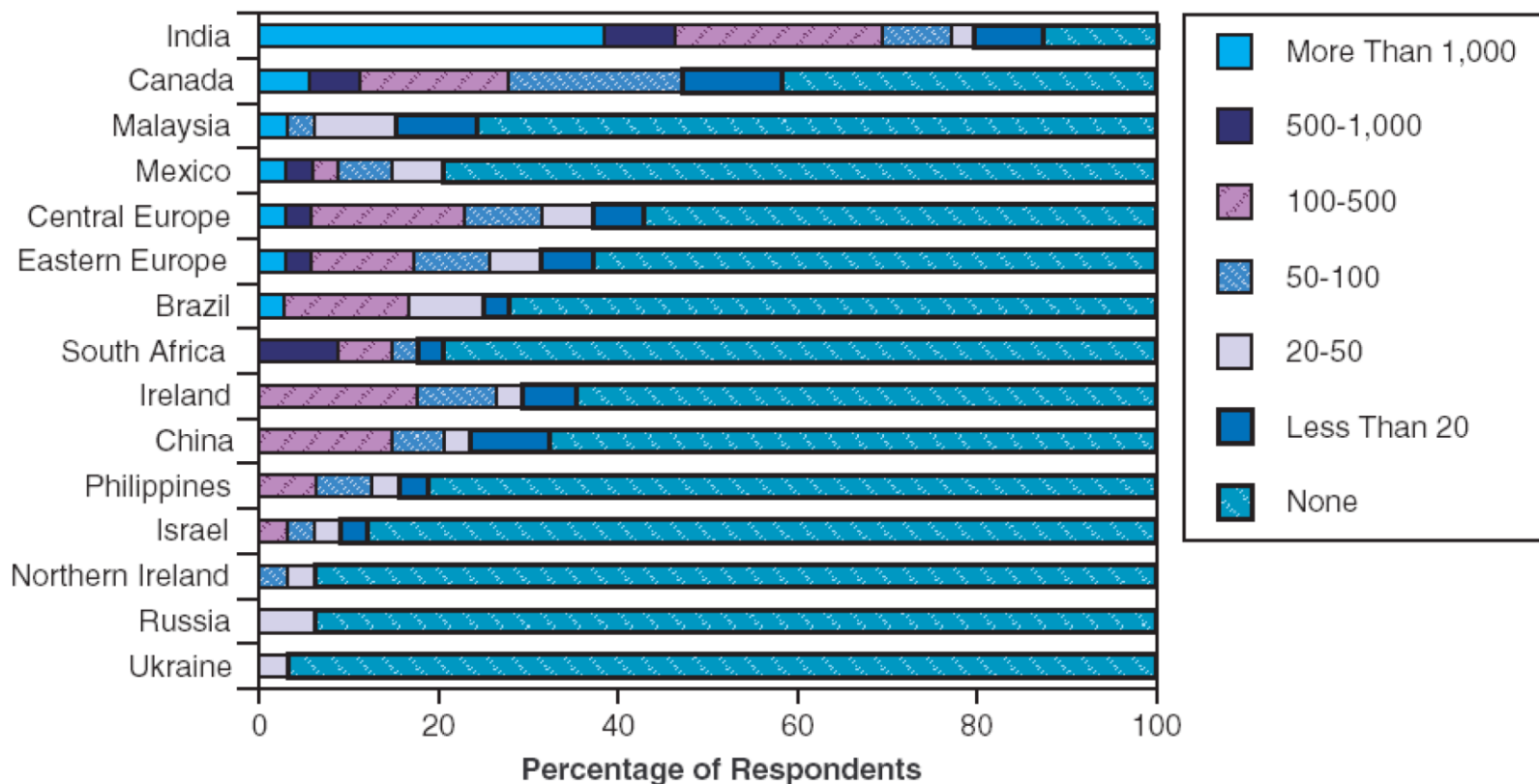
Next Generation Outsourcing Services Company

Strengths:

- Strategic business expertise
- Deep vertical expertise
- Deep and broad technical expertise
- Long-term engagement model
- Low cost structure - globally sourced
- Focus on process and quality improvements

