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# Successful Implementation of SAP S/4 HANA Product Lifecycle Management

David Mehornay – Business Solution Manager- PLM – Delta Faucet  
Sanjaya Una – Sr. Solution Architect/Practice Director – PLM/PPM - GyanSys Inc  
Session ID - 82967

# About the Speakers

## David Mehornay

- Business Solution Manager-PLM – Delta Faucet
- 25 + years experience in Business and IT

## Sanjaya Una

- Sr. Solution Architect/Practice Director – GyanSys Inc
- 20 + years experience PLM/PPM/PS/IM/DMS

# Key Outcomes/Objectives

- Replace the following systems
  - ❖ JD Edwards
  - ❖ NPD Database
  - ❖ Data Warehouse and Reporting Tools

# Agenda

Introductions – Company

Delta Journey

PLM Architecture & Deployment Strategy

Case Study

Lesson Learned

Q&A





# Who is Delta Faucet Company?

Where passion flows

# DELTA FAUCET COMPANY SNAPSHOT



BRIZO®



PEERLESS®

## FACTS & FIGURES

**2.3K**

Employees

**6**

Locations

**35**

New Product Lines

**1**

SAP Implementation

# About GyanSys

13+ years of organic growth

600+  
Global Consultants

100+ Customers  
Globally

SAP,  
Salesforce &  
Digital

- SAP's trusted partner since 2008
- Cost-effective implementation
- Accelerators for S/4HANA, IBP, Ariba, Leonardo, Hybris & PLM



**SAP**® Certified  
in Application Management Services

**SAP**® Certified  
Partner Center of Expertise

*GyanSys uses **SAP**  
**SuccessFactors** for  
managing its Employees  
Performance & Goals*

**ASUG**

# GyanSys S/4 Practice

Greenfield  
Implementation

S/4 Technical  
Migration/  
Upgrade

S/4  
Functional  
Upgrade

Central Finance

S/4HANA  
Assessment

B4HANA /  
BPC on  
HANA

20+ Active HANA Initiatives

250+ S/4 HANA experienced consultants

*Gartner has cited GyanSys as an **SAP S/4HANA**  
re-seller & services partner including **SAP Leonardo***



**Gartner**

**ASUG**



# Some of our S/4 Accelerators

- **Tools**

- S/4 Code Remediation
- S/4 Security Role Correction
- Easy EDI Integrator
- S/4 to Salesforce Integrator
- S/4 HANA Interface Monitoring Tool
- Migration Tool for Specifications, Value Assignment
- Migration Tool for Engineering Record
- Excel Upload for BOM creation
- Migration Tool for Inspection Plan, QIR & Quality Levels

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# Delta Faucet Case for Change

