



IBM SOA Technology Summit

# Moving Ahead With SOA

## SOA : impact on IT Governance

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*SOA on your terms and our expertise*



# Summary

The context : SOA infrastructure & IT production

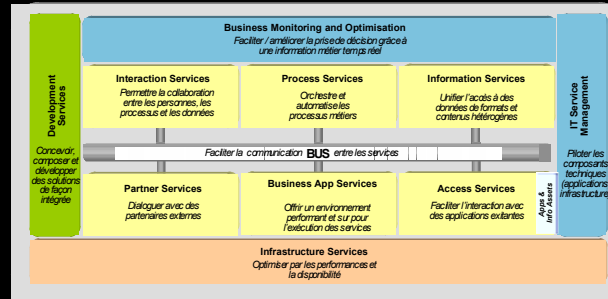
IT governance, processes and organization

How do I start ?

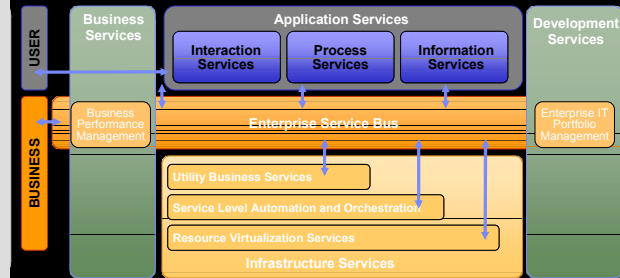
# SOA transformation projects deal with functional and operational architecture and with IT development and IT production governance.

■ **The SOA projects must deal with transformation for:**

- functional architecture
- operational architecture



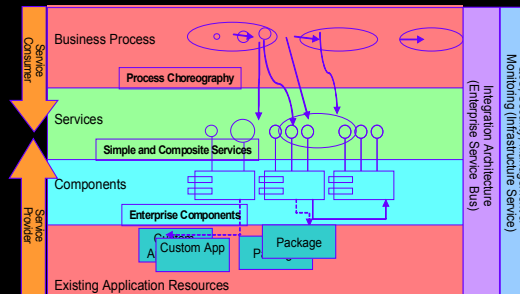
SOA Reference Architecture



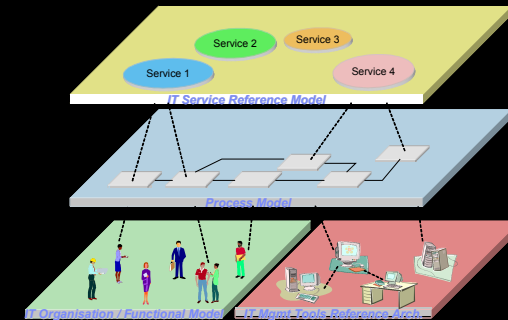
On Demand Operating Environment Architecture