The current focus of all the vendors in this space is the development of services which are to be deployed within a Service Oriented Enterprise. The services are not yet hosted by the ESPs in this market

Distribution Mix of Offshore/Near-shore Employees



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Note: Number of respondents = 43

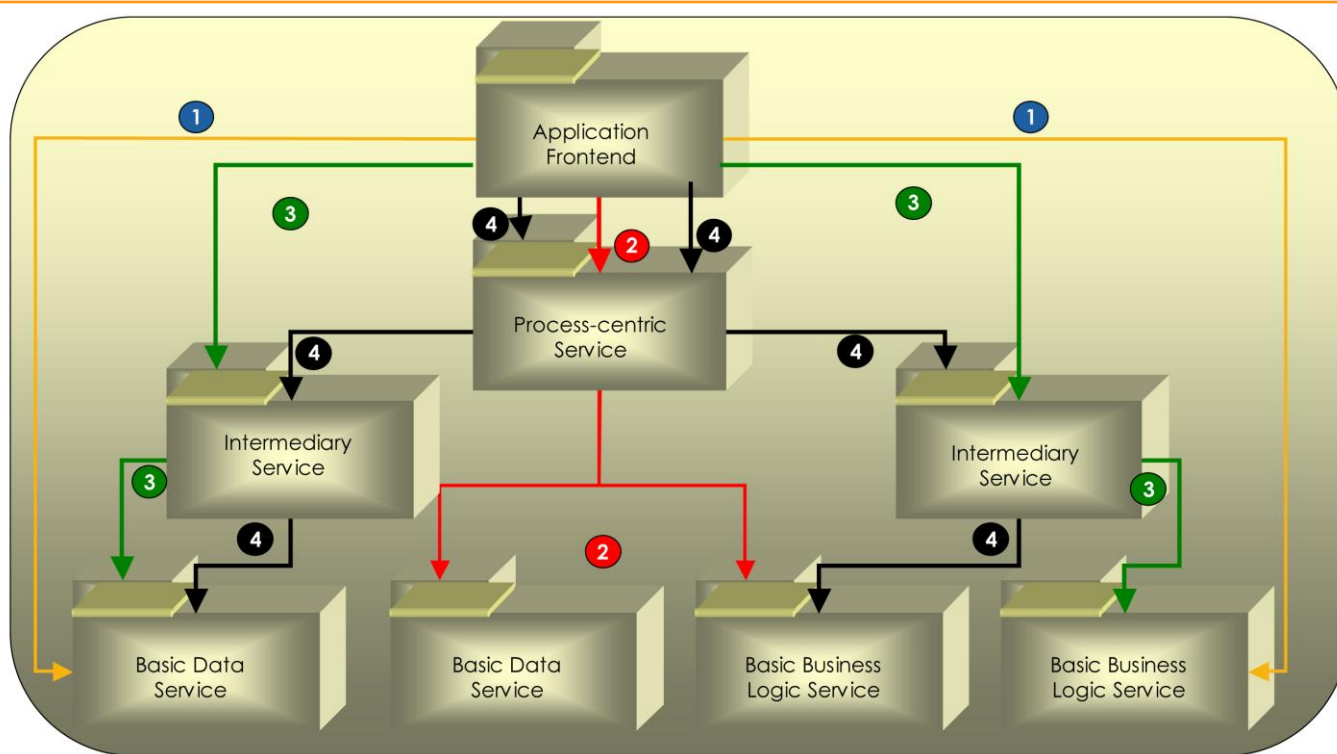
Source: Gartner Dataquest (October 2003)

Source: Gartner - "Market Trends: IT Professional Services Worldwide," Michele Cantara, 2004