*3 Key Drivers create impetus for change*

Unsupported ERP  
Platform

- Business disruption risk of aged infrastructure

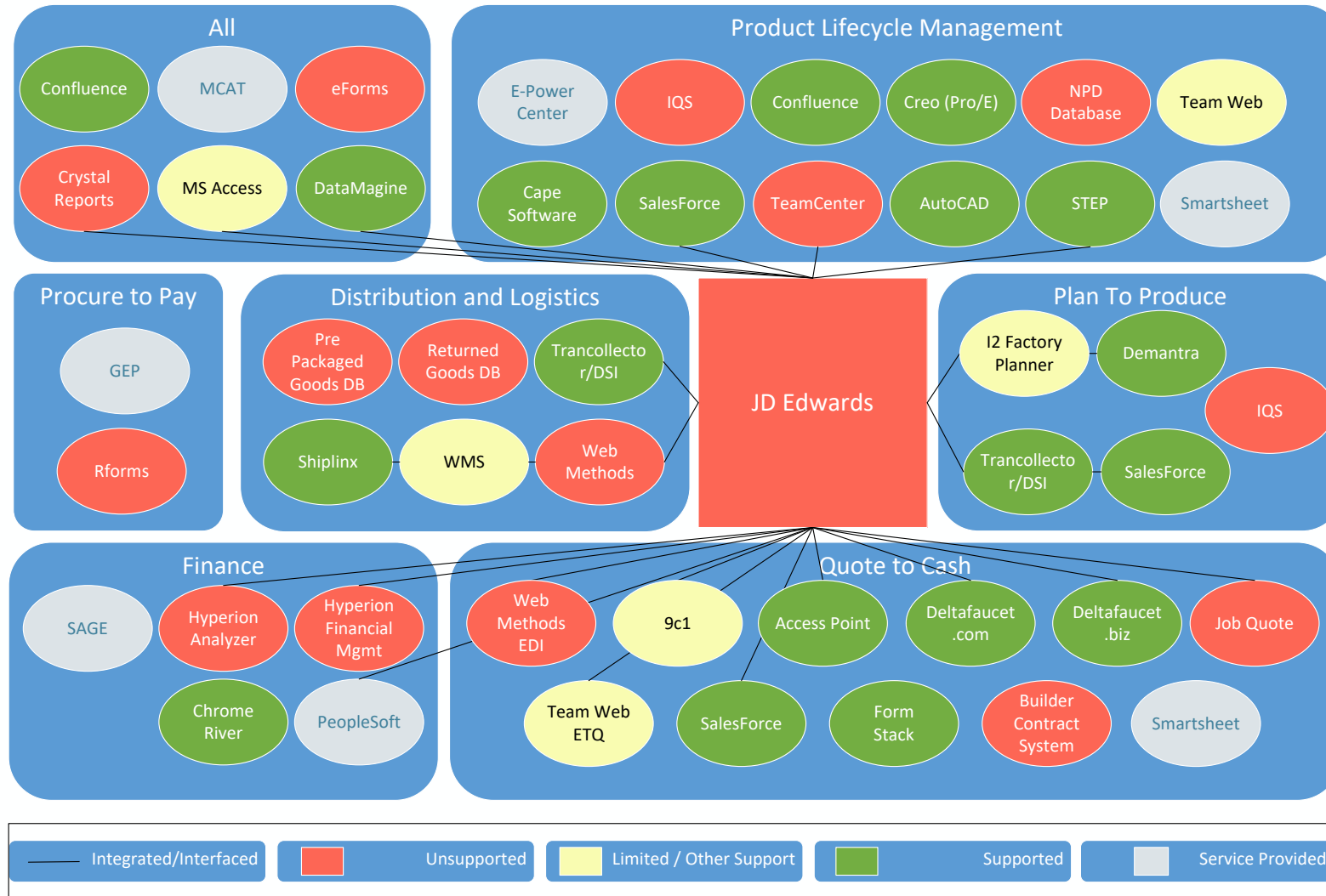
Simplify Application  
