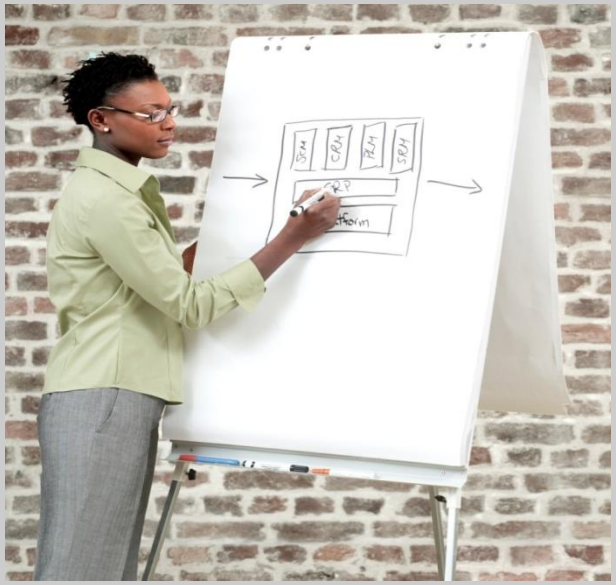
The Value of Enterprise Architecture

- An African Context



Alvin L Paules
Chief Technology Architect
SAP Africa

Johannesburg - South Africa

September 1, 2009

THE BEST-RUN BUSINESSES RUN SAP™

Agenda

1. Where have we come from?
2. Where are we today?
3. Enterprise Architects – A Valuable resource in the Emerging World
4. The role of Stakeholders
5. What is the potential of EA on our Continent & why the goal of “Boundaryless Information” should be a Continental Objective
6. EA as an enabler

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Where have we come from?

- 70’s, 80’s and early 90’s – As a country SA had the best Architects in the world (imho)
  - Sanctions
  - Integration
  - In-house Skills
- Defense / Public / Private – Development of skills base
- IT Technologists as a career path – Architects

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Where are we Today?

- Y2K -> COTS
- Sanctions – COTS solutions became available
- Integration – COTS became the Silver Bullet
- In-house Skills – COTS based
- Business Analysts – Skills Investment
- RealIRM – Zachman / TOGAF

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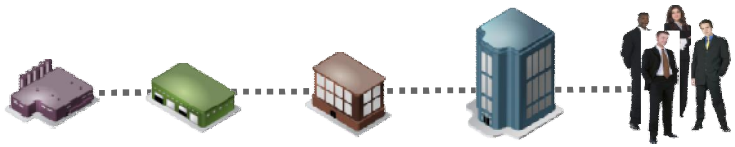
Boundaries Are Being Redefined

Value Chains Are Evolving into Business Networks



Value chain	Business network
Company-centric	Customer-centric
Command and control	Connect and collaborate
Ownership-driven	Relationship-driven
Self-contained risk	Shared risk

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Business Network Transformation
Example: Asian Paints

From selling paint to delivering painted rooms

asianpaints

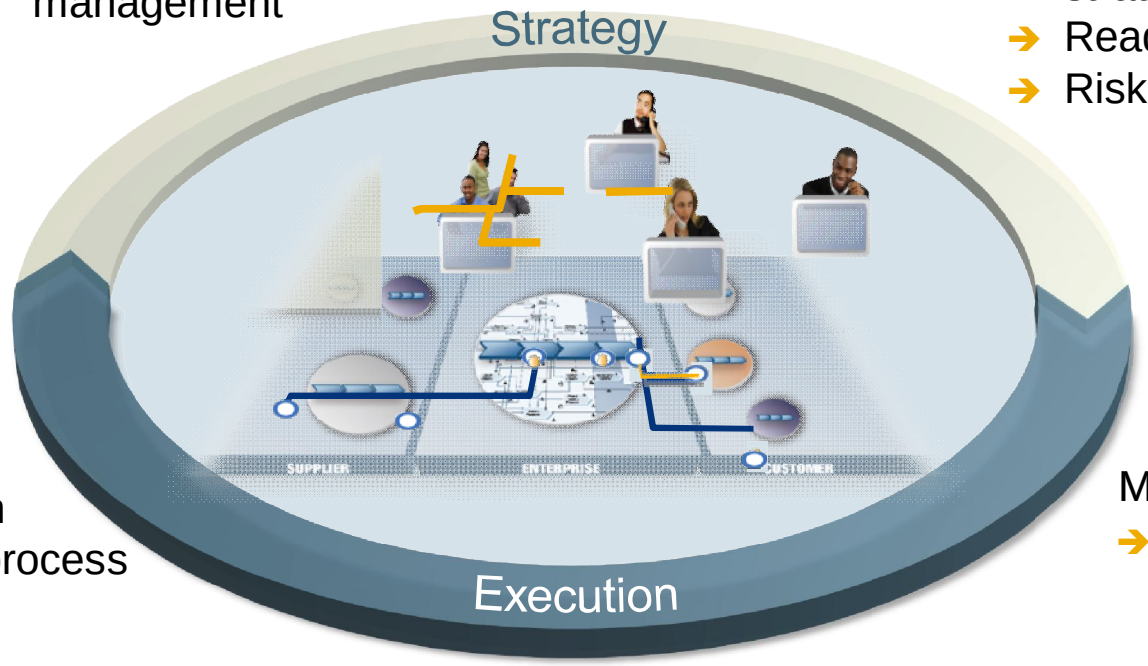
- SOA-based composite application
- Shared end-to-end painting solution
- Collaborative network of vendor, customer, and service providers

Closed Loop Strategy to Execution:
How Are You Closing the Loop?

Strategy
- Set strategy based on insight
- Real-time performance management

Decisions
- Deduced from strategy
- Ready for execution
- Risk mitigation

Insight
- Gained from reliable enterprise data



Events
- Trigger human interaction & process changes

Monitoring
- Compliance and risk

Process Execution
- Execute across business boundaries with the greatest efficiency

Process Refinement
- Required by strategic decisions or business events
- Easy to implement

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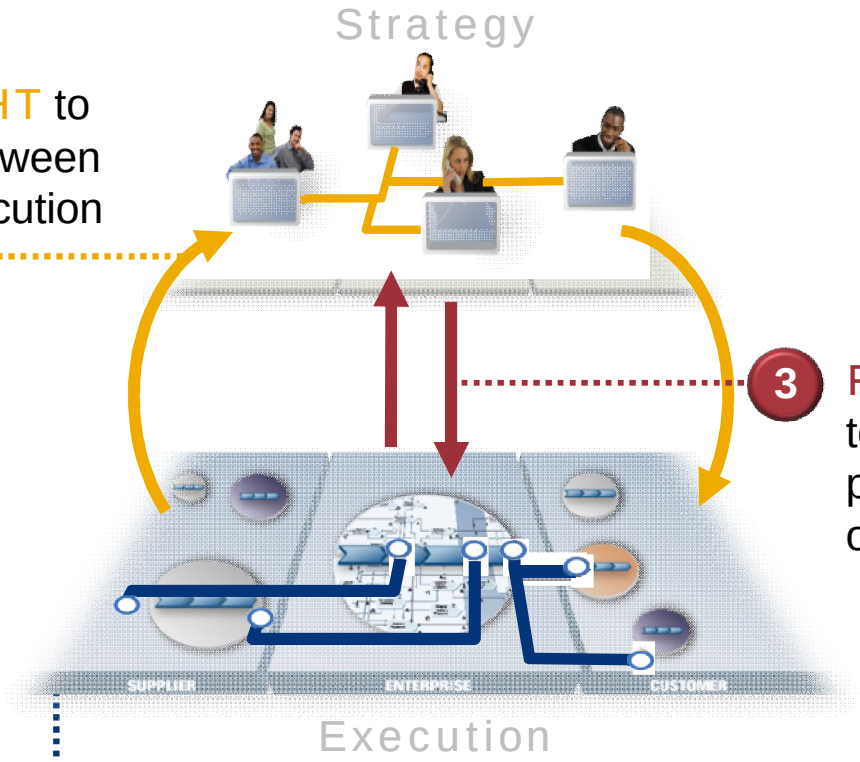
Achieving Strategic IT Agility is Key
Your Business Needs Efficiency, Insight, **and** Flexibility

