



SAP Innovation Awards 2019 Entry Pitch Deck

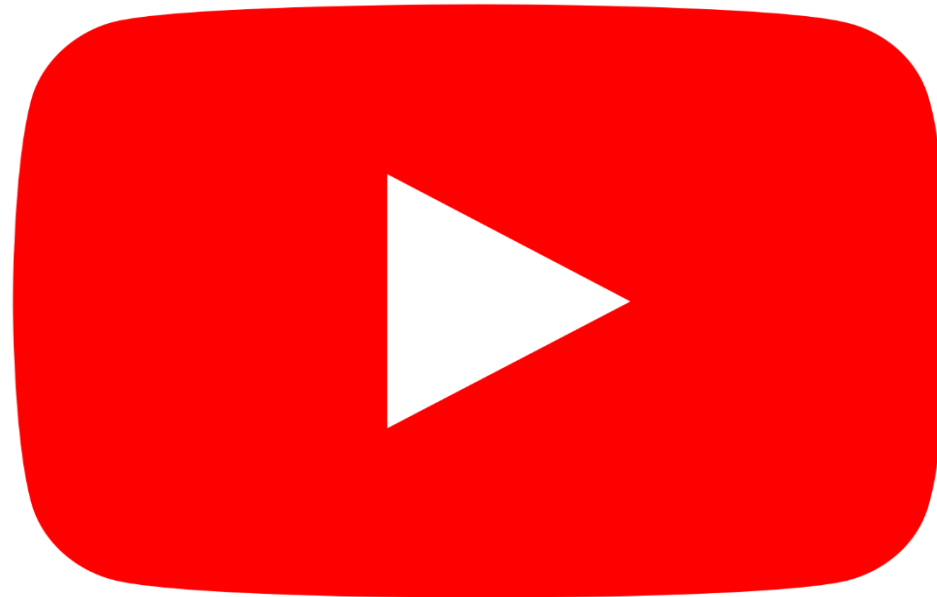
Supply Chain Segmentation for Life Science INdustry

HCL



https://youtu.be/gZkrW8_83QM

Supply Chain Segmentation Video by HCL



Driving efficiency & Reducing Risk with Supply Chain Segmentation

Multiple Pharmaceutical Companies



“Quote”

HCL has been an excellent partner to carry forward this industry focused co-innovation, from bringing the right business and technology expertise to the table, to investing the time required to build a game changing capability for Life Science.

With the completion of the phase 1 of the supply chain segmentation co-innovation, HCL has made a true difference in helping several large pharmaceutical companies building their business case for the adoption of S/4HANA.

Stephen Cloughley – SAP Senior Director for Life Science Supply Chain

Challenge

Matching customer demand with the supply within a globalized supply chain often requires to match customer demand attributes with batch level characteristics of the finish goods (e.g., remaining shelf-life) or even of the raw material (e.g., active ingredient country of origin). This is a very challenging mission with traditional ERP including ECC. It requires a lot of manual interventions, side check systems, etc. and it exposes organizations to a lot of non-compliance risk.

Solution

HCL has co-innovated with SAP to extend the newly release Segmentation functionality to cover the entire supply chain including process manufacturing (in S/4HANA), quality management (in S/4HANA) and supply chain planning (in IBP) and to create best practice deployment

Outcome

SAP together with HCL have led a customer engagement initiative with over a dozen companies within the Life Science Industry to create an end to end solution based on S/4HANA and SAP IBP to resolve the multiple supply chain challenges associated with complying with the country specific regulation of each drug product.

Automation of 50% to 100% of the compliance check tasks performed during batch selection at inventory issue

Inventory reduction of 0.5% to 2% across the supply chain

Reduce part number creation by 20% to 70%



Partner Information

HCL

Co-innovation partner for supply chain segmentation



HCL is pleased to work together with SAP and several customers to allow matching supply and demand using product and market attributes in a streamlined manner like never before. The solution has been validated by the pharmaceutical industry. It creates new capabilities to efficiently move toward the supply chain size of one goes way beyond this Industry.

