

BPM / SOA Governance

A Practical Approach

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BPM/SOA Governance

- BPM/SOA governance governs the usage of BPM and SOA concepts in a conformant, efficient and consistent way.

- It includes:
 - Goals
 - Principles
 - Policies

- Non-existing Governance is the main reason for unsuccessful BPM/SOA projects

BPM/SOA Governance

- Also known as:
 - API Management
 - Integrated SOA Governance
 - Application Services Governance
- Gartner:
 - Applications architected according to service-oriented architecture (SOA) are becoming more common than ever. Service-oriented applications increasingly include application functionality that is sourced from the cloud, private or public, according to different standards, but following the same architectural pattern. Packaged application vendors and SaaS providers are taking service orientation for granted, and increasingly expose the functionality they sell as Web APIs. Mobile applications increasingly use private and public APIs in addition to enterprise systems of record, necessitating adequate governance and oversight.

Goals

- Define best practices
- Maintain agility
- Reduce administrative burden

- SOA Governance enforcement should be based on best practices, not „police control“.

Governance Aspects: Service Design

- Service identification
- Interface design
- Description of functionalities and behavior
- Technical aspects (exports, bindings, ...)
- Implementation best practices
- Patterns
- Reuse strategies
- Service lifecycle

- Enforcement

Process Design

- Process decomposition
- Modeling principles, patterns and best-practices
- Service invocation strategies
- Human task implementation
 - Escalation policies
 - Identity management
- Business rules
- KPI definition
- Process lifecycle

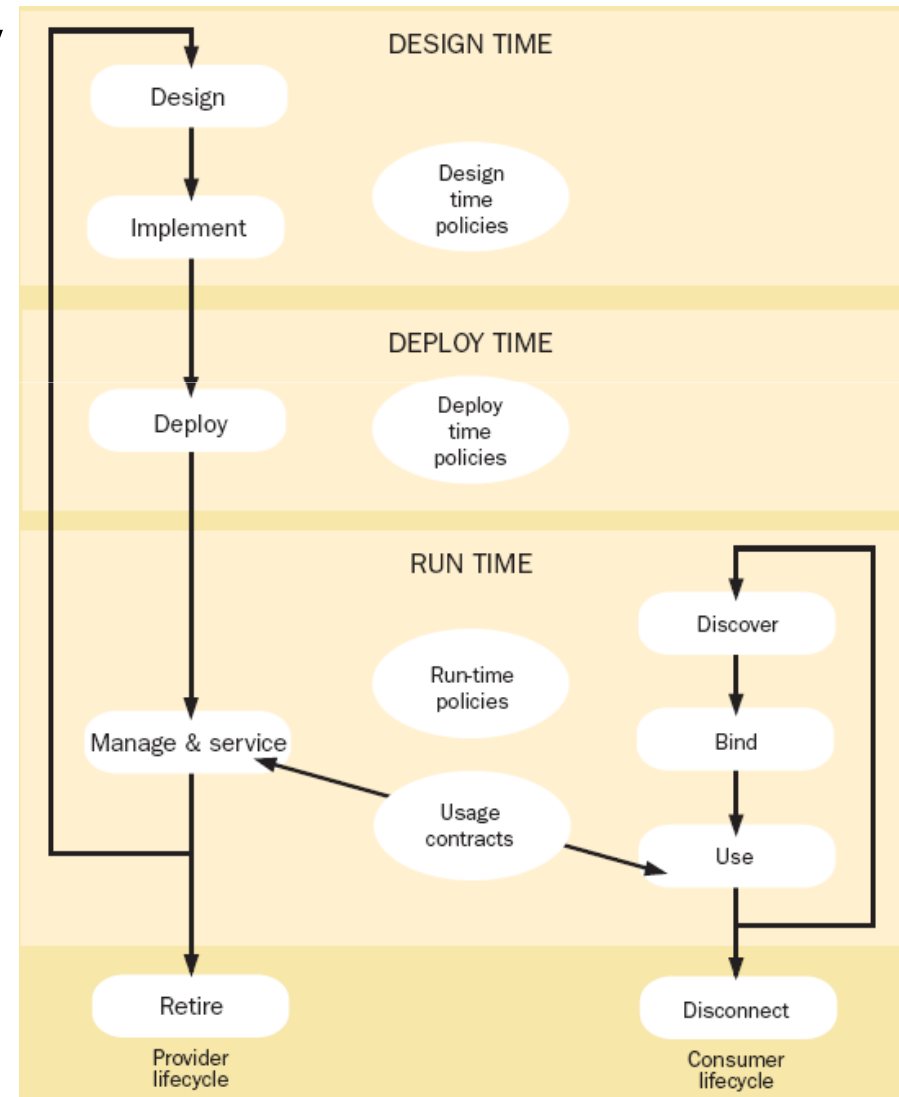
- Enforcement

Business Objects / XML Schema Design

- Identification of XML types
- Namespaces
- Definition of schemas
- Definition of common types
- Scenario management
- Reuse strategies