2 Improve INSIGHT to close the gap between strategy and execution



3 FLEXIBILITY to create new business processes that align operations to strategy

1 Drive process EFFICIENCY within and across your business

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SAP Services for SOA

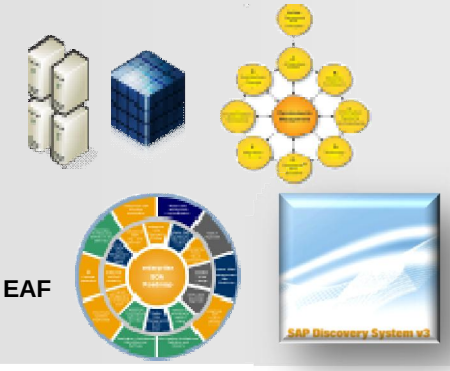
Support from Strategy to Implementation

SAP Services – from SOA strategy to business results

Skills & Training

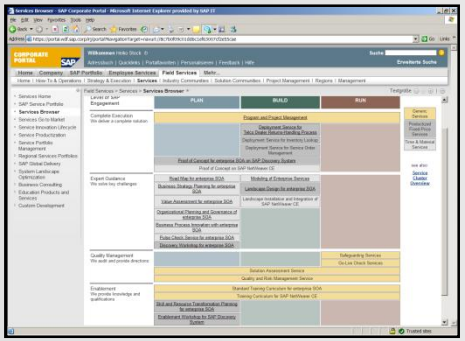
- Advice on IT skill transformation
- Enable your staff for adoption
- Certify your people for success
- Skills re-tooling framework

Tools & Methodologies



- Rapid prototyping on the SAP Discovery System
- Enabling IT evolution with the SAP Enterprise Architecture Framework
- Methodology for accelerated transformation to SOA

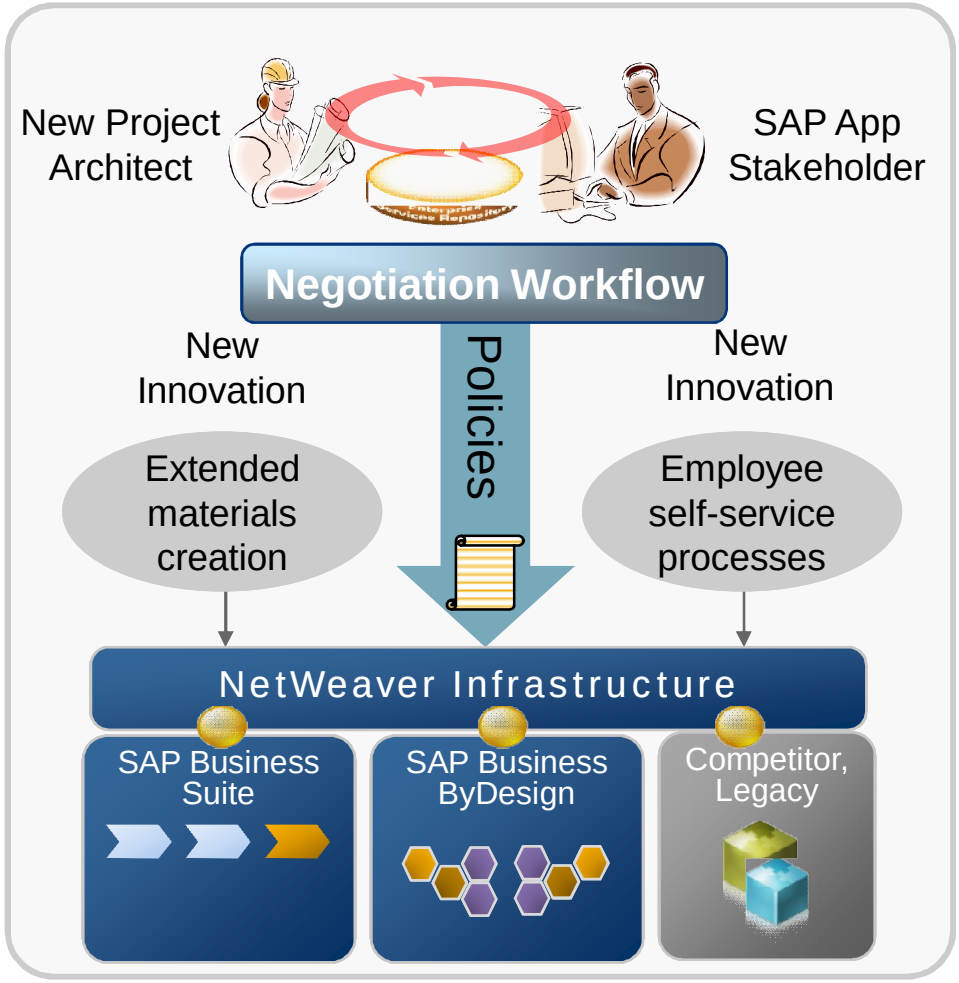
Services & Support



- Comprehensive services portfolio enable customers to execute their IT strategy
- Services can be bundled based on customer maturity and needs
- Reduced risks through end-to-end solution operations, Run SAP, mission critical support and the SAP global support backbone

Safe Consumption with Negotiation and Enforcement

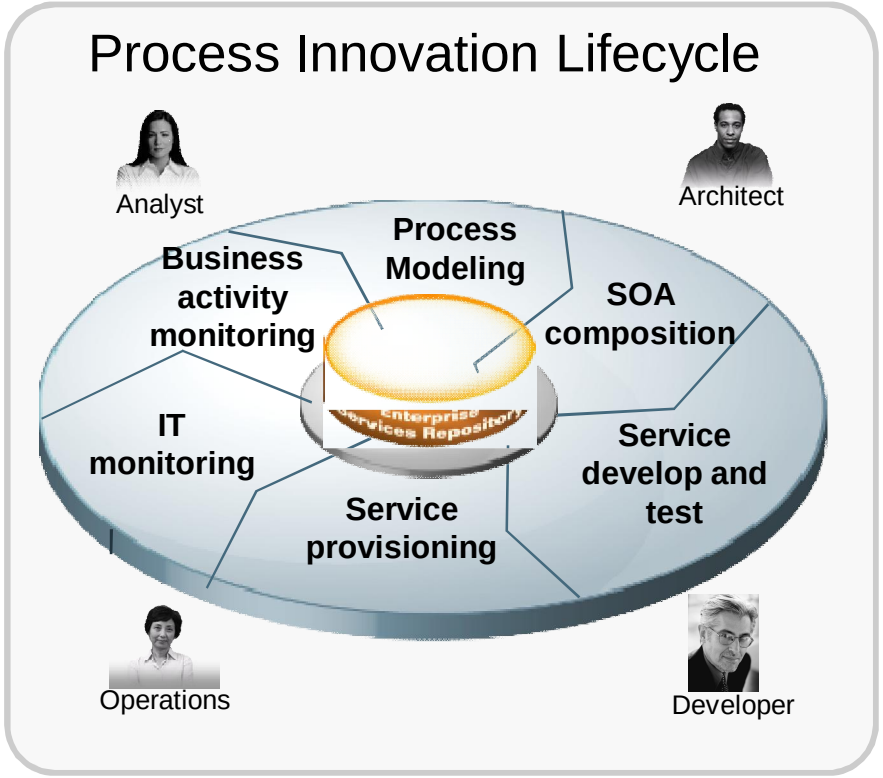
- Negotiate access with stakeholders
  - SAP App stakeholders with owners of new process innovation projects
  - Negotiation workflow and generation of policies
- Generate policies from negotiated behavior
  - Performance SLAs – response times, throughput
  - Security – user authentication, authorization, privacy
- Enforce policies at run-time



Innovation without compromises for a more flexible, agile organization

360⁰ Collaboration Across Roles and Tools

- Unifies all activity around the repository core, with role-optimized tools
- Analysts discover suite processes, model, simulate and document the extensions
- Architects bridge the gap between business and IT, via SOA composition
- Multiple developers skilled in different technologies – BPM, ESB, Java, ABAP, etc.
- Provision services to a distributed landscape
- IT monitoring and BAM with closed-loop optimization



