



**ONE IT WORLD**



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# THE PROCESS OF MODELING ENTERPRISE ARCHITECTURES

NEW YORK ORACLE USERS GROUP

**Mauricio Naranjo, General Director**  
New York Architecture & Design Center  
ONE IT WORLD CORP. 2009

September 16<sup>th</sup>, 2009  
Version 2.1

# Confidentiality Agreement

The following presentation is intended for information purposes only, and may not be incorporated into any contract.

# Agenda

## ARCHITECTURE & STANDARDS

- ✓ Service Oriented Industries
- ✓ Service Oriented Architectures
- ✓ SOA Value Patterns
- ✓ Enterprise Architectures

## TECHNOLOGY: ORACLE SOA SUITE 11g

- ✓ Oracle Technology Architecture
- ✓ Integration Architecture
- ✓ Process Architecture
- ✓ Business Event Processing Architecture
- ✓ Recommendations



# About the Speaker: Mauricio Naranjo

## Experience on Architecture

- Mr. Mauricio Naranjo is an Engineer with experience since 1994 specialized on Architecture and Design of Information Technology Solutions using Standards, Middleware, Enterprise Architecture & IT Governance.
- Enterprise Solutions Experience for more than 60 banks & financial institutions, communication companies and governments.
- 2002 & 2003. Architect for Inter-American Development Bank, + 18 Banks & 20 Stock Brokers.
- Oracle SOA Architect Certified Expert (US)
- ITIL v3 Certification - IT Governance (UK)
- **Speaker** at New York Oracle Users Group (NYOUG), Oracle Developer Tools Users Group (ODTUG), Independent Oracle Users Group (IOUG).
- **Speaker at Oracle Events:** Chile, San Salvador, Costa Rica, Bogota, Lima, Quito.



- **Oracle ACE Director** at Oracle Corporation (US), since 2007.

**Oracle ACE**

- Co-Author of the Book: Oracle Java Programming, Wrox Press (UK).