Service life-cycle

- Life-cycle planning
 - Using enterprise repository
- Typical stages
 - Designed
 - Tested
 - Active
 - In maintenance
 - Deprecated
 - Retired



Service Versioning

- Change management procedures for services
- Service versioning
 - Versioning nomenclature
 - Major.minor.buld.release
 - Rules for changing version numbers
 - Versions compatibility
- Notification of service consumers
- Rules for migration to new versions

Service Ownership

- Who is responsible for which service
- Responsibilities in a composite application
- Definition of procedures in case of
 - Failure
 - Upgrading a service
- *Important: service ownership model should support agile development.*

Service Migration

- Where are services deployed
- What happens if an endpoint URL is changed
- Migration between development, test, and production environments

- Continuous Integration

Service Identification

- How to publish services
- How to search for services
- Reuse strategy
- How to modify an existing service
- Dependency control
 - Between services and service consumers
- Service registry / enterprise repository

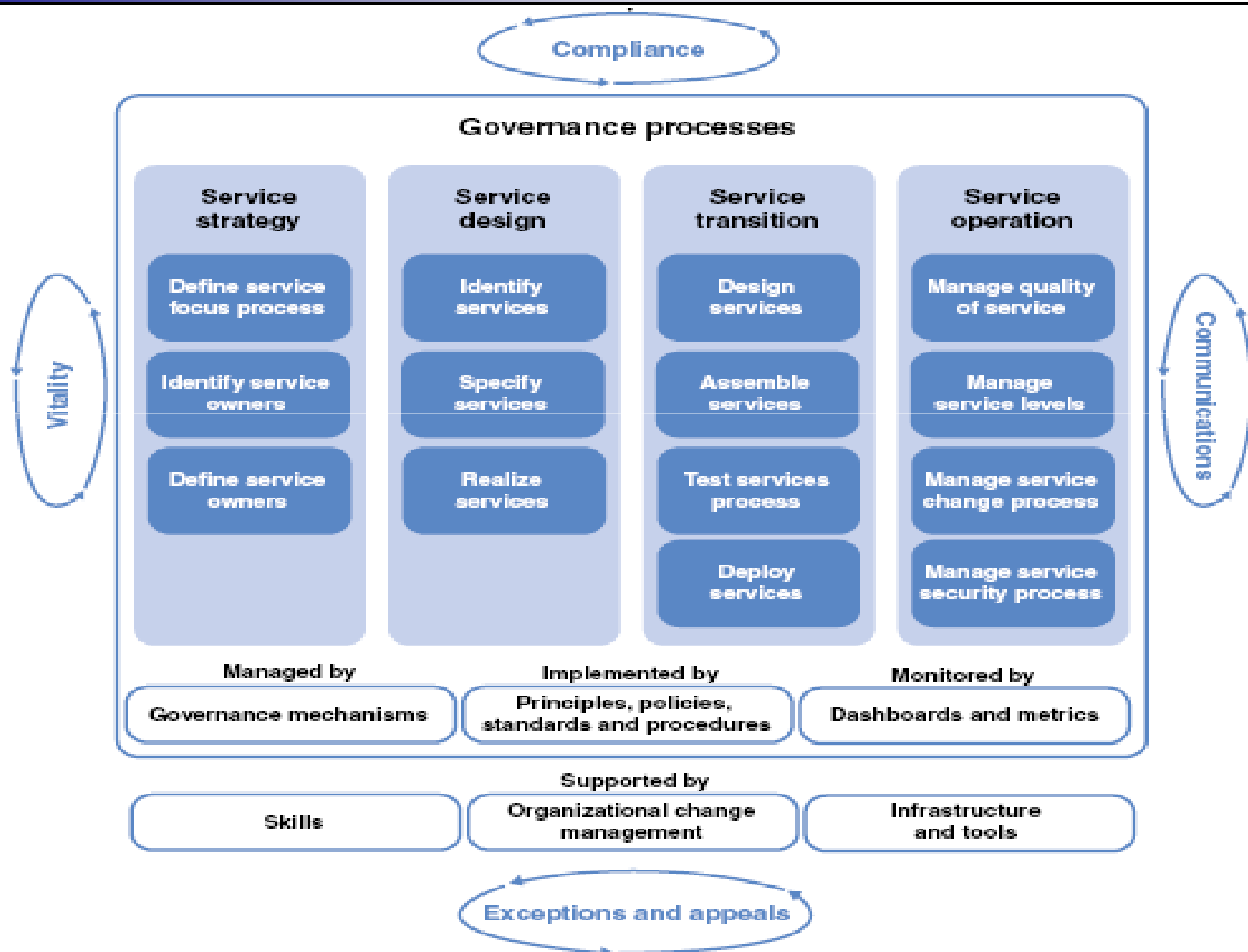
Service Control

- How to control and manage service execution
- What happens if a service fails
- Definition of SLAs and QoS
- Monitoring

Governance Aspects

- Service testing
 - Unit testing
 - Functional testing
 - Integration testing
 - Stress testing
 - ...
- Service security
 - How to secure services
 - How to secure data
 - ACLs
 - *Security testing!*