Business and IT collaboration with seamless hand-offs through a holistic lifecycle and role-optimized tools

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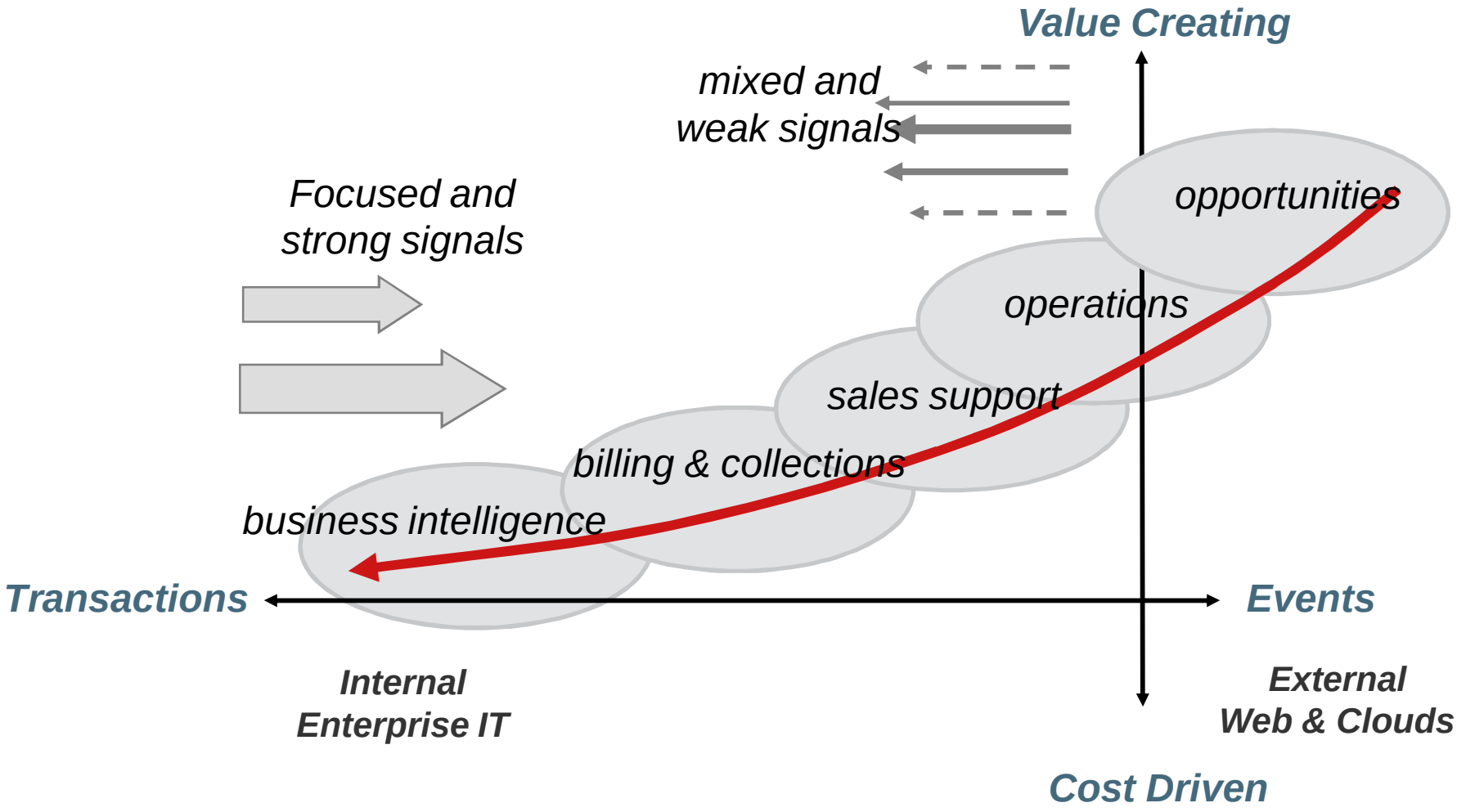
The Value Chain from a Clients Perspective – is now external



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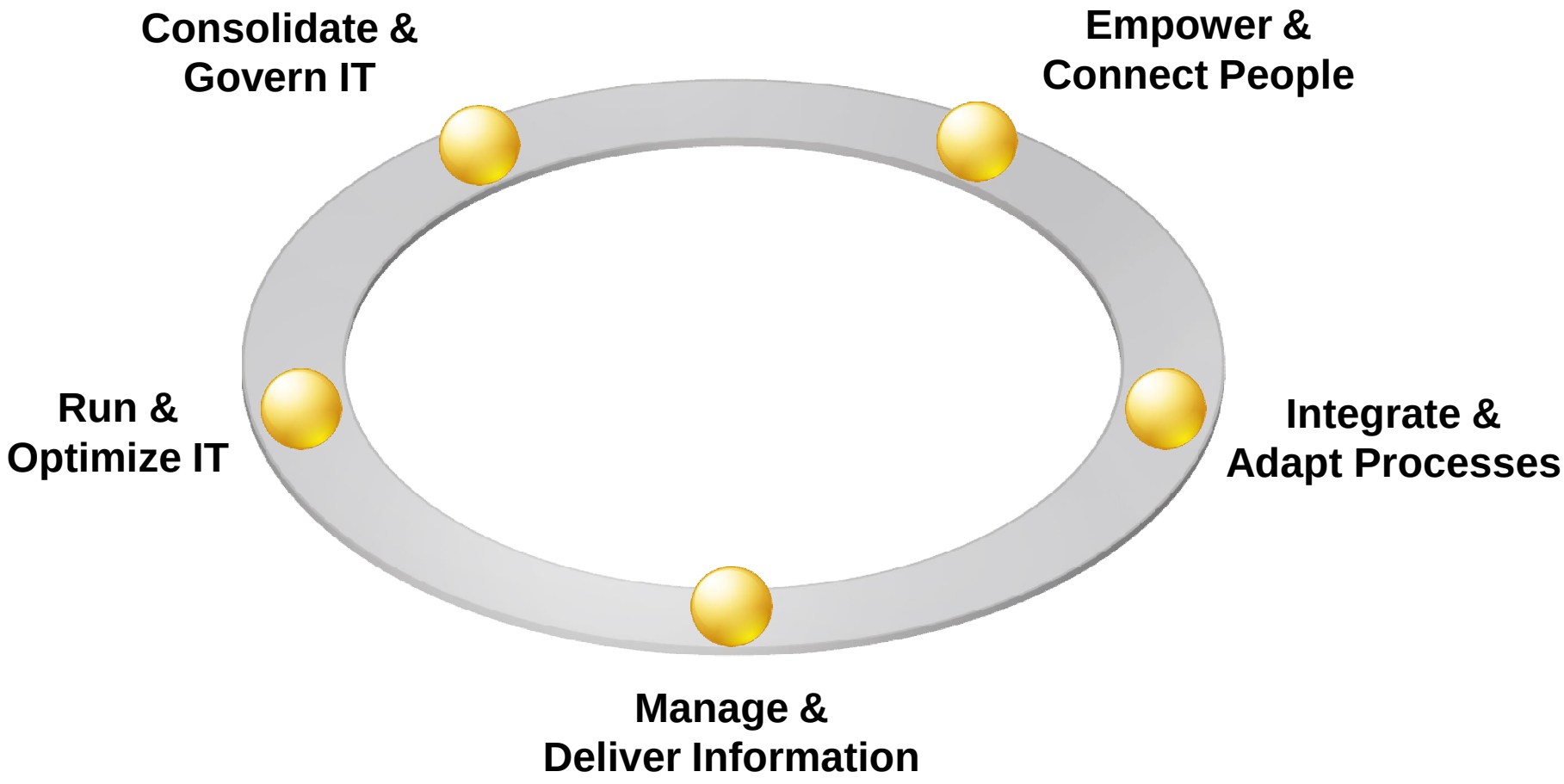
Courtesy of Capgemini