■ **and with governance, organisation and processes for:**

- IT development
- IT production



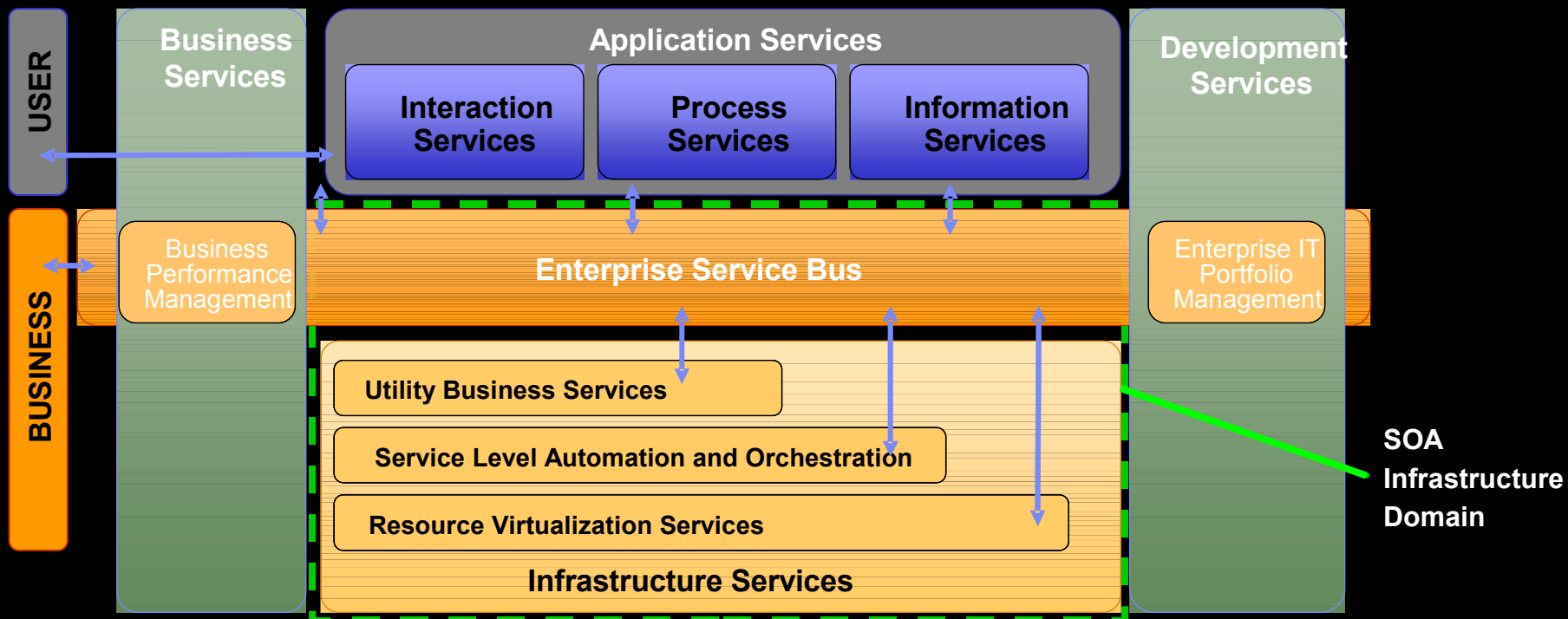
IT development



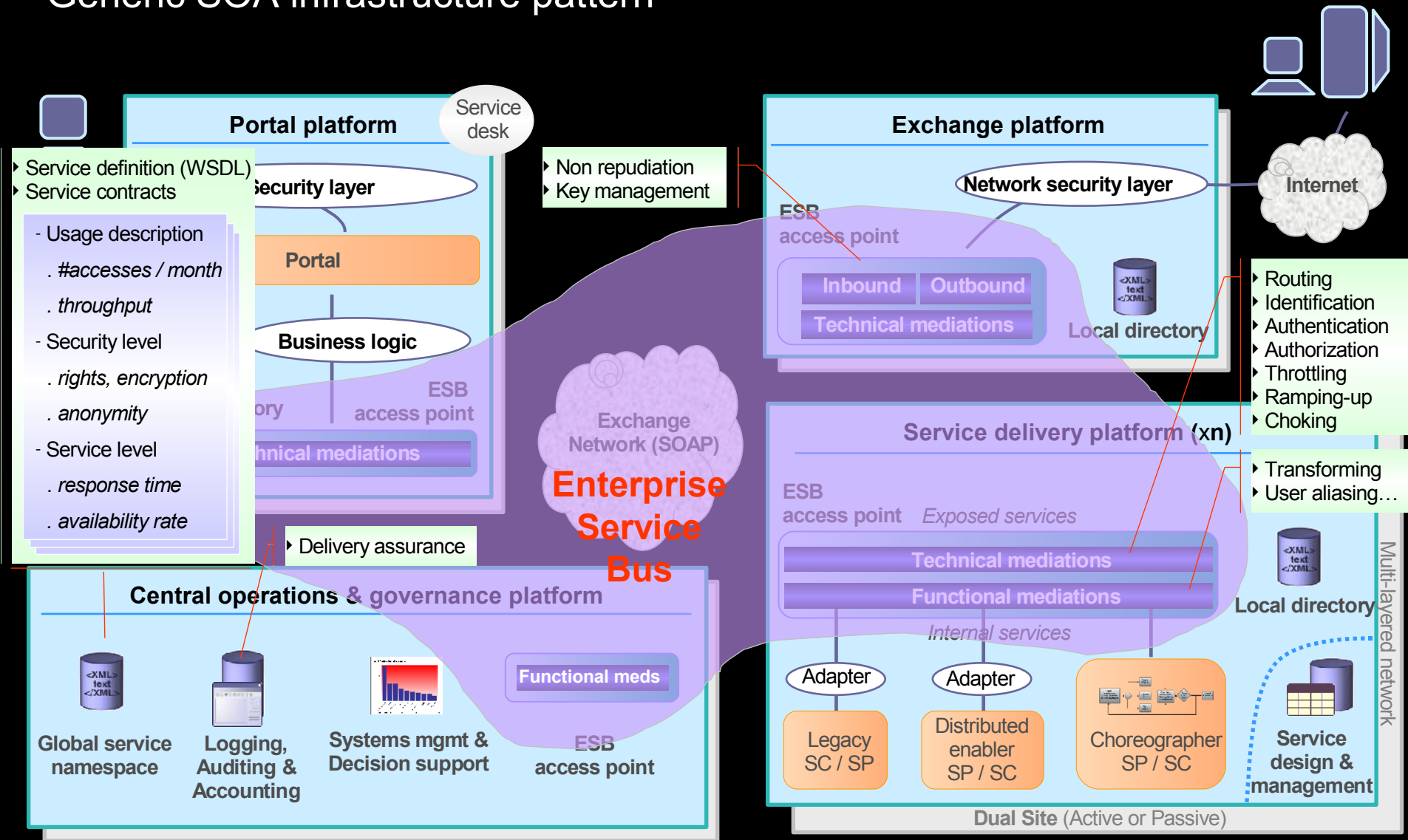
IT Production

The SOA Infrastructure environment is part of the On Demand Operating Environment, which itself is based upon SOA design principles.

SOA infrastructure is focused on adapting the IT infrastructure layers to enable the functional services layers to function optimally in an SOA.



# Generic SOA infrastructure pattern



The context : SOA infrastructure & IT production

IT governance, processes and organization

How do I start ?

## What is Governance?

### It's all part of Corporate Governance

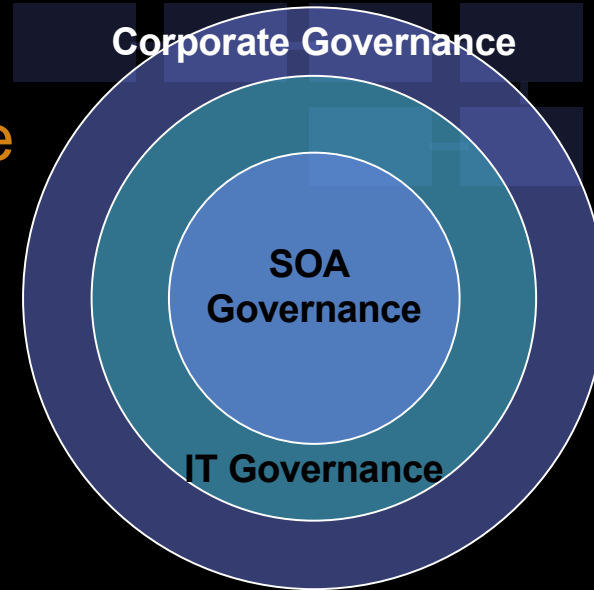
#### What is IT governance?

Establishing decision making rights associated with IT

Establishing mechanisms and policies used to measure and control the way IT decisions are made and carried out