# Service Oriented Industries



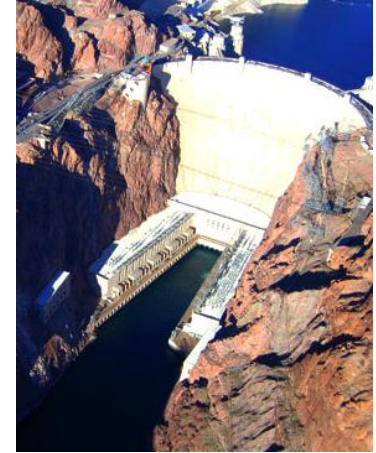
**Light**



**Energy Generators**



**Energy Plants**



**Energy Networks**





# Service Oriented Industries



**Processors**



**Computers**



**LAN / WAN**

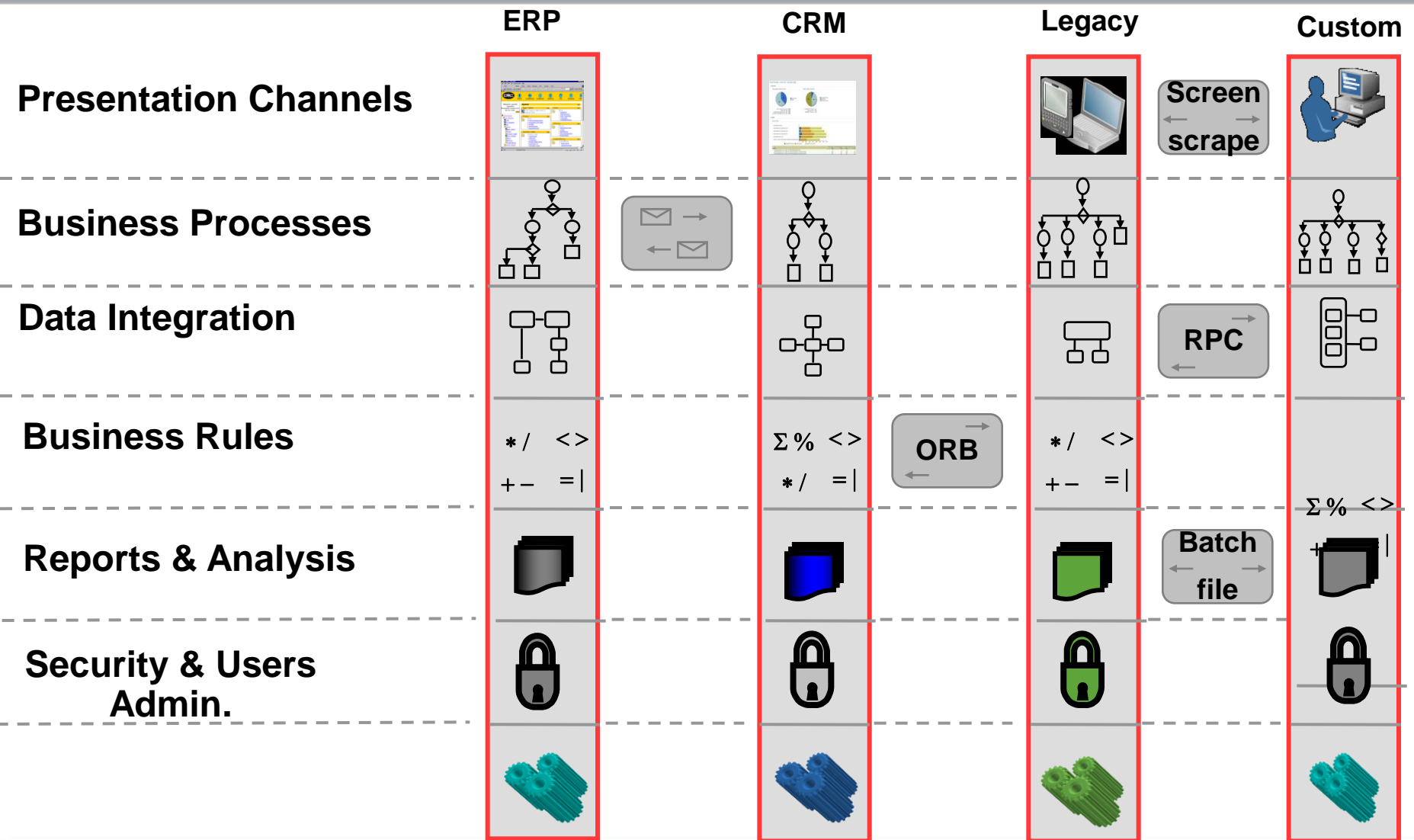


**Internet Services:**

**WWW, E-MAIL, FILE-TRANSFER,  
SEARCH, SOCIAL NETWORKS**



# System's Reality



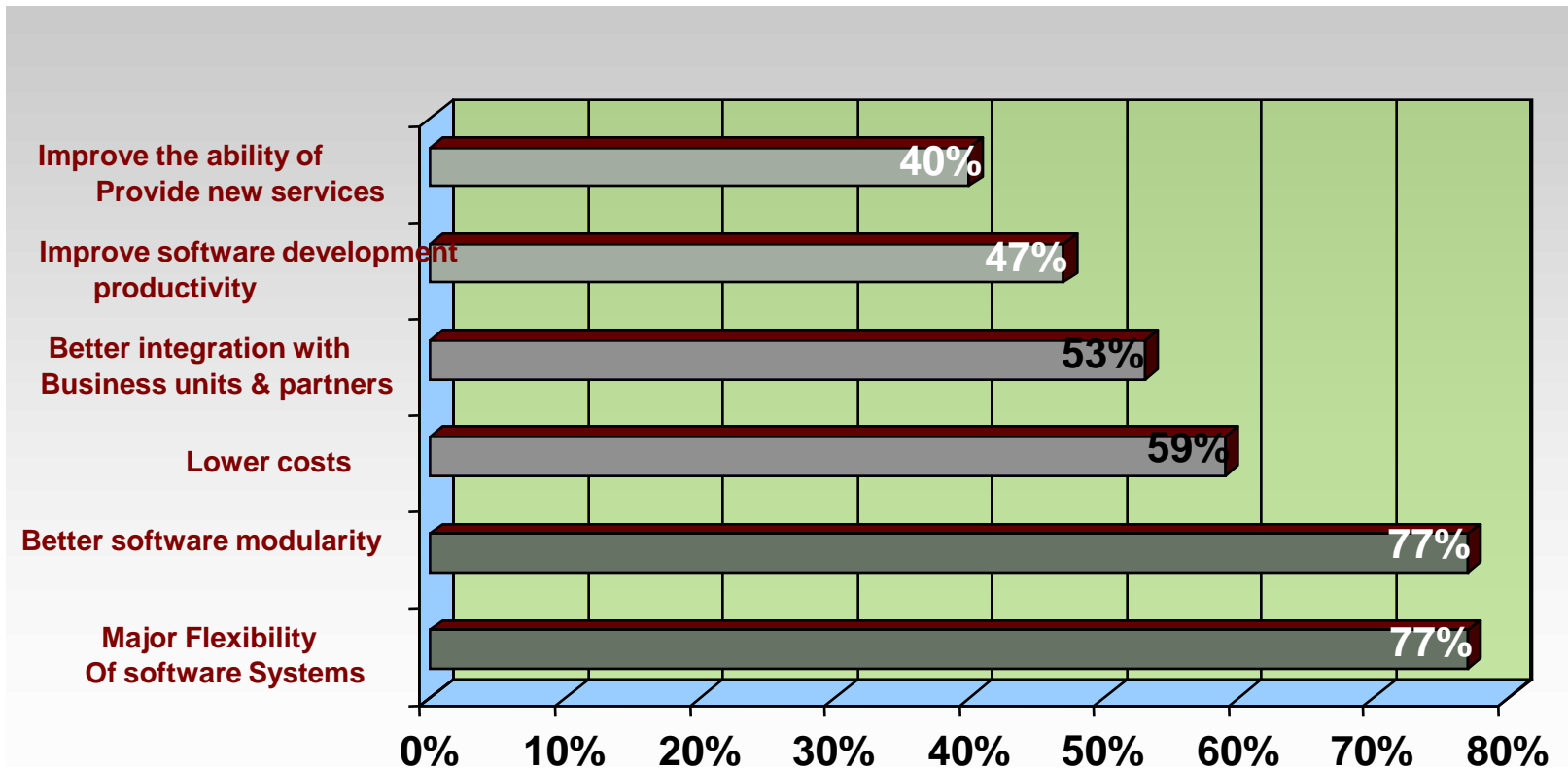


# Business Needs & Challenges

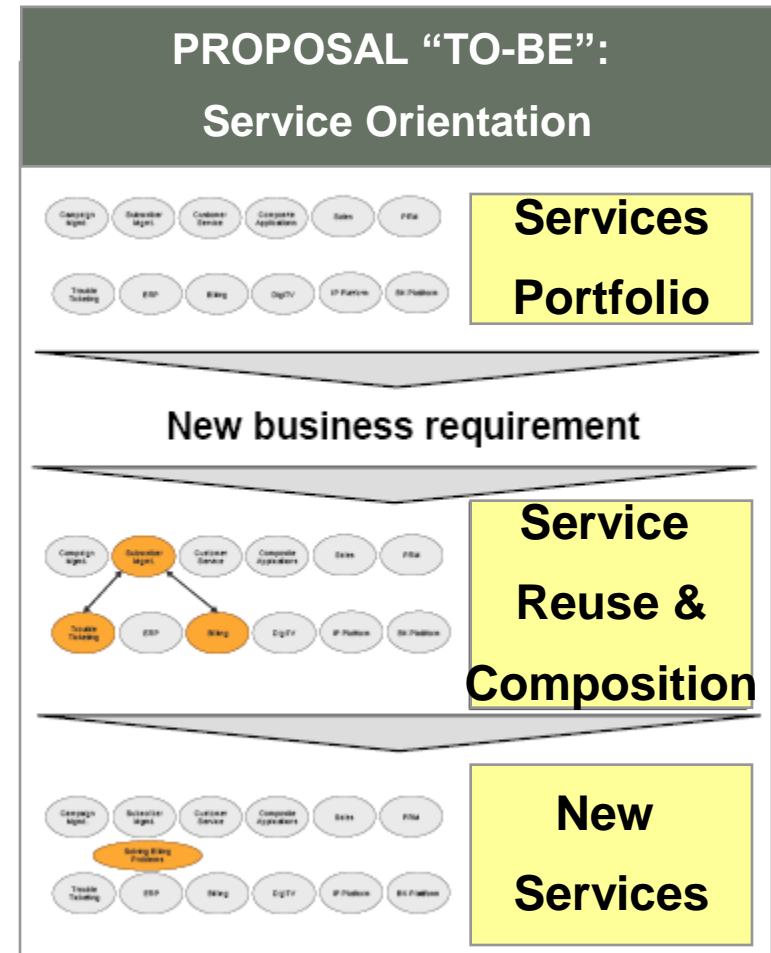
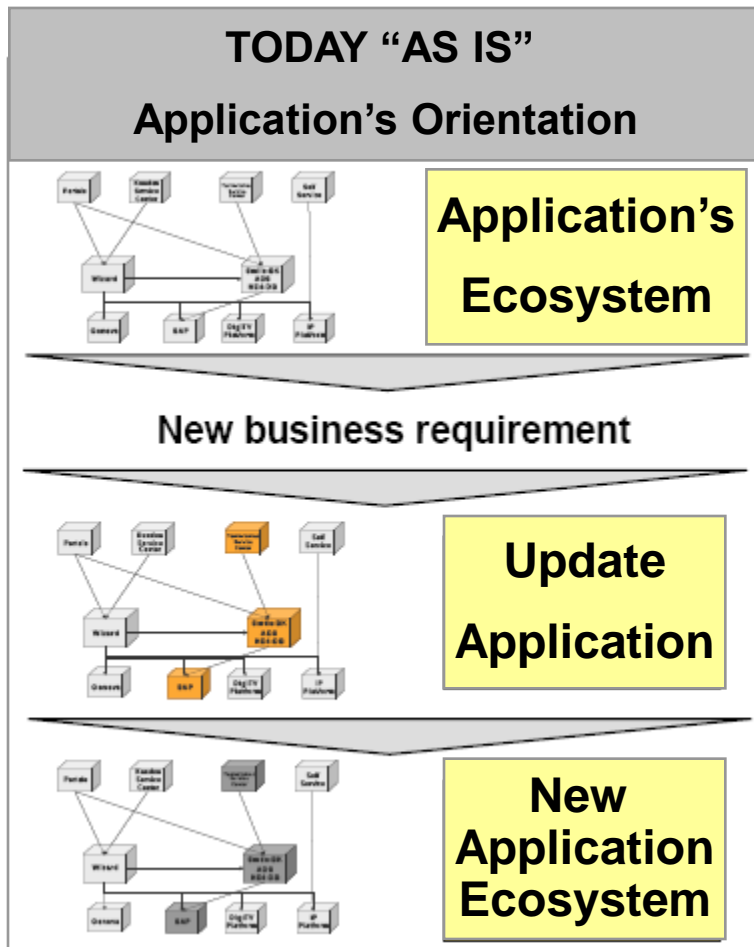
- Reduce operacional costs
- Control and improve the efficiency of processes and services.
- Improve the quality of the information.
- Improve the quality of decisions.
- Improve the collaboration between business areas and eco-system of customers, providers and partners.



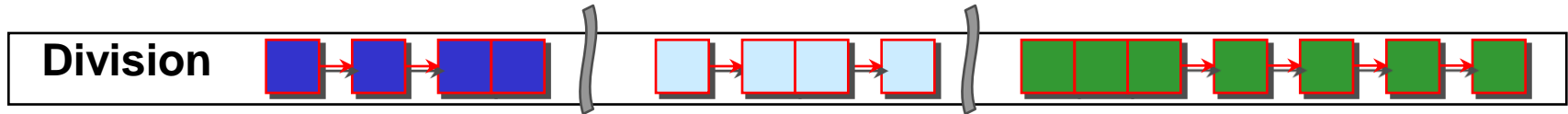
# IT Directors Expectations



# Change of IT Philosophy



# How Are the Business Process Today?



- ✓ **Inflexible**: Hard-coded in systems and applications.
- ✓ **Isolated**: By departments or areas.
- ✓ **Coupled**. Integration: Point to Point, DB Links, Flat Files, Batch.
- ✓ **Low Visibility**. Black boxes. No visibility to the business. Difficulty for making decisions of Directors and Managers.

# What is Service Oriented Architecture?

- ✓ SOA – Service Oriented Architecture is an architectural estyle of bulding software systems, based on the paradigm of service re-use and composition.
- ✓ Software architecture concept focused on service reuse to support new business requirements (Wikipedia).



