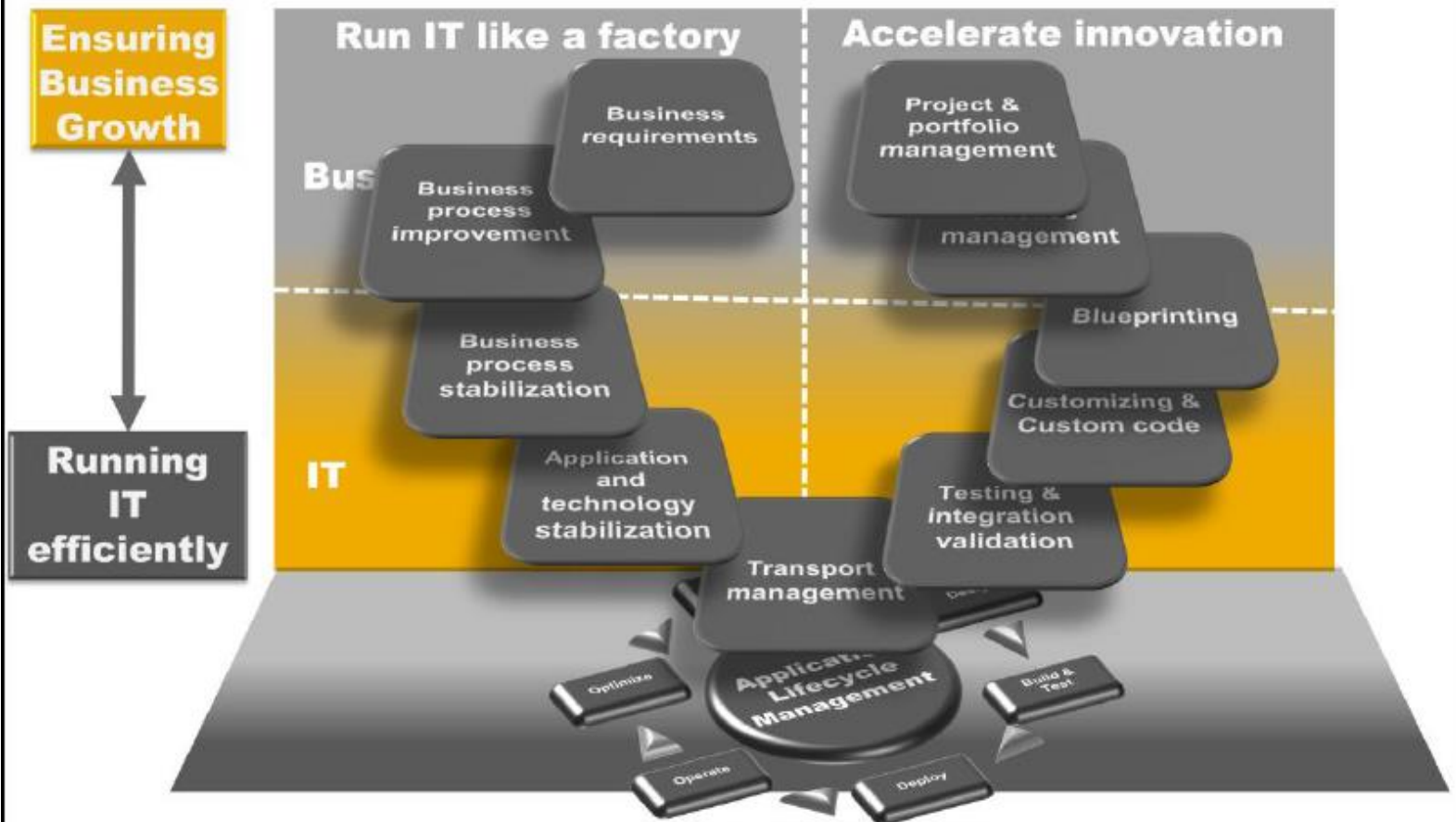# Solution Manager Overview

Agenda

- SAP Solution Manger Services & Solutions
- SAP Solution Manger Release Strategies & Service Enhancements
- SAP Solution Manager Implementations
- SAP Solution Manager Basic configuration run through
- Exercise & Break Out Session

Why do we need Solution Manager?

SAP Solution Manager Release Strategy Overview

New product versions are released every 5-7 years.

Major Release

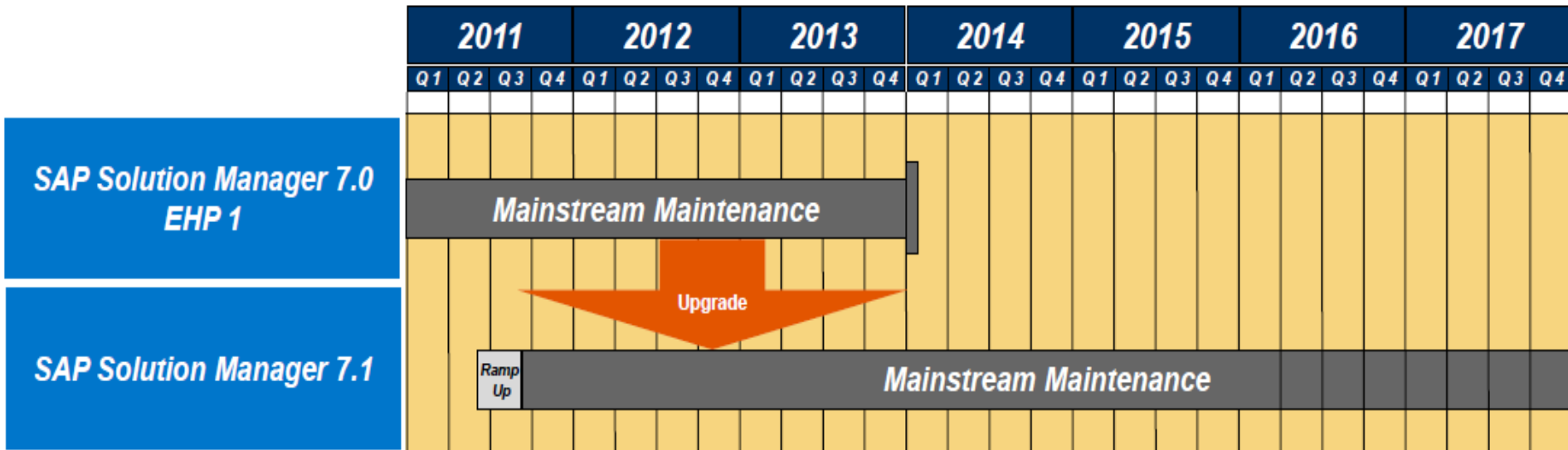| Product Versions	Release to customer	End of maintenance
SAP Solution Manager 7.0	16.12.2005	31.12.2016
SAP Solution Manager 7.1	16.05.2011	31.12.2017

Enhancement packages are released 2-3 years after the corresponding product version

Minor Release

Enhancement Package	Release to customer	End of maintenance
SAP Enhancement Package 1 for SAP Solution Manager 7.0	15.12.2008	31.12.2016

SAP Solution Manager Upgrade Strategy Overview

Upgrade from SAP Solution Manager 7.0 to 7.1 today to take advantage of new developments

	2011				2012				2013				2014				2015				2016				2017			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4

SAP Solution Manager 7.0 EHP 1 — Mainstream Maintenance

Upgrade

SAP Solution Manager 7.1 — Ramp Up — Mainstream Maintenance

SAP Solution Manager 7.1 will be supported for over six years!

Obstructions in Solution Manager 7.0

Solution-wide Usage
Impediments of SAP Solution Manager 7.0

"7.0 doesn't help me to manage my entire solution. If only SAP Solution Manager were easy to extend to all my IT."

Situation as is

Mixed user acceptance
- SAP look and feel
- Hardly intuitive to non-SAP savvy users

Limited Capabilities beyond SAP
- Very SAP-centric

Costs
- Other tools already purchased
- Must leverage existing investments into licenses, hardware, training etc.

Result

SAP Solution Manager from SAP for SAP

Used by SAP teams, but not beyond

Improvements in SAP Solution Manager 7.1

Three Dimensions

SAP focused on user acceptance and protection of customers' investments in e.g. training, now providing an overhauled user interface as a result

SAP focused on capabilities such as permanent and proactive monitoring, coming up with a whole new Monitoring and Alerting Infrastructure for the whole solution

SAP focused on leveraging investments, creating more openness, with e.g. integration of third party products, like IBM Rational for Test Management.

Technology

SAP Solution Manager 7.0

User Interface

Openness

○ **SAP Solution Manager 7.1**

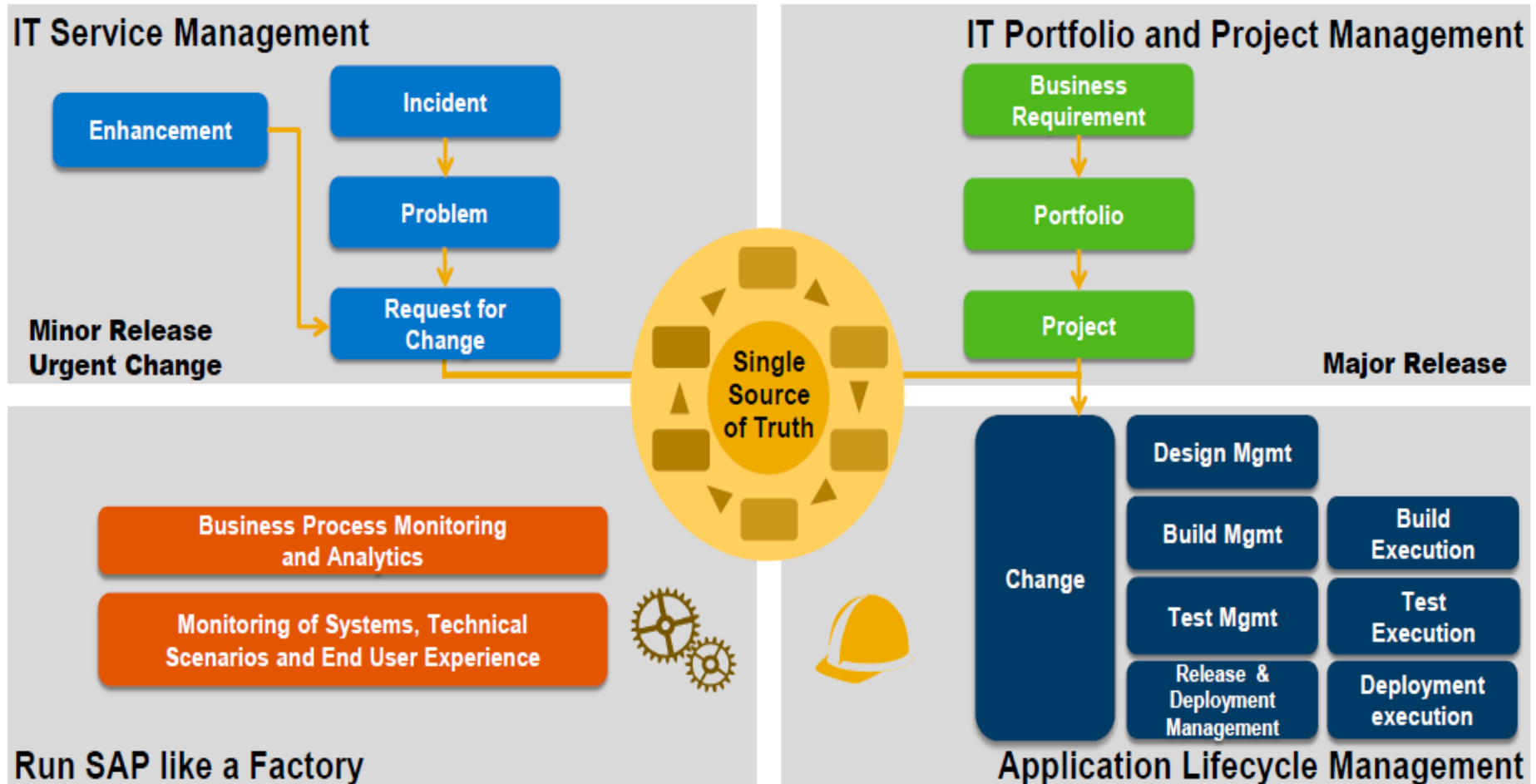# Improvements in SAP Solution Manager 7.1
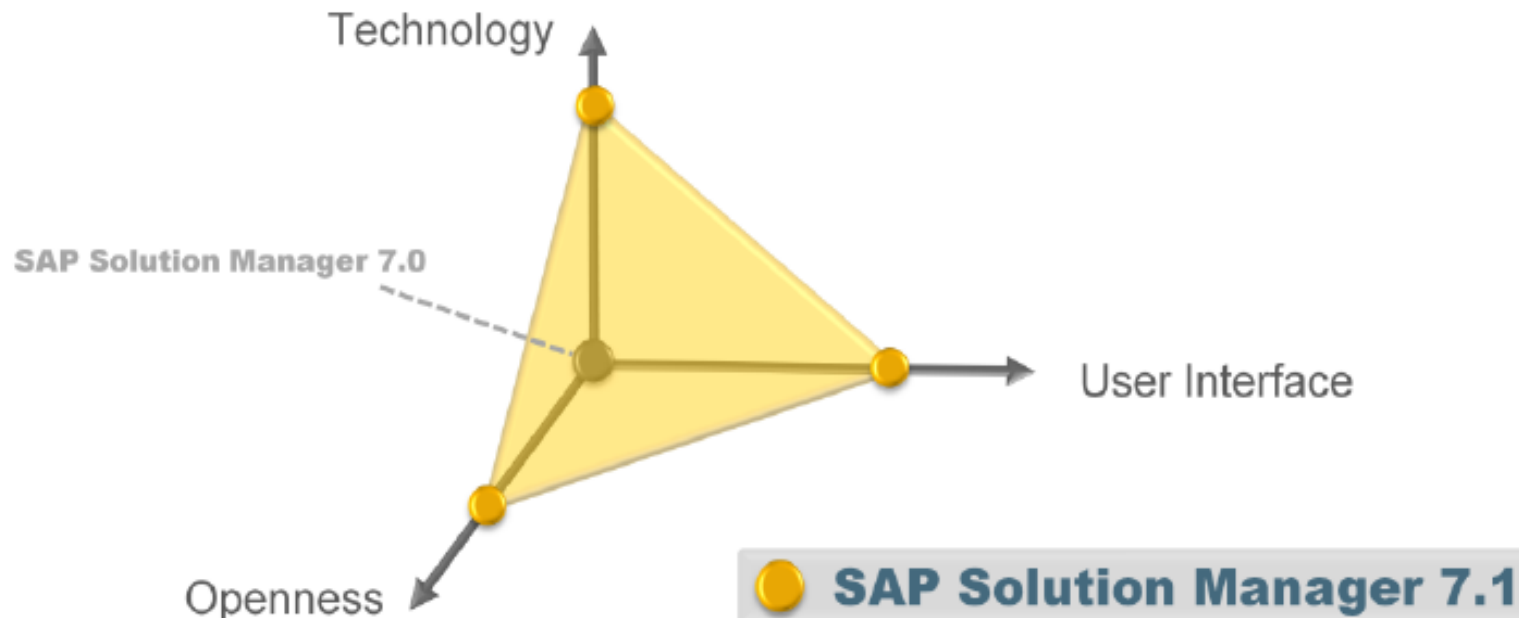
SAP Solution Manager 7.1 is a comprehensive IT management solution