Service Categories in an SOA

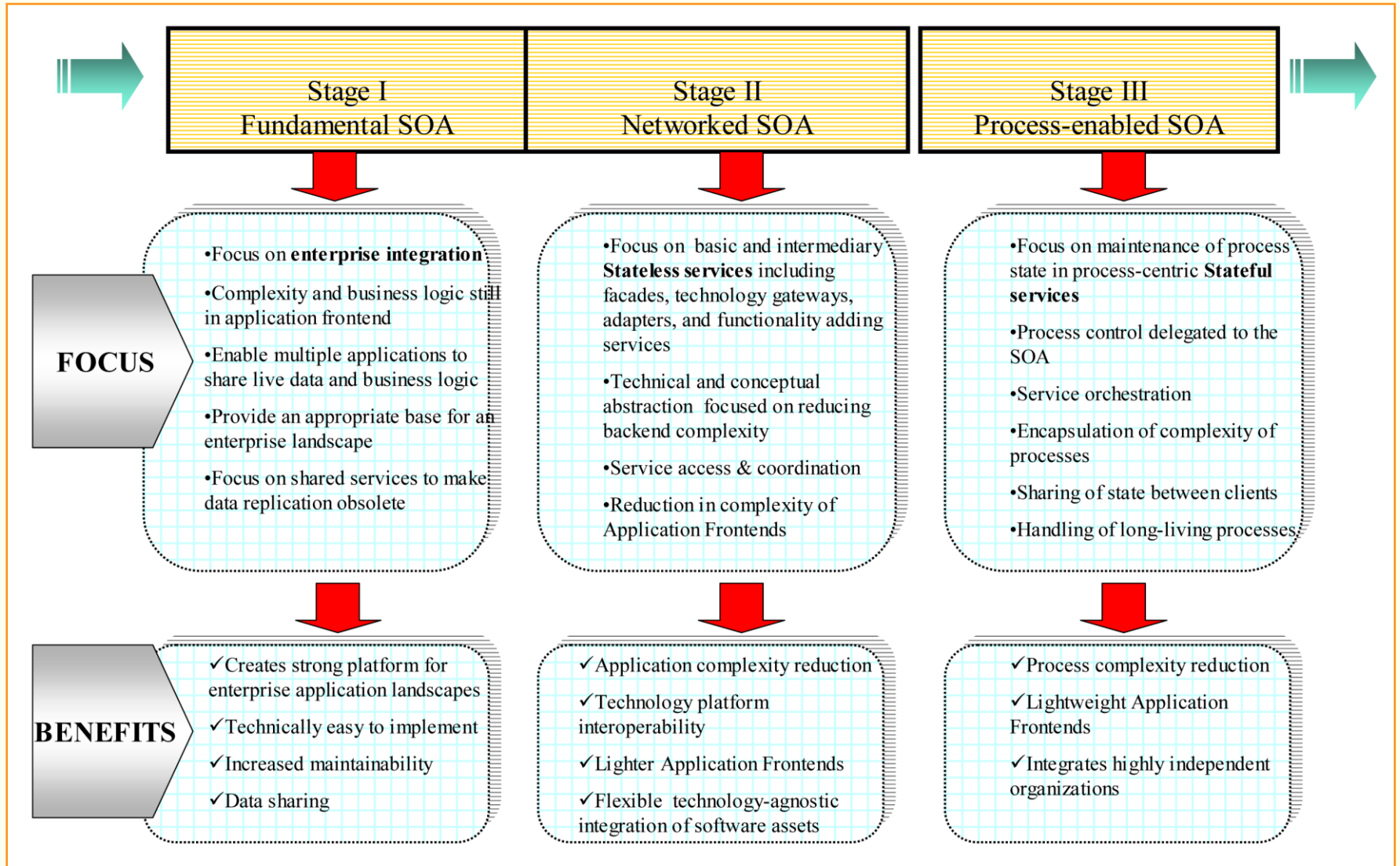
	Basic Services	Intermediary Services	Process-centric Services	Public Enterprise Services
Implementation Complexity	Low to Moderate	Moderate to High	High	Service Specific
State Management	Stateless	Stateless	Stateful	Service Specific
Reusability	High	Low	Low	Low
Frequency of Change	Low	Moderate to high	High	Low
Mandatory Element of SOA	Yes	No	No	No
Examples	Customer service (data), insurance product engine (logic)	Legacy wrapper (Technology gateway), ERP adapters (Adapters), Service Access Layer (Façade)	Booking an airline ticket, approving a loan	Shipment tracking service, SMS service

