SAP Solution Manager usage for Digital Transf. at Public Sector Company

Surendra Utti, Project Manager
Agenda

1. Project overview
2. Why SAP Solution Manager for projects
3. SAP Solution Manager landscape
4. Process Management
5. Focus Build
6. Test Suite
7. Challenges
8. Summary
iLMS is an integrated system (S4Hana 1610) that will connect procurement, finance and logistics functions across the different Departments of a Public Sector Organization.

<table>
<thead>
<tr>
<th>What iLMS provides</th>
<th>Benefits realised</th>
</tr>
</thead>
<tbody>
<tr>
<td>An integrated view across Organization Departments</td>
<td>Better sharing of resources</td>
</tr>
<tr>
<td>An integrated view across purchasing, finance and logistics</td>
<td>Improved operations, less duplications, less errors and less corrections</td>
</tr>
<tr>
<td>Access to updated information in real time</td>
<td>Better reaction to unplanned events</td>
</tr>
<tr>
<td>Data-sharing and analytics capabilities</td>
<td>Uncovering of patterns leading to better anticipation and better decisions</td>
</tr>
<tr>
<td>Automated business rules and audit trails</td>
<td>Better governance, risk management and compliance</td>
</tr>
<tr>
<td>Monitoring of operational assets and contracts</td>
<td>Better insights and better forward-planning</td>
</tr>
</tbody>
</table>
Project Schedule – Phase 1 & 1B

**Phase 1**

**Development**
- WRICEF Build & Unit Test
  - 17/3 – 28/7

**Testing**
- SIT (7 weeks)
  - 22/6 – 8/8
- UAT Cycle 1 & 2 (8 + 4 weeks)
  - 28/8 – 17/11

**Training**
- EUT 1
  - 27/11 – 22/12
- EUT 2
  - 8/1 – 9/2
- Remedial Trg
  - 26/2 – 19/3

**Data Migration**
- Data Migration 1
  - 13/3 - 31/3
- DM2
  - 12/6 – 21/6
- DM3
  - 15/8 – 25/8
- DM4
  - 13/12 – 21/12

**Phase 1 Go Live**
- 1 Apr

**Scope:**
- S4Hana – FI, PU, IM, PM
- BW, BoBJ
- PO
- GRC
- Open Text

**Phase 1B**

**Development**
- WRICEF Build & Unit Test
  - 29/1 – 7/5

**Testing**
- SIT (6 weeks)
  - 23/4 – 4/6
- UAT (6 weeks)
  - 18/6 – 30/7

**Training**
- EUT 2
  - 30/7 – 27/8

**Data Migration**
- DM2
  - 9/4 – 23/4
- DM3
  - 4/6 – 18/6
- Prod DM & Cutover
  - 27/8 – 1/10

**Phase 1B Go Live**
- 1 Oct

**Scope:**
- BPC
- IBM BPM
- Deferred Objects
- CRs
ILMS Solution Overview

SAP BusinessObjects Business Intelligence Platform

Project Systems
- Plant Maintenance
- Materials Management
- Warehouse Management
- Real Estate Management

SAP Financials

ERP – SAP Enterprise Core Component
- SAP xECM / Document Access by OpenText
- SAP Content Management for SharePoint by OpenText
- SAP Solution Manager

SAP Mobile Platform
- SAP Work Manager
- SAP Inventory Manager

Legend
- Mandatory
- Optional

SAP NetWeaver Business Warehouse
- SAP Business Planning & Consolidation
- SAP NetWeaver Process Orchestration

cs making IT happen
Why SAP Solution Manager for Delivery?

• **Simplified requirement to deploy process** with modem UI (Fiori based) available with Focused Build-add on (accelerated setup)

• Improved **Process Management with mature modeling capability**

• **Test suite in solman is quite comprehensive** (All under one roof) with mature end to end test management capabilities for both manual and automated testing

• SAP Solution Manager supports on **premise, cloud and hybrid solutions**

• **No additional license cost**

• Assets created in the delivery phase e.g. Process Models, Test cases, etc. is quite helpful in managing operations

• **One integrated tool** for all aspects of Project Delivery – Wave/sprint planning, To be process models design, requirements management, etc.
Requirements to Deploy (R2D) in NCS Solman