...providing all required technology, core processes and functionality, and optimally integrated with **SAP**

- E2E Monitoring and Alerting
- CTS+
- Analytics

- Incident Management
- Change Management
- Problem Management
- Technical Operations
- Application Operations
- Implementation
-

- Application Lifecycle Management & "Run SAP like a factory" Solution Operations
- IT Service Management
- IT Infrastructure Management
- Business Strategy and Business Operations
- Management Dashboards

Improvements in SAP Solution Manager 7.1

Integrated IT Management for the New Innovations

IT Service Management

- Enhancement
- Incident
- Problem
- Request for Change

Minor Release
Urgent Change

IT Portfolio and Project Management

- Business Requirement
- Portfolio
- Project

Major Release

Single Source of Truth

Run SAP like a Factory

- Business Process Monitoring and Analytics
- Monitoring of Systems, Technical Scenarios and End User Experience

Application Lifecycle Management

- Change
- Design Mgmt
- Build Mgmt
- Build Execution
- Test Mgmt
- Test Execution
- Release & Deployment Management
- Deployment execution

BREAK

SAP Solution Manager 7.1 Enhancements

Upgrade Management
- Integration of Upgrade Dependency Analyzer

Custom Code Management
- Lifecycle Management for custom code

Maintenance Management
- Maintenance Optimizer for complicated landscapes
- System Recommendations

Business Process Operations
- BPO Dashboards with Alert Inbox
- Business Process Analytics
- Cross-database comparison
- Job Control and Schedule Management

Technical Operations
- New Technical Monitoring and Alerting infrastructure
- End User Experience Monitoring
- Technical Administration and Analytics
- Extended Root Cause Analysis scope
- Data Volume Management work center

Application Incident Management
- ITIL IT Service Management aligned
- Configurable web-client user interface
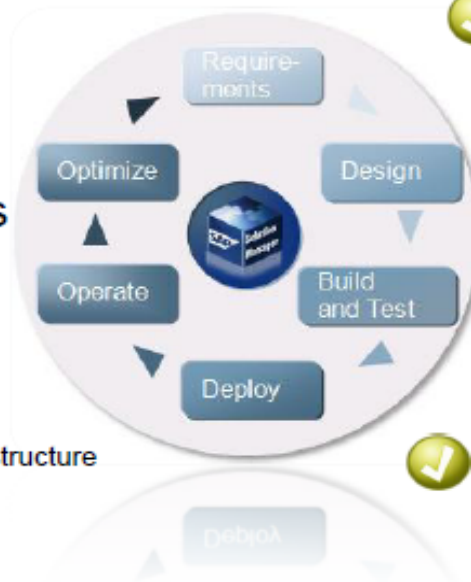- Additional Service document functions

Solution Documentation
- Extended of Solution Documentation Assistant analysis scope
- Reverse Business Process Documentation
- Upload interface to build an initial Business Blueprint structure

Solution Implementation
- New Business Blueprint modeling capability
- End-to-End Business Function implementation process
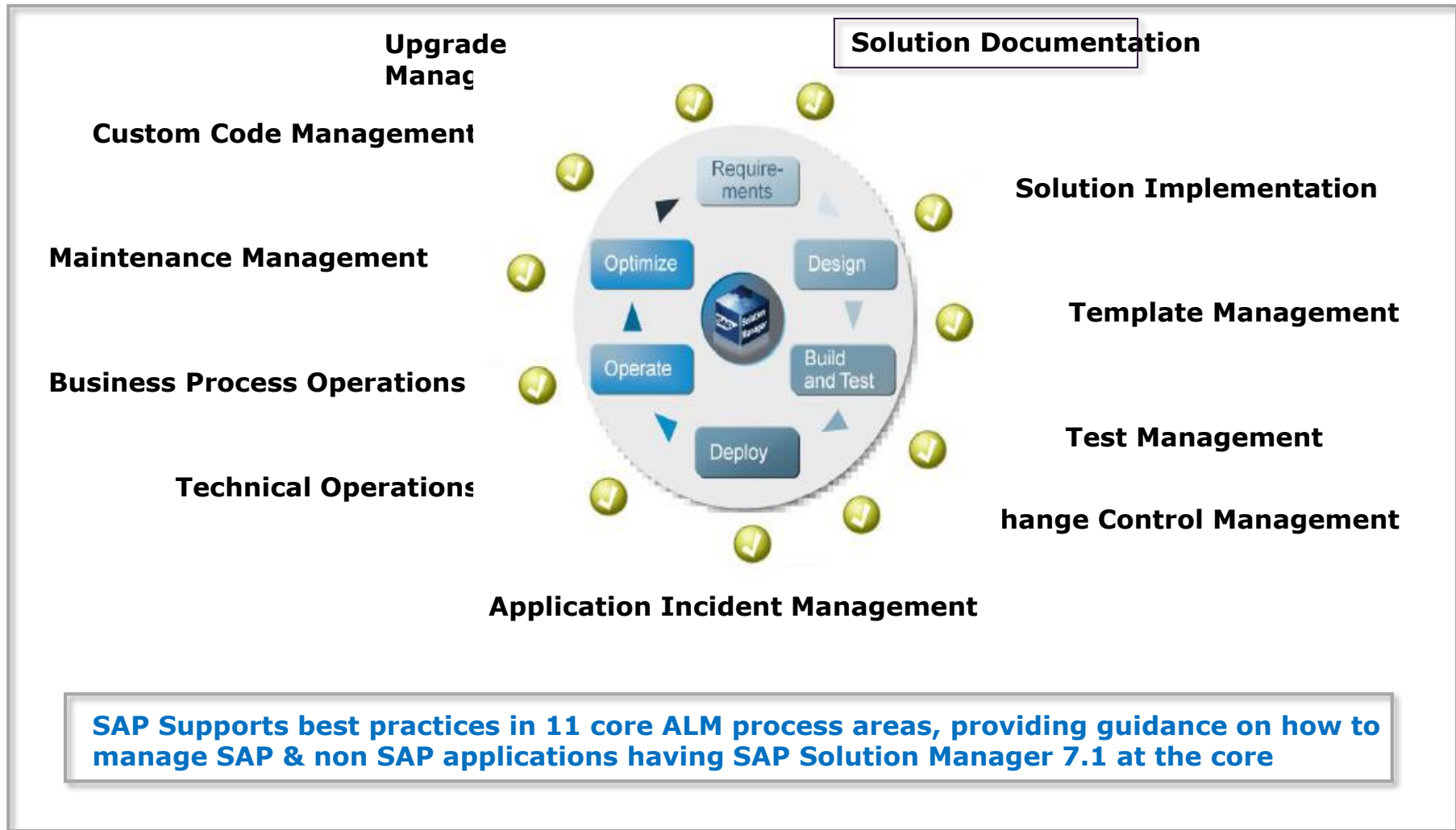- Project and Solution Reporting Enhancements

Template Management
- Comparison & Adjustment for template
- Roll-in changes from projects

Test Management
- More efficient test phase management
- Test Automation Framework with 3rd party tools
- Test Scope Identification & Optimization with BPCA

Change Control Management
- Quality Gate Management to control changes
- Change Request Management process flexibility
- New Change and Transport System mechanism
- Configuration Validation and Change Analysis

Requirements · **Design** · **Build and Test** · **Deploy** · **Operate** · **Optimize**

SAP Solution Manager – Functionalities Overview

Upgrade
Manag

Solution Documentation

Custom Code Management

Solution Implementation

Maintenance Management

Template Management

Business Process Operations

Test Management

Technical Operations

hange Control Management

Application Incident Management

Requirements
Design
Build and Test
Deploy
Operate
Optimize

SAP Supports best practices in 11 core ALM process areas, providing guidance on how to manage SAP & non SAP applications having SAP Solution Manager 7.1 at the core

Solution Documentation

Solution Documentation is divided into 2 types

Technical Landscape Documentation

- Documentation of systems, servers, databases and software components

- Maintenance done by:
  - system administrators
  - technical SAP Solution Manager experts
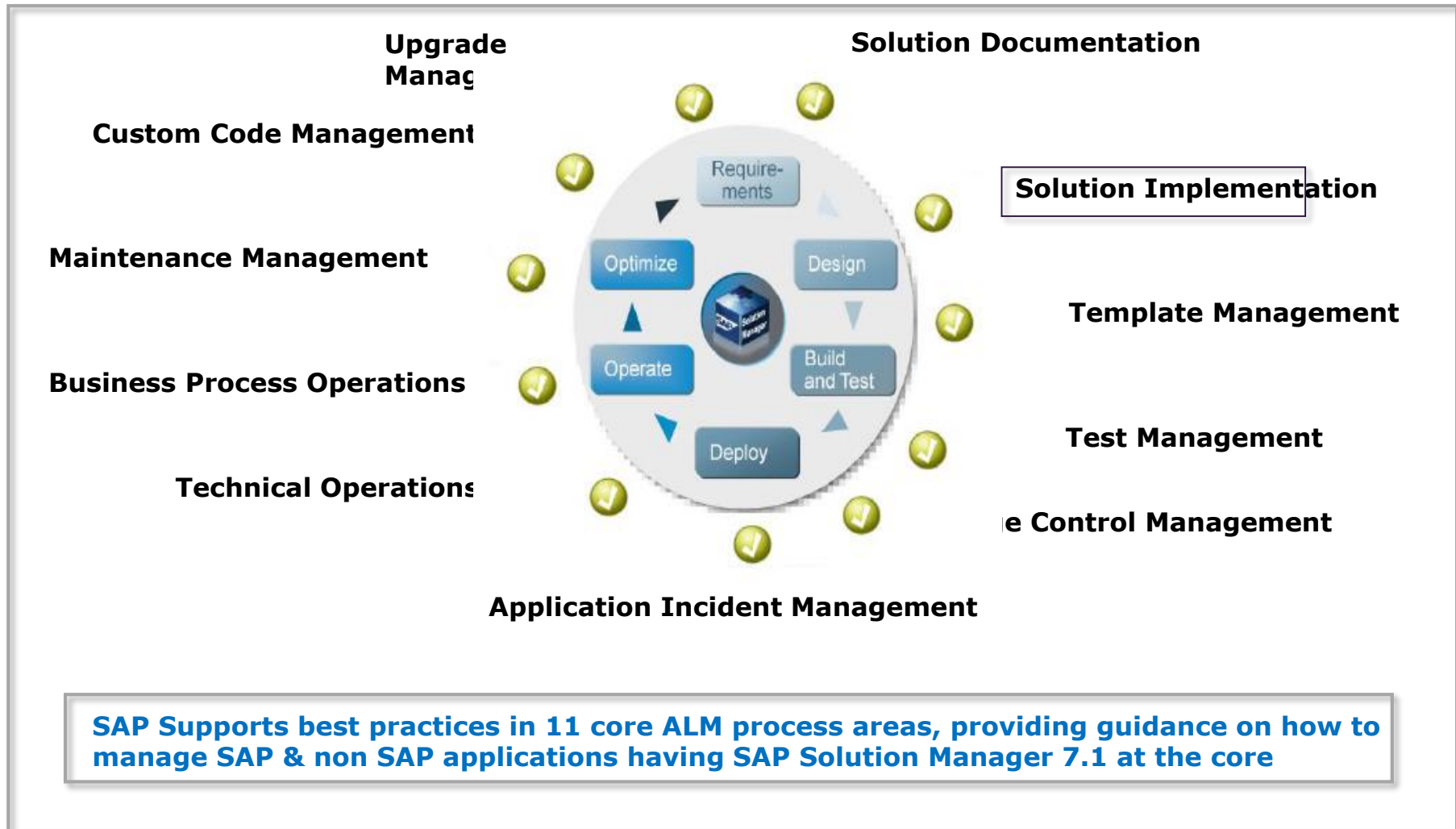 - Automatic update of landscape documentation (e.g. via SLD)