Customers Move Through Many Phases As They Build Business Value Using Technology

A Comprehensive Approach for Strategic IT

Five Ways SAP Helps IT Provide Efficiency, Insight, and Flexibility



Collaboration Across the Continent – Adoption of Global Standards

Establishing the most valuable ecosystem for African Architects with a new dimension of collaboration, innovation and interoperability

Value

Enhanced, Shared Industry Insight

Industry Thought Leadership

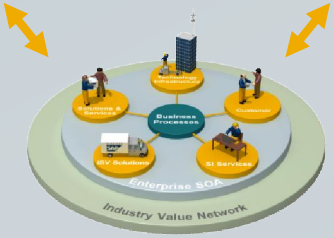
Multi-vendor Collaboration & Alignment

Combined Assets

Expertise

Information

Solutions



Services

Resources

Infrastructure

Strong, Long-term Partnerships

High Value Industry Co-Innovation

Integrated, Multi-vendor Solutions & Services

Business Process Platform Momentum

Work towards a common set of standards

simplicity

innovation

integrity

transnational

teamwork

trust

lean

agility

commitment

empowerment

mutual accountability

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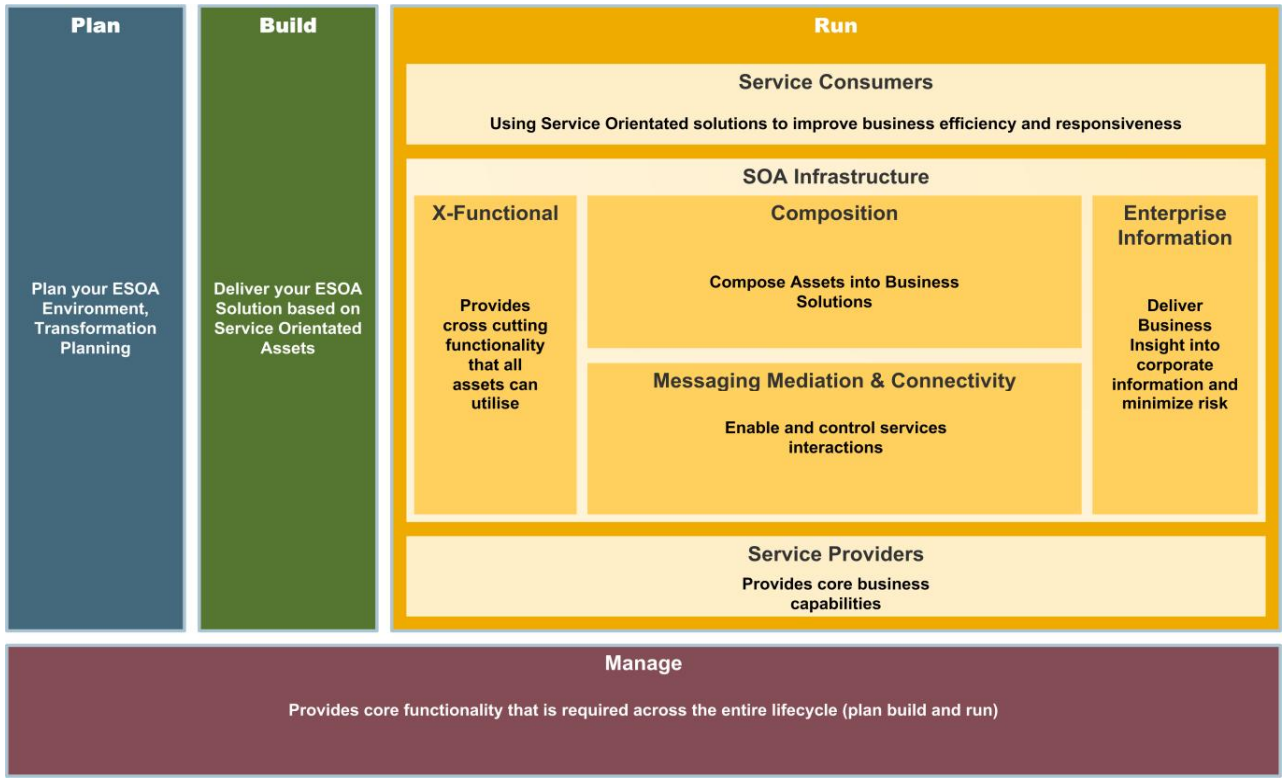
SAP Conceptual SOA Reference Architecture

Definition

The reference architecture is a product and vendor agnostic capability map which provides a holistic overview of the building blocks needed for a SOA blueprint.

Value Prop

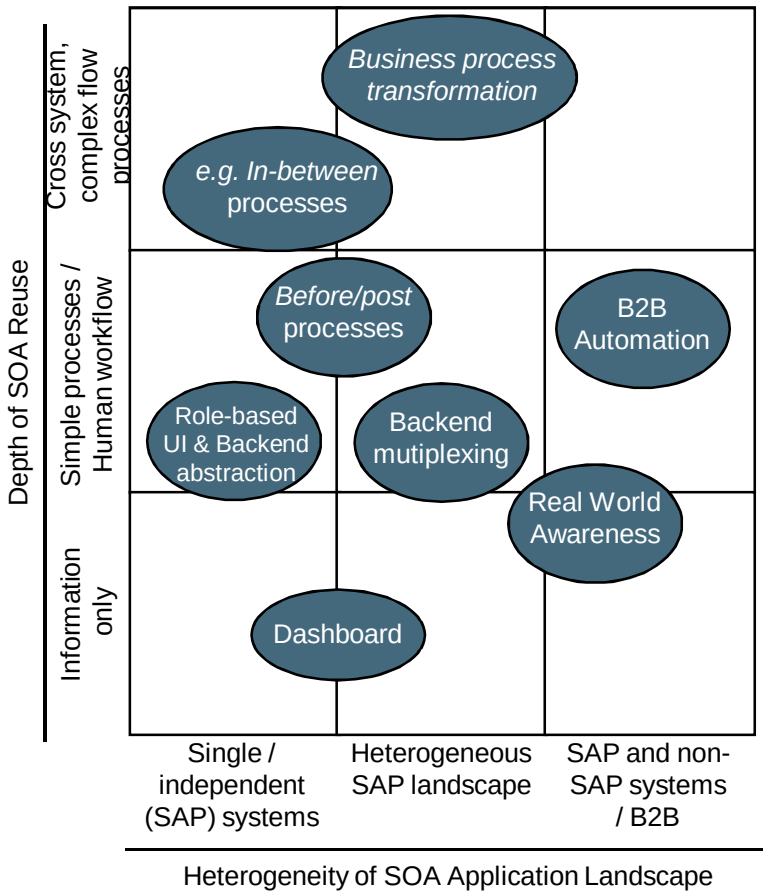
- Common understanding and approach on SAP agnostic Infrastructure and Services.
- Mapping of SOA Solutions and Service Offerings across LoB's.
- Faster Time to Solution via Composite Application Scenarios
- Support effective white space analysis
- Great Communication tool for customer, partners and vendors



Definition / Description of Composite Application Scenario (aka Project Nemo)

Background

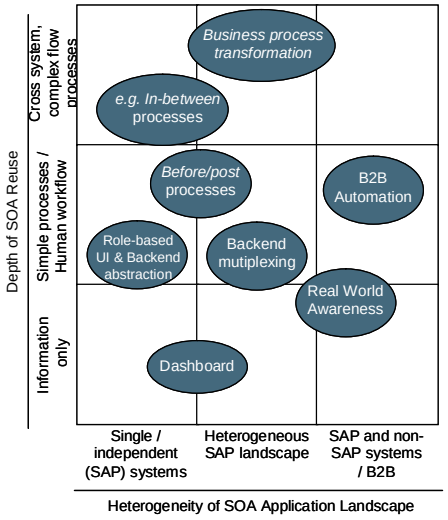
- The Composite Application Scenario's (CAS) were a deliverable of the Research Project "Nemo", conducted by PDEF NW in 2006.
- Goal of NEMO was to collect composite application scenarios as they are implemented or desired by customers and identify recurring themes.
- The description of the CAS was initially done with a 4 dimensional taxonomy, which consist of functional drivers, application landscapes, application topologies and delivery modes, which was simplified to 2 dimensions.
- The CAS enables us to map a "Bill of Materials" (Solutions and Services) for implementation purposes.