Distributing Services for GDM

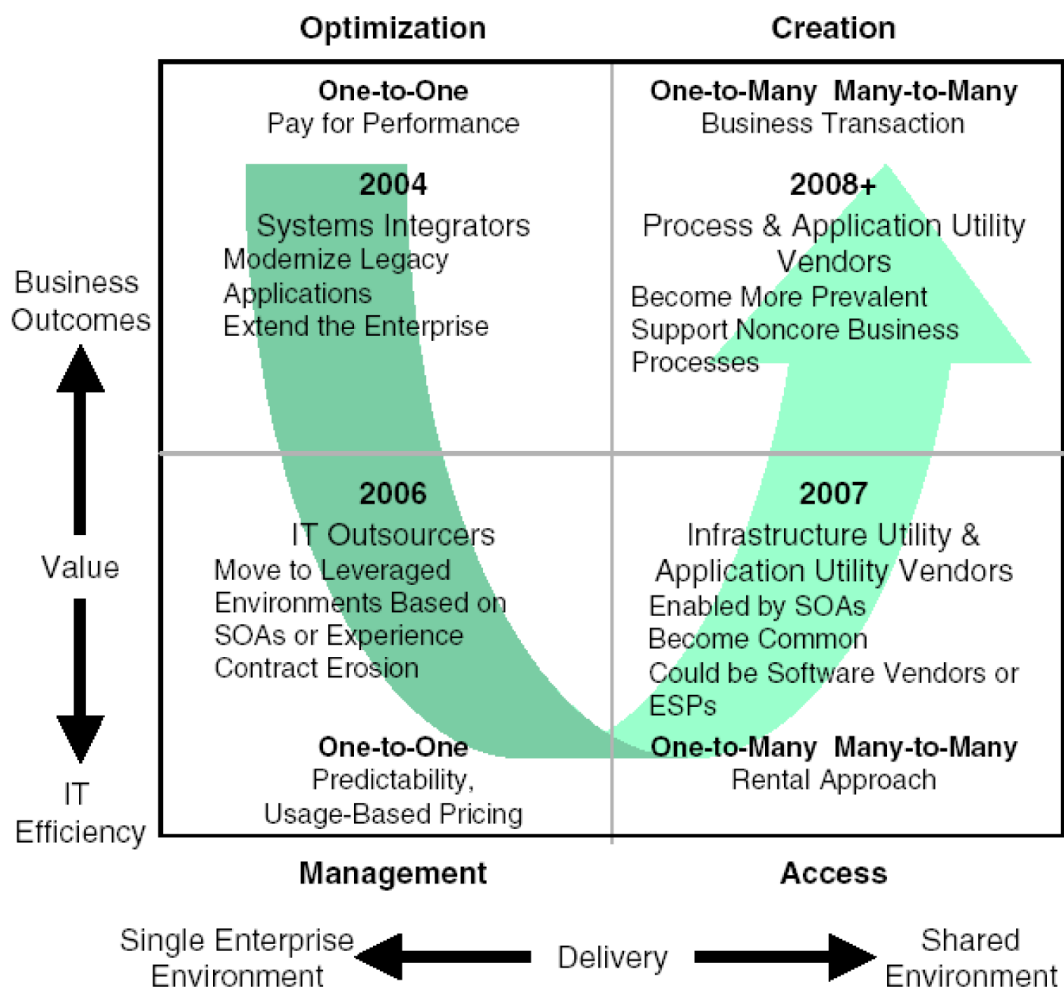


1. Frontend calls basic services directly
2. Process-centric service coordinates basic service calls
3. Frontend used intermediary service to get to basic services
4. Process-centric service uses intermediary service to get to basic services