Business Process Documentation

- Documentation of core business processes, related interfaces and custom code

- Maintenance done by:
  - solution architects, e.g. for custom development and interface specifications;
  - business process experts, e.g. to document (core) process flow
  - project members, e.g. to document test cases and project specific customizing
  - functional SAP Solution Manager experts, e.g. for simple transfer if good process documentation is available
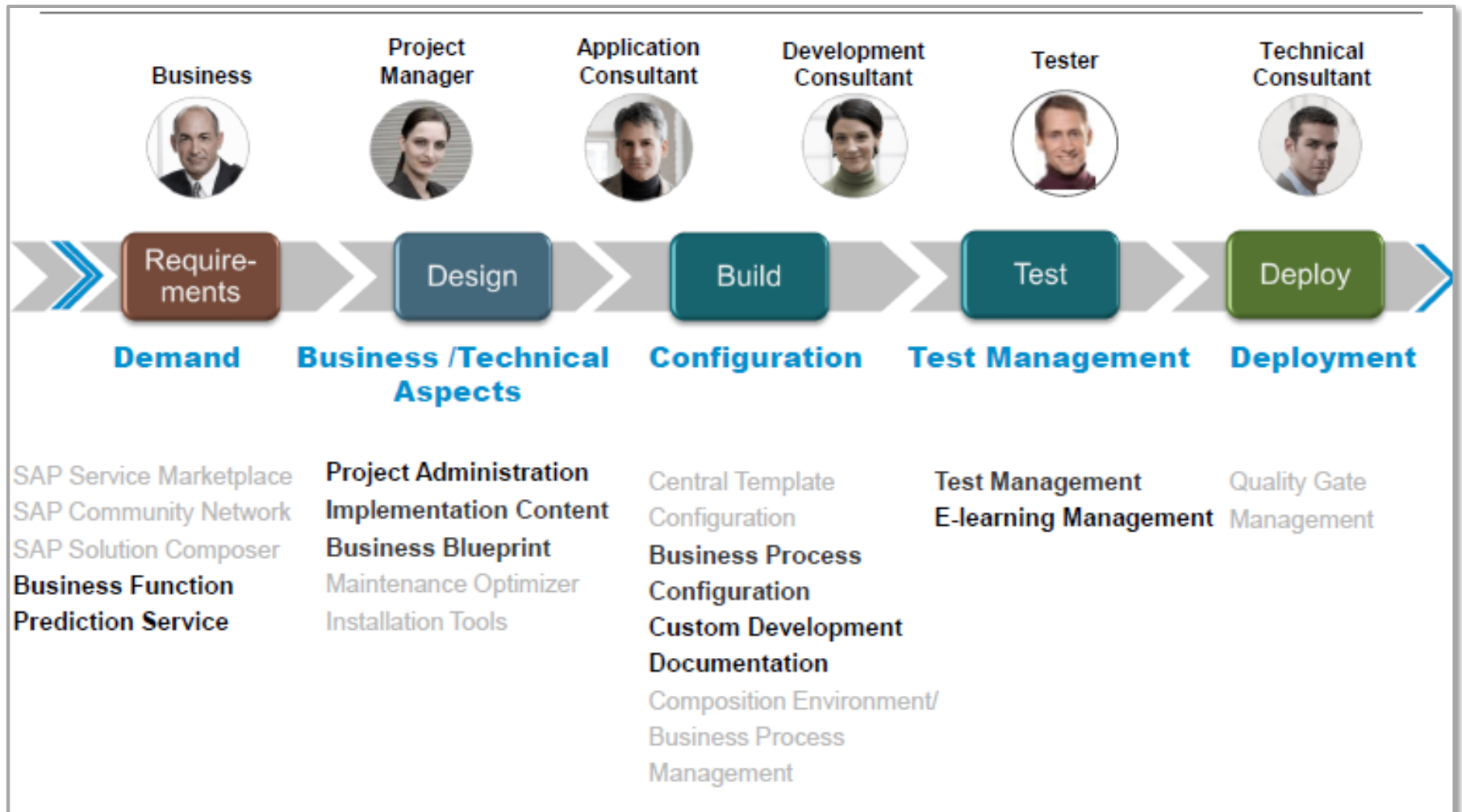
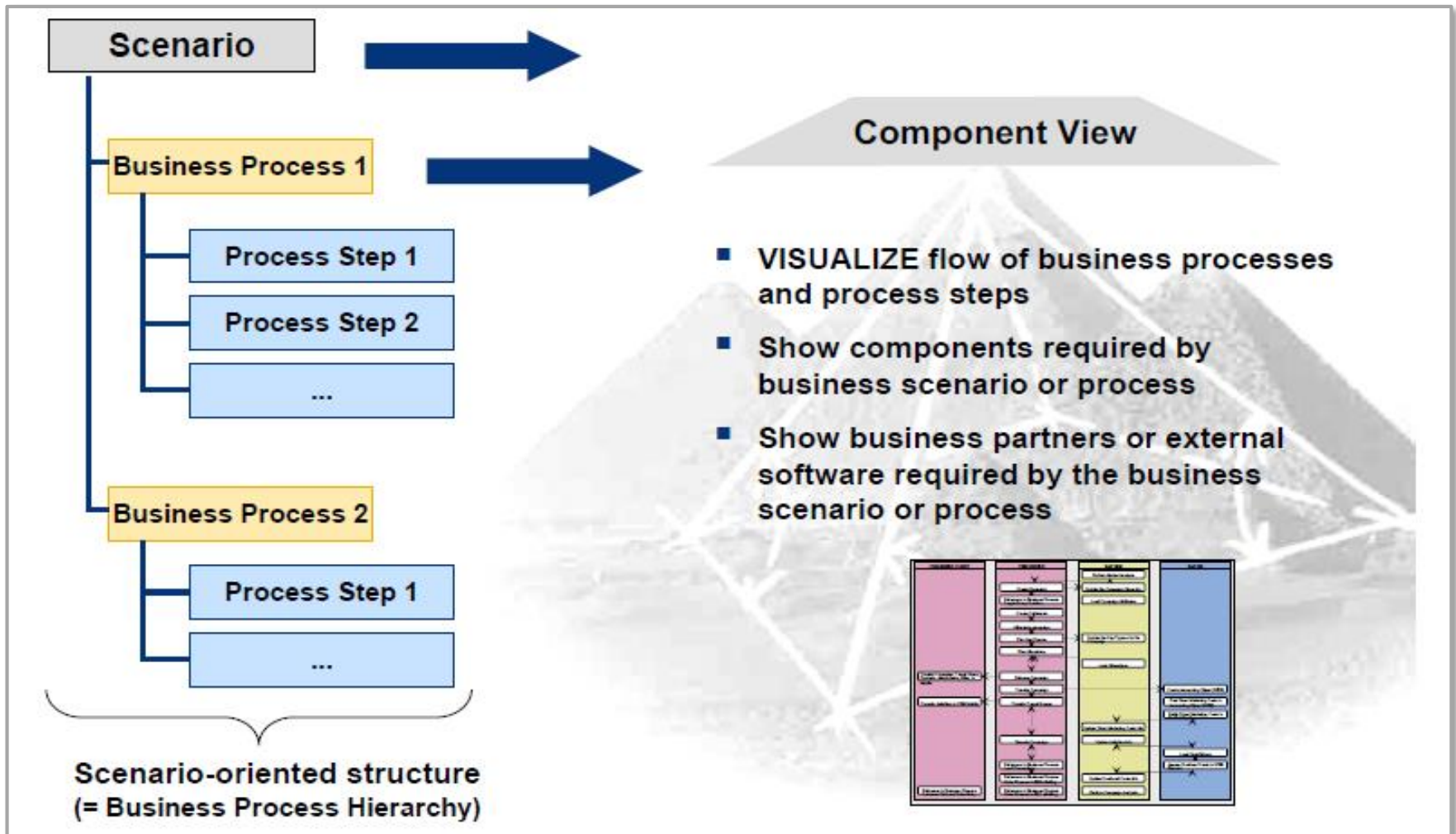# Solution Documentation : Solution Documentation Assistant (SDA)

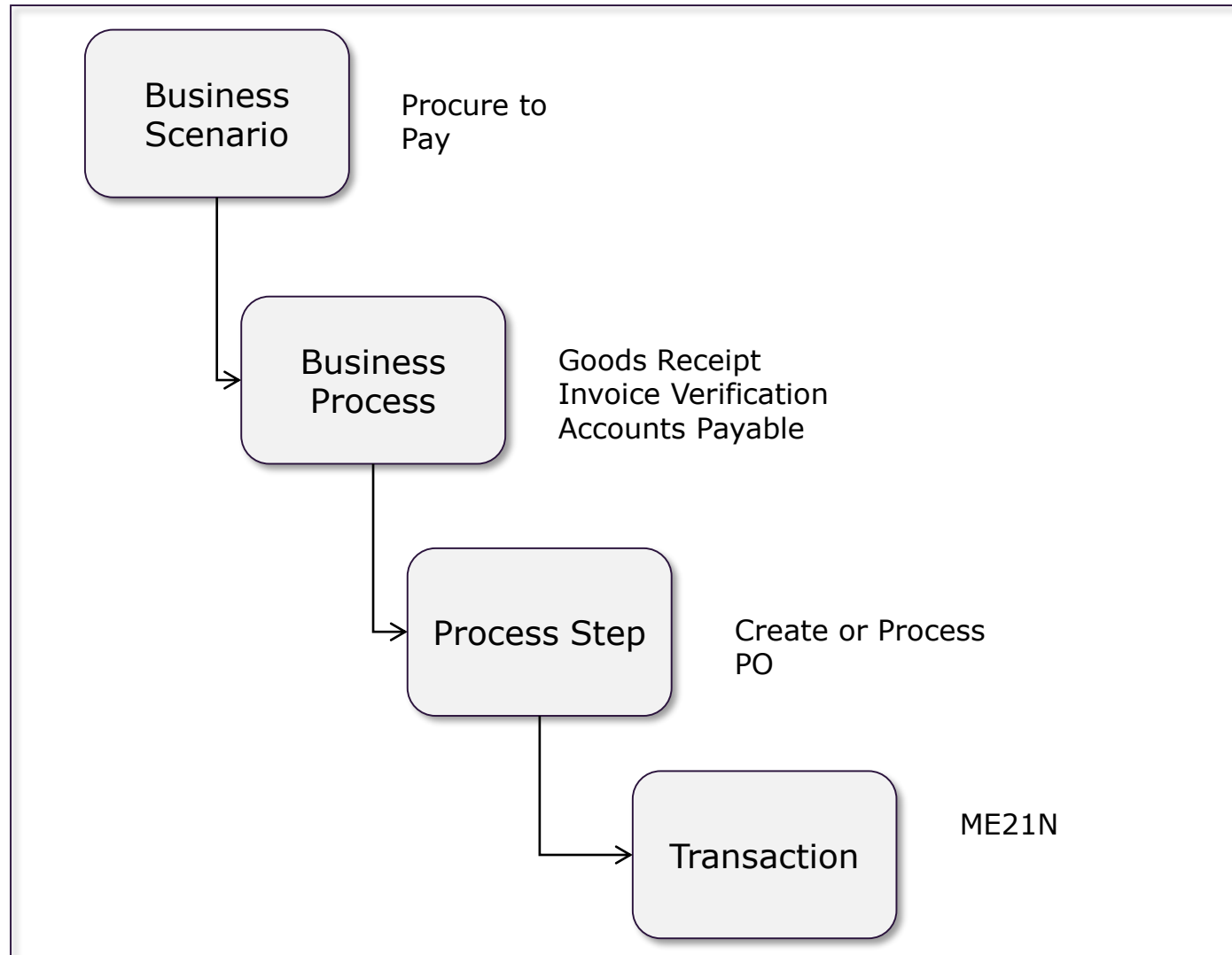# SAP Solution Manager – Functionalities Overview
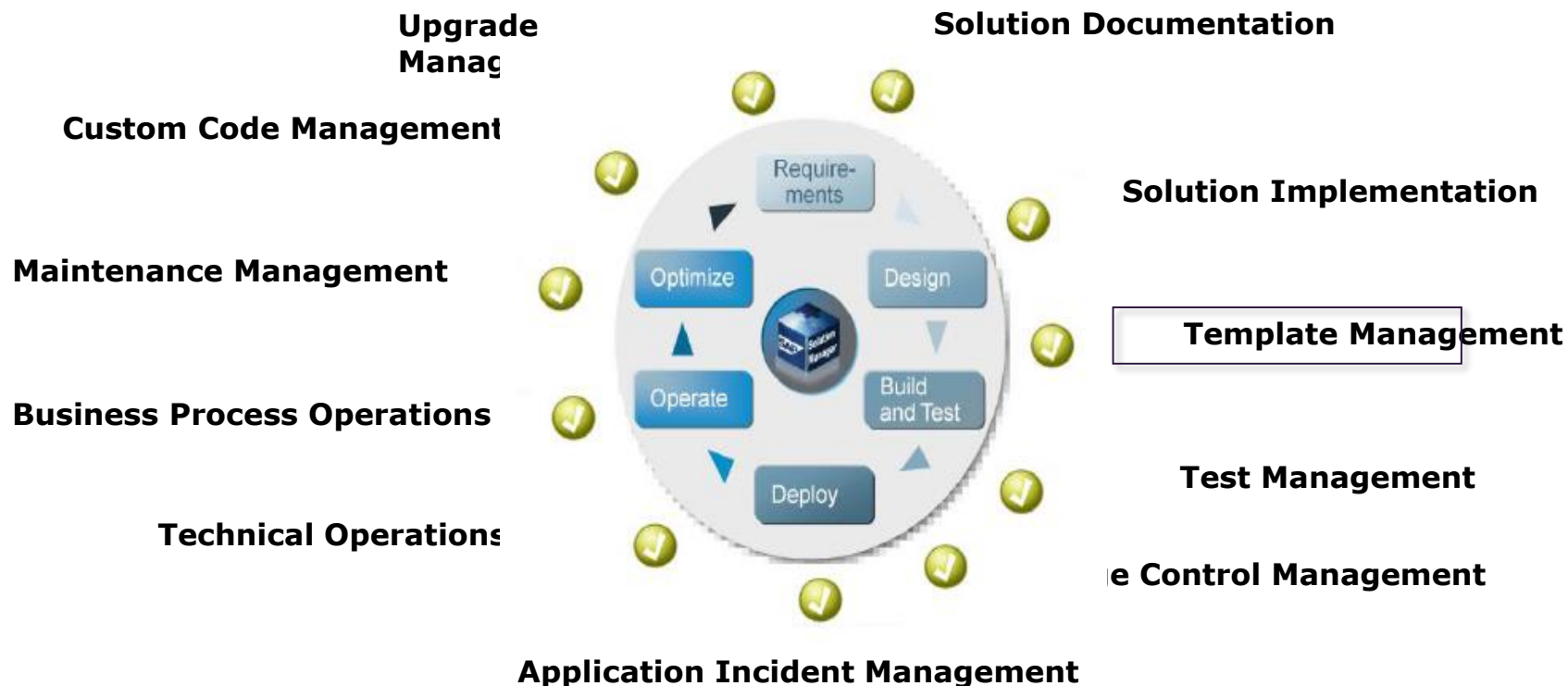
Upgrade
Manag