- Capture to be Process models
- Document requirements
- Specify requirements in work packages
- Scope work packages into work items and provide design documents
- Use Test Suite of solman for SIT and UAT
SAP Solution Manager landscape

SolMan Usage
- Business Process Management (includes Sol. Doc.)
- Requirements management
- Work package & Work item management
- Test Suite
- Dashboards e.g. Solution Readiness

SolMan + Focused Build

NCS
(Partner)

Air gap

Customer

SolMan Usage
- Business Process Management
- SolMan for operations

SolMan

SAP S/4HANA
Dev

SAP S/4HANA
7.2
Solution Manager

SAP S/4HANA
Quality

SAP S/4HANA
Production

Customer
SAP Solution Manager Scope in NCS Solman

- Solution Documentation (Process Management with models)
- Test Management
- Focused Build
  - Requirements Management
  - Work package Management
  - Work item management with transport centrally controlled using SAP Solution Manager
  - Release Management
- Incident Management, Defect and Defect Correction process
Process Management
Branch design

- Production
- Development
- Design

- No editable production branch
- Change controlled dev. branch
- Design branch to capture to be process models
Branch design (contd.)

All modification permitted in context of Work item (no ad-hoc changes permitted)
No. of Scenarios, processes and process steps

- No of Scenario: 110
- No of processes: 429
- No of Process steps: 3700+
- No of business process models: 429
ILMS Process Mgmt in SAP Solution Manager

Business processes have 5 levels, with Process Area, Process Groups, Scenario, Process and Process Step.
Process models in SAP Solution Manager

- 1 process model was created for each process using BPMN notation.
- Easy to use UI, quite intuitive to create process models.
Branch synchronization - NCS and customer solman

Transfer after every Wave
(using Jason export/import & transports)

= Change Request Management controlled
Value of using SAP Solution Manager
Process Management

- Efficient documentation
- Transparency
- Secure
- Audit compliant
- Easier transition to operations
- Smooth hypercare
- Business process monitoring enabled
## Value of using SAP Solution Manager

### Process Management

#### Efficient documentation
- Document Process centrally
- Document as your progress via Work packages and work items

#### Transparency
- Entire to be processes is centrally available to all
- Easy to find Specification and Design documents

#### Secure
- Access to SAP Solution Manager is authorization controlled
- Design branch is change controlled, so, finalized processes cannot be modified.

#### Audit compliant
- All changes are logged

#### Easier transition to operations
- Entire solution is well catalogued
- Test cases are already available and linked to Processes/Process steps

#### Smooth hypercare
- High quality deliverable, no missing transports
- Easy to find relevant documentations if issues found

#### Business process monitoring enabled
- Business process models already available to activate the business process monitoring

#### No license Cost
- Usage right already available with maintenance contract
Focused Build
Focused Build – An add-on on SAP Solution Manager

- Pre-configured add-on
- Provides IT best practice for S/4HANA implementation
- Supports entire Requirements to Deploy process in agile way
- License already available via max-attention contract (or any premium engagement)
- Provide mature functionality (Saves 250 days of implementation effort)
NCS usage of Solman & Focused Build

Requirements captured at Business Process

One work package per requirement

Multiple work items per work package

Test Plans created from Work packages and directly from processes (SIT, UAT, RT)
NCS usage of Solman & Focused Build

- **Processes** → **Requirements** → **Work Package** → **Work Item** → **Test Plan**

  - Requirements captured at Business Process
  - One work package per requirement
  - Multiple work items per work package
  - Test Plans created from Work packages and directly from processes (SIT, UAT, RT)

<table>
<thead>
<tr>
<th>Capabilities</th>
<th>No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Requirements</td>
<td>127</td>
</tr>
<tr>
<td>Work packages</td>
<td>127</td>
</tr>
<tr>
<td>Work items</td>
<td>152</td>
</tr>
<tr>
<td>Major release</td>
<td>1</td>
</tr>
<tr>
<td>Minor releases</td>
<td>5</td>
</tr>
</tbody>
</table>

Focused Build was used for Release 1b
All requirements were created and linked to Business Process Branch: Design branch
Requirements in SAP Solution Manager

Processes → Requirements → Work Package → Work Item → Test Plan
Work packages in SAP Solution Manager

Processes → Requirements → Work Package → Work Item → Test Plan
Work packages in SAP Solution Manager