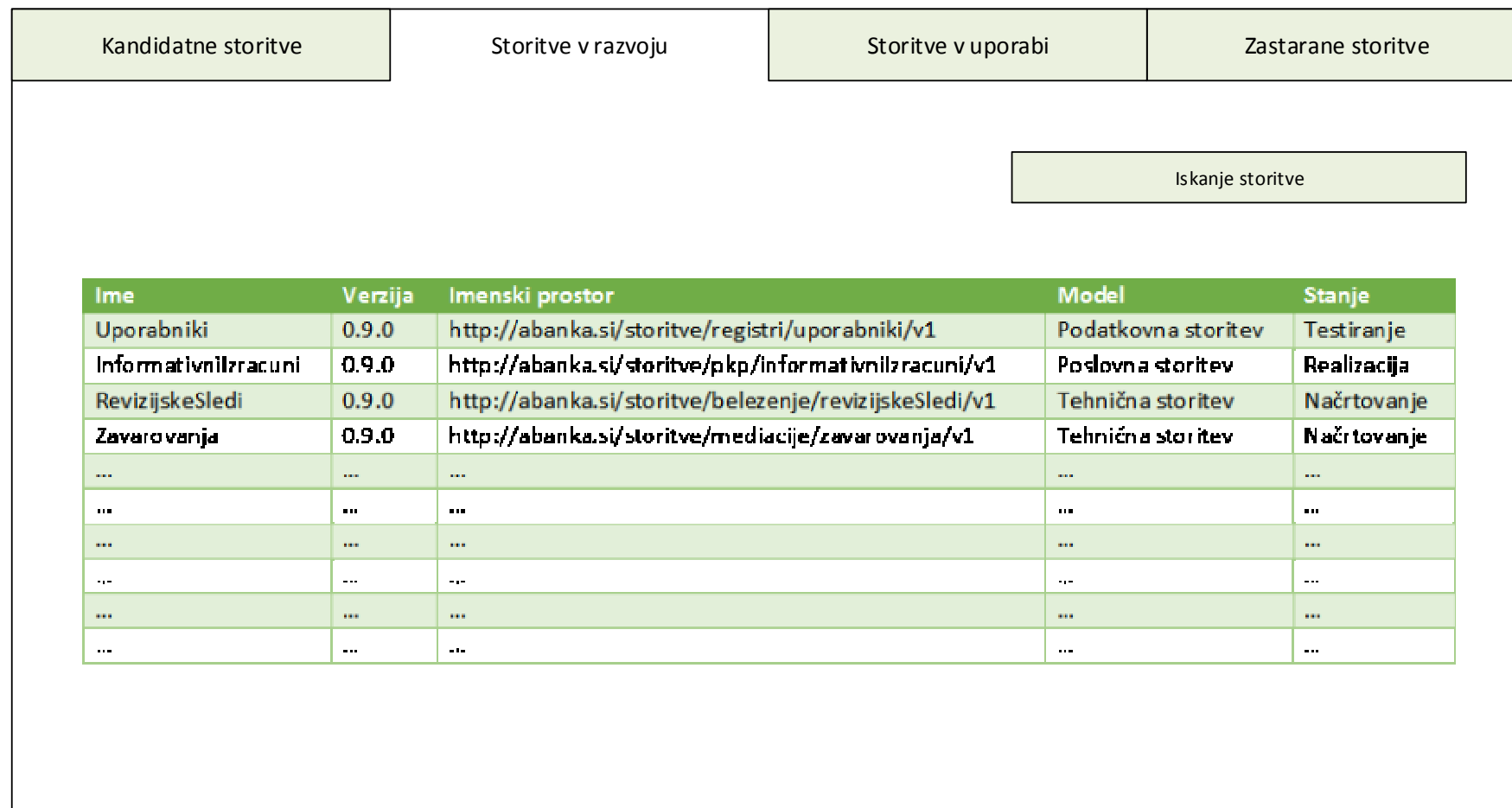
Governance Aspects



Tools

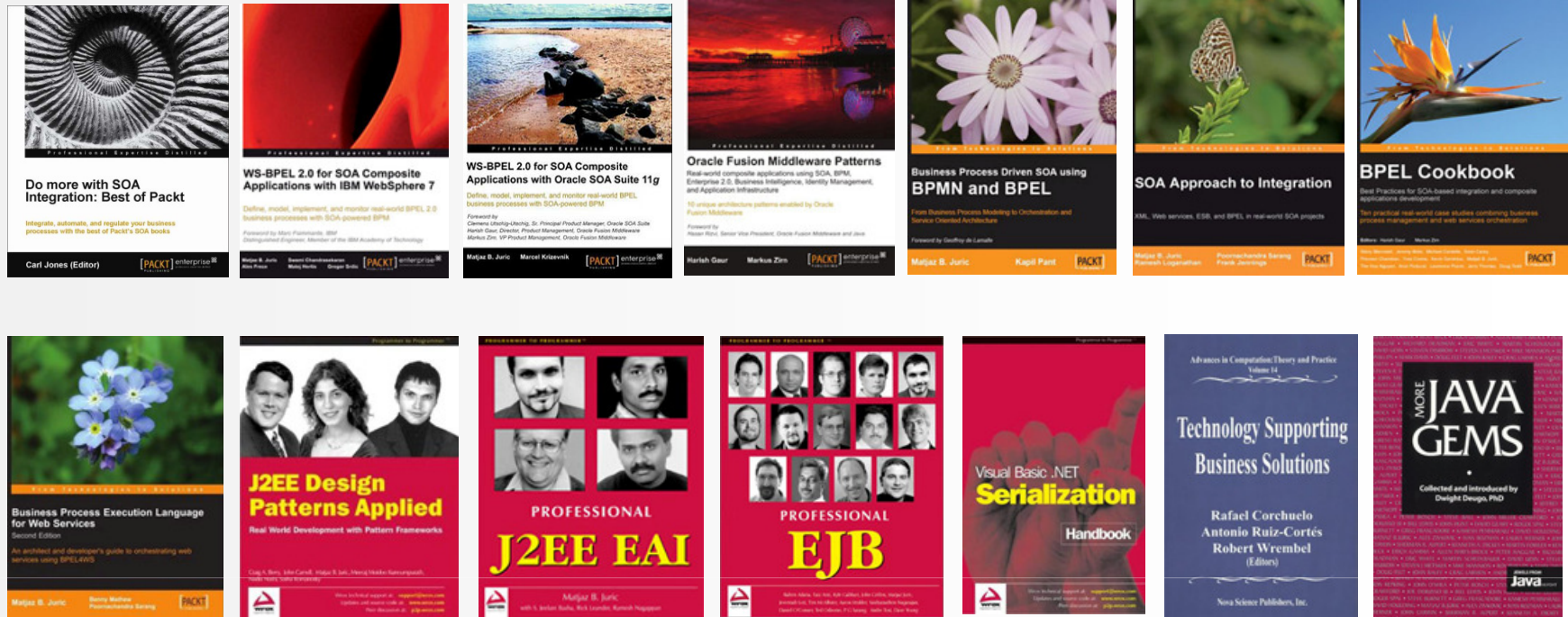
- Oracle SOA Governance Suite
 - Enterprise Manager
 - Oracle Service Registry
 - Oracle Enterprise Repository
 - Harvester
 - Oracle Service Bus

Alternatives





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