Solution Documentation

Custom Code Management

Solution Implementation

Maintenance Management

Template Management

Business Process Operations

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e Control Management

Application Incident Management

SAP Supports best practices in 11 core ALM process areas, providing guidance on how to manage SAP & non SAP applications having SAP Solution Manager 7.1 at the core

Solution Implementation Overview

Business	Project Manager	Application Consultant	Development Consultant	Tester	Technical Consultant
Require-ments	**Design**	**Build**	**Test**		**Deploy**
Demand	**Business /Technical Aspects**	**Configuration**	**Test Management**		**Deployment**

SAP Service Marketplace	**Project Administration**	Central Template	**Test Management**		Quality Gate
SAP Community Network	**Implementation Content**	Configuration	**E-learning Management**		Management
SAP Solution Composer	**Business Blueprint**	**Business Process**			
Business Function	Maintenance Optimizer	**Configuration**			
Prediction Service	Installation Tools	**Custom Development**			
		Documentation			
		Composition Environment/			
		Business Process			
		Management			

Solution Implementation

Scenario

Business Process 1
- Process Step 1
- Process Step 2
- ...

Business Process 2
- Process Step 1
- ...

**Scenario-oriented structure
(= Business Process Hierarchy)**

Component View

- VISUALIZE flow of business processes and process steps
- Show components required by business scenario or process
- Show business partners or external software required by the business scenario or process

Solution Implementation: BPR – Business Process Repository

Business Scenario — Procure to Pay

Business Process — Goods Receipt / Invoice Verification / Accounts Payable

Process Step — Create or Process PO

Transaction — ME21N

SAP Solution Manager – Functionalities Overview

Upgrade Management

Solution Documentation

Custom Code Management

Solution Implementation

Maintenance Management

Template Management

Business Process Operations

Technical Operations

Test Management

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Application Incident Management

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Template Management Global Roll Out Process - I

① Define global Template

Global Template Project

Global TMP 01 V01

② Roll out global Template

Global Template(s) become Reference System

③ Implement Template

Implementation Project 1

Global TMP 01 V01

Implementation Project 2

Global TMP 01 V01

Implementation Project 3

Global TMP 01 V01

Template Management Global Roll Out Process - II

Global Template Project

Global TMP 01 V01

Global TMP 02 V01   Global TMP 03 V01   Global TMP 04 V01

(5) Create new Templates

(4) Roll in Global Template Requirements

(6) Roll out new Template to relevant Projects

(7) Implement new Template

Global Template(s) become Reference System

Implementation Project 1

Global TMP 01 V01

Global TMP 02 V01

Global TMP 03 V01

Implementation Project 2

Global TMP 01 V01

Global TMP 02 V01

Implementation Project 3

Global TMP 01 V01

Global TMP 04 V01

SAP Solution Manager – Functionalities Overview

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Test Management in SAP Solution Manager

E2E Test Management Test Options for Functional Testing
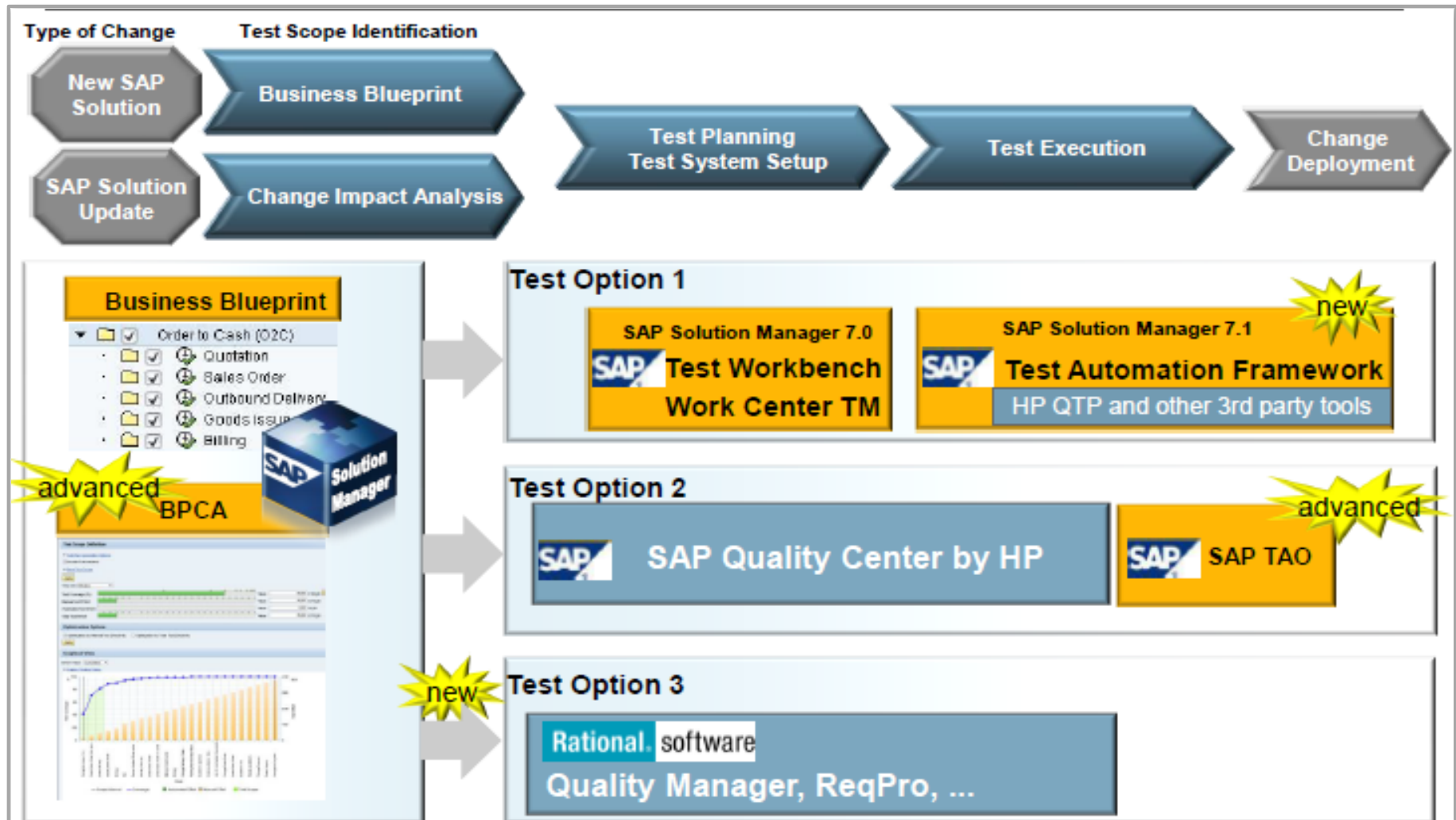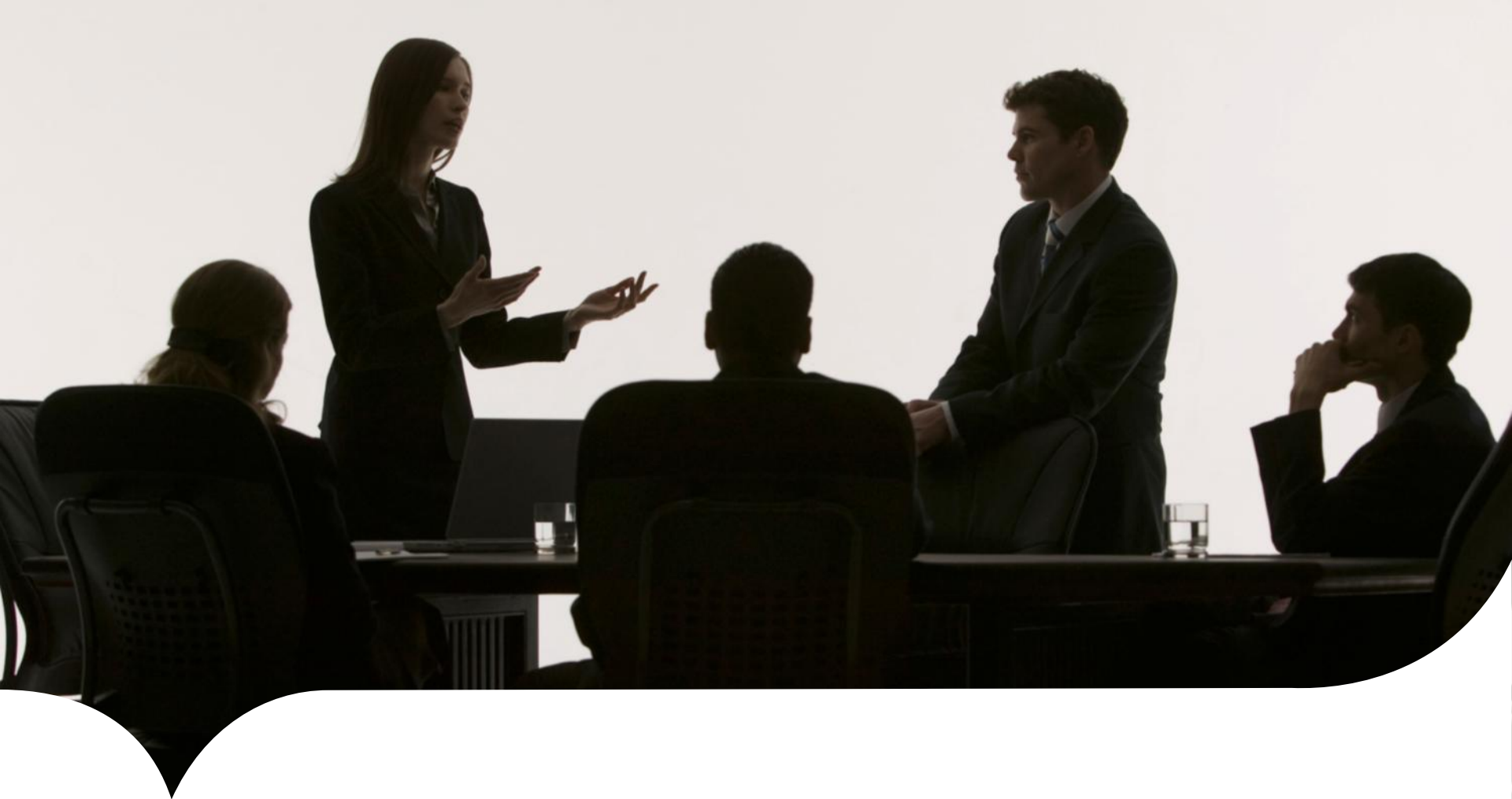
BREAK

Test Management – Business Process Change Analyzer (BPCA)

BPCA Use Case 4: **SP / EhP Deployment and Test Scope Optimization**

Example: Deployment of EhP 4 for SAP ERP

SAP Support Package / Enhancement Package Deployment

DEV — SP / EhP → TST ⤍ PRD
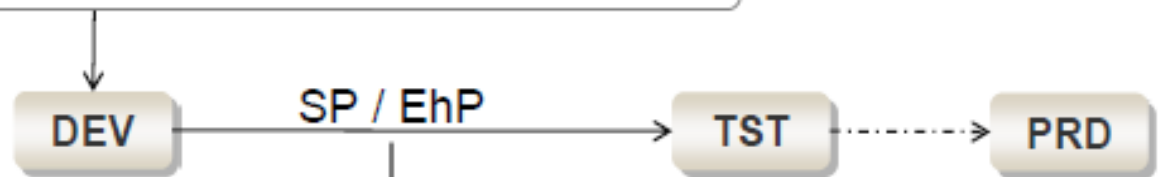
Change Impact Analysis

Identification of impacted business processes

Test Recommendation

Generation of Test Plan with risk-based test scope

SAP Solution Manager – Functionalities Overview

Upgrade Manag...