- Processes
- Requirements
- Work Package
- Work Item
- Test Plan
Work items in SAP Solution Manager

Processes → Requirements → Work Package → Work Item → Test Plan
Work items in SAP Solution Manager

- Processes
- Requirements
- Work Package
- Work Item
- Test Plan
Work items (transports) in SAP Solution Manager

Requirements

Work Package

Work Item

Processes

Test Plan

Transports are created from Work Items centrally in SAP Solution Manager (direct creation of transports in S/4HANA dev. System was not permitted)
Focused Build – Solution readiness dashboard

- Solution Readiness dashboard was used to track live progress of project.
- Many hours per week was saved in project reporting.
## Value of using Focused Build

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Transparency</strong></td>
<td>• No surprises, no manual reporting, streamlined distribution and monitoring of work</td>
</tr>
<tr>
<td><strong>Traceability</strong></td>
<td>• Well orchestrated industry best practice based R2D, develop/configure what you need, when you need</td>
</tr>
<tr>
<td><strong>Efficiency</strong></td>
<td>• All the relevant artifacts centrally stored and linked to business processes, faster adoption of innovation</td>
</tr>
<tr>
<td><strong>Audit compliance</strong></td>
<td>• Entire R2D is authorization controlled and changes are logged</td>
</tr>
<tr>
<td><strong>Secure</strong></td>
<td>• Authorization controlled access, centrally stored on server, less challenges due to resource churn, laptop crashes, etc.</td>
</tr>
<tr>
<td><strong>Faster T2O</strong></td>
<td>• All the relevant artifacts centrally stored and linked to business processes</td>
</tr>
<tr>
<td><strong>Uneventful hypercare</strong></td>
<td>• Lesser bugs in production and higher customer confidence</td>
</tr>
<tr>
<td><strong>No license cost</strong></td>
<td>• No license cost for max-attention customers</td>
</tr>
</tbody>
</table>
Test suite
Mature and comprehensive Test Suite in SAP Solman

- **Tests for SAP and non-SAP**: covers SAP Business Suite, S/4HANA, Concur, Ariba, … and non-SAP solutions
- **On-premise, Cloud, Hybrid**: Supports functional tests for on premise, cloud and hybrid solutions
- **End to end test management functionality**: no integration setup and ongoing data replication required
- **Integration**: integrated with project management, process management, change and release management, defect and incident management, custom code management
- **Requirements to Deploy**: Supports waterfall and agile development approaches
- **Manual Tests**: Easy to use manual tests for business users
- **Automated Tests**: for all SAP and non-SAP processes
- **Test Data**: Possibility to store data centrally in SAP Solution Manager
- **Change Impact Analysis**: reduce test scope based on software changes and smart calculations
- **Test Planning**: proposes test plan fitting the needs of the upcoming test cycle
- **Analytics**: provides full transparency of test status and test progress for all involved parties
### Details on number of Test Cycle

<table>
<thead>
<tr>
<th>Category</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>No. of Test Cycles</strong></td>
<td></td>
</tr>
<tr>
<td>Scenario Integration Test</td>
<td>1</td>
</tr>
<tr>
<td>User Acceptance Test</td>
<td>2</td>
</tr>
<tr>
<td><strong>No. of Test cases</strong></td>
<td></td>
</tr>
<tr>
<td>Scenario Integration Test</td>
<td>695</td>
</tr>
<tr>
<td>User Acceptance Test</td>
<td>800</td>
</tr>
<tr>
<td><strong>No. of testers</strong></td>
<td></td>
</tr>
<tr>
<td>Scenario Integration Test</td>
<td>30</td>
</tr>
<tr>
<td>User Acceptance Test</td>
<td>100+</td>
</tr>
</tbody>
</table>
Test Planning and Execution

Work Streams

- Test Preparation
- Test Planning
- Test Execution
- Test Execution Analytics

Tasks

- Create / Assign Test Cases to Business Process
- Generate Test Plan associated with Solution
- Create Test Packages
- Assign Tester
- Access Tester Worklist
- Test Case execution
- Document test Result / set status / create defects
- Defect Correction (Developer provides fix)
- Retest and set test case status

Operational Test Management Reporting

- Setup of Solution Documentation
- Setup of Projects and Release
- Create and select Requirements