Stages of SOA Adoption using GDM



SOA Adoption for SOEs Leveraging ESPs

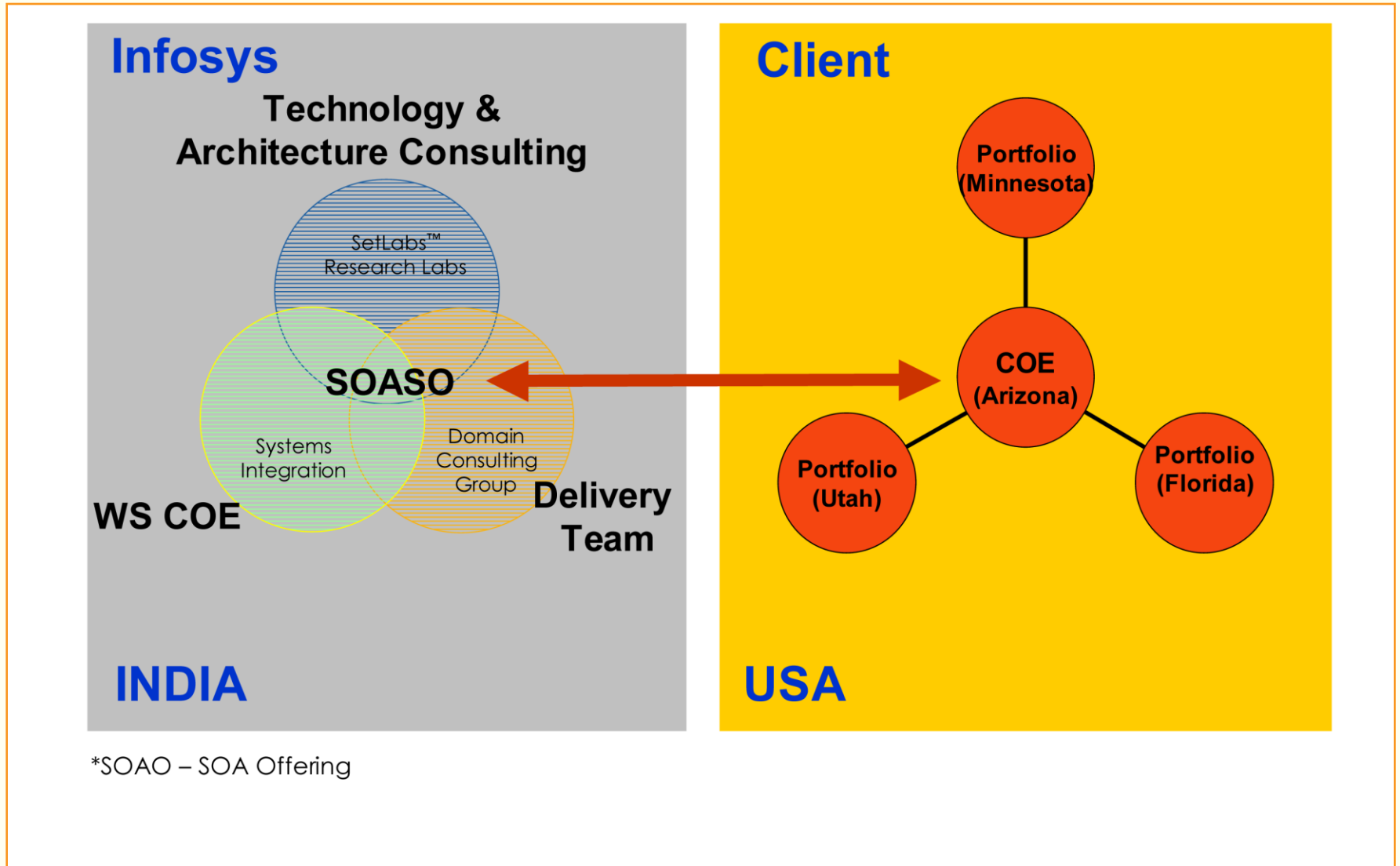


Source: Gartner Research (April 2004)