Architecture

- Opportunity to consolidate applications from 43 to 16

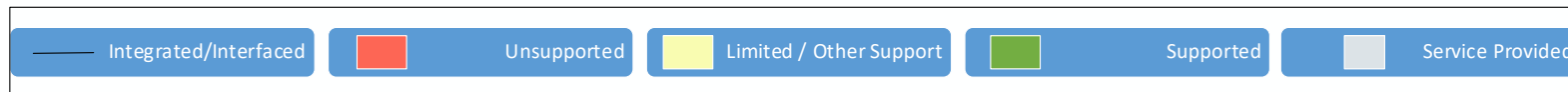
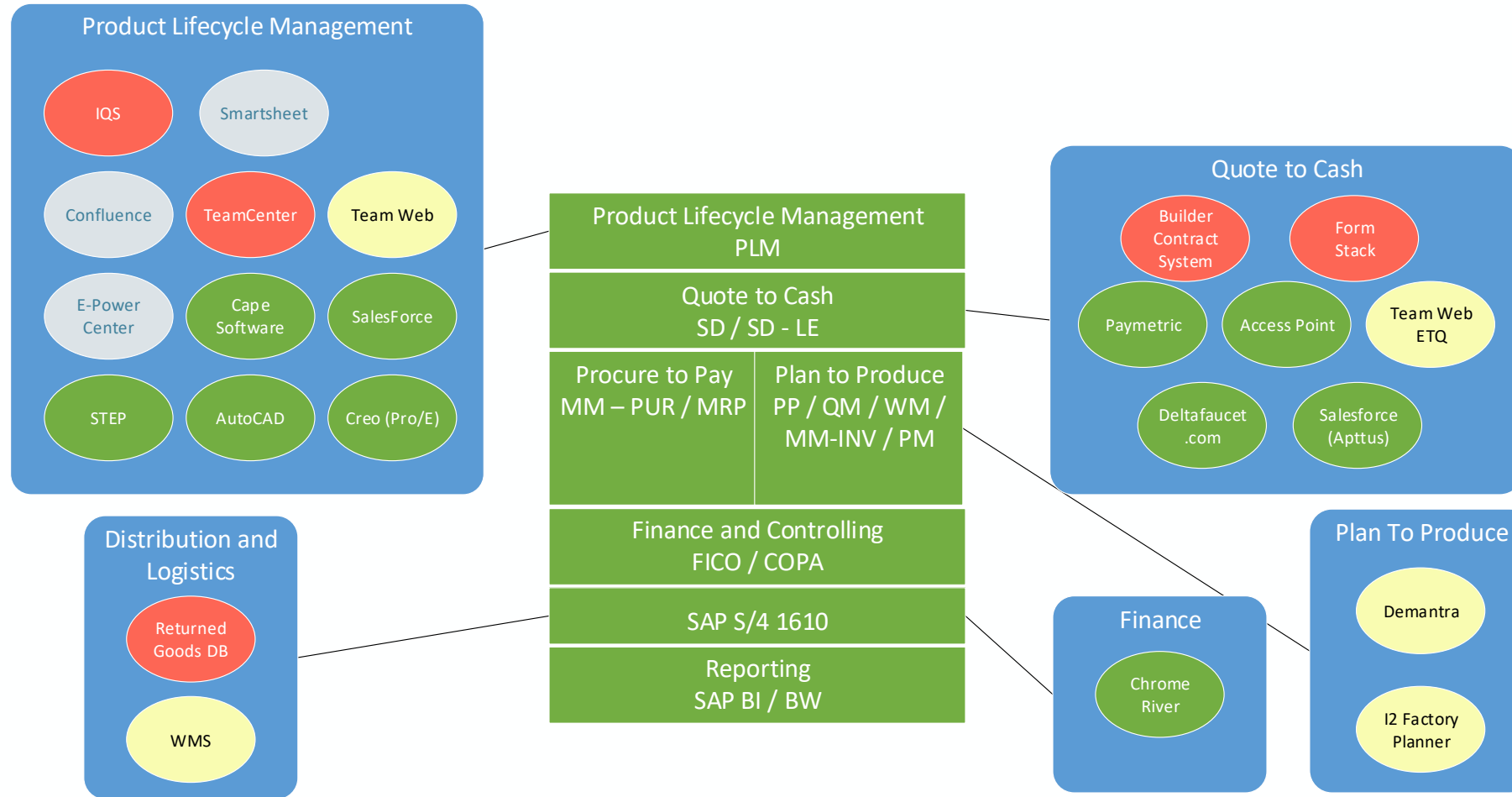
Capability  
Enablement

