#### **International Journal of Management, IT & Engineering**

Vol. 6 Issue 9, September 2016,
ISSN: 2249-0558 Impact Factor: 6.269
Journal Homepage: <a href="http://www.ijmra.us">http://www.ijmra.us</a>, Email: editorijmie@gmail.com
Double-Blind Peer Reviewed Refereed Open Access International Journal - Included in the International Serial
Directories Indexed & Listed at: Ulrich's Periodicals Directory ©, U.S.A., Open J-Gage as well as in Cabell's
Directories of Publishing Opportunities, U.S.A

# FRAMEWORK TUNING FOR SAP S/4 HANA IMPLEMENTATION A TECHNICAL APPROACH

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#### Abstract :

In the simplest terms, cloud computing means storing and accessing data and programs over the Internet instead of your computer's hard drive. The cloud is just a metaphor for the Internet. SAP S/4HANA Cloud Platform is an in-memory cloud stage for now's inexorably arranged, versatile, social, and information-driven world. This case study is based on a project for implementing Enterprise Management, which uses HANA database, and the project team can say that it was really a challenge. A lot of companies will face that same challenge if they want to go with SAP's new technology i.e S/4 HANA, a brand new product with table simplification, increased user experience and real-time information, but it will be a real challenge to adopt this innovation. Before explaining why that challenging, have to clarify that S/4HANA product is still improving and evolving. While several companies are wondering if it is time to move on into S/4HANA or wait? This article is all about the important factors to be consider before making the decision. Especially talking about the variables that play into the big step to move towards S/4HANA. The major variables covered in this article are broadly classified and discussed in terms of 1. Functionality, 2. Architecture and landscape, 3. Customization and 4. Change adoption.

Keywords: SAP, ERP, S/4 HANA, Cloud, On-Premise, Fiori, Mobile applications, Internet, APIs, TM, SRM, EWM and CRM

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#### 1. INTRODUCTION

SAP S/4HANA is the short form for "SAP Business Suite 4 (for) SAP HANA" with another code line. It brings enormous flood of SAP advancement to their clients, like the move from SAP R/2 to SAP R/3. It is SAP's cutting edge business suite and another item completely based on the most exceptional in-memory stage today. And, as per the present-day outline standards this suite came up with SAP Fiori (Fig: 1) client experience (UX). SAP S/4HANA conveys gigantic rearrangements (client appropriation, information model, client experience, basic leadership, business procedures, and models) and developments (Internet of Things, Big Data, business systems, and versatile first). This will give organizations run straightforward in an advanced and arranged economy. SAP at present offer on-Premise, cloud (open and oversaw) and half-breed organizations to give a genuine decision to clients.

SAP S/4HANA additionally gives their clients analternative to completely influence the new HANA multi-tenancy usefulness as gave by the SAP HANA stage for the cloud.



Figure 1: SAP Fiori User interface (UX)

# 2. STRATEGY TO MOVE ONTO S/4 HANA

A reasonable methodology on moving to S/4HANA must be characterized, proceeding begin any undertaking or exercises to move into the most up to date SAP advancement. This

procedure must be adjusted tobusiness technique. We like the phrase read couple of days ago: "We don't need a digital strategy - we need a business strategy for a digital world".

These are three situations on moving to S/4HANA that we recommend:

1. New implementation, also known as "green field" implementation, for companies that does not have SAP ERP core or companies willing to re-implement SAP core solution.

2. System conversion, which means is not an upgrade for going to S/4HANA. As a new product system migration is possible, but consider that a lot of data transformation needs to be done.

3. Landscape transformation that could include migration of selected applications or system consolidation into one S/4HANA system. This is when having several instances or different functionality in several SAP systems which need to consolidate them on S/4HANA.

In the last two scenarios, system upgrade is not an option.One example of migration would be converting vendors & customers into business partners. In order to do it data transformation should takes place. SAP is providing some tools for data migration and transformation, even though process validation, data analysis and data cleansing times must be considered during the project's timeline.

Here, fundamental challenge is to establish a business-aligned road-map to move into S/4HANA.Planning times for transition schema should be considered for all activities within to avoid operation risks and business downtimes. For any selected scenario a clear strategy should be addressed from the very beginning day of the project. Actually to make the strategy will take time and resources so you must budget for that as well.

## **3. FUNCTIONALITY**

For this part, make sure all the current business processes are covered by new product functionality on the new suite. There is a road map available for S/4HANA to include all ECC (Enterprise Central Component) functions which includes like APO, CRM, SRM, EWM, and TM. This is part of SAP's simplification, also if there is a plan to expand the business or enter to

new markets where you will need new business processes or new ways of doing things, you should consider a full functionality review beforehand. The good thing is S/4HANA helping you on entering to new markets or going to new business processes providing speed and some flexibility with Cloud Platform (to make extensions).

System architects definitely have to take a deep review of S/4HANA simplification list and SAP Help (http://help.sap.com/s4hana) to check for functionality on each version. Be aware that each quarter new releases are coming for cloud edition and every year for on-premise edition. S/4HANA most recent release is 1511 (November 2015) but 1602 could be released on any moment by SAP.