Reference Model for Service Oriented Architecture 1.0

- ✓ Paradigm for organizing the distributed capabilities that can be controlled by different business domains



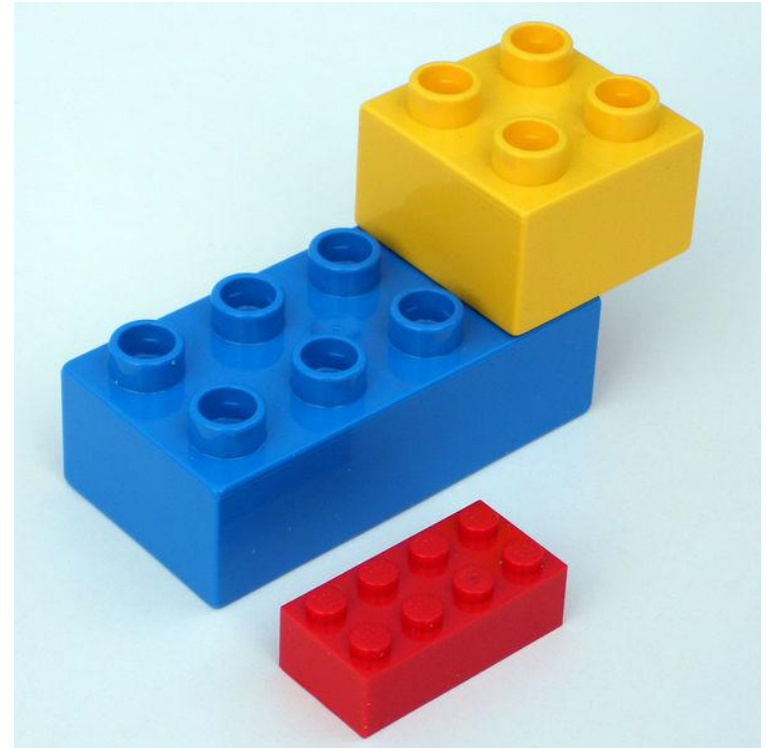
# Services Classifications

## Four Major types include:

- Application Services
- Information Services
- Integration Services
- Process Services

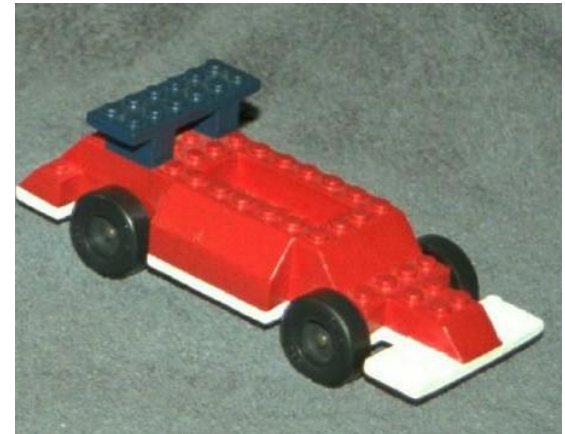
## Other Services:

- Infrastructure Services
- Presentation Services





# SOA - Service Reuse & Composition



# Complementary Technologies & Methodologies to SOA

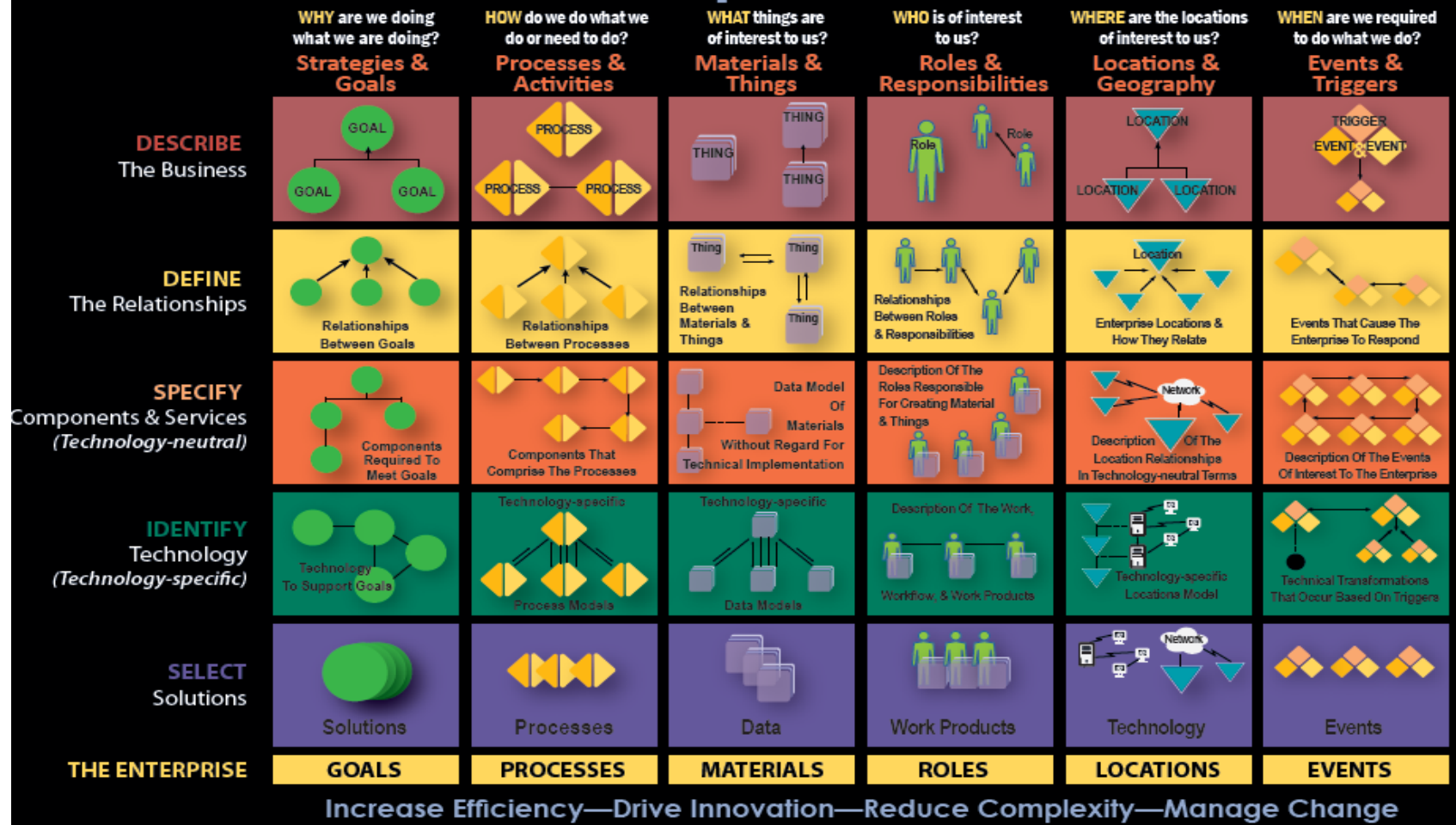
- SOA **MUST** be used in conjunction with other technologies and methodologies from Software Industry for the successful transformation and business improvement:
- ✓ Enterprise Architecture (TOGAF, FEAF)
  - ✓ Arquitectura de Software
  - ✓ Arquitectura de Informacion.
  - ✓ Arquitectura de Integracion.
  - ✓ Arquitectura de Tecnologia
- ✓ IT Governance (ITIL, COBIT, MOF) for Service control and Improvement
- ✓ Business Process Management (BPM, BPMN)
- ✓ Project Management (PMP)