- Enable foundation for growth

# Pre SAP Delta IT Ecosystem



# Current Delta IT Ecosystem





# Agenda

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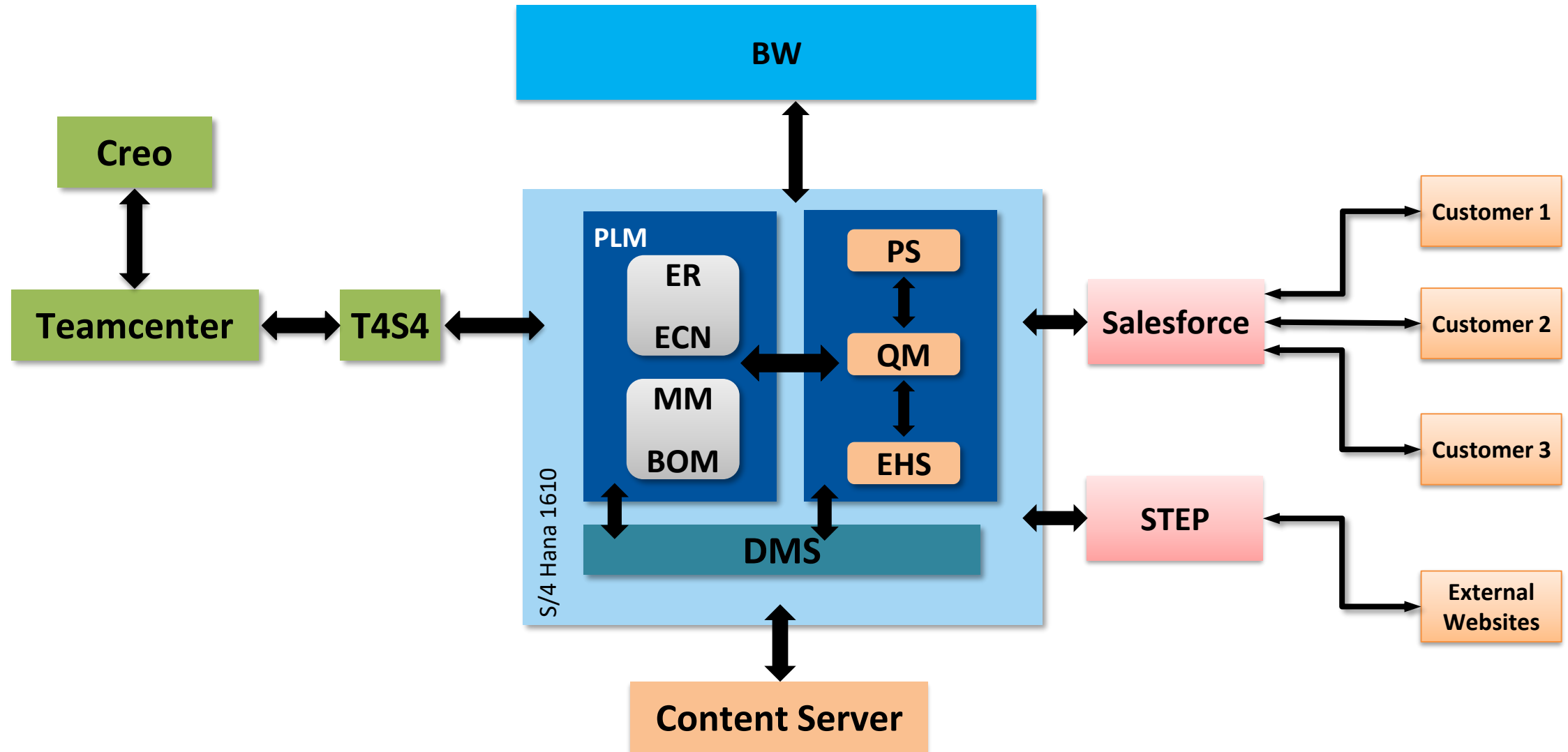
PLM Architecture & Deployment Strategy

Case Study

Lesson Learned

Q&A

# S/4 Hana PLM Architecture for Delta



# Delta PLM Road Map

## Phase 1

### New Product Development

- Project System
- Product Data Mgmt.
- Workflow
- Quality Mgmt.
  - Inspections
  - NCM/CAR/QAT
- PPAP
- DMS
- Compliance
- Interfaces
  - Teamcenter
  - SFDC

## Phase 2

### Stabilization and Enhancements

- Gages and Tooling
- Automation for Material Master using workflow
- Obsolescence process
- Quality Process Stabilization for PPAP/CAR

## Phase 3

### Upgrade to S/4 HANA 1809

- Supplier Quality Management
- Product Compliance Streamlining
- PMI

# PLM Functionality

## PLM

- Materials
  - Components
  - Semi finish
  - Finish good
  - Tooling
- PBOM
- Engineering Record
- Process Route
- BOM Redlining
- DMS
  - Structured
  - Unstructured
- Classification
- Product Costing

## PS

- Create Project
- Update Project
- Project Performance Status
- Metric Management
- Templates
- Resource Assignment to WBS element
- Cost Planning for CAPX & EXPX
- Commitments
- Automatic creation of AUC
- Project Execution
- Project Stock for PPAP Production Order
- Month end process
- Asset
- Project Closure
- DMS

## QM

- Source inspection
- Incoming Inspection
- In process Inspection
- Final Product inspection
- Integrated inspection
  - Gauges
  - Documentation
  - Standardized the code
- Notification
  - PIR(Product incident report) /PAR/CAR-
  - NCM (Non confirming material)
  - MRB ( Material Review Board)
  - PPAP
- Control planer (FMEA)
- Gauge Calibration inspection
- DMS

