SOA Project Planning & Management

SOA Project Phases [1]

- Requirement engineering
- Business domain analysis
- Solution architecture outline
- High- and low-level design
- Analysis and design
- Various test phases (unit, integration, system, and acceptance tests)
- Going live
- Maintenance
- Management

SOA Project Members (function roles)

- 6 Existing Roles & Skills
  - The IT Project Manager
  - The Business Analyst
  - The Architect
  - The Developer
  - The Security Specialist
  - The System and Database Administrator

- New Roles
  - The Service Deployer
  - The Service Integration Tester
  - The Toolsmith
  - The Knowledge Transfer Facilitator
  - The SOA Project Manager
  - The SOA System Administrator
  - The SOA Architect
  - The Service Modeler or Designer
  - The Process Flow Designer
  - The Service Developer
  - The Integration Specialist
  - The Interoperability Tester
  - The UDDI Administrator
  - The UDDI Designer
  - The Service Governor
6 Project Time Management

6.1 Activity Definition

6.1.1 Activity Definition: Inputs
- .1 Enterprise Environmental Factors
- .2 Organizational Process Assets
- .3 Project Scope Statement
- .4 Work Breakdown Structure
- .5 WBS Dictionary
- .6 Project Management Plan

6.1.1 Activity Definition: Tools and Techniques
- .1 Decomposition
- .2 Templates
- .3 Rolling Wave Planning
- .4 Expert Judgment
- .5 Planning Component
  - Control Account
  - Planning Package

6.1.1 Activity Definition: Outputs
- .1 Activity List
- .2 Activity Attributes
- .3 Milestone List
- .4 Requested Changes

6.2 Activity Sequencing

6.2.1 Activity Sequencing: Inputs
- .1 Project Scope Statement
- .2 Activity List
- .3 Activity Attributes
- .4 Milestone List
- .5 Approved Change Requests

6.2.2 Activity Sequencing: Tools and Techniques
- .1 Precedence Diagramming Method (PDM)
- .2 Arrow Diagramming Method (ADM)
- .3 Schedule Network Templates
- .4 Dependency Determination
  - Mandatory dependencies
  - Discretionary dependencies
  - External dependencies
- .5 Applying Leads and Lags

6.2.3 Activity Sequencing: Outputs
- .1 Project Schedule Network Diagrams
- .2 Activity Lists (Updates)
- .3 Activity Attributes (Updates)
- .4 Requested Changes

6.3 Activity Resource Estimating (persons, equipment, software, etc)
6.3.1 Activity Resource Estimating: Inputs
   - 1. Enterprise Environmental Factors
   - 2. Organizational Process Assets
   - 3. Activity List
   - 4. Activity Attributes
   - 5. Resource Availability
   - 6. Project Management Plan

6.3.2 Activity Resource Estimating: Tools and Techniques
   - 1. Expert Judgment
   - 2. Alternative Analysis
   - 3. Published Estimating Data
   - 4. Project Management Software
   - 5. Bottom-Up Estimating

6.3.3 Activity Resource Estimating: Outputs
   - 1. Activity Resource Requirements
   - 2. Activity Attributes (Updates)
   - 3. Resource Breakdown Structure
   - 4. Resource Calendar (Updates)
   - 5. Requested Changes

6.4 Activity Duration Estimating
6.4.1 Activity Duration Estimating: Inputs
6.4.2 Activity Duration Estimating
6.4.3 Activity Duration Estimating: Outputs
   - 1. Activity Duration Estimates
   - 2. Activity Attributes (Updates)

6.5 Schedule Development
6.5.1 Schedule Development: Inputs
6.5.2 Schedule Development: Tools and Techniques
6.5.3 Schedule Development: Outputs

6.6 Schedule Control
6.6.1 Schedule Control: Inputs
   - 1. Schedule Management Plan
   - 2. Schedule Baseline
   - 3. Performance Reports
   - 4. Approval Change Request
6.6.2 Schedule Control: Tools and Techniques
   - 1. Progress Reporting
   - 2. Schedule Change Control System
   - 3. Performance Measurement
   - 4. Project Management Software
   - 5. Variance Analysis
   - 6. Schedule Comparison Bar Charts
6.6.3 Schedule Control: Outputs
   - 1. Schedule Model Data (Updates)
   - 2. Schedule Baseline (Updates)
   - 3. Performance Measurement
- .4 Requested Changes
- .5 Recommended Corrective Actions
- .6 Organizational Process Assets (Updates)
- .7 Activity List (Updates)
- .8 Activity Attributes (Updates)
- .9 Project Management Plan (Update)

**PMBOK Guide 2004 [2]:**

7 Project Cost Management

- 7.1 **Cost Estimating**
  - 7.1.1 Cost Estimating: Inputs
    - .1 Enterprise Environmental Factor
      - Marketplace conditions
      - Commercial databases
    - .2 Organizational Process Assets
      - Cost estimating policies
      - Cost estimating templates
      - Historical information
      - Project files
      - Project team knowledge
      - Lessons learned
    - .3 Project Scope Statement
    - .4 Work Breakdown Structure
    - .5 WBS Dictionary
    - .6 Project Management Plan
      - Schedule management plan
      - Staffing management plan
      - Risk register
  - 7.1.2 Cost Estimating: Tools and Techniques
    - .1 Analogous Estimating
    - .2 Determine Resource Cost Rates
    - .3 Bottom-up Estimating
    - .4 Parametric Estimating
    - .5 Project Management Software
    - .6 Vendor Bid Analysis
    - .7 Reserve Analysis
  - 7.1.3 Cost Estimating: Outputs
    - .1 Activity Cost Estimates
    - .2 Activity Cost Estimate Supporting Details
    - .3 Requested Changes
    - .4 Cost Management Plan (Updates)

- 7.2 **Cost Budgeting**
  - 7.2.1 Cost Budgeting: Inputs
    - .1 Project Scope Statement
    - .2 Work Breakdown Structure
    - .3 WBS Dictionary
7.2.2 Cost Budgeting: Tools and Techniques
- Cost Aggregation
- Reserve Analysis
- Parametric Estimating
- Funding Limit Reconciliation

7.2.3 Cost Budgeting: Outputs
- Cost Baseline
- Project Funding Requirements
- Cost Management Plan (Updates)
- Requested Changes

7.3 Cost Control
7.3.1 Cost Control: Inputs
- Cost Baseline
- Project Funding Requirements
- Performance Reports
- Work Performance Information
- Approved Change Requests
- Project Management Plan

7.3.2 Cost Control: Tools and Techniques
- Cost Change Control System
- Performance Measurement Analysis
- Forecasting
- Project Performance Reviews
- Project Management Software
- Variance Management

7.3.3 Cost Control: Outputs
- Cost Estimates (Updates)
- Cost Baseline (Updates)
- Performance Measurements
- Forecasted Completion
- Requested Changes
- Recommended Corrective Actions
- Organizational Process Assets (Updates)
- Project Management Plan (Updates)

References