Custom Code Management

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Test Management

...ge Control Management

Application Incident Management

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Change Control Management: ChaRM - Change Request Management
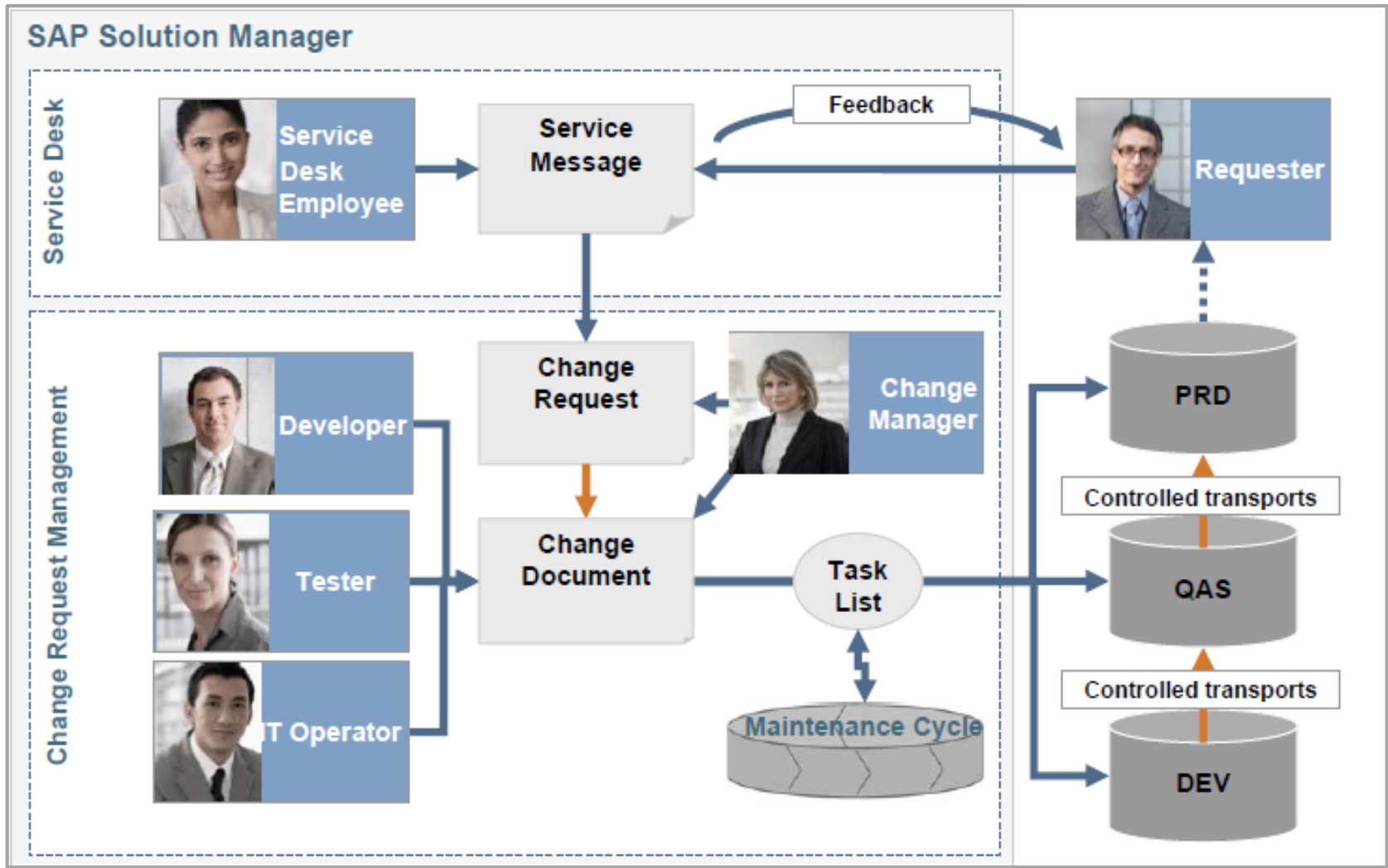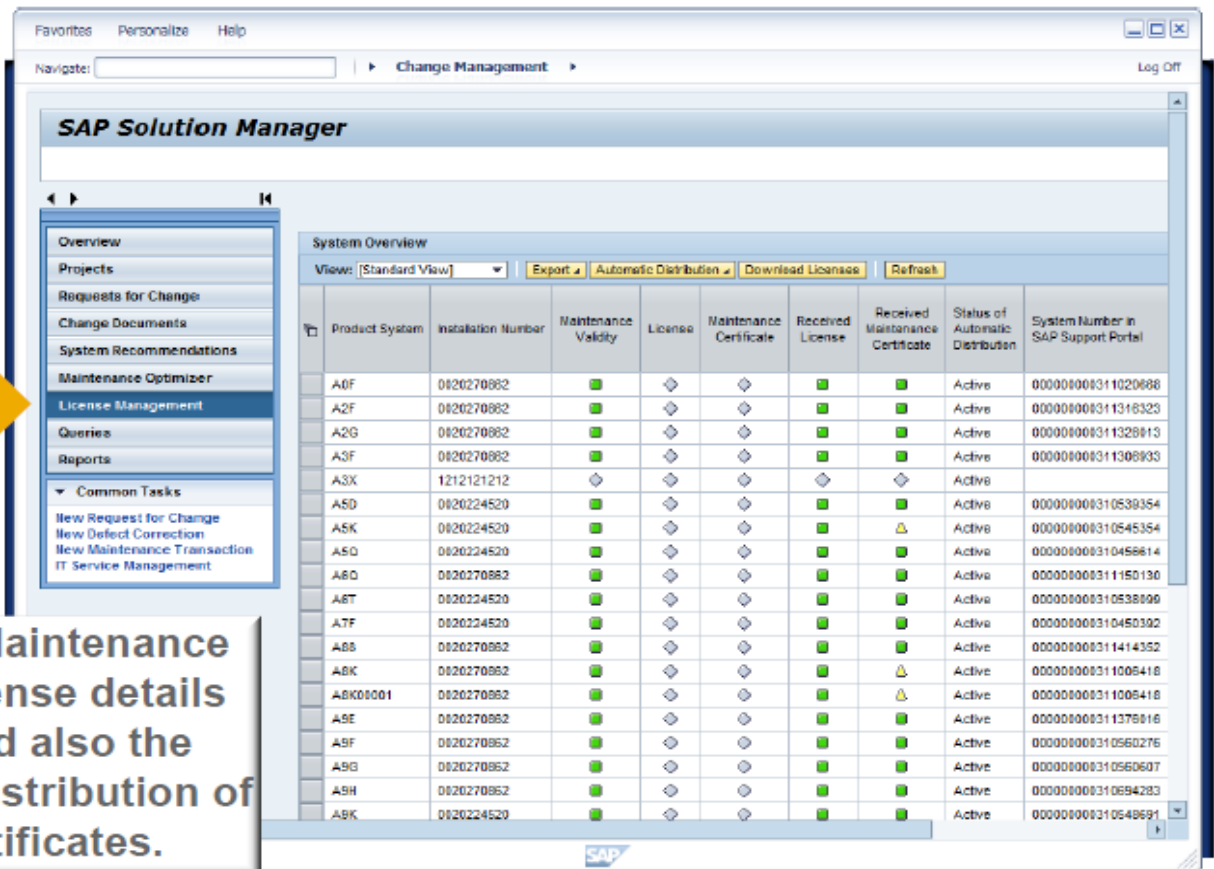
Change Control Management: Enables one consistent quality process
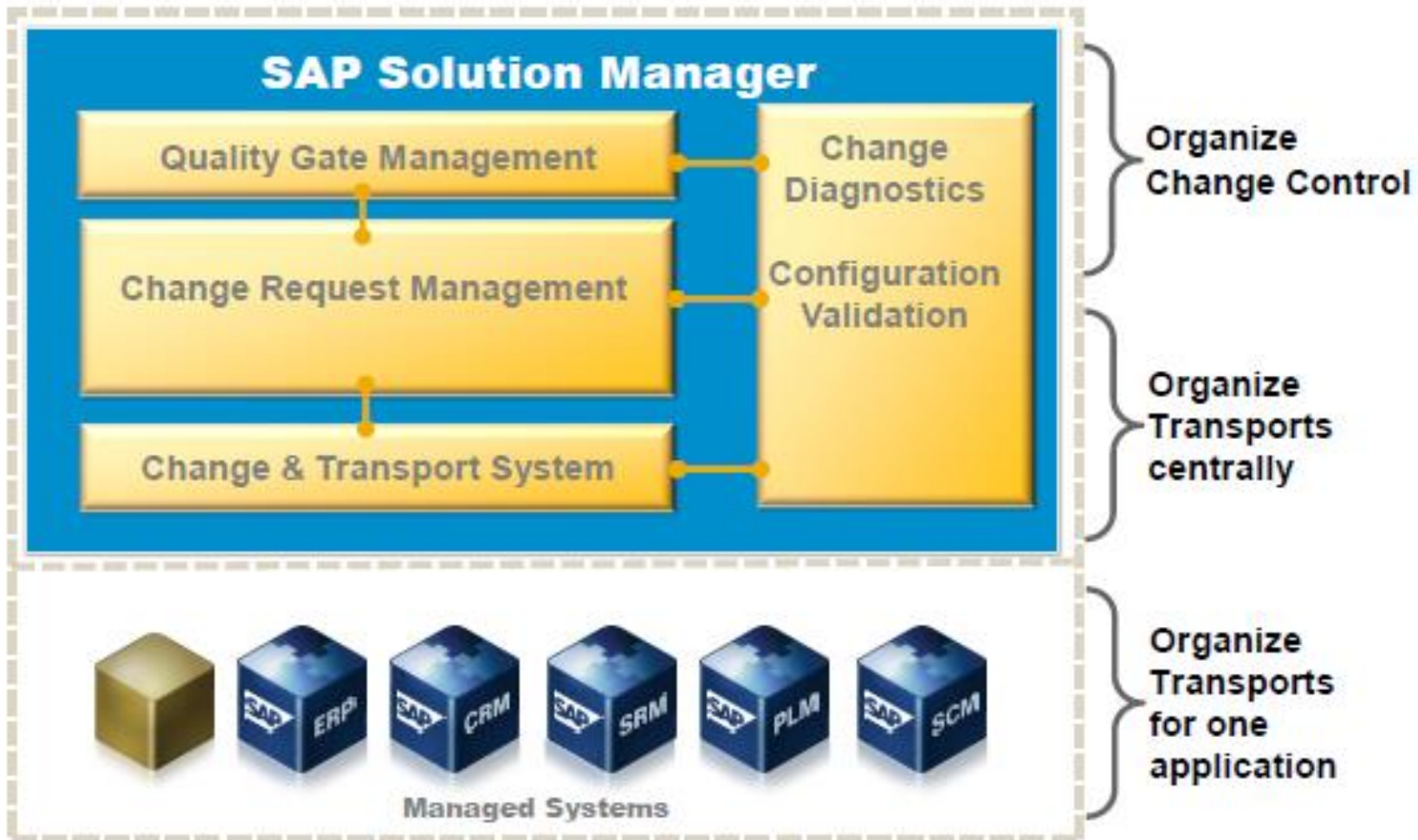
License Management

Change Management Work Center
License Management

This view displays Maintenance Certificates and License details for all systems, and also the status of automatic distribution of Maintenance Certificates.

SAP Solution Manager –Functionalities Overview
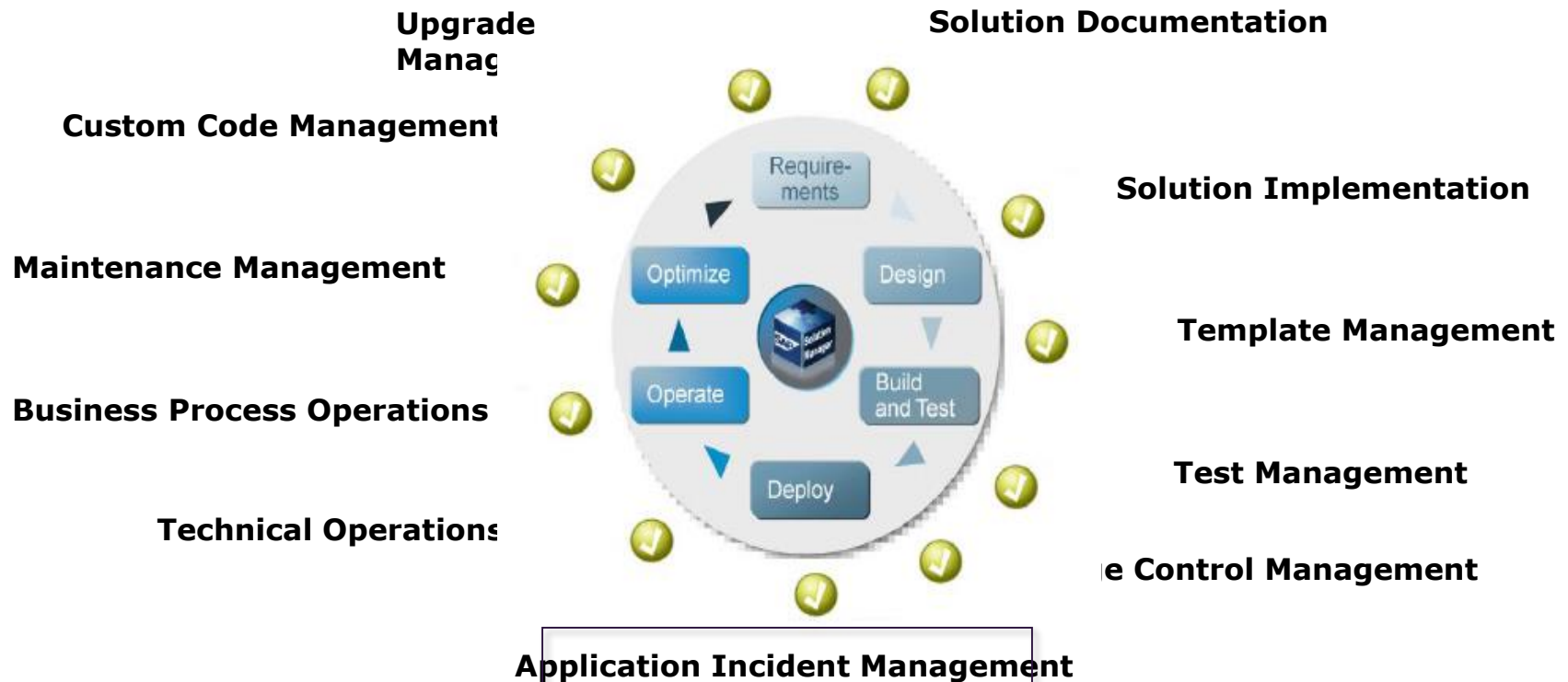
Upgrade Manag...