Test Management Dashboard
Drag drop functionality to create Test cases

Manual Test scripts were created at Process level
Test Plan and Test Package creation

Test scripts were filtered to create SIT and UAT Test Plans
Defect and Defect correction

Defects created for failed Test cases
## Value of Test Suite in SAP Solution Manager

### Transparency
- Platform to professionally manage testing
- Track current testing progress, defects, etc.

### Traceability
- Test what needs to be tested, creation of defects for failed test cases

### Efficiency
- Faster to do test planning and tester assignment (many mass management functionalities)

### Audit compliance
- Store test cases and test plans centrally, all changes are logged

### Secure
- Authorization controlled access, centrally stored on server, less challenges due to resource churn, laptop crashes, etc

### Faster T2O
- Regression test plan can be easily created, automate critical business processes

### Find Defects early
- Find defects early, also lesser defects in PRD systems

### No license cost
Challenges
Summary
Optimizing the digital transformation project with SAP Solution Manager and Focused Build

NCS Pte Ltd. implemented S/4HANA 1610 for large scale public sector company in Singapore. NCS leveraged SAP Solution Manager & Focused build as project delivery platform to optimize their S/4HANA implementation.

Before: Challenges and Opportunities for S/4HANA
• No integrated view across multiple departments
• No Realtime information
• Need for improved analytics for uncovering new patterns
• Need for better governance, risk management and compliance

Why SAP Focused Build for Solution Manager
• Simplified requirements to deploy process with modern UI
• Improved Process Management with mature modelling capabilities
• Test suite is quite comprehensive
• Supports on premise, cloud and hybrid solutions
• No additional license cost
• Transition to operations becomes easier
• One integrated tool for all aspects of project delivery
• Support from SAP Digital Business Services during setup and training

After: Value-Driven Results
• Provides a clear view of status for management on the overall project
• End to end traceability from requirements to final deployment with audit trails
• Single Source of Truth; with baseline Business process content
• Highly scalable tool supporting on premise, cloud and hybrid landscape for project delivery and operations
  o There is a potential to reduce almost 30% efforts during implementation
• One integrated and comprehensive tool with no additional license cost

“SAP Solution Manager and Focused Build provide one single toolset to optimize delivery and operations”
Surendra Utti – Project Manager, NCS Pte Ltd.

“Hypercare is smooth and escalation can be avoided if SAP Solution Manager is rightly used”
Surendra Utti – Project Manager, NCS Pte Ltd.
NCS as implementation partner

• SAP Solution and Focused build provides an accelerated setup of Requirements to Deploy process, saves time and cost.

• Customers appreciate transparency provided by the Focused build dashboard; decision making is faster.

• Think beyond project delivery, usage of Solman during project phase also adds considerable value during operations.

• Agile approach for implementation is well supported by Focused Build; also with Work Package concept, its easy to distribute work.

• SAP provides comprehensive role base eLearning for entire Requirements to Deploy process using Focused Build which is easily accessible.
  • These role based eLearning's are self explanatory and can easily be complemented by system trials.

• Agile Framework (Safe) supported by Focused Build is well adopted and pragmatic framework for implementation projects.
Challenges

• Poor performance of modeling UI: SAP team promptly responded and issue was resolved.

• Update of SAP Solution Manager & Focused Build add-on with latest SPs: Since, there was only one Solman in the NCS landscape, any challenges faced in update impacted the project timeline.

• Solman availability on day 1 of the project: System with FB add-on was not available on Day 1 of the project, hence, required little rework later.

• Resistance from delivery team: Sometime, the team was in too hurry to build the wricefs, and they do not wish to record it in Focused Build via creation of Work packages and work items.

• Trex (Search) problem: Each time SAP Solman was updated with a new SP, trex was no working, solution was to refresh the Trex cache.
Summary

• We used SAP Solution Manager for S/4HANA project delivery – Process Management, Focused Build and Test Suite.

• SAP Solution Manager is sufficient and no third party tool is needed.

• Focused build truly accelerates setup of SAP Solution Manager covering complete requirements to deploy

• Agile approach of implementation is recommended

• With SAP Solution Manager as delivery platform, 30% of project delivery cost can be saved.

• Hypercare is smooth and escalations can be avoided if SAP Solution Manager is rightly used.

• Ensure that you have SAP Solman & FB add-on before the project starts
Thank you