#### What is SOA governance?

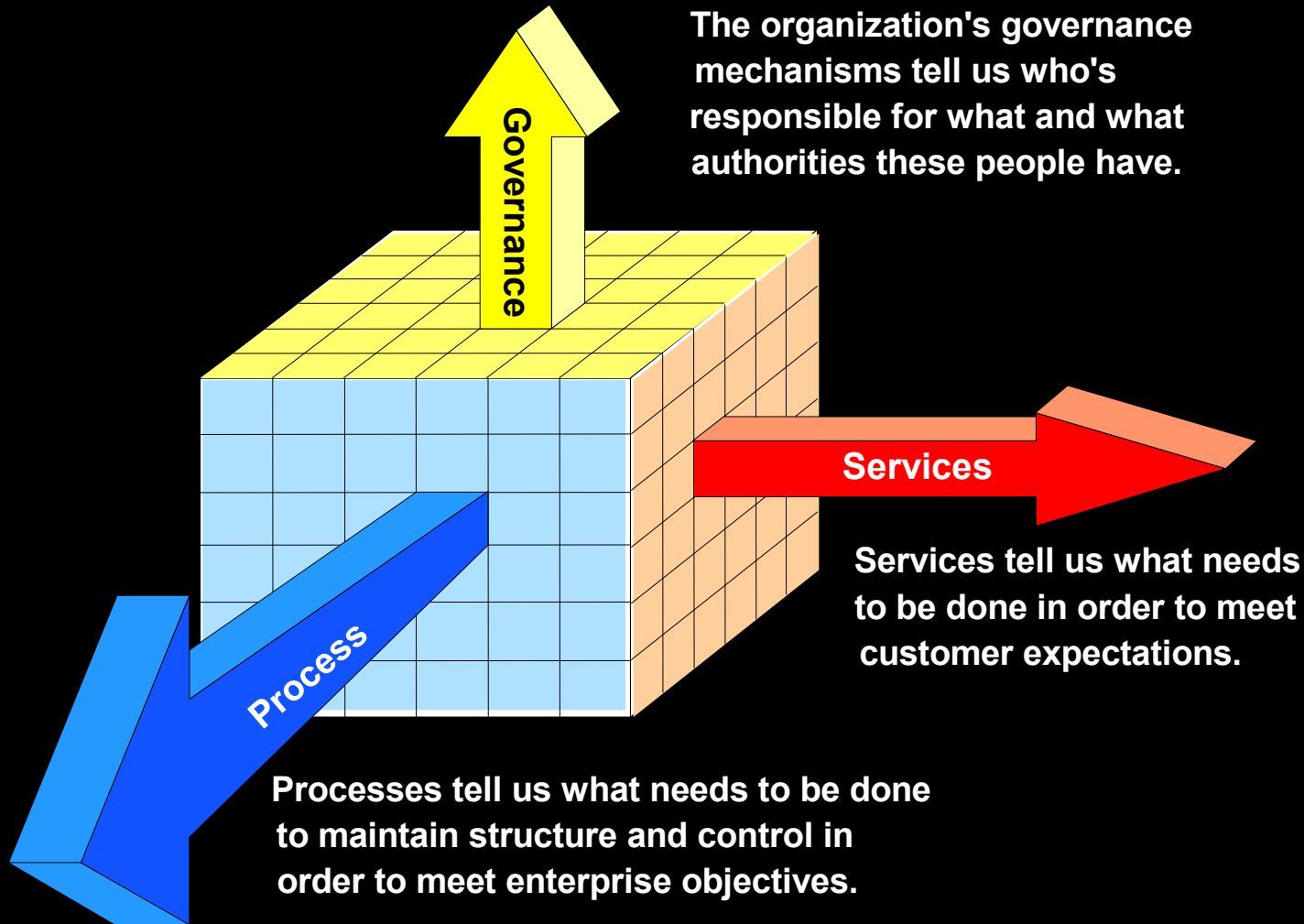
Extension of IT governance focused on the **lifecycle of services** to ensure the business value of SOA



- The corporate governance structure specifies the **distribution of rights and responsibilities** among different participants in the corporation, such as, the board, managers, shareholders and others stakeholders, and spells out the **rules and procedures for making decisions** on corporate affairs.

“OECD April 1999”

# Governance, Services and Process perspectives each provide a necessary way of looking at SOA projects





All three perspectives must be considered to optimize SOA IT value.

**Processes**

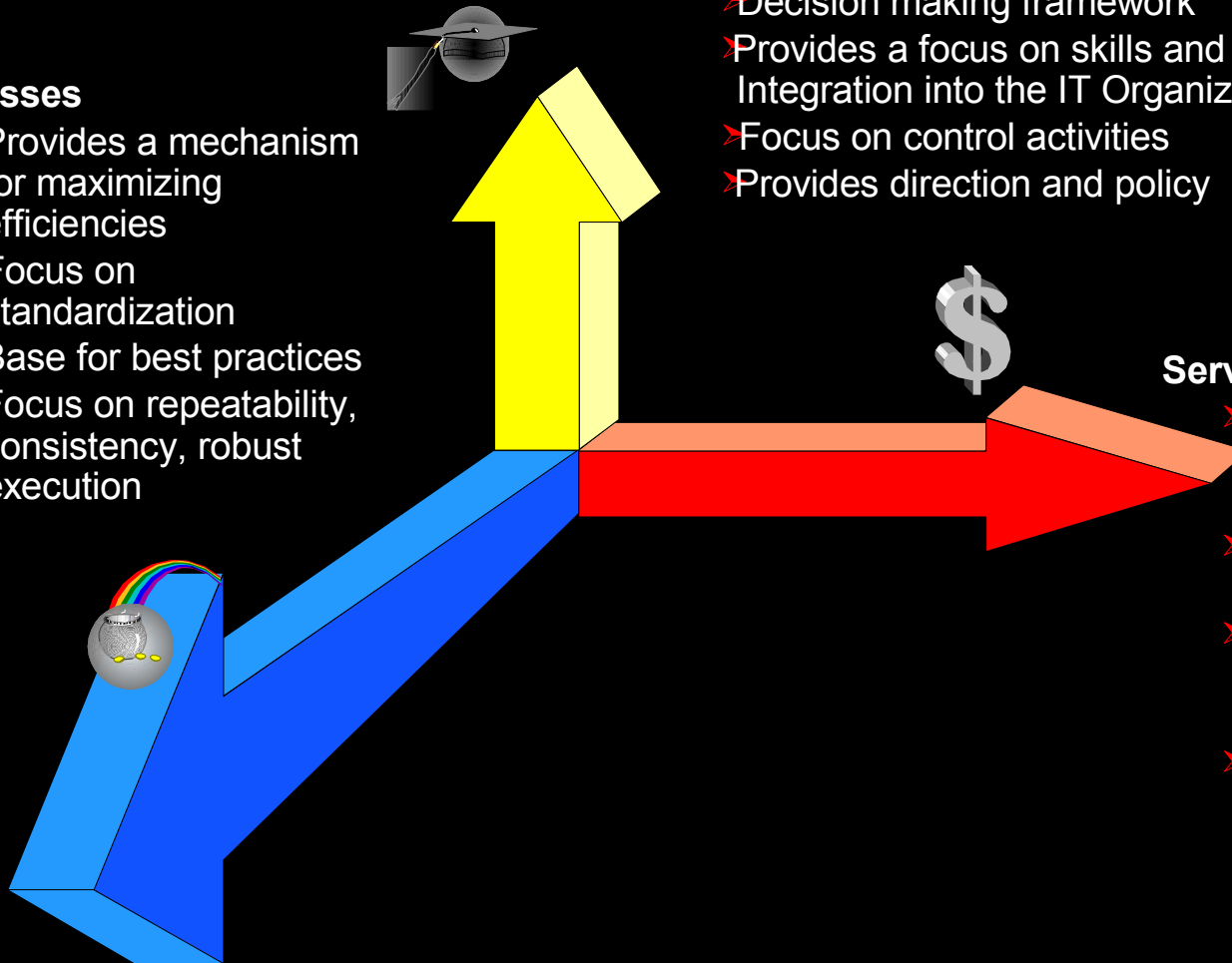
- Provides a mechanism for maximizing efficiencies
- Focus on standardization
- Base for best practices
- Focus on repeatability, consistency, robust execution

**Organization Governance Mechanisms**

- Decision making framework
- Provides a focus on skills and Integration into the IT Organization
- Focus on control activities
- Provides direction and policy

**Service**

- Provides a mechanism to maximize effectiveness
- Promotes an alignment with the business
- Focus on the needs of the customer requirements
- Base for marketing the value of IT



The implementation of an appropriate infrastructure and governance is a key success factor for SOA projects and their recurring operation.