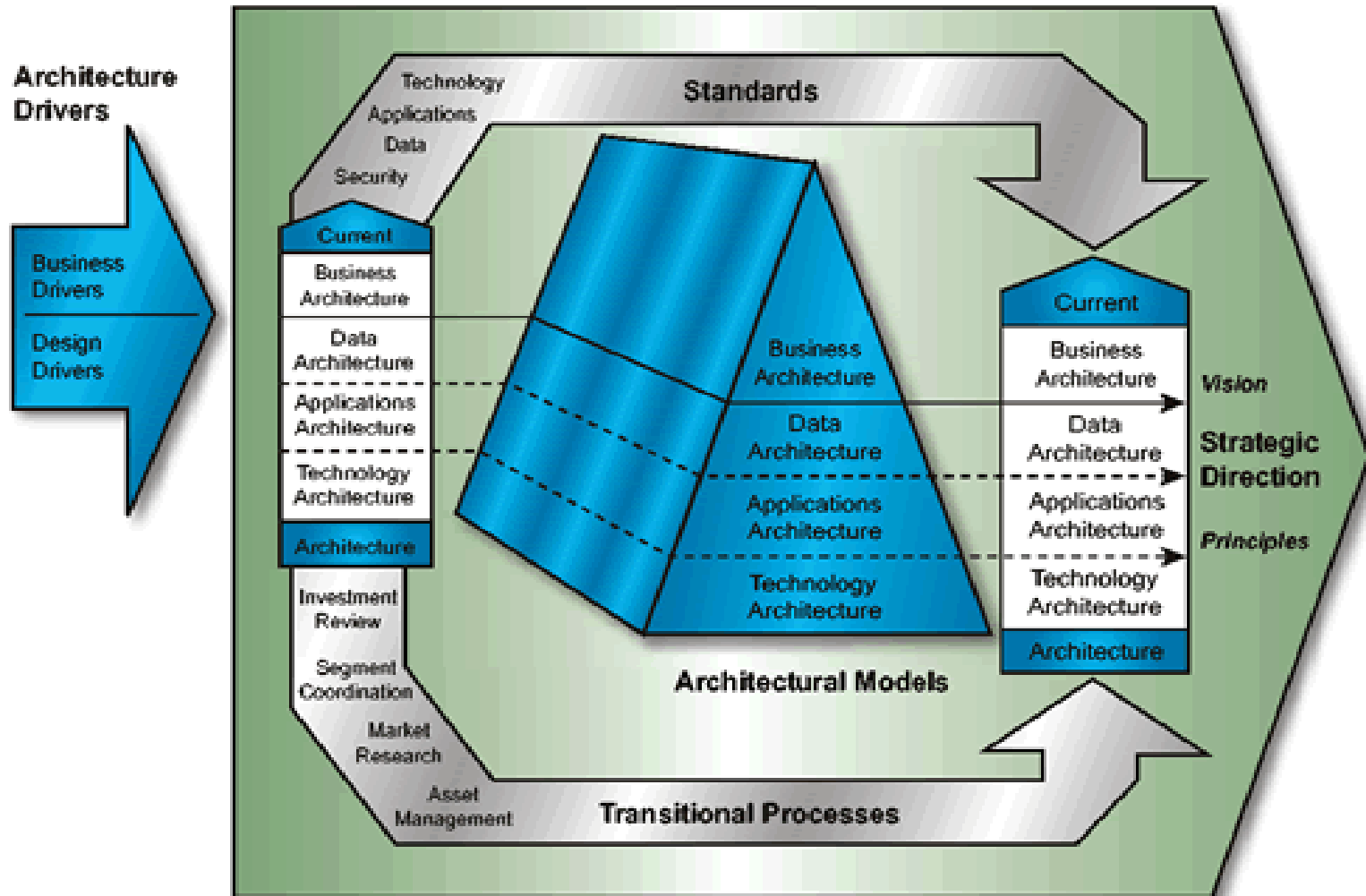
# Zachman - Enterprise Architecture

Enterprise Architecture Center Of Excellence

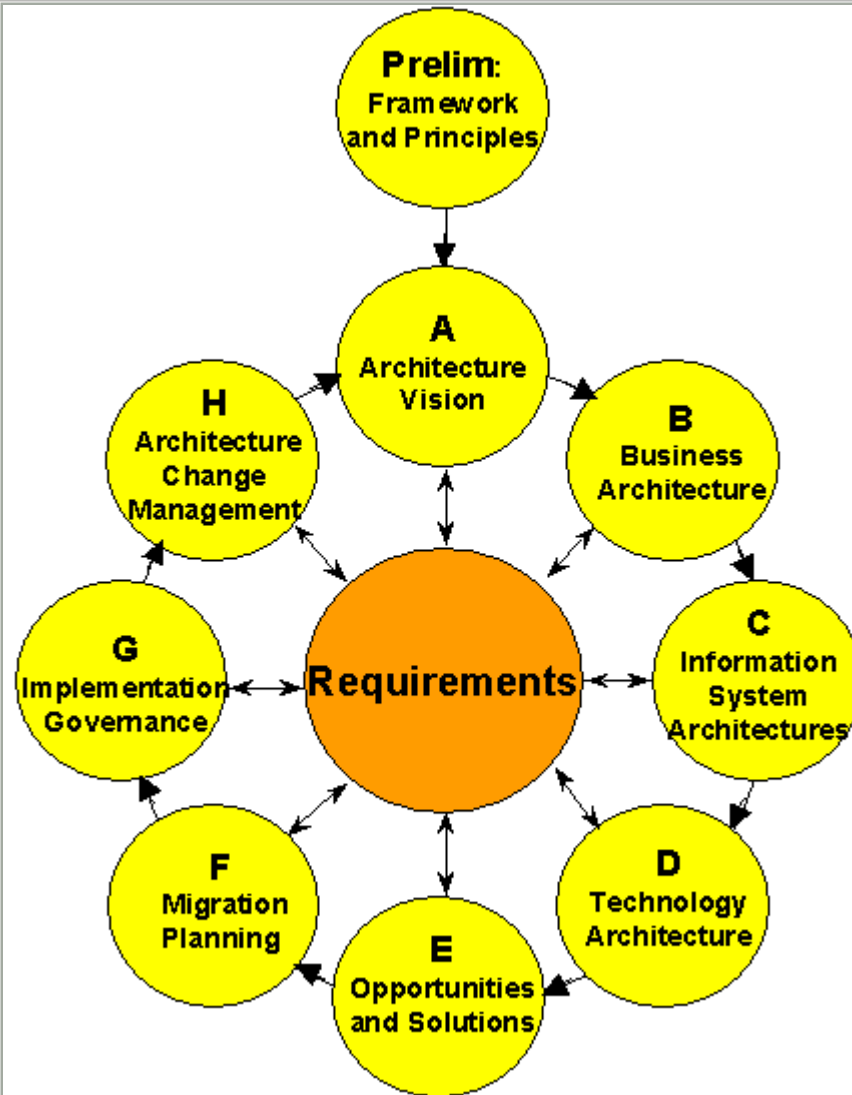
## The Enterprise Framework™



# FEAF - FEDERAL ENTERPRISE ARCHITECTURE FRAMEWORK



# TOGAF - THE OPEN GROUP ARCHITECTURE FRAMEWORK

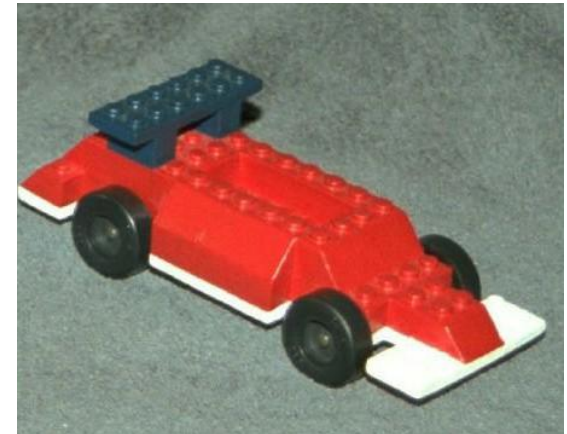




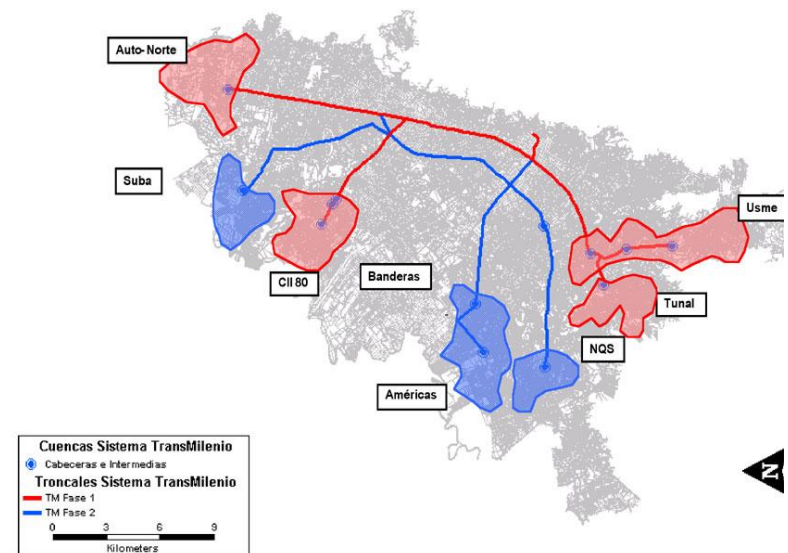
## What are the components of an Enterprise SOA Solution?