Further Contact for Information: Jose Velasco, Christoph Liebig & Dirk Ammermann

Architecture
From a bus requirement to an Implementation Outline

Business-Requirements



Customer Deliverables:

Validation
- Description of the Composite Patterns
- eSOA Showcases
- Success Stories & References
- Value Identification

Bill of Material
- Solutions
- Consulting Service Offerings
- Custom Development
- ES-Bundles

Support
- Best Practice
- SDN
- Heterogeneous SOA
- SAP Training

- Max 10 Questions to map from Business Process to Composite Pattern
- For each Composite Pattern a set of Reference Architecture.
- For each Reference Architecture – defined list of Cross-LOB Offerings (Products, Consulting Services, Showcase Examples)

SOA Reference Architecture

From a business requirement to an Implementation Outline

Business Drives Technology

Inputs

- Business Assumptions
- Business Drivers
- IT Drivers
- IT Principles
- Current IT Landscape
- Process Requirements

Customer Deliverables:

Validation

- Description of the Composite Patterns
- eSOA Showcases
- Success Stories & References
- Value Identification

Bill of Material

- Solutions
- Consulting Service Offerings
- Custom Development
- ES-Bundles

Support

- Best Practice
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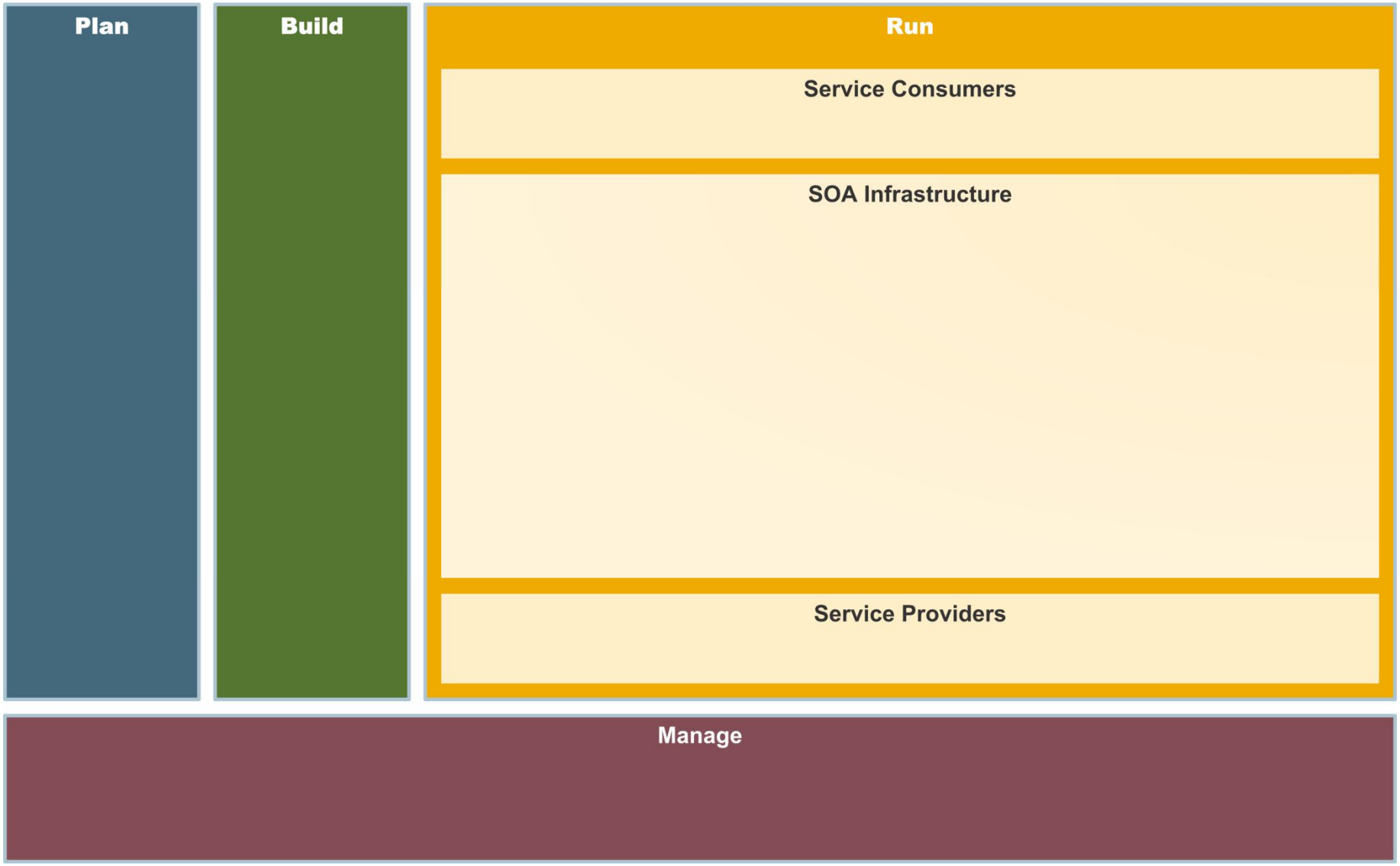
- Heterogeneous SOA
- SAP Training

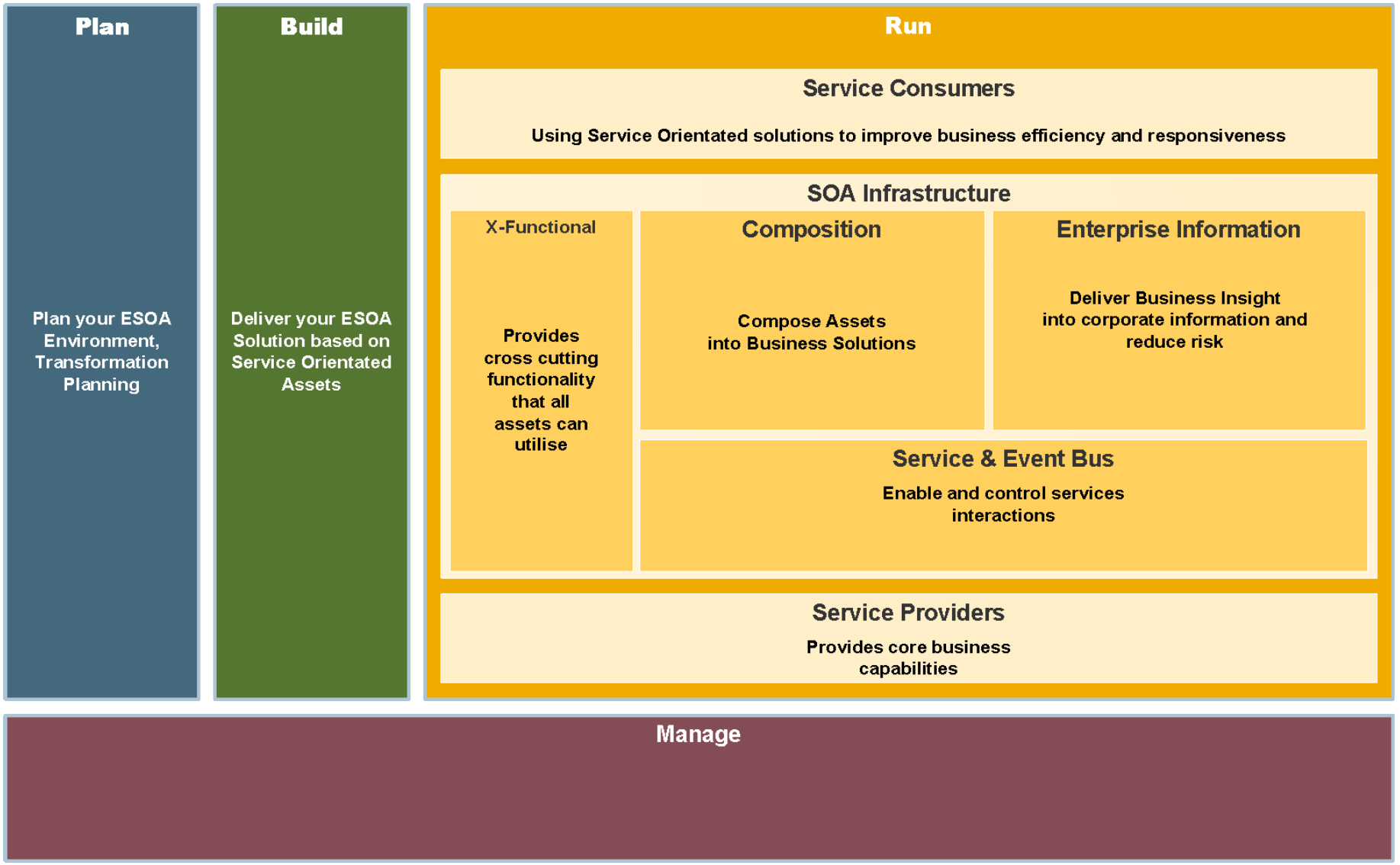
- Define and prioritize the needs – develop a baseline
- For each Process Requirement, identify the needed Capabilities
- Map the Capabilities, in order to develop the target landscape