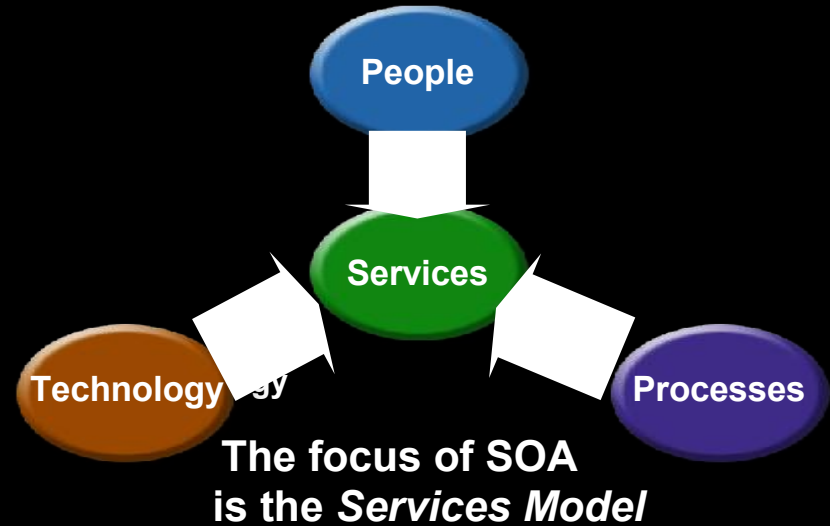
To support an SOA architecture, the **conception and implementation of the infrastructure** must meet the requirements expressed in the Service Level Agreements:

- **Availability**
- **Performances**
- **Security**
- **Operability**

and integrate **legacy applications**

The **SOA governance stakes** for the infrastructure and IT production projects :

- Who decide ?**
- Who pay ?**
- Which measures ?**



The governance model defines :

- **What has to be done?** *Service Lifecycle*
- **How is it done?** *Decision-path based Processes*
- **Who has the authority to do it?** *Roles and Responsibilities*
- **How is it measured?** *Conformance and Vitality Checkpoints?*

The context : SOA infrastructure & IT production

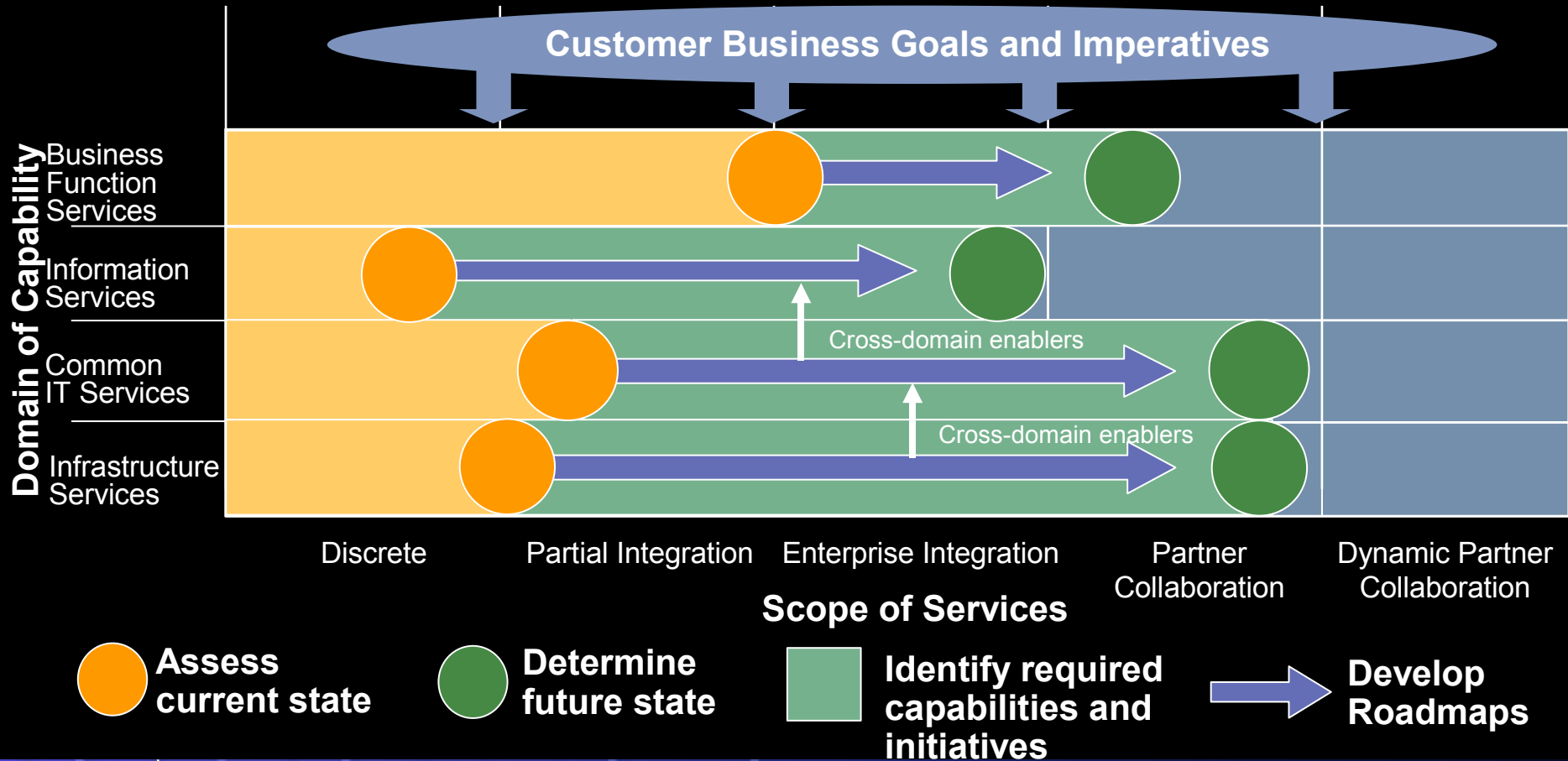
IT governance, processes and organization

How do I start ?