## 4. ARCHITECTURE & LANDSCAPE

This is one of the big changes in S/4HANA, with this new product a lot of components must be installed or activated (Application engines, Fiori, CDS, Gateway, HANA Studio, KPI modeler, OData, BW-Embedded, Analytics, etc.). These component versions are updated and enhancement packages are constantly released to make improvements on the new product. So, take into consideration of periodic checks on system and component versions, support packages and/or enhancement packages. SAP mentions that releases will not be disruptive as in predecessor technologies (R/3, ECC), but a clear strategy into that statement should be adopted by companies on sticking to standard S/4HANA processes.

Also when integrating to other SAP systems you could find new standard API's (Application Programming Interface) like Success Factors - Employee Central integration to S/4HANA Human Resources, new integration tools like HANA Cloud Integration (HCI) and more. Some considerations when integrating with Non-SAP systems could affect definitions for SOA and S/4HANA integration processes.



Figure 2: Complex S/4 HANA landscape

Organizations should remember making sure the global architecture definitions before the start of S/4HANA implementation or conversion. Check for periodic updates on components and make sure releases on cloud edition are planned in advance, this will eventually to avoid system failures generated by updates.

## 5. CUSTOMIZATION

Customization by developing code out of standard functionality is always a huge challenge and involves with budgets and resources. But for sure making customization reduction is a good recommendation so far;keep core development at minimum and non-core customizations on external applications, so when going into new versions non-disruptive adoption really happens.

What we did recommend is, HANA Cloud Platform has tools for code development and extensions on standard functionality, an architecture validation for customization should be driven to choose the right component for developing new code. Beforehand should not consider S/4HANA cloud edition if core development is taken as a business strategy. So S/4HANA on-premise will be the best option. So far we still recommend staying on standard processes all the way through the transition (it does not matter if there is cloud or on-premise edition).



Figure 3: The Road to SAP S/4HANA Transition and deployment options

# 6. CHANGE ADOPTION

Embrace change and innovation as one of the most important things on moving into S/4HANA, easy to say and very hard to apply. A lot of transformation processes fail because of people's change resistance. With this new product not only users or business analysts must be willing to adopt change, but also consultants, IT specialists, even directors and sponsors must understand innovation and their participation as part of the business transformation. An active role is clearly needed from company's leadership to help get things done while change is the biggest challenge of all.

Change Management is a must on any transformation process, this is not an exception, make sure all the project's team, company's leaders, sponsors and change agents are aligned to embrace change and innovation. Clarify objectives and participation for all business roles during the transitions, while more communication provided the more understanding on each person's contribution to achieve the final goals. S/4HANA is here now, and is really changing the way of doing business. These challenges could be surpassed by taking into consideration the main points. Not required be afraid to affront these obstacles, look forward for a good strategy and expert support to move into S/4HANA If you think about it maybe your Organization needs this transformation now, and getting into it soon will give your company an advantage that other would not have.

## 7. CONCLUSIONS

With the introduction given and the challenges mentioned about SAP S/4HANA (SAP's nextgeneration business suite) can meet the challenge of the day to day Networked Economy. Here's how:

1. Rethink about the plan of action by streamlining your business joint effort to interface individuals, gadgets and business systems continuously (by adopting the core challenges mentioned above). Grasp high-exactness focusing on and social advertising, request driven supply chains with downstream demand visibility, smarter business arranging with constant planning and reproductions.

2. Rethink about the decision making by getting insight on any data from anywhere in real time to accelerate and intensify business impacts. Connect contextual data and business users at the point of decision to discuss broadly about the challenges and how to overcome those.

3. Rethink your business processes by focusing on essential tasks in real time – with the flexibility to adapt quickly. SAP S/4HANA offers a single data foundation where both transactional and analytical workloads can be executed and the gap between insights and action is closed.

4. Rethink the user experience by completing the job across lines of business with a personalized, simple user experience on any device. Embed data mining and predictive tools in front-end applications. This empowers employees to make better, more informed decisions and respond to today's real-time business challenges.

#### ACKNOWLEDGMENTS

This case study was supported by Maria LeBeau (Director, Supply Chain Management, Spectra Energy Corporation) and Christopher Collins (Manager, ERP Legacy Systems, PSCM – Procurement and Supply Chain Management, Spectra Energy Corporation, headquarters, Houston, TX). We thank our colleagues from Spectra Energy Corporation who provided insight and expertise that greatly assisted the research, with their willingness to support all of the interpretations/conclusions of this paper.

I would also like to show our gratitude to the Jim Ischy (Manager, MDM technologies, Spectra Energy Corporation) and Irfan Ahmed(Manager, Business Process Improvements and Implementation, Spectra Energy Corporation) for sharing their pearls of wisdom with us during the course of this case study, and we thank the reviewersVeloz Rene (Reporting Data Expert, Spectra Energy Corporation) for their so-called insights. We are also immensely grateful to Pohjonen, Antti-Jussi (Manager, Supply Chain Management, Spectra Energy Corporation) for his comments on an earlier version of the manuscript.

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