Setting up a GDM based service offering

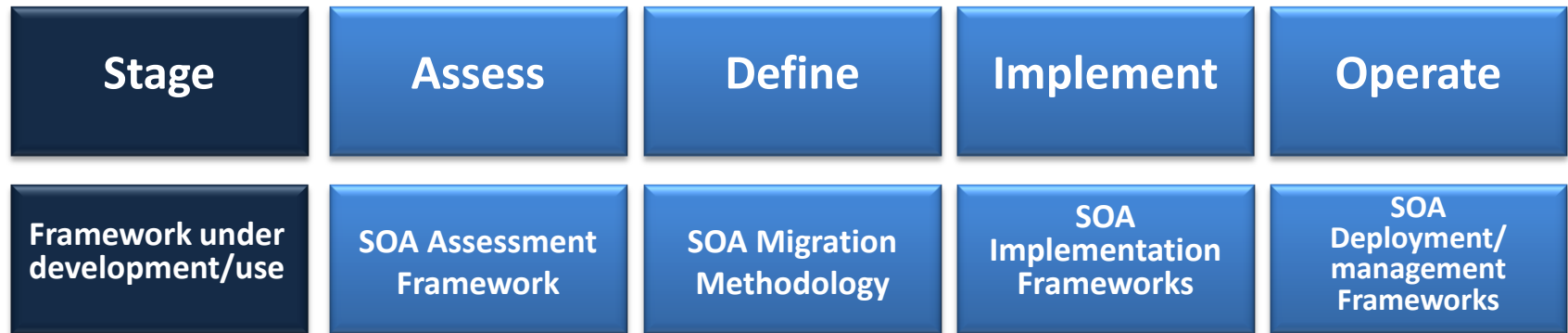
- Establishment of a Center of Excellence
- Establishment of a team based on the Global Delivery Model
- Establishment of a Governance body
- Development of SOA Services
- Deployment of distributed resources
- Clear definition of roles of persons involved
- Development of methodologies and tools

Example SOA Service Offering Model



SOA Implementation Frameworks

Overarching Capabilities



SOA Non-implementation Frameworks

- SOA Assessment Framework
 - A questionnaire based approach to understand the status of the SOA readiness of the enterprises, with a relative positioning w.r.t to the state of the practice in the area
- SOA methodology
 - An end-to end methodology for enabling enterprises to move to SOA, involving a combination of forward and reverse engineering methods
- SOA reference models
 - A comprehensive SOA reference models for different verticals

SOA Reference Enterprise Architecture

Service Integration Layer

- **Interfaces to Other Systems**
 - Connectors
 - Adaptors
 - Gateway and Callback
 - Internal Registry management
- **Core functions**
 - Identity Management
 - Policy Management
 - Service Aggregation
 - Access Control and Security
 - Routing and Transformation
 - Transaction Management
 - Internal Registry Management