Reference Architecture Conceptual View Building Blocks - empty

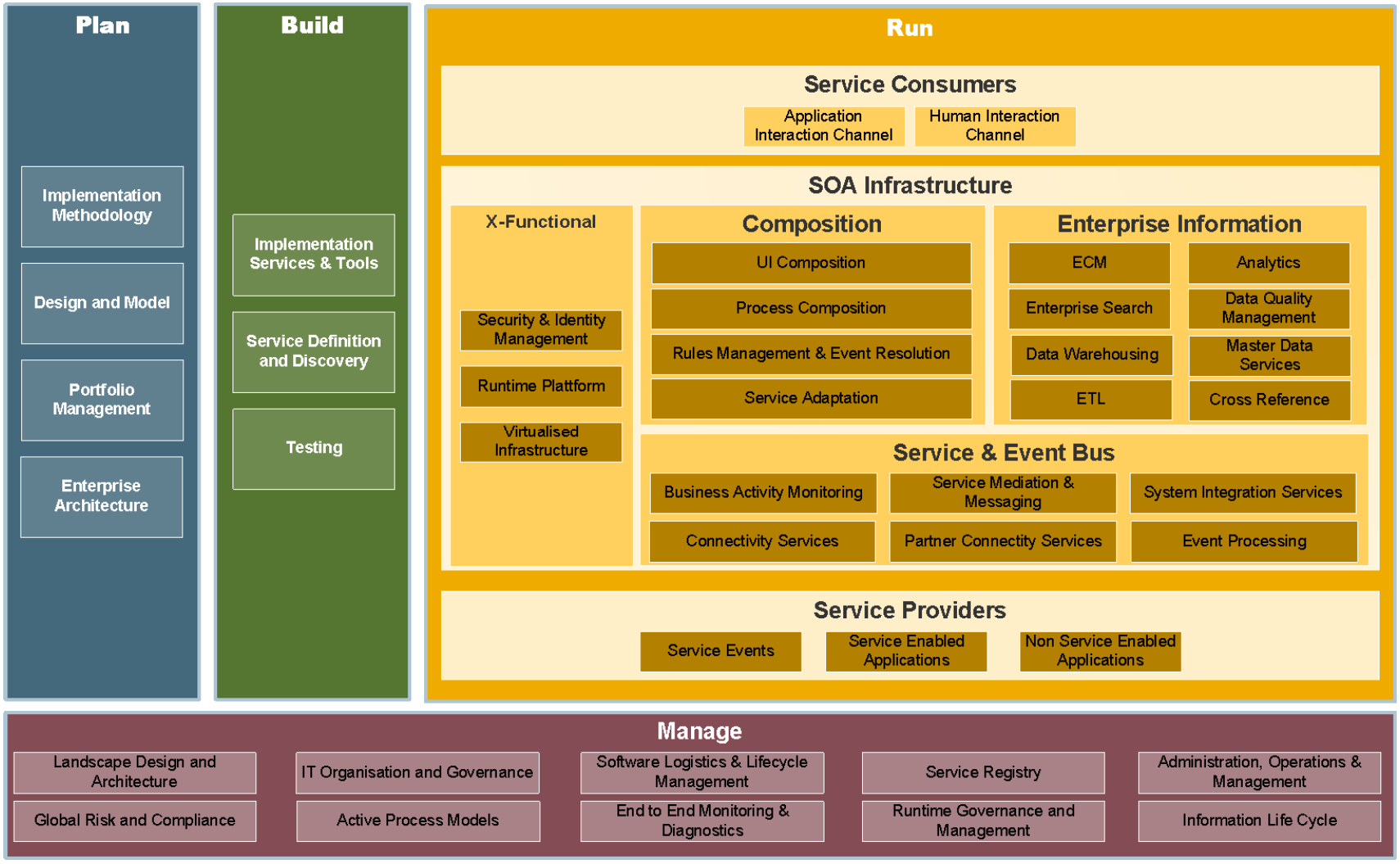


Reference Architecture Conceptual View Building Blocks

Reference Architecture Conceptual View Simplified View

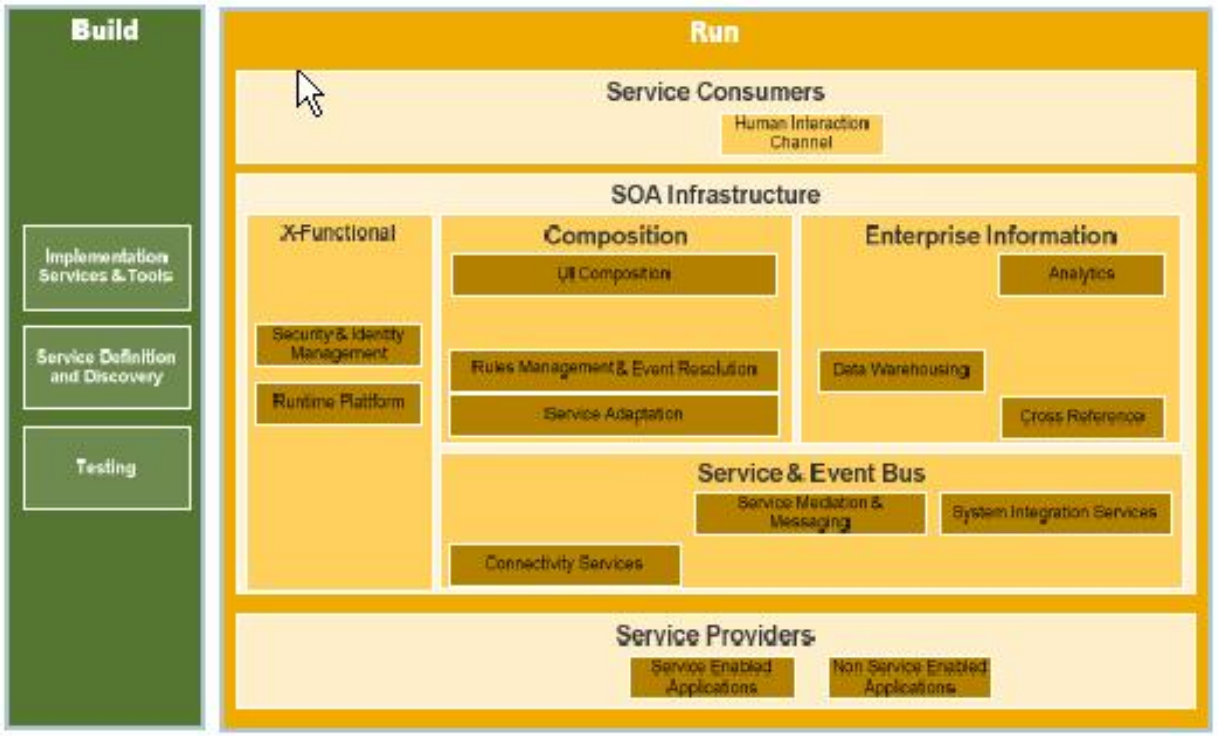


Reference Architecture Conceptual View Detailed View



SAP SOA Process Pattern I

Minimal Landscapes – UI Dashboard Composite