# Portfolio of “REUSABLE” Services - Instead of a Massive Bunch of “NON-Reusable” Services



# Enterprise Service Bus: Connectivity, Adapters, Routing, Transformation

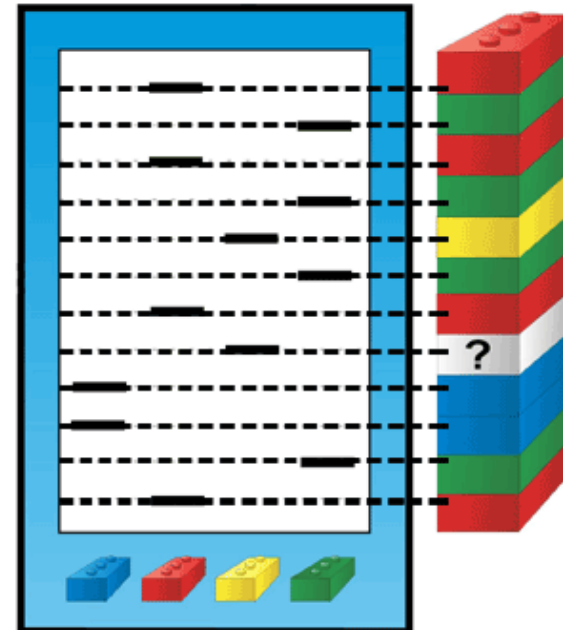


# Business Events



**Every business event generates a business reaction**

# Business Process Engine

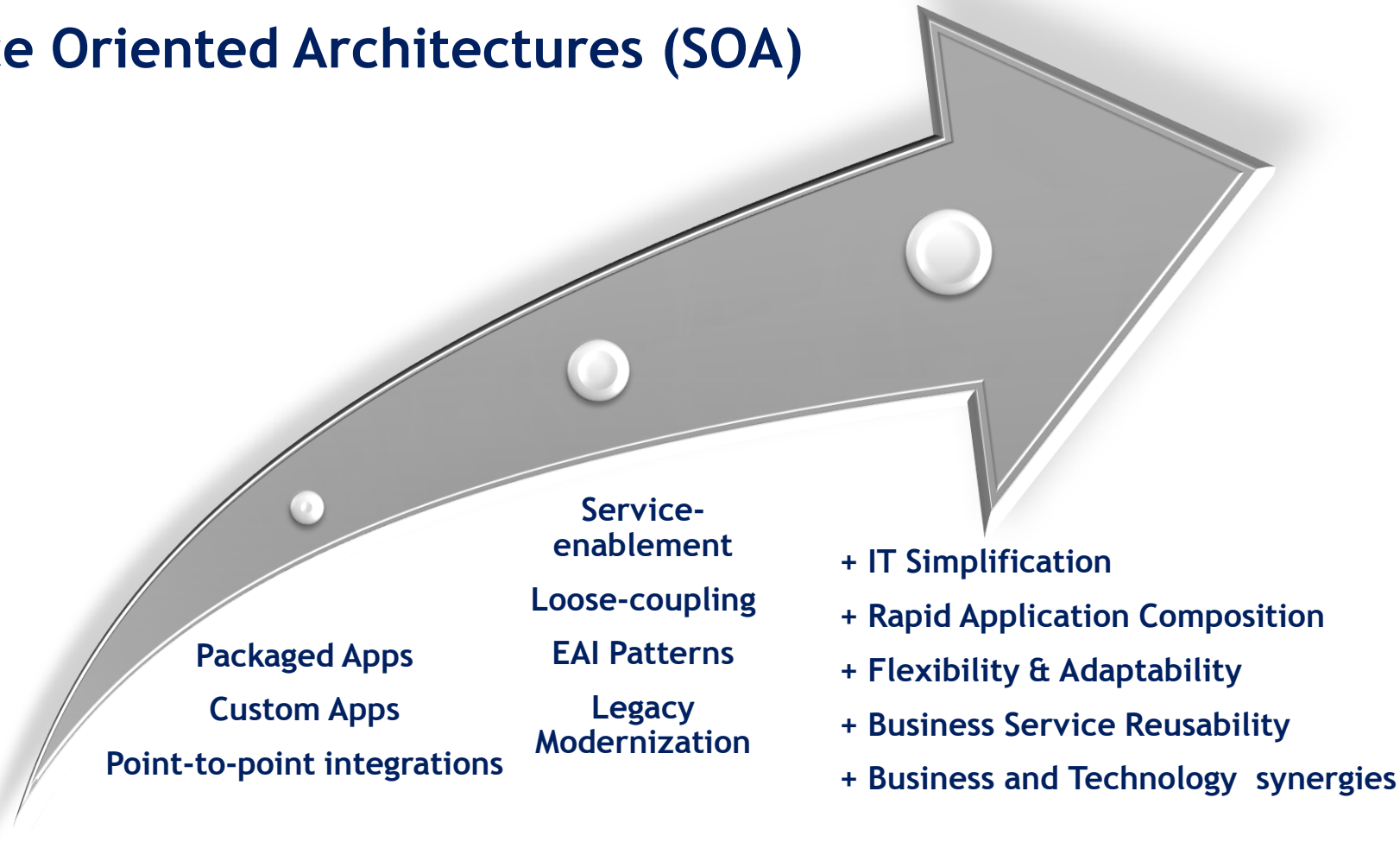


**Coordinates the execution's  
sequence of services:**  
**Information, Application, Integration**

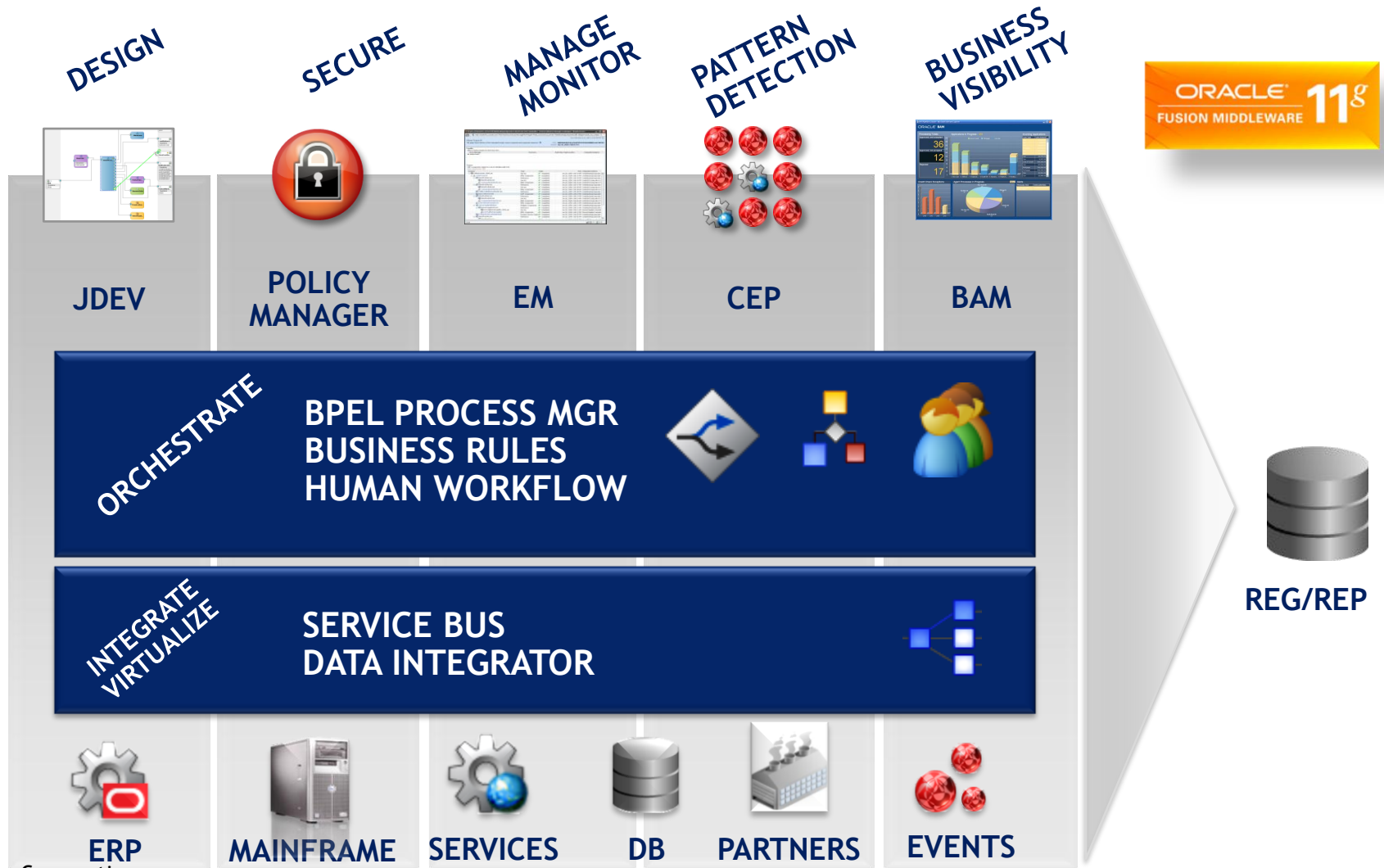