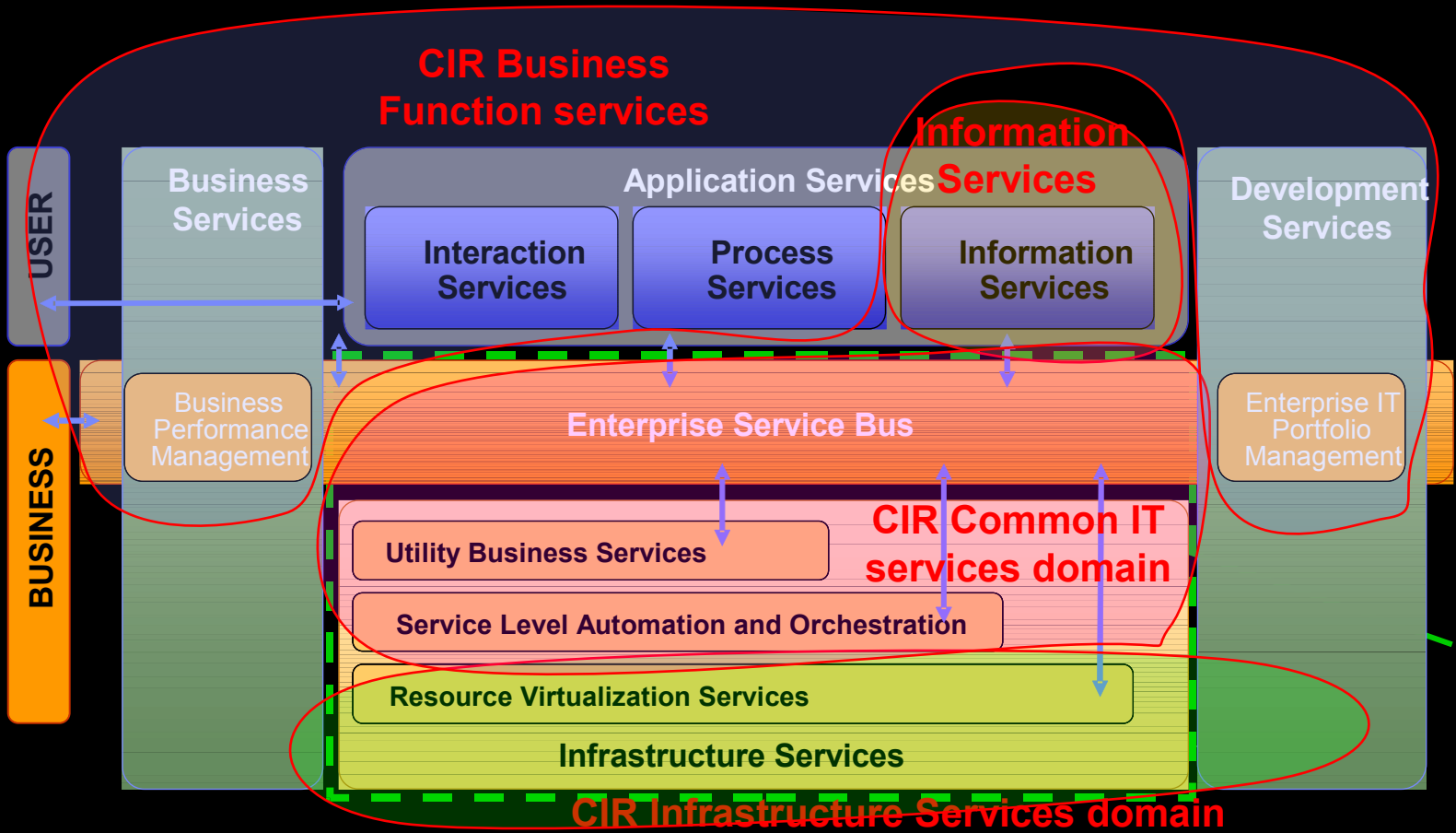
# IBM technique: Component Infrastructure Roadmap (CIR)

## Customer Tailored Roadmaps

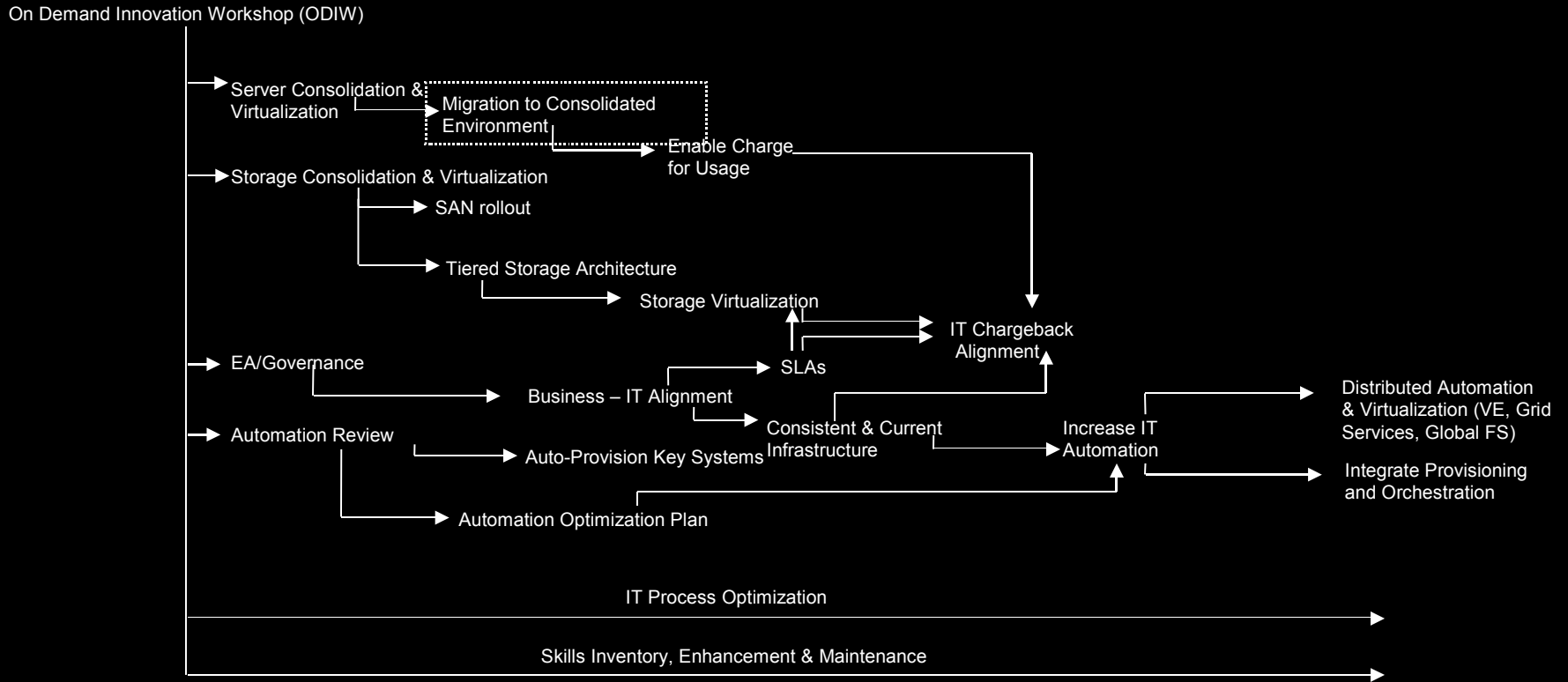
Analysis identifies current states and desired target states based on business goals and **SOA target maturity levels**. Incremental roadmaps are developed to achieve these states.