Sylvain Faure – Head of SAP Solutions



Business Challenge & Objectives

Business challenges:

- Separate stock based on attributes such as ingredient's country of origin, potency, production process or vendor
- Segment customer demand based on market attributes
- Drive the supply chain based on the optimal matching logic between demand and supply attributes
- Fulfill customer demand in compliance with demand and supply attribute matching (regulatory) requirements
- Execute the supply chain at all level, execution, tactical and strategic based on the optimal matching between demand and supply attributes

HCL has developed a set of S/4HANA and SAP IBP best practices including some solution enhancements to enable customer to segment their end to end supply chain within the SAP Digital Core in order to streamline the matching of customer demand with the supply at the attribute level (below the part number).

The resulting solution for supply chain segmentation has been validated by over a dozen large pharmaceutical customers (BMS, Pfizer, Roche,...) in the context of their need to match country level regulatory requirement (e.g., production process, dosage, remaining shelf-life, origin of the active ingredient, etc.) with the characteristics of the product batch they ship.



Project / Use Case Details

Within the pharmaceutical industry, regulatory approvals of drug products depend on the production process and the production line being used, the active ingredient source, the remaining shelf life, etc. This results in major supply chain pain points:

- Compliance at the execution level is handled through multiple manual processes and validations outside of core systems such as SAP! Companies need better execution capabilities within their ERP to manage regulatory approval compliance including:
 - Ability to check Regulatory Approval Status of Destination country (market) before confirming sales order,
 - Ability to block the delivery of goods to Destination country without 'Regulatory Approval',
 - Ability to pick bulk product batches with remaining shelf life to comply with targeted destination country,
 - ...
- The impact of new/changed regulatory approvals is poorly evaluated within the existing supply chain planning solutions resulting in multi-millions \$\$ procurement commitments being made based on suboptimal plans and lots of planning spreadsheets
 - Companies need to be able to align demand and supply based on expected regulatory approval release by country.



Benefits and Outcomes

Business / Social

Productivity increase through compliance check automation for good issue (Recurring)

Reduced expediting cost due to availability of non compliant inventory batch

Inventory reduction due to better supply and demand alignment (one-time)

Avoidance of unnecessary API procurement commitment including product scrapping(per occurrence)

Reduced effort for product master data creation (avoid part number proliferation)

IT

Eliminate multiple ad-hoc systems including many spreadsheets either used for supply chain planning or compliance validation throughout the supply chain

Human Empowerment

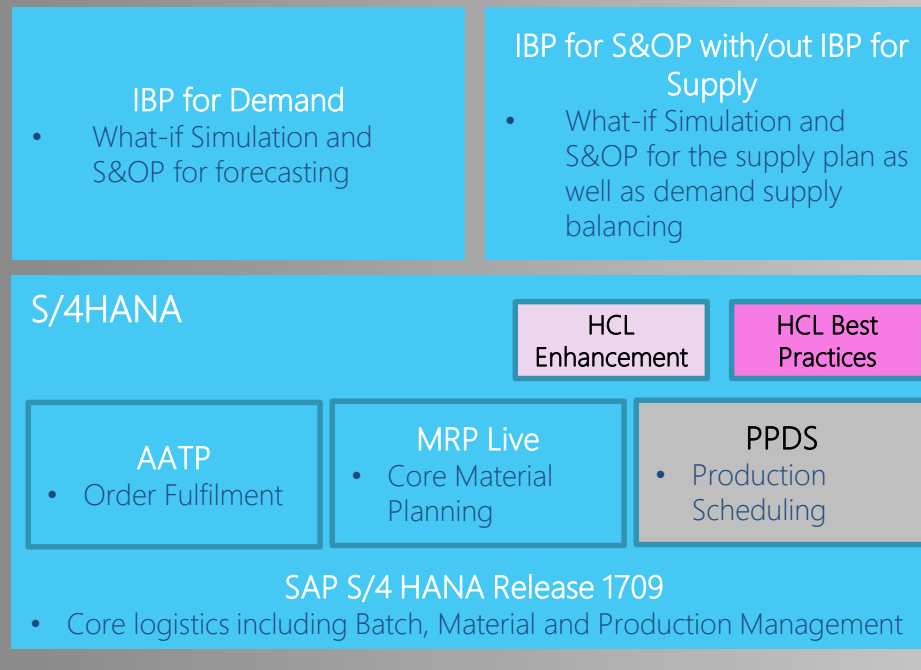
Eliminate low value add validation activities and remove the potential burden of “making a mistake” which could lead to potentially life strengthening consequences.