# Technology Evolution to:

## Service Oriented Architectures (SOA)



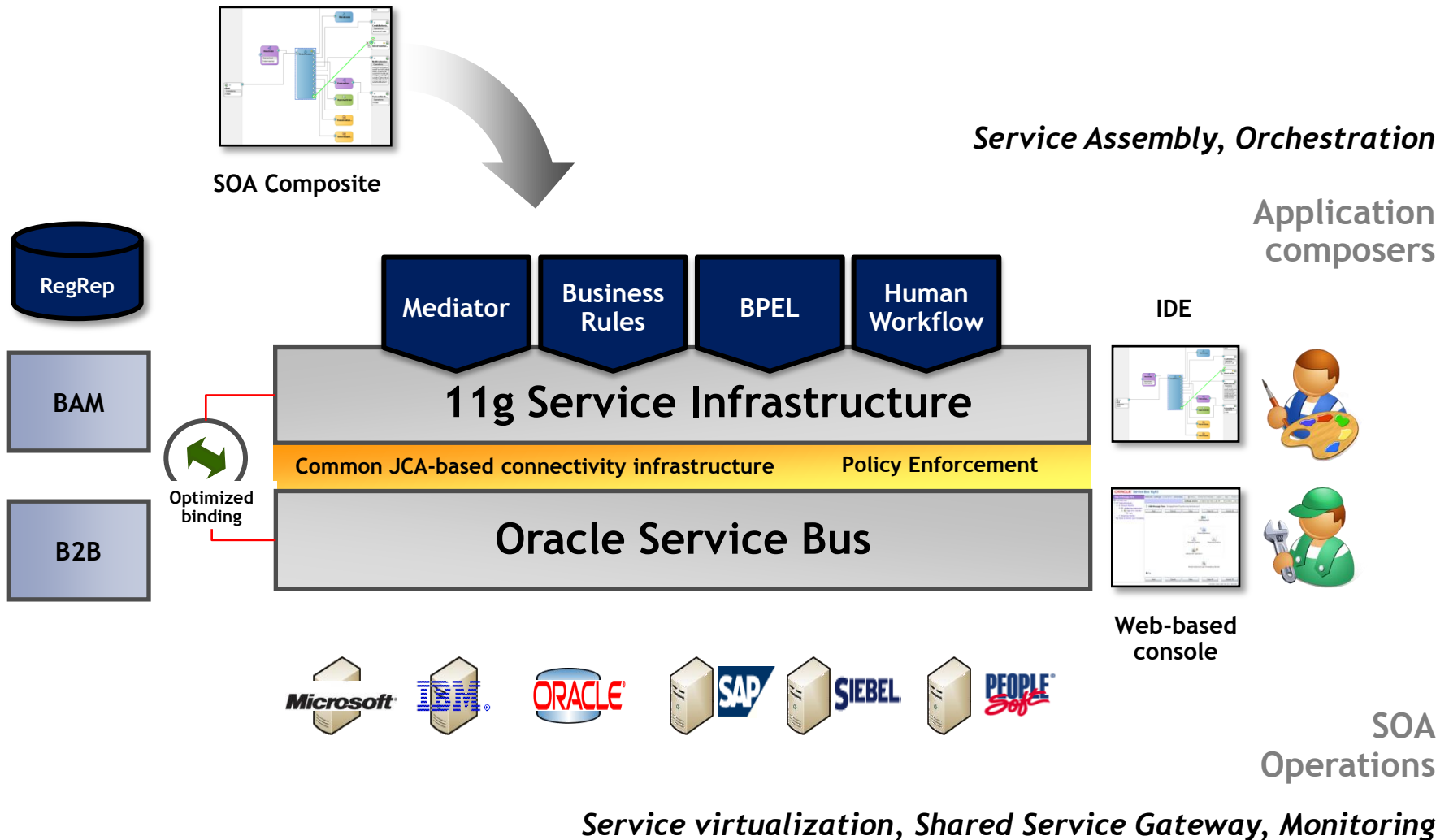
# Service Oriented Architectures | Oracle SOA Platform



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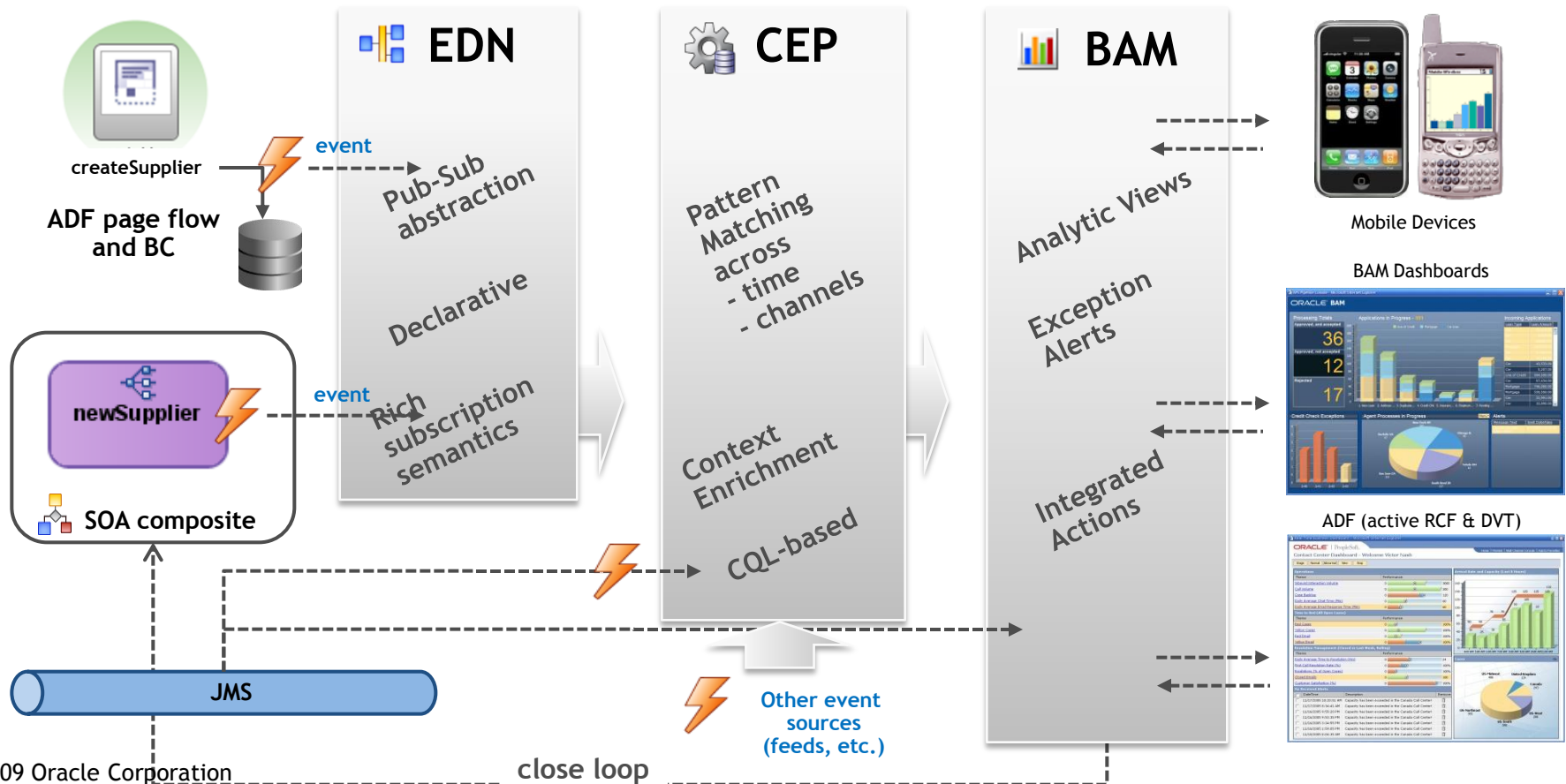


# SOA Integration Architecture



# Real-Time Business Event Architecture

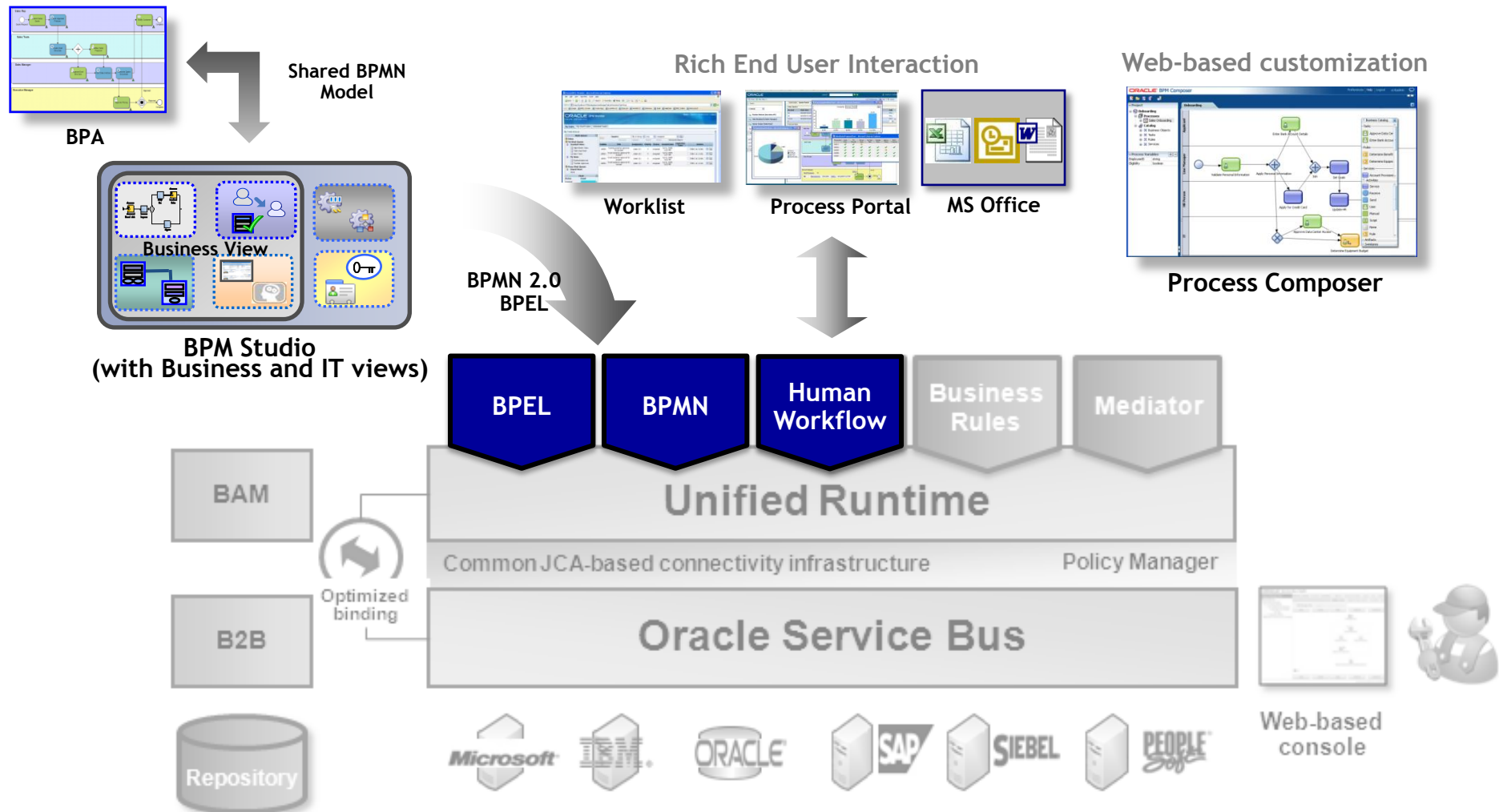
EDA delivers real-time event processing for monitoring, analyzing, and acting on business process optimization.