# CIR domains of capability are based on the On Demand Operating Environment



# Example of deliverable : roadmap



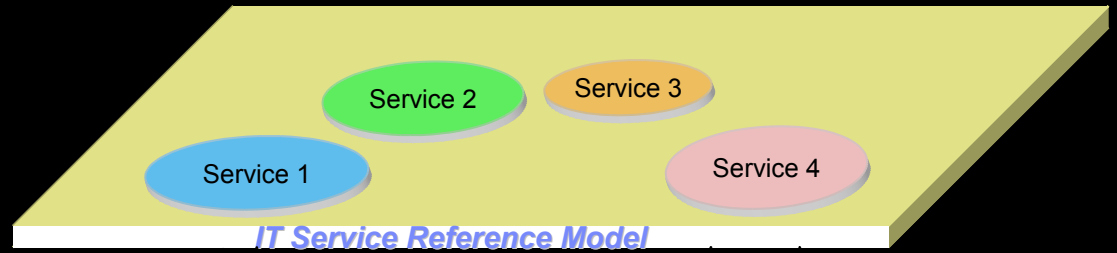
2H 2006	2007	2008
<b>Simplify &amp; Virtualize</b> Reduce complexity & size of IT Infrastructure. Reduce labor, improve QoS & Provisioning	<b>Standardize &amp; Align</b> Align IT infrastructure with Business Objectives lowering TCO further.	<b>Automate</b> Continue to optimize IT Infrastructure Mgmt reducing TCO, labor cost and increasing QoS
		<b>Exploit</b> Achieve optimal levels of system utilization. Establish Service based infrastructure

## CIR for SOA value proposition

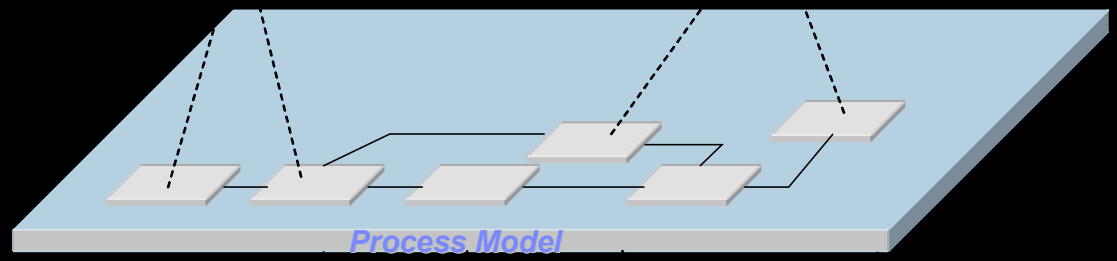
- A technique based on tools and a knowledge database allowing to quickly analyze a business context and to identify the initiatives and projects to be launched to move to SOA.
  
- CIR is a 2 days workshop to :
  - Define business needs
  - Identify existing and planned capabilities
  - Evaluate the necessary SOA maturity level
  - Identify the target capabilities
  - Define the projects priorities
  
- **Deliverable** : A customer tailored roadmap to implement products, services and technologies.

An effective and efficient SOA solution relies upon service management processes, defined roles, teams & functions, as well as management technologies.

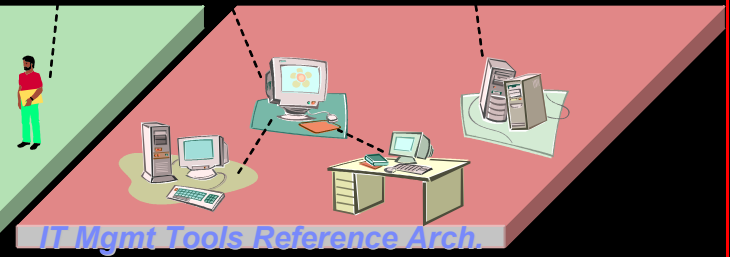
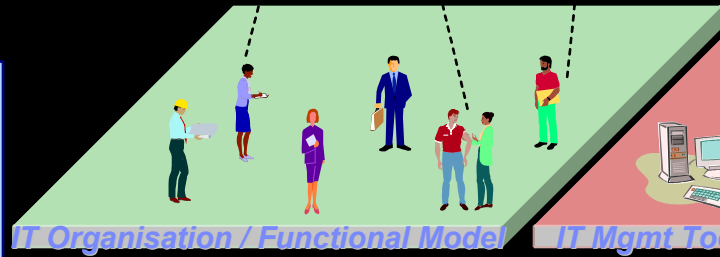
How my IT services must evolve to support SOA. What new services are needed



How my IT processes must be improved to support SOA



How my IT organization, roles and responsibilities must evolve to support SOA. What new roles are needed



How my management tools must evolve to support SOA

IT  
S  
M  
D  
D



The following are the service groups defined from the IBM starter set of services. The groups do not exclude interaction of services across groups, or preclude grouping of services in different ways.