Custom Code Management

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Requirements

Optimize

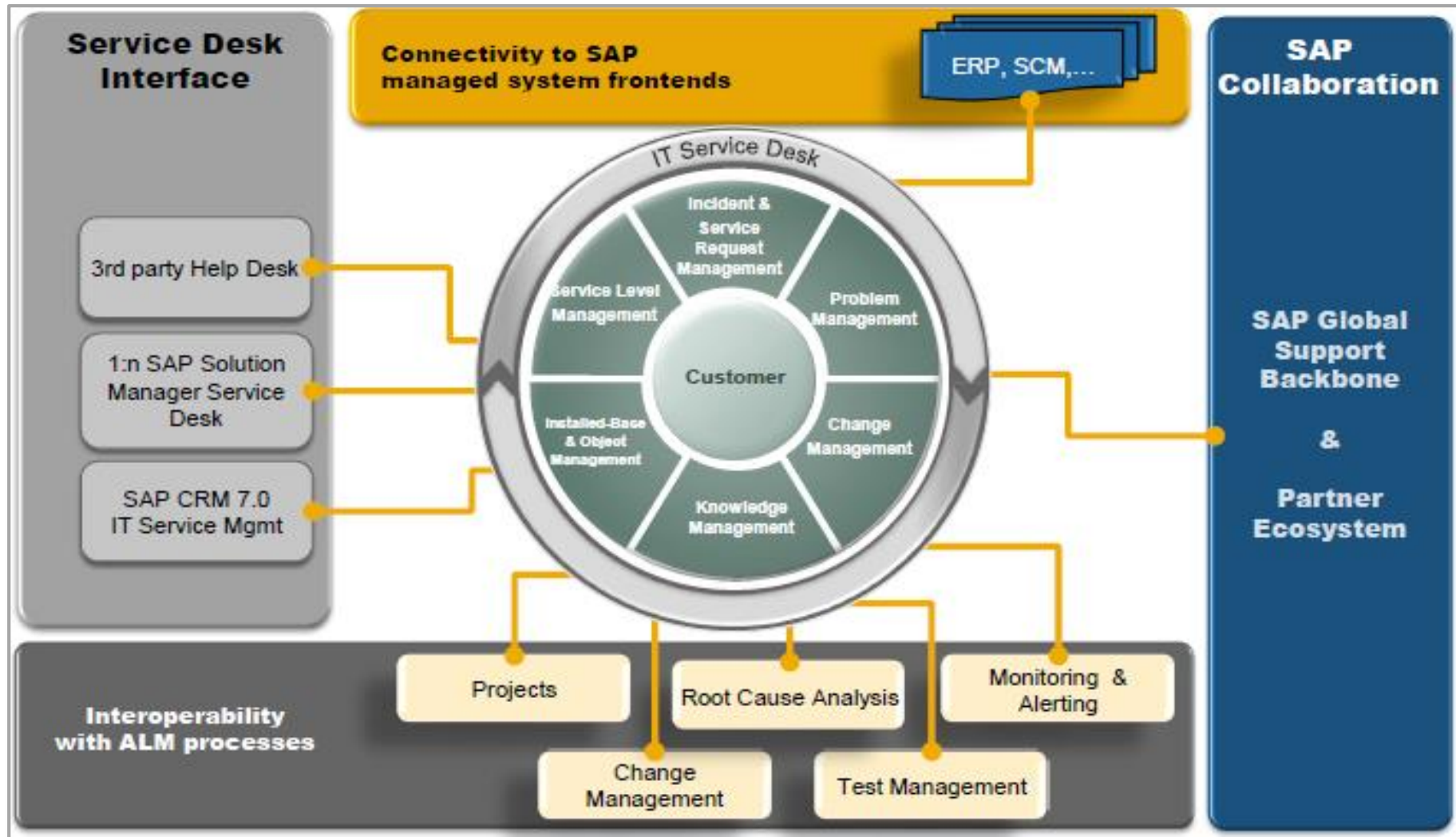**Design**

Operate

Build and Test

Deploy

SAP Supports best practices in 11 core ALM process areas, providing guidance on how to manage SAP & non SAP applications having SAP Solution Manager 7.1 at the core
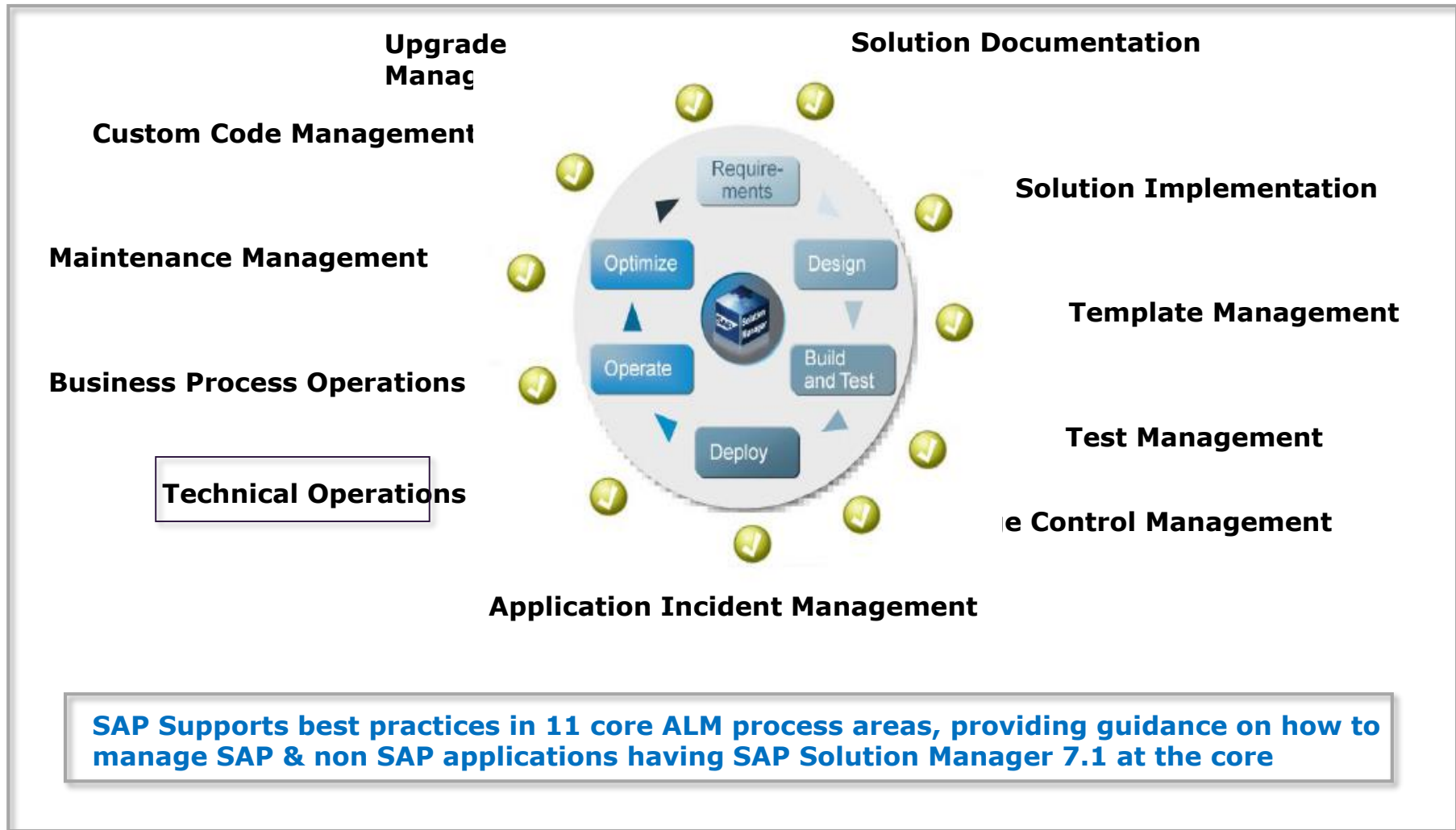
Application Incident Management in SAP Solution Manager

Application Incident Management Integration infrastructure

SAP Solution Manager – Functionalities Overview

Upgrade Manag

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e Control Management

Application Incident Management

(Central diagram labels: Require-ments, Design, Optimize, Operate, Build and Test, Deploy)

SAP Supports best practices in 11 core ALM process areas, providing guidance on how to manage SAP & non SAP applications having SAP Solution Manager 7.1 at the core

Technical Operations

Technical Monitoring & Alerting

One infrastructure for all monitoring and alerting covering SAP & non-SAP

Technical Analytics

From technical reporting to management reporting, out-of-the-box and extendable

Root Cause Analysis

Analyize issues in heterogeneous landscapes with one look-and-feel

Configuration Validation

Ensure that your landscape is configured compliant to your policy and references

Technical Administration

Optimize operation of your IT and application landscape

Data Volume Management

Manage data growth and archiving procedures in your landscape

Technical Operations: Technical Monitoring & Alerting

Unified Alert Inbox
- Central access point for all alert from the different monitoring scenarios
- Integration of Incident & Notification Management, Root-cause Analysis and collaboration features

System Monitoring
- Status overview for technical systems, instances, databases and hosts.
- Drill down to single metrics and events, Jump in to metric reporting and landscape information

End User Experience Monitoring
- Measurement of availability and response times from an End User perspective
- Deep integration in E2E Trace Analysis for Root-cause Analysis

Process Integration Monitoring
- Central entry point for SAP Process Integration specific monitoring for complete PI domains
- Contains central monitors as Overview, PI components, PI channels and Message flow monitoring as as context sensitive jump-ins in local monitors
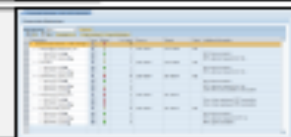

Business Intelligence Monitoring
- Central monitoring for SAP Business Intelligence solutions based on SAP BW and BOE XI
- Monitoring of SAP Business Warehouse process chains and Business Objects specific jobs

Connection Monitoring
- Active Monitoring of RFC and HTTP connections between SAP Systems

Integration of all scenarios in Alerting & Metric Monitoring

Technical Operations: Root Cause Analysis

End-To-End Workload Analysis

- General performance overview for heterogeneous landscape
- Review most important KPI's cross all technologies and drill down to product specific workload KPI's

End-To-End Change Analysis

- Statistical change data cross all technologies based on daily configuration snapshots
- Compare configurations between systems and drill down to change reporting for a detailed change history
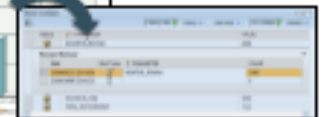
End-To-End Exception Analysis

- Statistical exception data cross all technologies for exception trend analysis or review exception after changes
- Jump to component specific exception analysis (ST22, NWA,…)
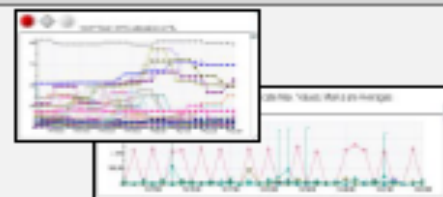

