S/4HANA Migrations: Guiding Principles and Lessons Learned

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October 2020
Introduction

Transitioning from SAP ECC to SAP S/4HANA is often discussed as a technical upgrade and there is a tendency to oversimplify the planning process and detailed execution tasks to successfully migrate to the new solution. The intent of this document is to highlight the key focus areas to mitigate project risks and provide a framework to guide the project team.

Migration Process - High Level Overview

Let’s start with the migration process steps.

There are two major phases: Preparation and Realization; however, we also refer to the phases as pre-SUM, SUM, and post SUM where SUM stands for Software Update Manager.

The SUM process is a critical path during the migration project. The duration of the SUM process is a crucial factor in your ability to minimize system downtime during the cutover from ECC to S/4HANA.

- During the Preparation phase, the pre-SUM process is executed.
  - All SAP Readiness check tasks must be completed during pre-SUM stage. As you perform system pre-checks to ensure Unicode compliance, custom code remediation, cross application specific preparations, and simplification list adjustments, this is where your preparation and attention to detail can make or break the SUM activity success.

- During the Realization Phase, the SUM and post-SUM process are executed.
  - The SUM process can take from 24 to 50 hours depending on your solution landscape. Once the SUM process is completed, you can begin post-SUM activities.
  - The duration of the post-SUM tasks will also vary based on the scope of your migration project functionality. Once the post-SUM process tasks are completed, then the solution is released back to your end users.

Guiding Principles

Based on a recent process manufacturing company transition to SAP S/4HANA from SAP ECC 6.0 EHP7 to SAP S/4HANA 1909, we’ve identified seven guiding principles that are helpful for a successful migration. Let’s cover each one:

1. Build a successful governance plan
2. Manage the hosting provider relationship
3. Have a clear strategy for code remediation
4. Define a security upgrade plan that factors in Fiori
5. Respect the Software Update Manager (SUM) Pre-check and execution process
6. Build a realistic testing plan
7. Focus on delivering value

**Principle 1: Build a successful governance plan**

Project management principles should not be minimized with this migration. Building a structured governance plan is fundamental to the success of any migration project. Governance starts with clear messaging. Here are few tips:

- **Transparent Communication:** Effective two way communication with all those involved in the process is essential. There will be issues that surface and it is important to listen and discuss the challenges early and often to avoid minimizing the significance of items identified.

- **Project Tracking:** We suggest using a cloud based tool like JIRA to support project tracking. We’ve found this easy for users to learn and it provides great dashboards to strengthen project management standards.

- **Structured PMO process:** Have regular PMO and Steering Committee meetings, as with any strategic initiatives. Key stakeholders can be great allies to drive change and help with the shift to the new Fiori user experience (UX).

- **Stick to Scope:** Clarify scope and focus on what is critical to include in the upgrade project. Leverage the PMO team to communicate a clear scope statement to the user.

**Principle 2: Manage the hosting provider relationship**

If you have a hosting provider, manage that relationship closely. “Collaboration and communication” is key. Here are a few tips for hosting providers:

- **Have a Plan:** Document the migration plan steps in an accurate and comprehensive way down to the hour.

- **Follow the plan:** Follow the plan for migrating the system, step by step.

- **No Rogue Agents:** When you encounter an issue, don’t go rogue. Stop, ask for input, get approval, then proceed, and have respect for the business operational priorities.

- **Respect client’s business priorities:** Delays in turning over systems that are being upgraded can cause a ripple effect and potentially impact other business functions that rely on the systems.

Delays in upgrading development or quality assurance systems may not seem disruptive on the surface; however, dependent IT activities with third party interfaces or service providers could be disrupted unintentionally. It is important to work as a cohesive team collaborating and defining a new level of alignment for the good of the company.

**Principle 3: Have a clear strategy for code remediation**

Having a clear strategy for code remediation is critical for the success of the migration. Here are a few tips:

- **Core remediation should be based on the complexity of the code and the approach to remediating code.**

- **Plan developer coverage throughout the project.**

- **Make sure there is an understanding regarding output documents and whether there is a desire to shift to Adobe Forms.**

These are decisions that shouldn’t be taken for granted given the impact on the project schedule if business expectations are not clarified up front.