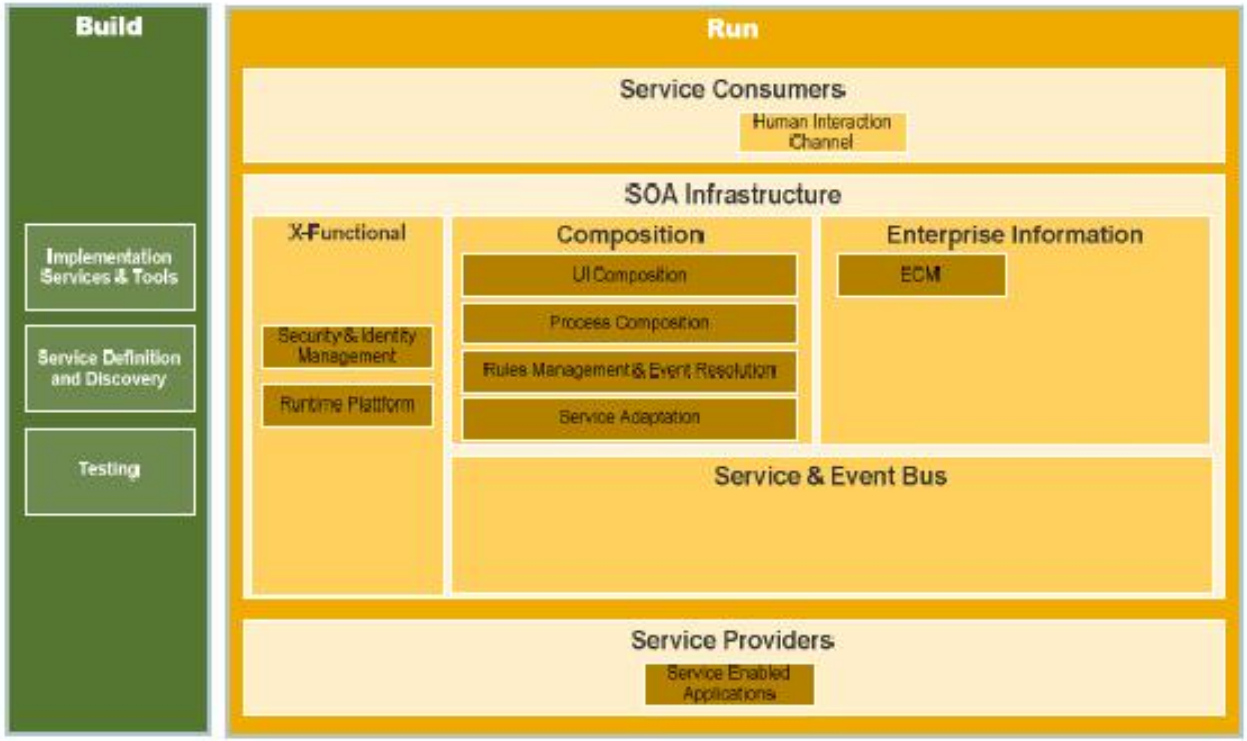
** Minimal conceptual footprint for a UI oriented dashboard Composite **

* Non service enablement needed * Multiple S2S access *

* Tx & Analytical View / EIM needed * BRM automating decisions *

SAP SOA Process Pattern II

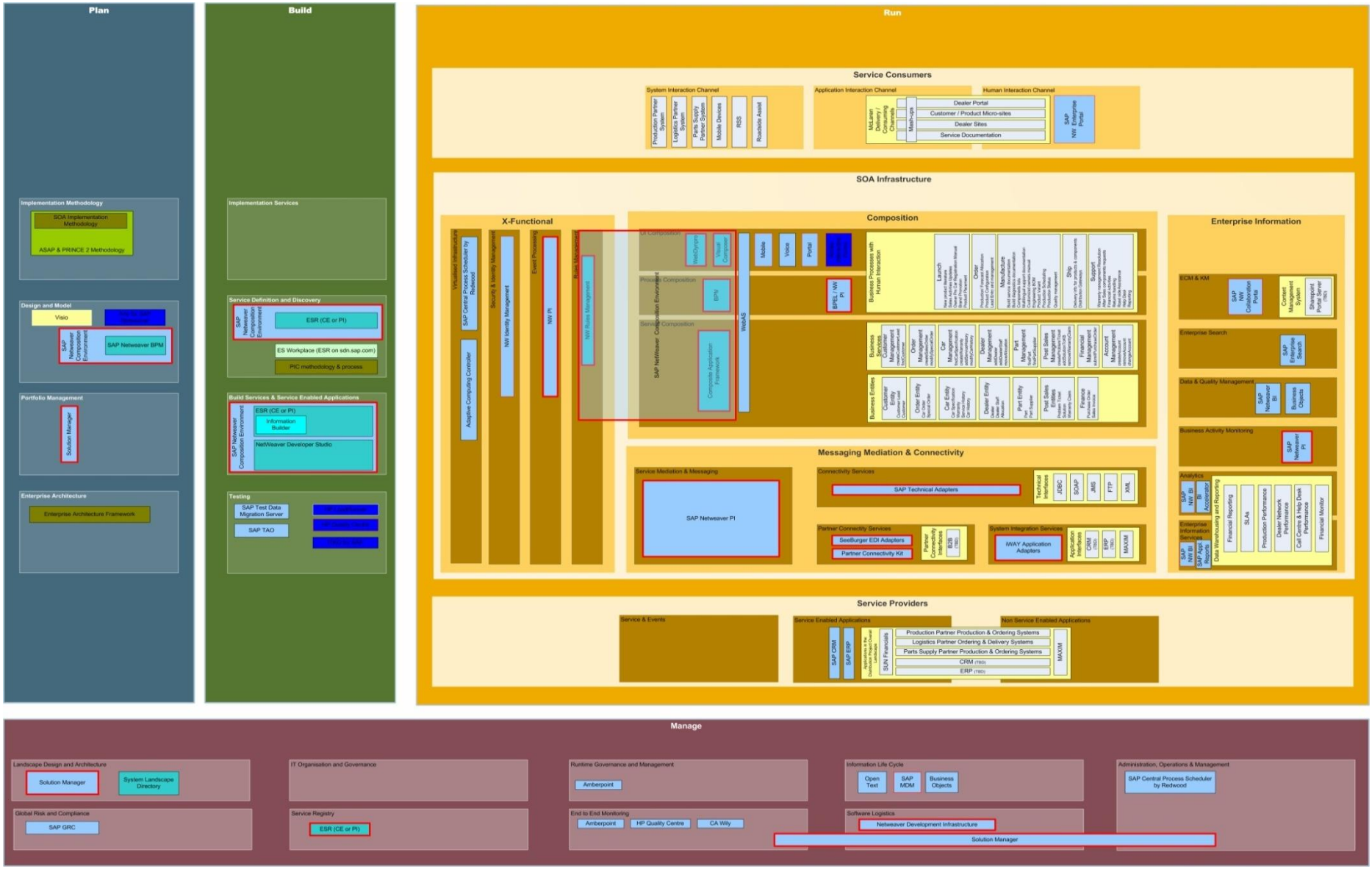
Minimal Landscapes – Before / Post Processes