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close loop

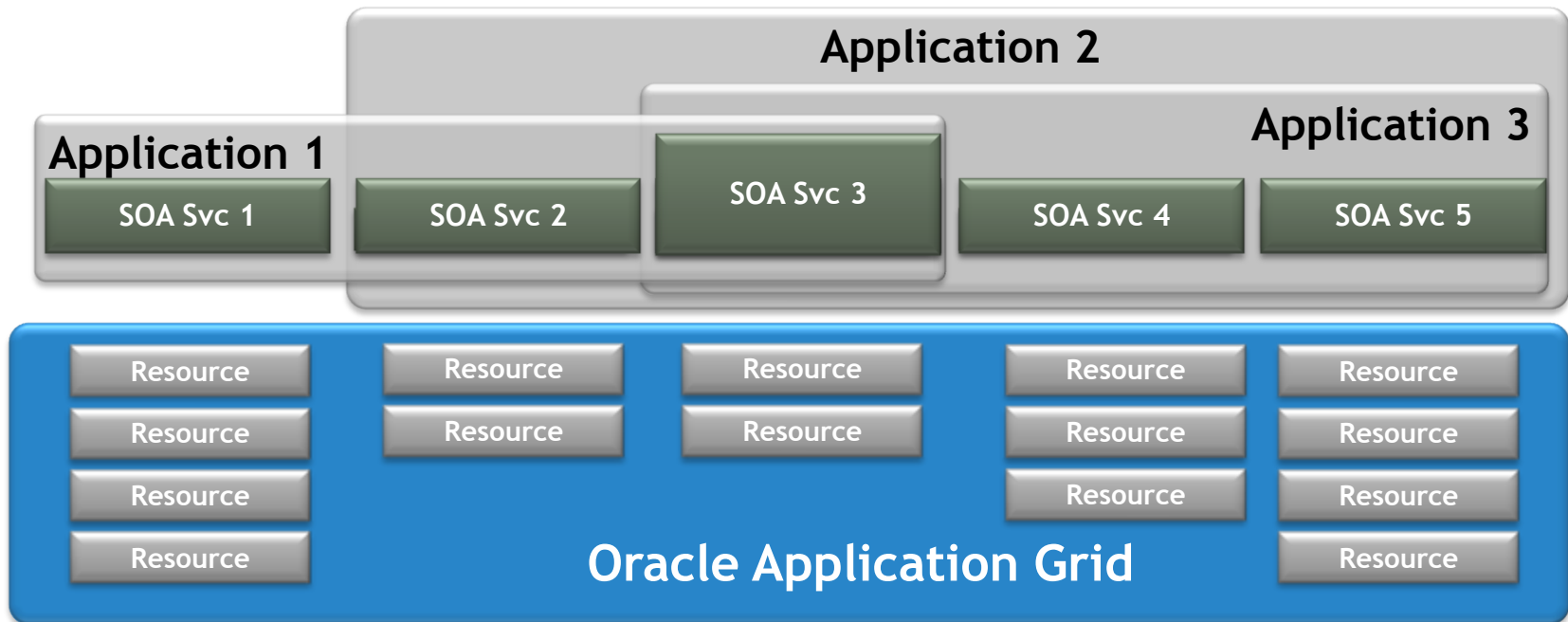
# Business Process Architecture



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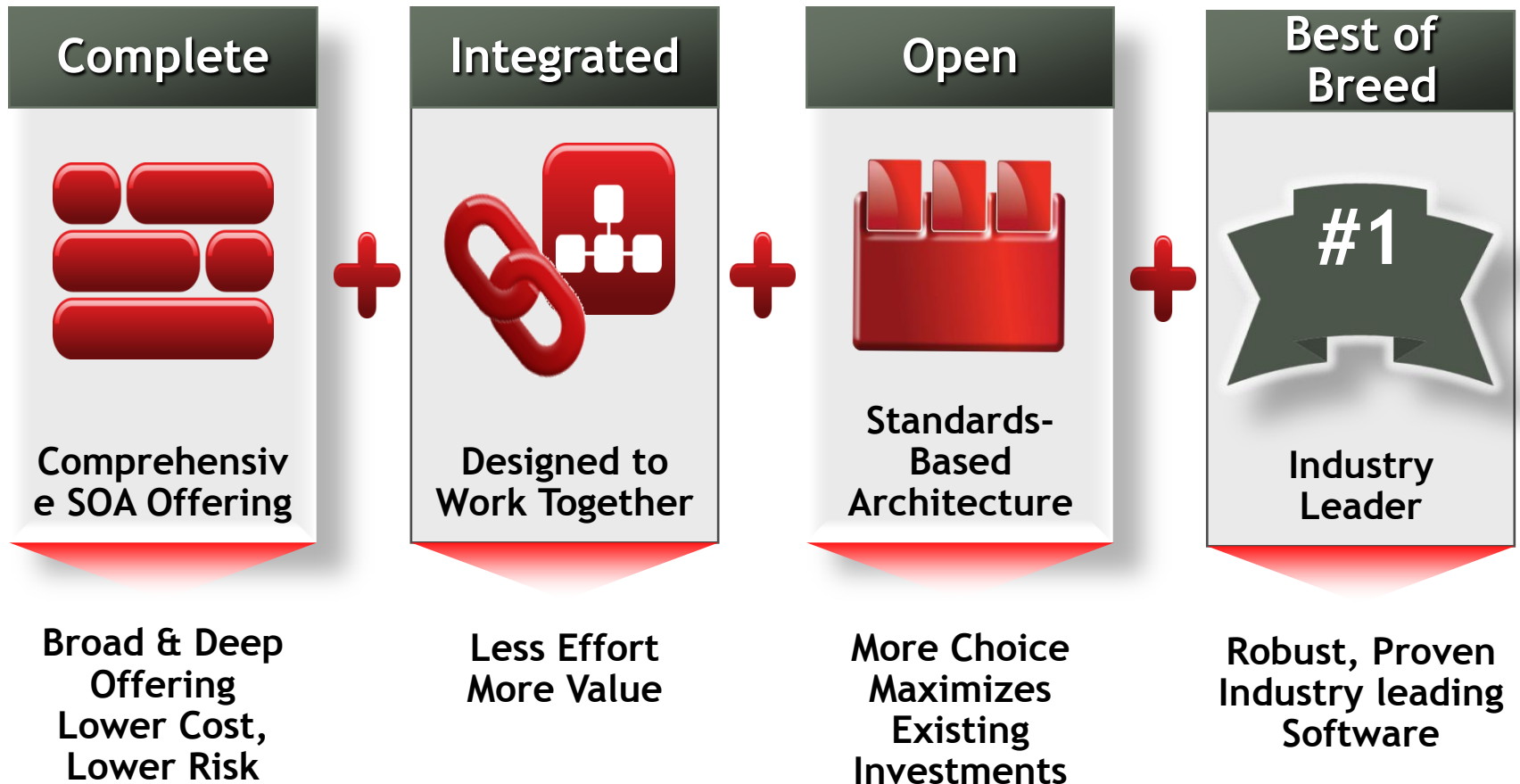
# Scalable Architecture