- **Take the time to understand the various types of code remediation tasks that will be needed as it may drive decisions to use automated code remediation tools or guide you to go with a different approach through additional staffing.** Items ranging from field length changes to data model changes to coding syntax changes will be required to make your code compliant and getting these changes completed efficiently and accurately is the overall goal.
Principle 4: Define a security upgrade plan that factors in Fiori

Needless to say, security aspects are very important for a successful migration. So don’t overlook the security aspects of an upgrade. Include sufficient time and resources for the security role upgrade process.

- Understand the security role upgrade steps and plan for them appropriately. Through the pre-check activities, roles that will require remediation due to obsolete transaction codes and new transaction codes are easily identified.
- Your security resource can use standard SAP programs to focus on the clean-up effort. Review the SAP generated reports with the business stakeholders and identify what is going to change with their roles.
- Identify key Fiori roles by functional area that users should consider adopting into their work activities.
- Work with key stakeholders to assign Fiori roles to user groups in advance of integration testing to support organizational change management plans and to accelerate user acceptance.

Principle 5: Respect the Software Update Manager (SUM) pre-check and execution process

Most chemical process manufacturing companies are used to the discipline and rigor of following procedures because they are essential to worker safety, the health and well-being of the local community, and key to meeting product quality standards. The SUM pre-checks are similar. You must complete the procedures as prescribed and if you do, you get to proceed to the next steps.

There are no shortcuts here. The ability to have a functioning system on the S/4HANA application depends on it. The accounting data migration associated with the post-SUM execution process requires this discipline and focus on following procedures.

Principle 6: Build a realistic testing plan

When it comes to testing, this activity is just as important as a well-executed SUM process. Here are few key tips:

- Unit test each transaction and document results - don’t underestimate unit testing of each transaction that is used by your company. Depending on your SAP modules deployed, have a testing team focused on accounting, quality, production, procurement, sales and distribution, inventory management, plant maintenance, transportation planning and reporting.
- Create a robust integration test script library - most chemical companies, for example, take advantage of extensive SAP core functionality and yet test script libraries tend to be rather scarce. We recommend checking all sources of past enhancement pack upgrades to assemble a comprehensive list of test scripts.
- Allow sufficient time for script enhancements - make the investment and take the time to enrich each script with new t-codes and Fiori apps so that the scripts can be used effectively.
• Leverage a test management tool to manage the process - leverage a cloud based test management tool with workflow and email notifications to the testing resources.

• Have a testing lead - get creative to motivate the testing team to finish test in a timely manner. Most chemical manufacturers, for example, have lean staffing with limited ability to dedicate full time resources to the upgrade effort. It is not always feasible. With that in mind, we recommend scheduling focused cross functional testing sessions at regular time slots, outsource certain aspects of regression testing where practical to ensure that testing is thorough and most importantly...completed.

**Principle 7: Focus on delivering value**

Above all, shifting to S4/HANA is about delivering value with transactional efficiency improvements with Fiori and Embedded Analytics, so don’t lose that focus.

• Run SAP’s Value Lifecycle manager tool to benchmark the before and after metrics.

• Be strategic in which Fiori apps you adopt – target the apps that offer efficiency gains in:
  – Supply Chain Management
  – Materials planners
  – Workflow management
  – Embedded analytics

Less is more. Don’t overwhelm the user community. Over time, they will want more app access.

• Hold virtual Lunch and Learn sessions to break down barriers of resistance.

• Be prescriptive in the adoption of S/4HANA innovations as part of the upgrade. Save certain changes for post migration vs. taking on too much during the migration project.

**Key Takeaways**

Don’t underestimate the organizational change management requirements of effective communication, stakeholder engagement, training, and executive sponsorship and leadership alignment.

Be aware of other strategic IT projects that may pull key testing resources away from the S/4HANA project.

Understand the risks associated with adding new embedded solution capabilities as part of the upgrade: Advanced ATP, PP/DS, CRM, and TM are all embedded in S/4HANA. While taking these on during an upgrade can add significant business value and simplify the IT application footprint, adding them to the scope can also significantly increase the effort and lengthen the cutover weekend duration after the SUM process is complete.