End-To-End Trace Analysis

- Single user request tracing in a complex system landscapes
- Identify the problem causing component (performance and functional) and jump-in to detailed component specific trace analysis (SQL, ABAP, J2EE trace,…)
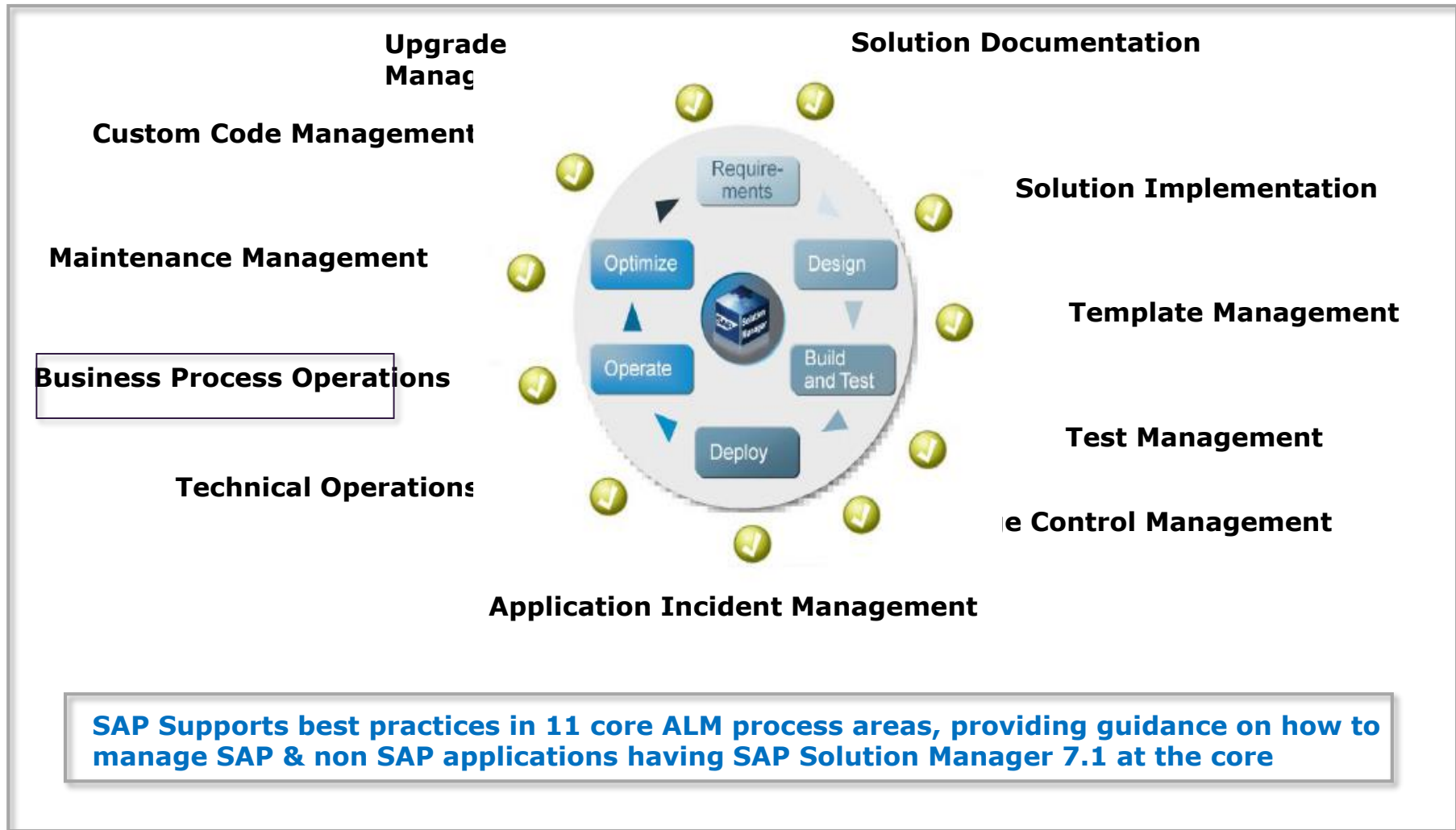

System, Host & Database Analysis

- Central, safe and remote access to file system, OS and DB
- Links to read-only monitoring and administration tools like Wily Introscope for performance analysis and monitoring
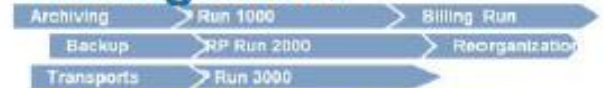
SAP Solution Manager – Functionalities Overview

Upgrade Manag...

Custom Code Management

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Application Incident Management

(Center diagram: Requirements, Design, Build and Test, Deploy, Operate, Optimize — SAP Solution Manager)

SAP Supports best practices in 11 core ALM process areas, providing guidance on how to manage SAP & non SAP applications having SAP Solution Manager 7.1 at the core

Business Process Operations

Business Process Performance Optimization

Optimize business process flow and throughput

Data Consistency Management

Proactively avoid or detect harmful data inconsistencies

Operations

Job Scheduling Management

Archiving	Run 1000	Billing Run
Backup	RP Run 2000	Reorganization
Transports	Run 3000	

Automate business process while considering time and HW restrictions

Business Process Monitoring and Improvement

Proactively ensure reliable business process flow and throughput
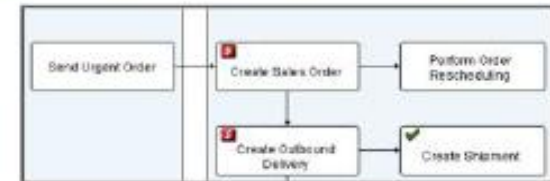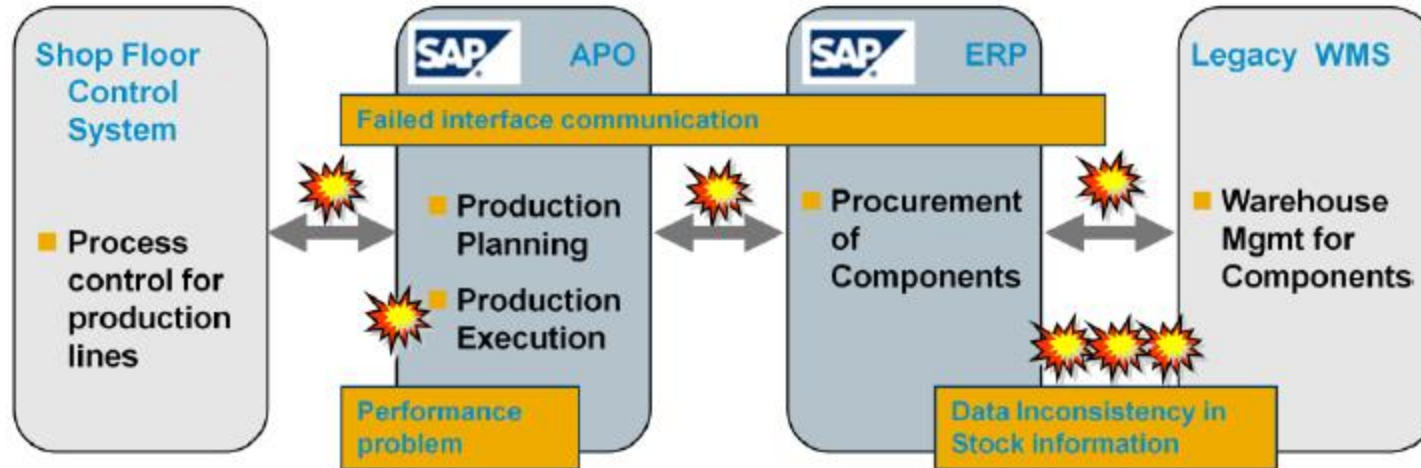
Business Process Operations

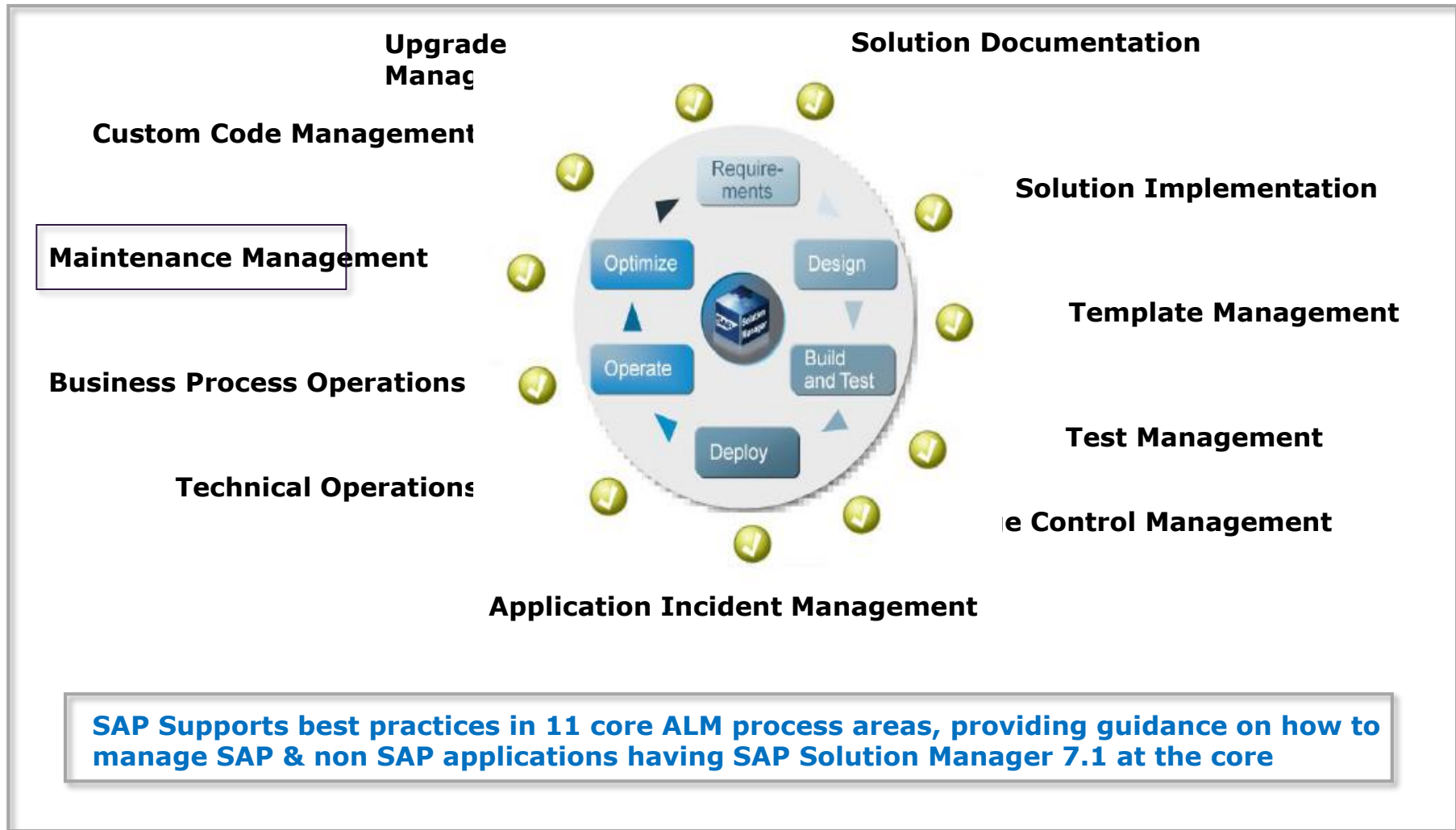

Motivation for Business Process Operation

„Keep Mission Critical Business Processes Running"

Example: Car Manufacturing Process (24 hours - 7 days per week)
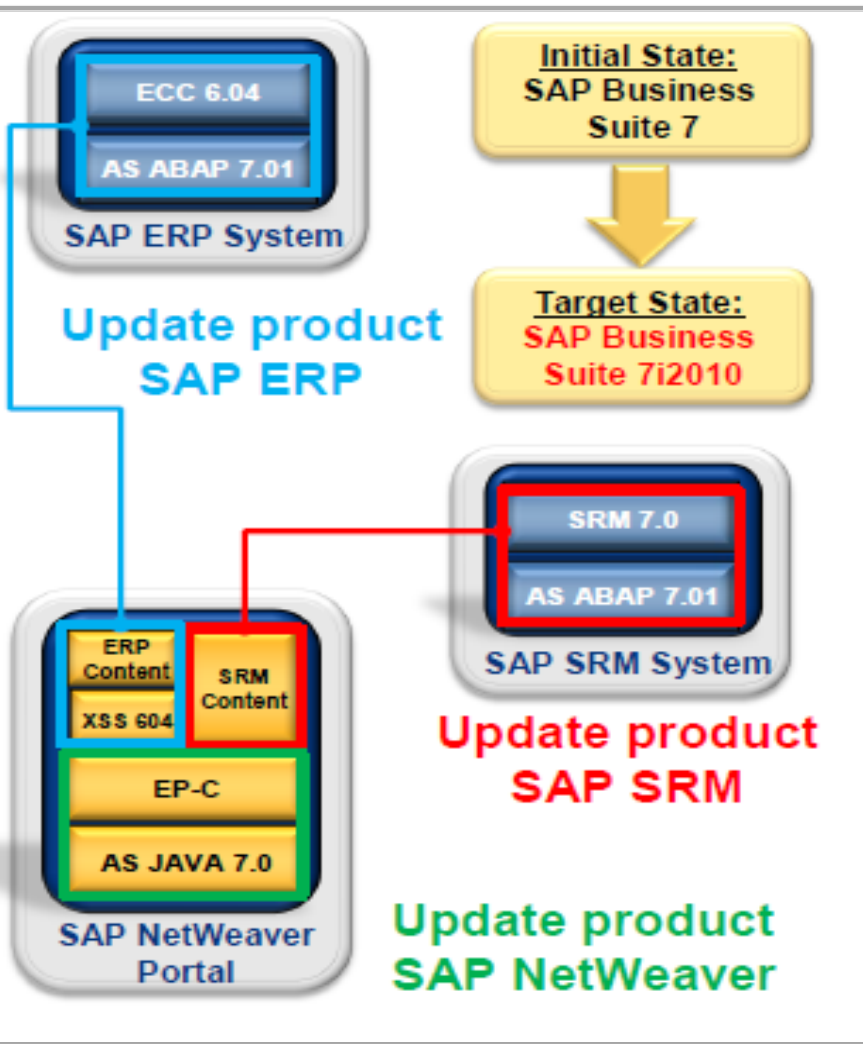1000 Cars assembled per day – about 50 cars per hour

Shop Floor Control System
- Process control for production lines

SAP APO
Failed interface communication
- Production Planning
- Production Execution

Performance problem

SAP ERP
- Procurement of Components

Data Inconsistency in Stock information

Legacy WMS
- Warehouse Mgmt for Components

Business Risks: One hour production down „costs" about 1.000.000 $

SAP Solution Manager – Functionalities Overview

Upgrade Manag...