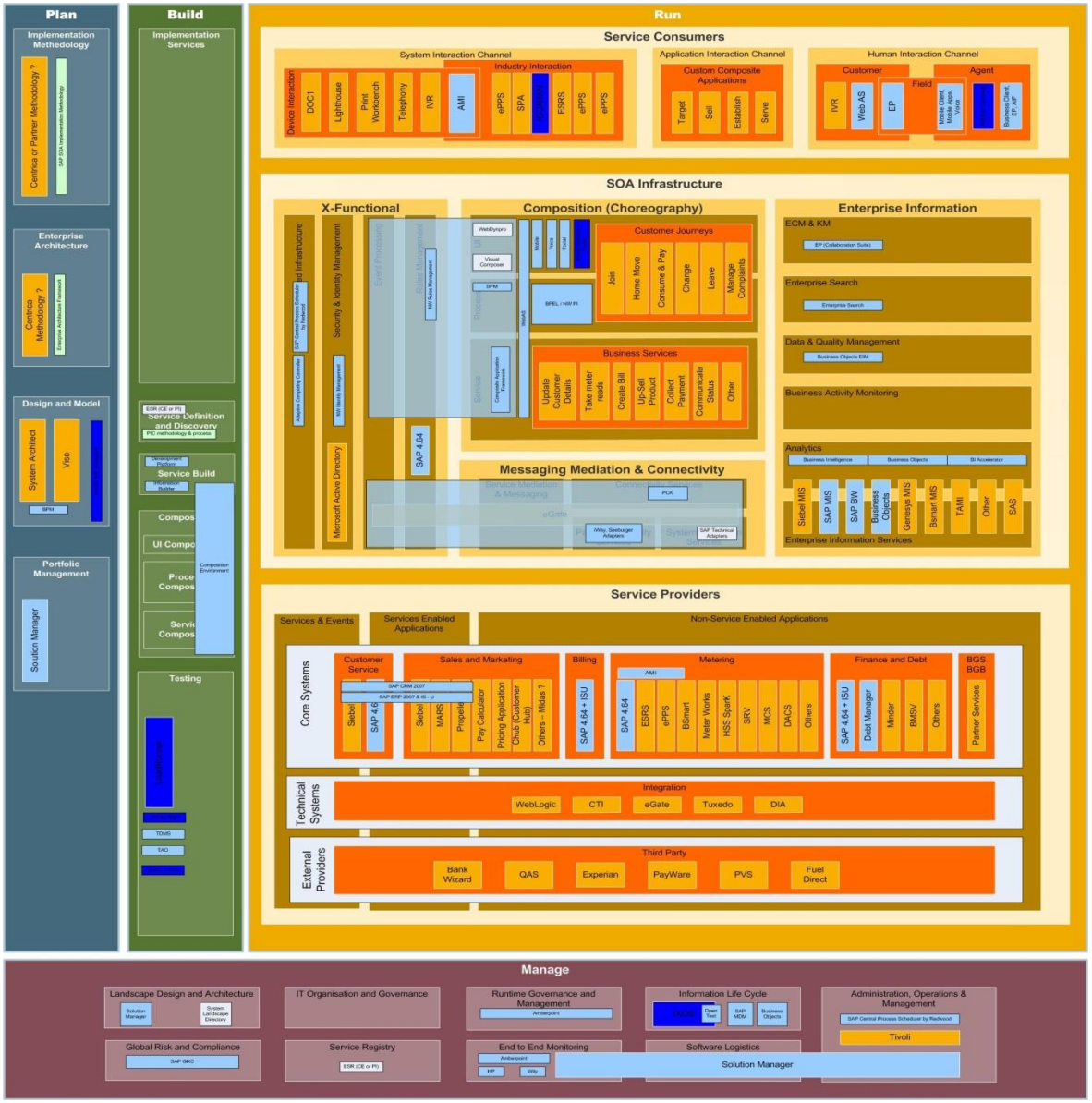
** Minimal conceptual footprint for common Workflow Pattern (Adding processes before / after CORE processes)**

* Predefined processes from SAP Business Suite * Composite Business Processes (H2H) *

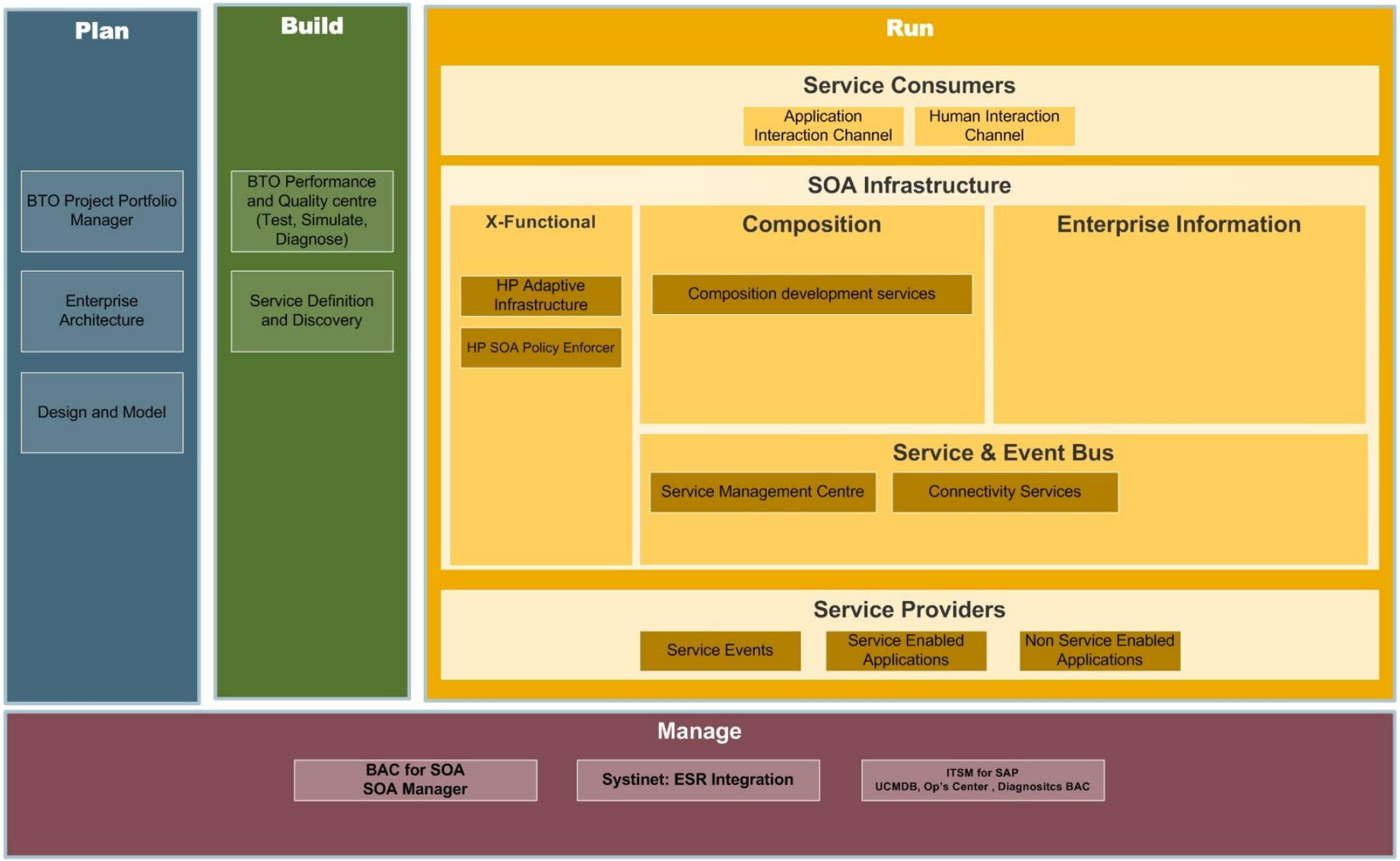
Use Case I – Manufacturing Customer



Use Case II – Utilities Customer



Use Case III – Software Partner (HP)



Starter Kit for Enterprise SOA
Overview

Media Distribution

Info in SDN: https://www.sdn.sap.com/irj/sdn/bpx-enterprisesoa

Download: https://www.sdn.sap.com/downloads/Subscriptions/StarterKit/StartKit.zip

CD-ROM: https://www.sap.com/shop

Objective & Scope

The Starter Kit for enterprise SOA provides **step-by-step guidance for initial SOA projects** with knowledge building blocks including content focused on value and benefits, architecture, governance, composition of services and ongoing operations.

In addition, the kit contains a **methodology** for project managers and hands-on **developer guidance**.

To learn from other user experiences, **references** and customer cases are included as well.

Value for Customer

By providing a "**one-stop shop**" of integrated information, SAP offers customers the value of transparency and step-by-step guidance needed for an **efficient and successful start** with enterprise SOA.

Thank You! – Questions?

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