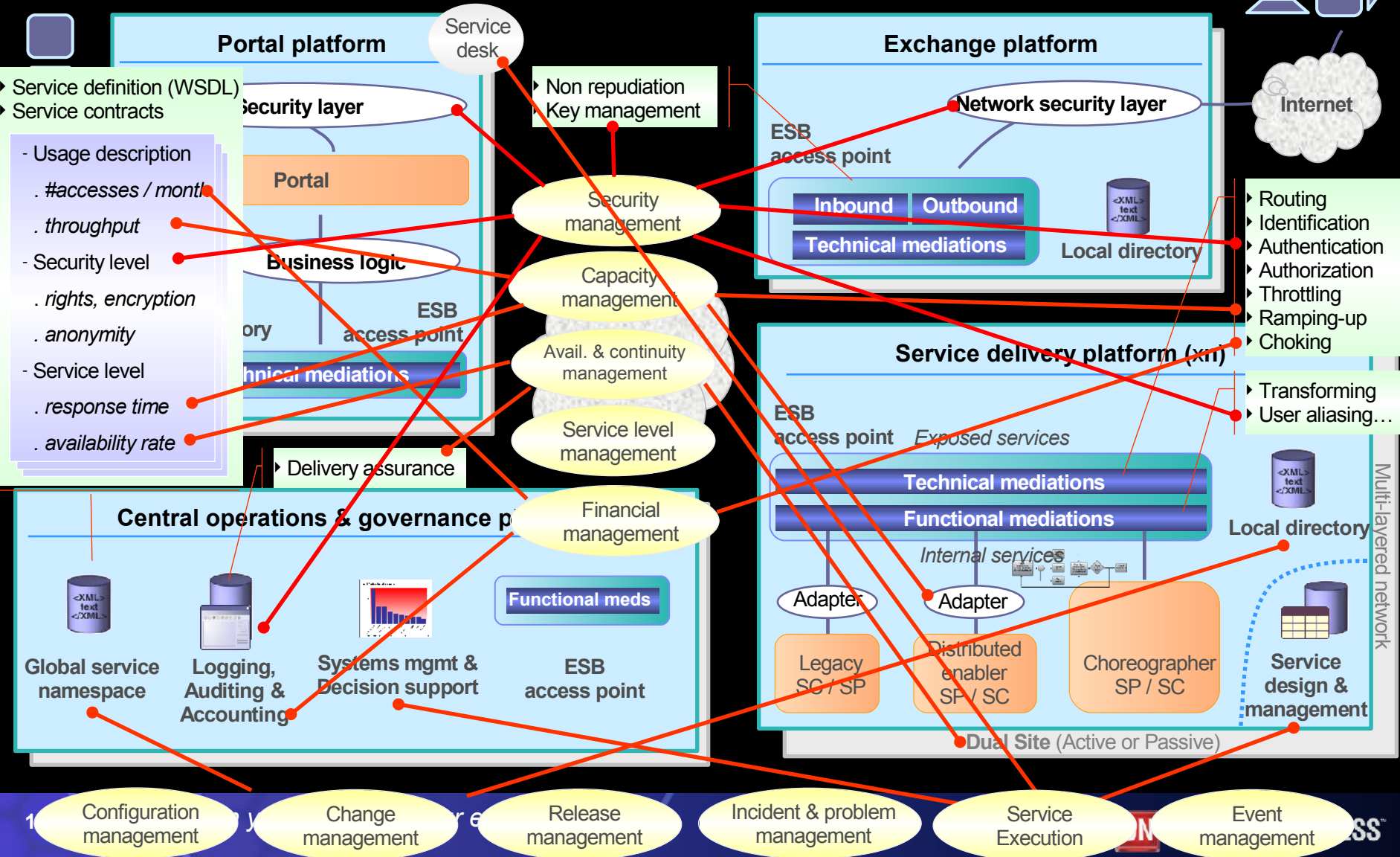
<b>USER / CUSTOMER SUPPORT SERVICES</b>	Direct support to the internal / external user to enable day to day usage of IT resources
<b>DEPLOYMENT SERVICES</b>	Planning, administering, and implementing new or updated services (remote or central site)
<b>APPLICATIONS SERVICES</b>	Creation and support of applications to support the business
<b>OPERATIONAL SERVICES</b>	Day to day delivery of the technology services
<b>DELIVERY SUPPORT SERVICES</b>	Enabling services needed to keep Operational Services up, running, and continually improving
<b>MANAGEMENT AND CONTROL SERVICES</b>	Management and control of resources, projects and services deliveries
<b>BUSINESS SUPPORT SERVICES</b>	Financial and strategic alignment of IT and enterprise business initiatives

Services candidates to be re-designed in an SOA environment are further identified in red

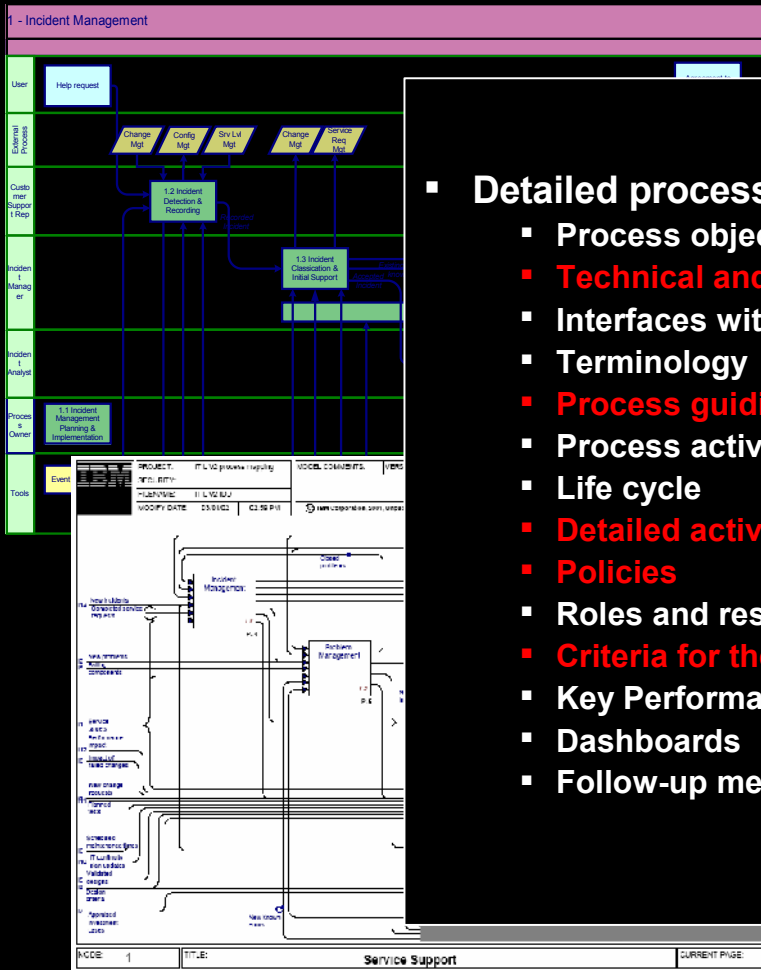
# First repartition of SOA impacts on IT Services

Service group	Service	SOA sensibility	Comment
<b>USER / CUSTOMER SUPPORT SERVICES</b>			
	User call management		SOA does'nt bring specific new needs on these services
	User training		
	Install/Move/Add/Change		
	Deskside support		
	Access enablement		
<b>DEPLOYMENT SERVICES</b>			
	Site preparation		SOA does'nt bring specific new needs on these services
	Pre delivery preparation		
	Roll-out and installation		
	Install/Move/Add/Change		
	Software distribution		Development and production teams are impacted
	Solution testing		
<b>APPLICATION SERVICES</b>			
	Develop applications		Development teams are impacted
	Integrate applications		Development and production teams are impacted
	Maintain applications		Development teams are impacted
	Support Application		Development and production teams are impacted
<b>OPERATIONAL SERVICES</b>			
	Job scheduling		
	Job execution		
	Infrastructure maintenance		
	Performance management		Performance management among services loosely coupled is modified
<b>DELIVERY SUPPORT SERVICES</b>			
	Event management		These services need to be at a good level for SOA
	Security management		
	Availibility management		
	Capacity management		
	Hardware maintenance management		
	Problem management		
	Inventory administration		
	Change management		These services need to be at a good level for SOA
<b>MANAGEMENT AND CONTROL SERVICES</b>			
	Disaster recovery		These services must be adapted to SOA
	IT Architecture definition and support		
	Project audit and control		
	Service Level Management		
	IT Consulting		
	IT Plan Management		
<b>BUSINESS SUPPORT SERVICES</b>			
	IT Strategy definition		Must shift to a SOA strategy
	Finance / Budget Management		Billing in particular is impacted (how to bill business services)
	Procurement		
	Supplier liaison		

# IT processes impacted by SOA

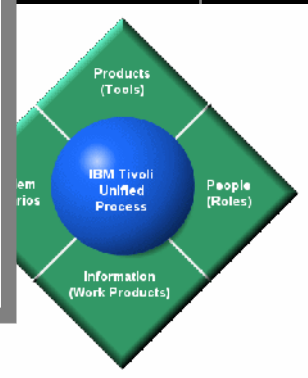


Detailed process design has to be reviewed to be adapted to SOA. The items which are more likely to be reviewed are highlighted in red.