Custom Code Management

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SAP Supports best practices in 11 core ALM process areas, providing guidance on how to manage SAP & non SAP applications having SAP Solution Manager 7.1 at the core

Maintenance Management: Maintenance Optimizer

Various reasons for updating an SAP system Landscape :

Application Driven

Update triggered by new business suite functionality

Implementing new enhancement packages for SAP business suite

Technology Driven

Update Triggered by new Net weaver functionality

Maintenance Optimizer allows maintenance for each product separately as well as combined maintenance of connected systems

Maintenance Optimizer

**Change Management Work Center
Maintenance Optimizer**

This view displays all Maintenance Optimizer transactions and their details.

System Recommendations

System Recommendations

System Recommendations: Process Flow

Customer

SAP

1. Select system to check & update

2. Retrieve system information (SP level, patch level, notes, ...)

3. Connect to SAP Global Support Backbone

5. Send information back to the customer's SAP Solution Manager system

4. Calculate delta information (latest relevant notes, etc...)

6. Apply relevant notes to the system(s)

BREAK

SAP Solution Manager – Functionalities Overview

Upgrade Manag

Custom Code Management

Maintenance Management

Business Process Operations

Technical Operations

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e Control Management

Application Incident Management

Requirements

Optimize

Design

Operate

Build and Test

Deploy

SAP Supports best practices in 11 core ALM process areas, providing guidance on how to manage SAP & non SAP applications having SAP Solution Manager 7.1 at the core

Custom Code Management – Custom Development Management Cockpit (CDMC)

Custom Development Management Cockpit
Promotion of Innovation & Protection of Investment

Solution: CDMC - „Usage / Clearing „

- Helps in identifying unused custom code as a basis for custom code effective retirement as part of Custom Code Lifecycle Management
- Leverage upgradeability of custom code based on transparency of used custon code

Solution: CDMC - Custom Code Change Impact

- Helps in identifying impacts of Lifecycle Change event such upgrade or SPs / EhPs implementation on custom code
- Leverage better planning & control of custom code adjustment activities
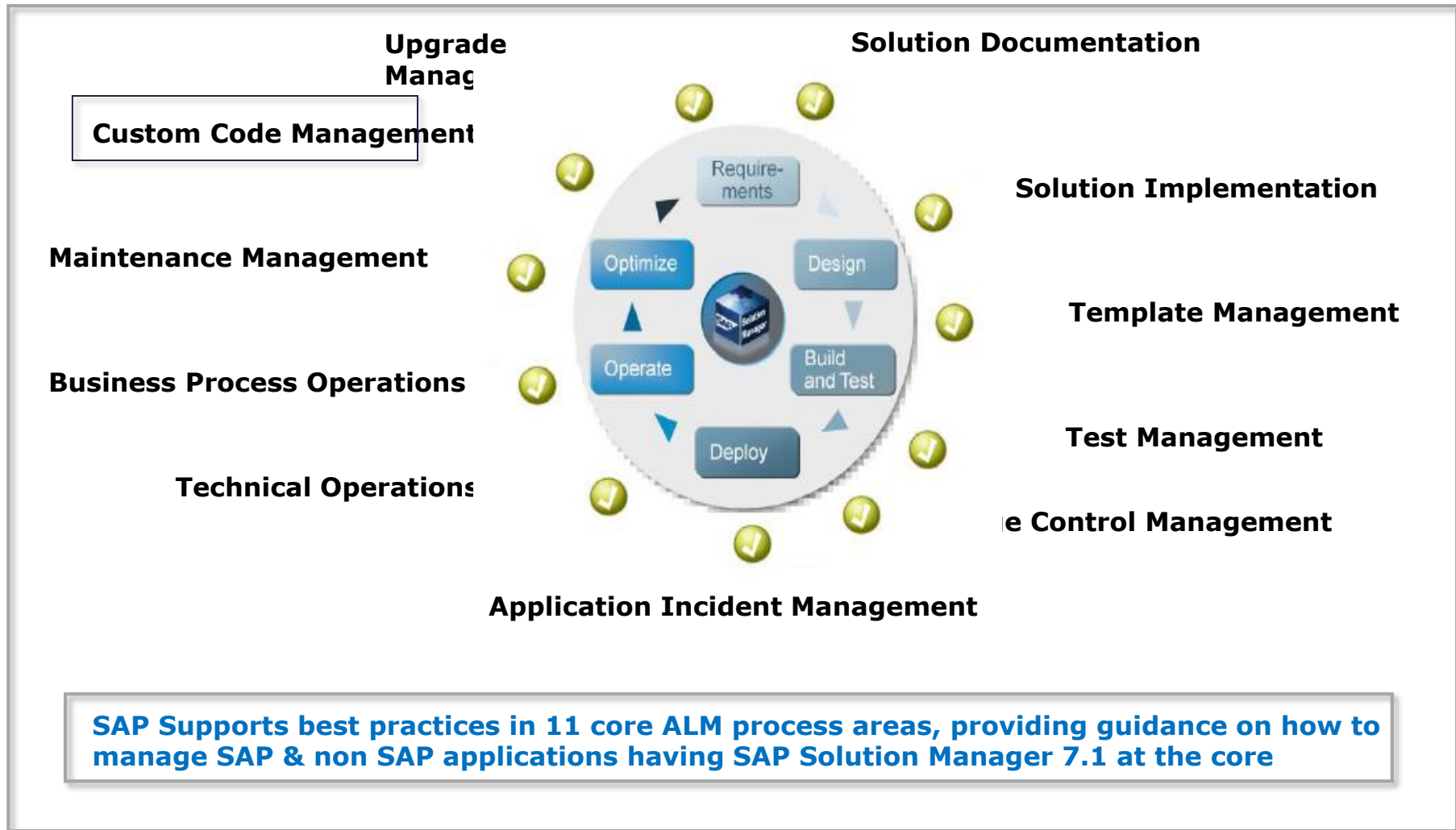
Solution: CDMC – Change and Transport Analysis

- Helps in identifying the usage information of testcase objects as part of test scope identificatoin and test coverage analysis activities. Also helps in performing the remote comparison of the objects that are part of the transport request between the systems.
- Leverage quality checks for the trasnport request across systems.

Requirements

Design

Build & Test

Deploy

Operate

Optimize

Custom Code Lifecycle Management

SAP Solution Manager

Business Benefits

- Transparency on custom code and its usage along with the business context information.
- Big saving potential by clearing based on identified obsolete customer objects
- Accelerated Upgrade

SAP Solution Manager – Functionalities Overview

Upgrade Management

Solution Documentation

Custom Code Management

Solution Implementation

Maintenance Management

Template Management

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Application Incident Management

SAP Supports best practices in 11 core ALM process areas, providing guidance on how to manage SAP & non SAP applications having SAP Solution Manager 7.1 at the core

Upgrade Roadmap

SAP Solution Manager 7.1 supports upgrade project holistically and effectively end-to-end new and enhanced features in the areas high-lighted below

Business	Business Process Expert	System Administrator	Business Process Expert	Quality Manager	System Administrator

Plan	**Build**				
Requirements	Design	Build	Test	Deploy	
Discovery	Evaluation	Preparation	Blueprint	Realization	Prep. for Cutover	Go-Live & Support

Demand
- Solution Documentation Assistant
- Upgrade Info Center
- ASAP Methodology
- Upgrade Roadmap
- EHP Business Function Predictor
- **Upgrade Dependency Analyzer**

Business and Technical Aspects
- Landscape Verification
- Business Blueprint
- Implementation Content
- **Custom Development Management Cockpit**

Configuration
- Technical Configuration
- Business Process Configuration
- Upgrade Customizing
- **Maintenance Optimizer**
- Upgrade Tools
- **Double Maintenance Management (Retrofit)**

Test Management
- Business Process Change Analyzer
- Test Management Capabilities
- E-learning Management

Deployment
- Hand-over to Support
- Quality Gate Management Capabilities
- Upgrade Monitoring
- Near Zero Downtime Methodology

Upgrade Management Workcenter

SAP Solution Manager: Work Centers

| Business Process Operations | Change Management | SAP Solution Manager Configuration | Root Cause Analysis | Data Volume Management | Implementation / Upgrade |

SAP delivers business scenarios and processes within multiple tools and documents.This information helps you to evaluate your business processes.

Overview
Projects
Evaluate
Plan
Build
Going Live Preparation
Upgrade Analyses
Reports

▼ **Common Tasks**

Show Roadmap
Maintain Project
Maintain Business Blueprint
Configure Business Processes
Manage Issues

▼ **Related Links**

System Landscape
System Data Transfer
Project Administration
Copy Projects and Solutions
Learning Maps
Custom Development Management Cockpit
SAP Links
  SAP Support Portal
  SAP Help Portal
  Upgrade Dependency Analyz...

SAP Business Maps

SAP Business Maps provide a platform for knowledge transfer, and act as a communication channel.They enable SAP, its partners, and customers to use a common language.

Access Business Maps

Customer Business Maps

You can use this intuitive software to design customer-specific solution maps.You can draw up a new solution map from scratch or customize one of SAP's Solution Maps.Solution Composer lets you visualize an organization's business processes and plan new IT solutions

Download Solution Composer

Business Function Prediction for SAP ERP

Business Function Prediction for SAP ERP simplifies the discovery of new SAP Innovations.It recommends the business functions delivered in SAP enhancement packages which are relevant to you.You can request this service which can help you to implement SAP enhancement packages for SAP

SAP Standard Scenarios

Process models help you define and model company-specific business processes for the business blueprint.Configuration information and best-practices offerings provide support when you implement the business processes in the system.

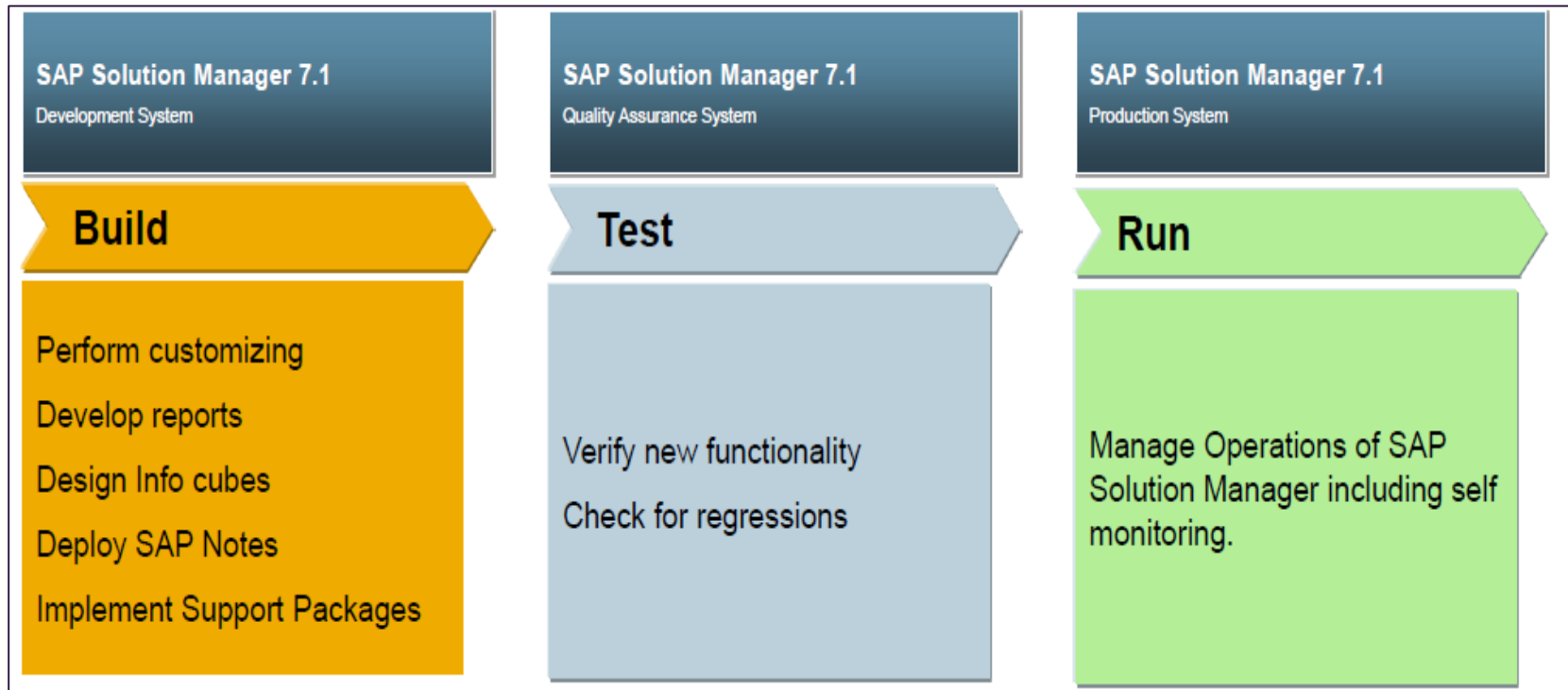Access Business Process Repository
Access SAP Best Practices

Customer Scenarios

The Solution Directory is a repository of processes and scenarios that are running in your production systems.You are able to copy processes and scenarios from your projects into the solution directory when you go live.

Access Projects
Access Solution Directory

SAP Solution Manager Landscape design

SAP Solution Manager 7.1 Development System	SAP Solution Manager 7.1 Quality Assurance System	SAP Solution Manager 7.1 Production System
Build	**Test**	**Run**
Perform customizing Develop reports Design Info cubes Deploy SAP Notes Implement Support Packages	Verify new functionality Check for regressions	Manage Operations of SAP Solution Manager including self monitoring.

To enable broad adoption, SAP recommends the best practice of a 3 – tier landscape.
 A 2- tier landscape may be sufficient if no customizing or custom development is involved.

Thank You

Source : SAP AG , Service Marketplace,Capgemini Repository