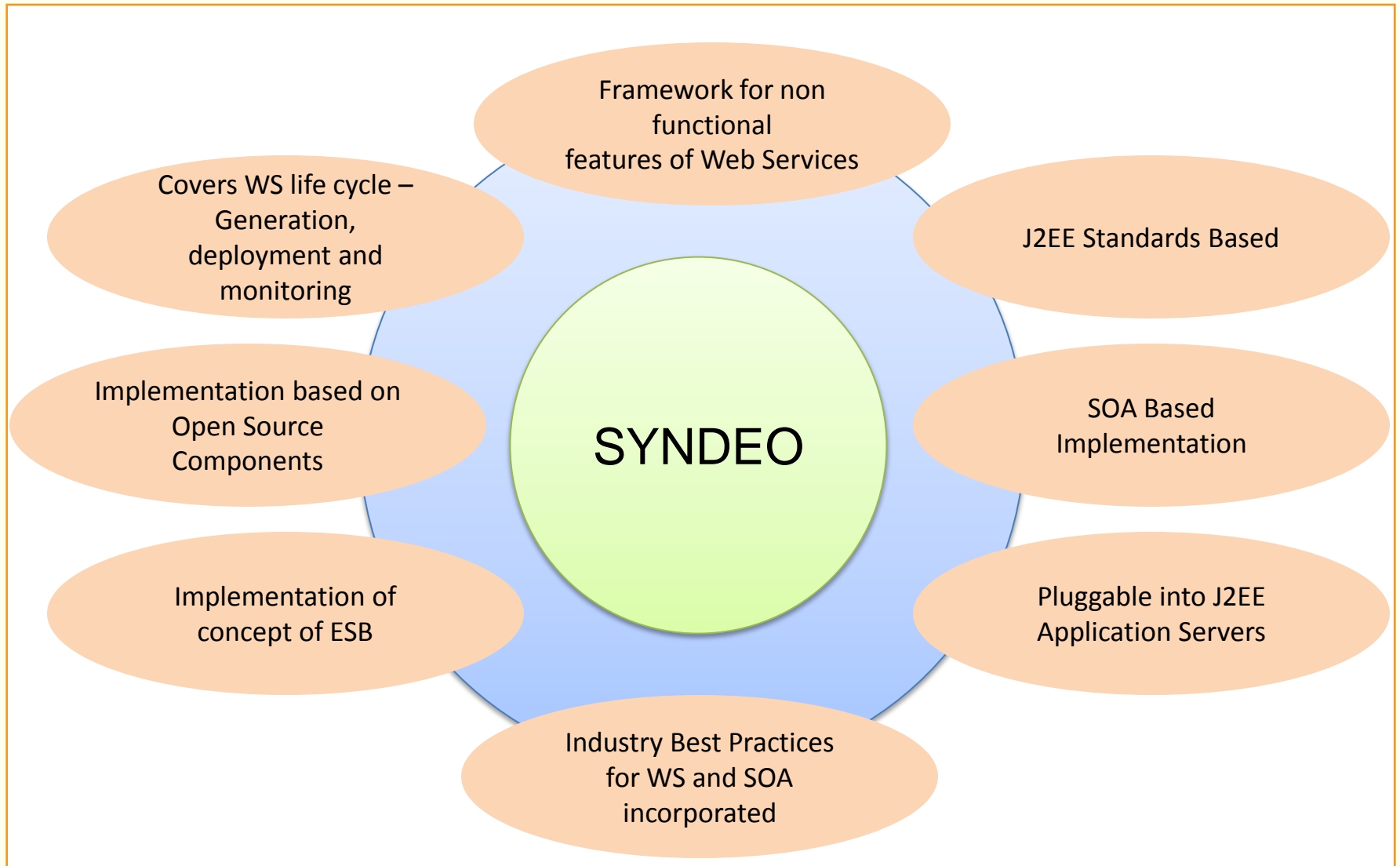
Service Access Layer

- **Core Functions**
 - Protocol mapping and conversion
 - Security
 - External Registry Management
 - Load Balancing
 - XML Firewall
- **Functional Services**
 - B2B services
 - B2C services
 - Portal services
 - BI Services
 - SCM services
 - Domain Specific Services