## Grow your Business on-demand!



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# Oracle SOA Architecture Benefits



# Recommendations

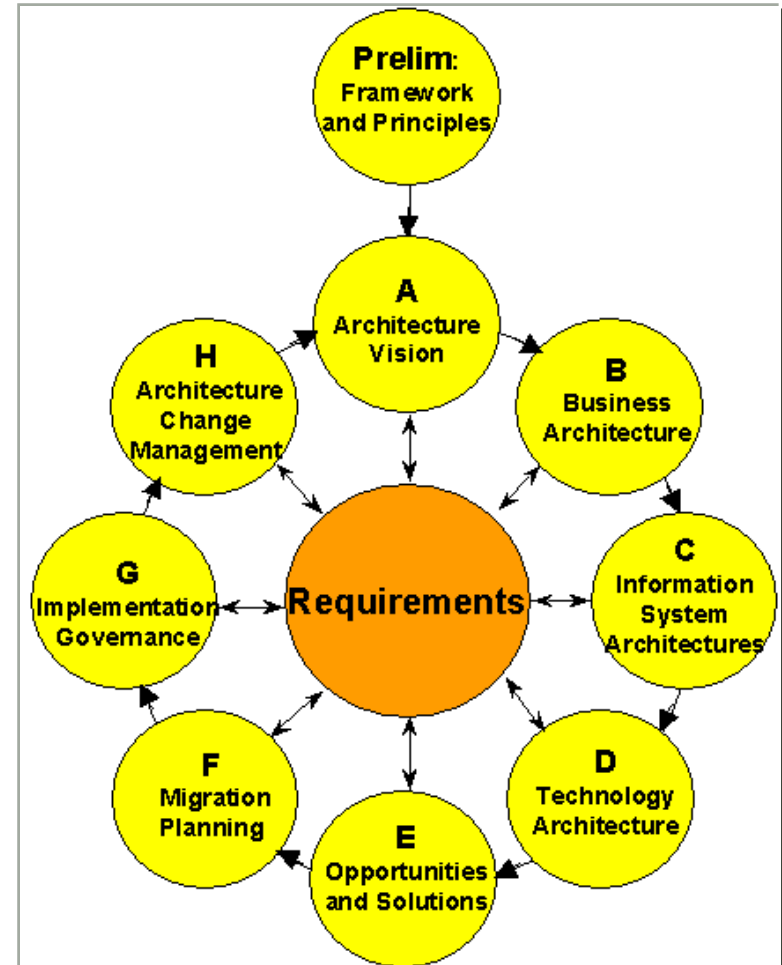
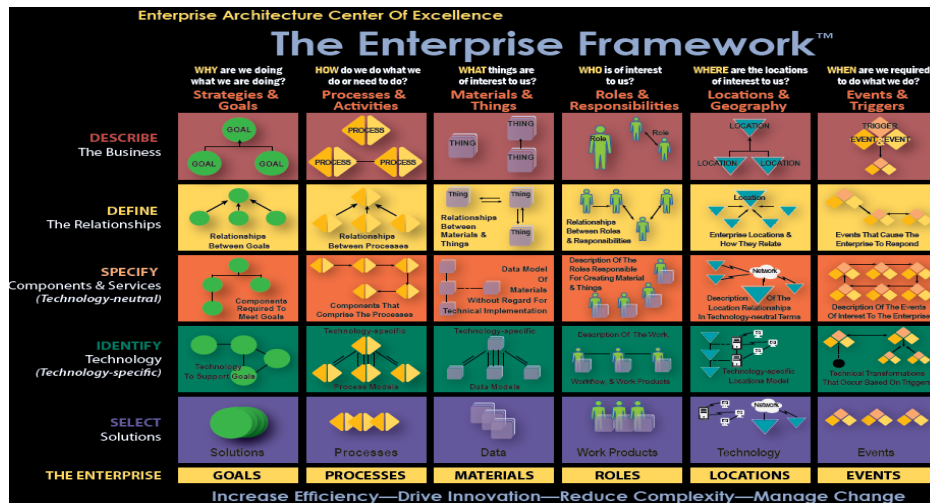
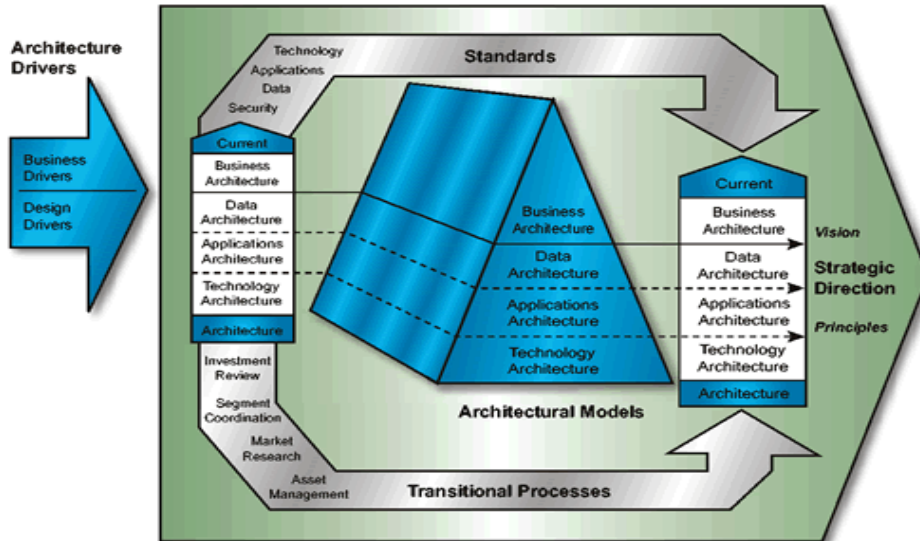
✓ The following cases are recommended for implementing SOA in enterprises:

- Business Process Automation & Monitoring.
  - Secure, non-intrusive application's Integration.
  - Business Dashboards
  - Centralized Auditory and Security
  - Incremental Modernization of Legacy Systems.
  - Information Consolidation and Exposure.
  - Multi-Channel Applications. (Internet Online-Services, Mobile Applications, IVRs)
- 
- **PLAN YOUR ARCHITECTURE! AND GOVERN ITS IMPLEMENTATION TO IMPROVE THE QUALITY, EFFICIENCY AND RELIABILITY OF YOUR BUSINESS!.**





# Define your Enterprise Architecture, NOT ONLY your Technology Architecture



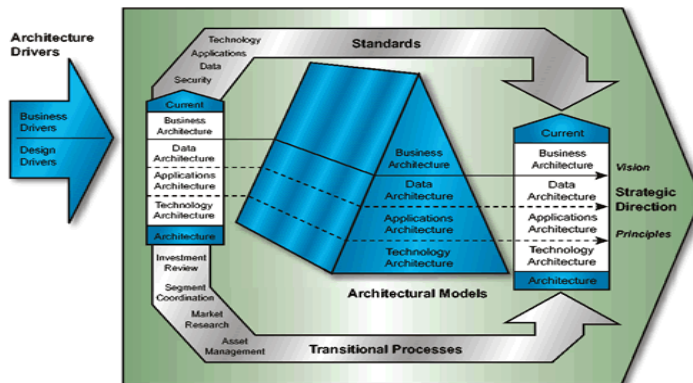
# About ONE IT WORLD



- ONE IT WORLD CORPORATION (USA)
- GENERAL DIRECTOR & CO-FOUNDER | SEP 2009
- [www.oneitworld.com](http://www.oneitworld.com)
- Launch September 2009. Headquarter in Wall street, NY.
- Specialized Services: ARCHITECTURE, IT GOVERNANCE, SOA, BPM
- Industries: Banking | Financial sector | communications | Government.
- Partnerships with major technology and standards organizations in progress!

**Oracle ACE**

**ORACLE**  
TECHNOLOGY NETWORK



Partners: Technology & Standards

**ORACLE**

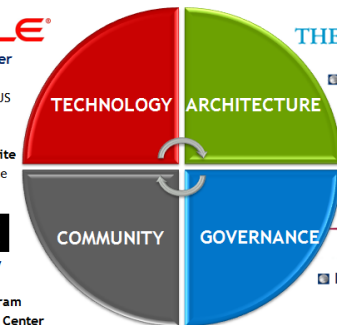
Technology Partner

- Oracle SOA Suite
- Oracle Service BUS
- Oracle BP&L
- Oracle CEP
- Oracle Weblogic Suite
- Oracle Coherence
- Weblogic Server

**Oracle ACE**

Oracle Technology Network (OTN)

- Oracle ACE Program
- Oracle Architect Center



**THE Open GROUP**  
Making standards work®

Enterprise Architecture Partner

- TOGAF
- The Open Group Architecture Framework

**ISACA** 40  
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IT Governance Partner

- Information Systems Audit and Control Association
- COBIT



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