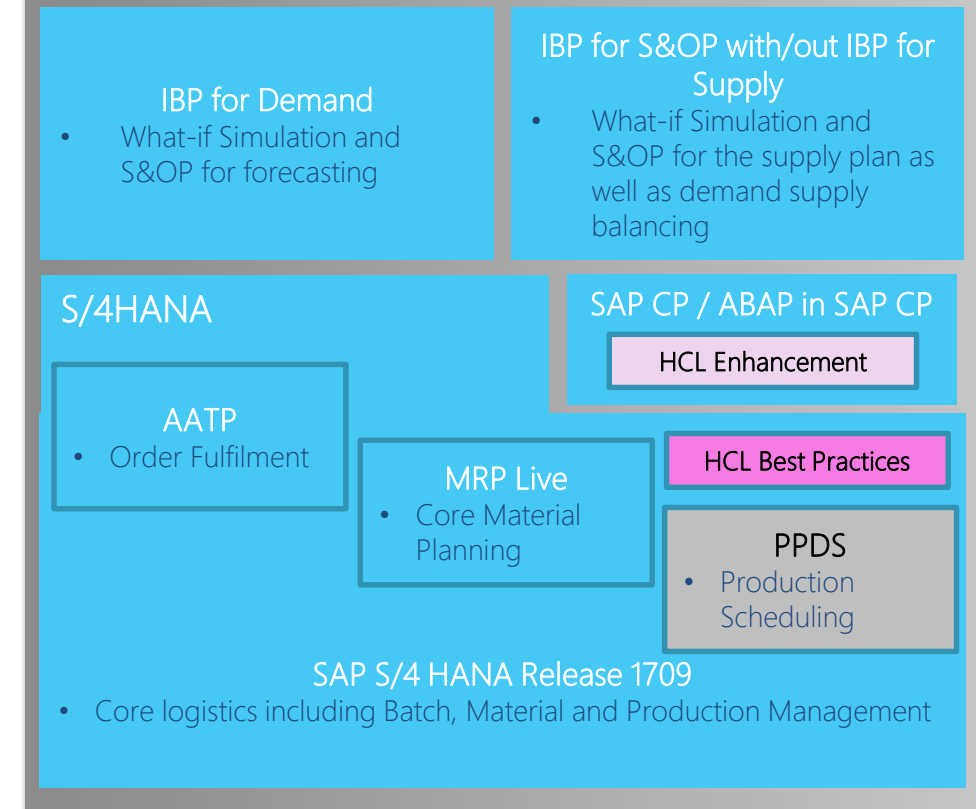
Architecture

2 deployment architectures

SAP Landscape for Supply Chain Segmentation (inside the core extension)



SAP Landscape for Supply Chain Segmentation (in cloud extension)



Legend:





Deployment

Date of Deployment or POC: POC completed in Q3 2018

Number of live users: 20 users from over 12 enterprises with over 200 requirement validation points

SAP Technologies Used:

SAP S/4HANA 1809	POC
SAP IBP	POC
SAP CPI	POC
SAP CP / ABAP in SAP CP	POC

Server Processor: unknown

Linux Distribution: unknown



Emerging Technologies and Use Cases

The following Emerging Technologies and use-cases are part of the project and describe the contribution

	Technology or Use Case	Yes/No	Contribution to Project
1.	Machine Learning / Artificial Intelligence		
2.	IoT		
3.	3D printing		
4.	Blockchain		
5.	API Economy / Integrate the Intelligent Enterprise		
6.	Cloud Native / Event Based Architectures		
7.	Extending the digital core with SAP CP / ABAP in SAP CP	Yes	Demonstrate the ability to enable core supply chain enhancement as cloud extensions
8.	SAP Leonardo Application (extending SAP application, using Industry Innovation Kits or result of Design Thinking workshop)		