Business Process Management Layer

- Process definition
- Process orchestration
- Process workflow

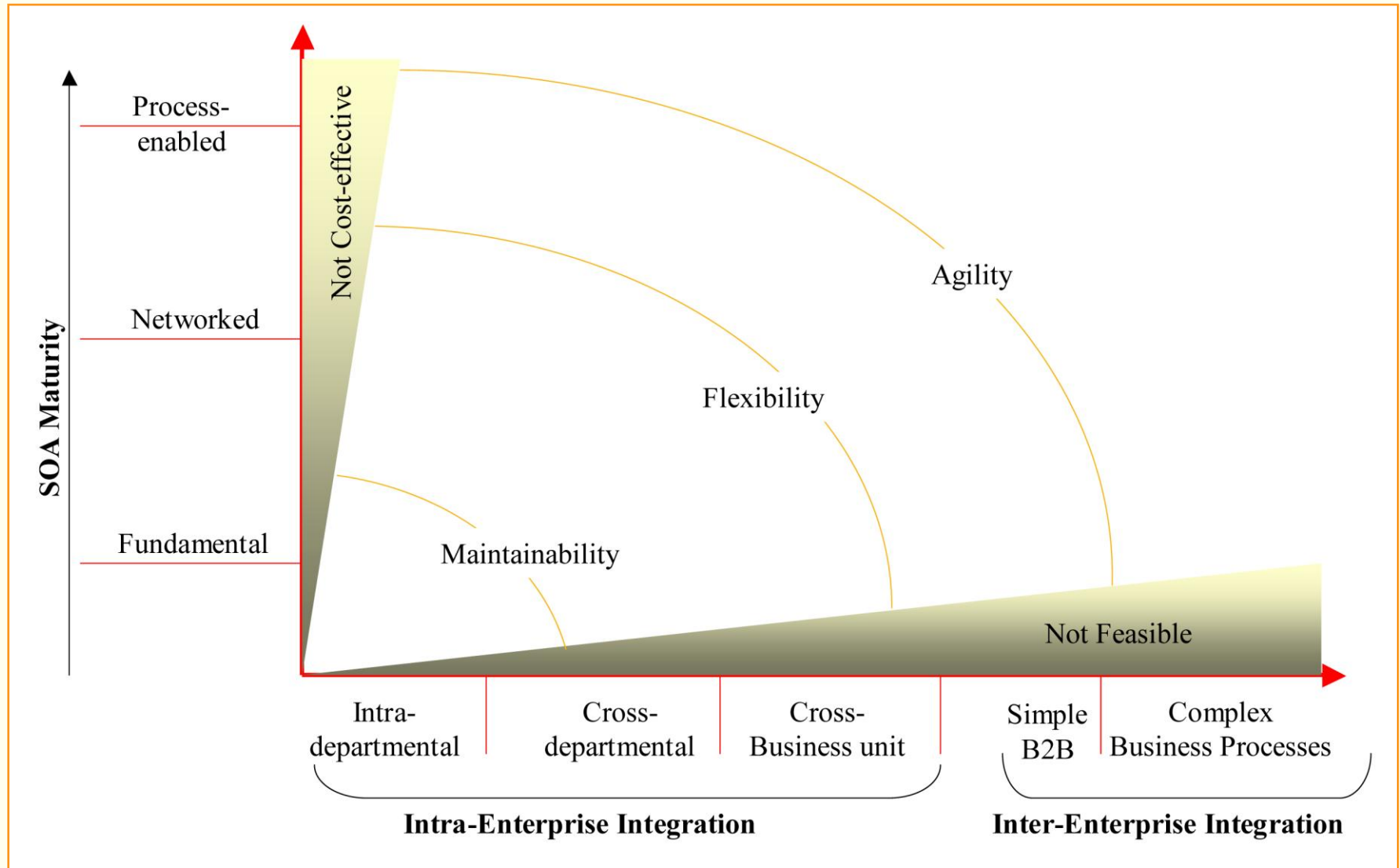
Syndeo – Web Services Bootstrap Framework



GDM-based sample engagements for the SOA

- Bank - Service orientation to enable better decisions making
- Courier, Logistics – SOA via an Enterprise Service Bus (ESB)
- Automotive - SOA Migration to re-use business models across geographies and business units
- Information Availability across verticals
- Multi-Channel Integration - Retail, Banking
- Operation and Business Support Systems – Telecom
- Dealer Integration - Auto

The landscape for service adoption



Why here, why now?

- I'm at an SOA and Web Services conference in China
- I work for a company that has mastered the art of delivering through GDM
- India and China are the leading candidates for SOEs through a robust GDM model

Useful links and contacts

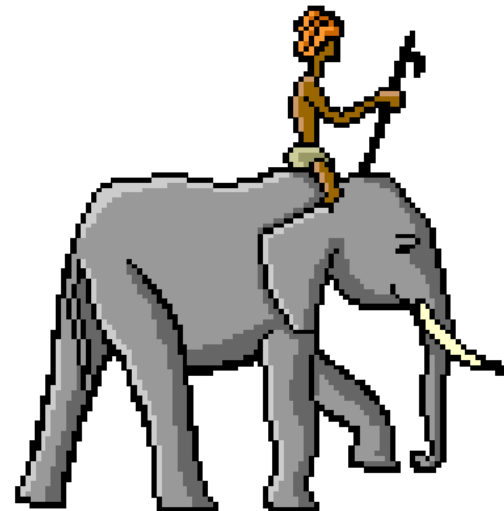
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- <http://sys-con.com/webservices/>



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The Agile
Elephant

Building
Tomorrow's Enterprise



Thank You

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