Detailed process design includes :

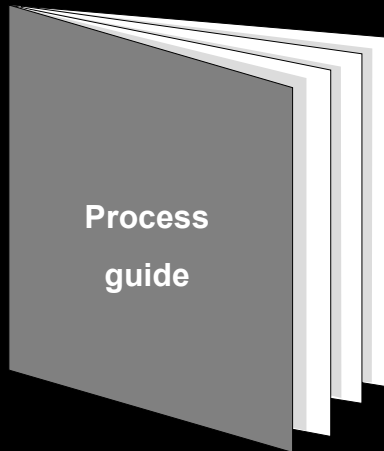
- Process objectives
- **Technical and organizational scope**
- Interfaces with others processes
- Terminology
- **Process guiding principles**
- Process activities
- Life cycle
- **Detailed activities**
- **Policies**
- Roles and responsibilities
- **Criteria for the affectation of roles to the organization**
- Key Performance Indicators
- Dashboards
- Follow-up meetings



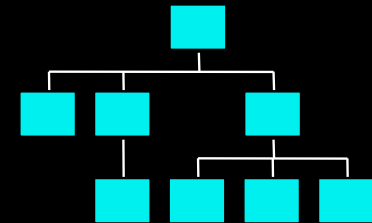
# The evolution of activities and processes may induce modifications of the IT job roles and possibly of the IT production organization.

<p><b>OPERATIONS</b></p> <p><b>GES</b> Gestion des Entrées/Sorties réception des cartouches exécution des tests réguliers alimentation des imprimantes, des lecteurs de cartes gestion des externalisations des sauvegardes Etc. et Tels</p> <p><b>SVP</b> Help Desk gestion des appels assistance aux utilisateurs enregistrement des incidents (callistes) analyse de l'air vicié des incidents</p> <p><b>PII</b> Pilotage démarrage /arrêt des services surveillance des systèmes, réseaux, applications gestion des incidents (et travaux liés critiques)</p> <p><b>SIL</b> Support Informatique Local support rapproché aux utilisateurs gestion des incidents locaux réception des matériels "hors réseau" appel et accueil des "dépanneurs"</p>	<p><b>SUPPORTS</b></p> <p><b>ARC</b> Architecture technique stratégie en architecture (urbanisme) systèmes et réseaux veille technologique conception en architecture technique et choix des composants</p> <p><b>ING</b> Ingénierie choix et qualification des produits représentant l'architecture traitement des incidents techniques de 2ème niveau optimisation des capacités et des performances optimisation de l'investissement des bases de données</p> <p><b>STP</b> Support Technique Produits analyse/ tests / adaptation des produits (matériels et logiciels) gestion 2ème niveau des incidents techniques relations techniques avec les fournisseurs</p> <p><b>SCP</b> Suivi et Contrôle de Production coordination des incidents et des changements maintenance, reporting gestion des fournisseurs externes</p> <p><b>MeOA</b> Mise en Oeuvre Appliquée préparation de l'environnement des applications (batch et TP) recette des applications, qualifications, migration préparation des applications, packaging, déploiement réalisation et accompagnement des travaux</p> <p><b>GA</b> Gestion Applications assistance en pilotage sous-journaux des applications et des données gestion 2ème niveau des incidents applicatifs mise en oeuvre des procédures de reprise</p> <p><b>SEC</b> Sécurité architecture de sécurité logique et physique gestion de la sécurité logique et physique conception et audit de sécurité gestion, tests du Plan de continuité et du Plan de reprise</p>	<p><b>ADMINISTRATIVES</b></p> <p><b>AO</b> Assurance Qualité définition / suivi / évolution des indicateurs de pilotage/reporting formalisation des méthodes / règles / standards / normes élaboration de la documentation des processus</p> <p><b>LE</b> Logistique et Environnement étude des besoins en électricité et climatisation suivi des installations physiques relation avec les services d'entretien</p> <p><b>ACH</b> Achats gestion des demandes d'achat relations avec les fournisseurs suivi et contrôle des contrats/livraisons</p> <p><b>SPB</b> Stratégie - Plan - Budget élaboration et suivi de la stratégie et du plan informatiques élaboration et suivi du budget</p> <p><b>AS</b> Administration - Secrétaire secrétariat et gestion administrative gestion de la documentation technique</p> <p><b>RH</b> Ressources Humaines gestion des ressources humaines gestion des compétences</p> <p><b>MGT</b> Management des hommes mise en oeuvre des effectifs organisation et animation des équipes suivi des indicateurs et commentaires à la hiérarchie</p> <p><b>MP</b> Management de Projet coordination des tâches planification / suivi des activités</p> <p><b>COM</b> Communication communication interne</p>
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IT activities



IT job roles and profiles adapted to SOA



Organization adapted to SOA

# ITSM DD (IT Service Management Design and Development) for SOA value proposition

- ITSM DD capability Overview

- Methods and Models : Assess, Plan, Design and Implement best practices
- Intellectual Capital : Templates and examples save time and ensure quality
- Competencies : Experienced consultants with diverse skills deliver quality results

- A global scope covering :

- IT Services
- Processes
- Organization
- Outils

- ITSM DD covers the full IT service management implementation life cycle from Readiness Engagement to Implementation Services

- **A successful operational SOA demands to :**
  - **Design and roll out an operational architecture, flexible and reactive, satisfying the main non functional requirements (e.g. performances, security, availability)**
  - **Take into account the impacts of SOA on IT production, related to IT governance, services processes and organization**

धन्यवाद

Hindi

多謝

Traditional Chinese

ขอบคุณ

Thai

Спасибо

Russian

Gracias

Spanish

Thank You

Obrigado

Brazilian Portuguese

شكراً

Arabic

Grazie

Italian

Dank

German

Merci

French

நன்றி

Tamil

多谢

Simplified Chinese

감사합니다

Korean

ありがとうございました

Japanese