## PLM Compliance Leveling

- Specification
- Environmental Parameters
- Regulatory List
- Substance Type
- Product Compliance attributes
- Value based assignment
- DMS

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# Implementation of PLM & PS

## Use Case

- Review, complete replacement of legacy offline NDP application (MS Access) using SAP PLM & PS, SAP NWBC
- Integration with STEP & Salesforce
- Seamless integration between Teamcenter & SAP for Material & ECM using T4S4

## Results & Learnings

- Material Tracking, PPAP & Purchasing tabs in the Engineering Record (ER) to track the Material Progress which provide single window to manage 50 - 1000+ materials
- Auto creation of ER, Project Scheduled, Cost Planning, Budgeting and Cost Tracking using PS for Capital & Expenses
- Workflow automation for setting up of Finish Good, Semi-finish and component materials from ER
- Project Dashboard provides all project status using single click

## Next Steps

- Automation of Manual Process

# Implementation of DMS

## Use Case

- Storing the different documents related to Product, Project, Quality and compliance using SAP DMS

## Results & Learnings

- Seamless integration of product documents ( MM & BOM) in SAP from Teamcenter
- Automatic DIR version management
- Auto-create DIR's upon different phases of project to see all the documents of NPD phases in single click

## Next Steps

- TBD

# Implementation of Quality Management

## Use Case

- Replace the IQS system to do all types of inspections using SAP Quality Management

## Results & Learnings

- Auto assignment of Inspection Types based on different types of material and material to Inspection Plan
- Track all the PPAP status for Purchase and manufacture material by project using Engineering Record (ER) in single click and Mass creation of PPAP notification from ER
- Material Status update for production release upon PPAP approval
- Extended Workflow for PPAP, NCM and CAR Processes

## Next Steps

- NPD PPAP Metrics
- Supplier Quality Management

# Implementation of Product Compliance

## Use Case

- Replace Product Compliance MS access data base
- Standardized & Dynamic Label Printing

## Results & Learnings

- Product Compliance listing regulation for individual using Specifications Management
- Automatic Creation of Specification Management for Finish Good, Components
- Streamline the Sales Order Product compliance data blocking logic
- Zlabel Solution for different types of printing in integration with Loftware

## Next Steps

- PMI
- Improve the data governance by optimizing data validation using business rule

# Utilize Fiori 2.0 for User Interface

## Use Case

- Desired to implement Fiori for ALL User Interaction (Browser Based)

## Results & Learnings

- Quickly Realized – Lofty Goal
- Standard Fiori
  - Vanishing Scroll Bars
  - Inconsistent Results (Data Elements)
  - Performance
- Deployed Standard GUI to Users

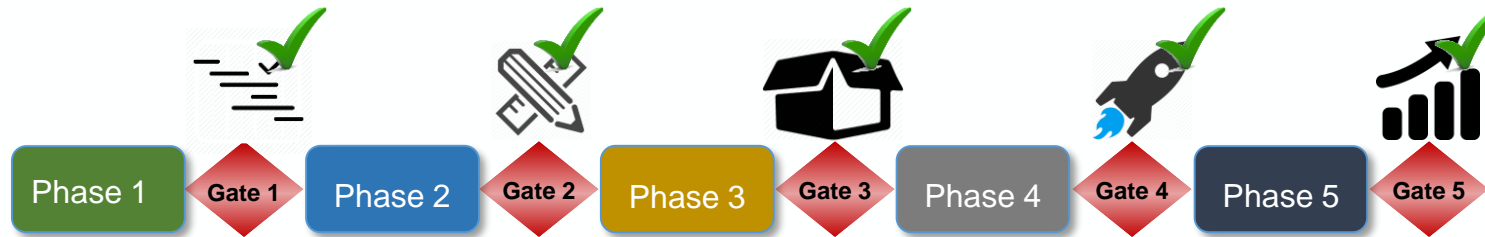
## Next Steps

- Develop FIORI Roadmap for Delta Faucet Aligned with Maturity of FIORI from SAP

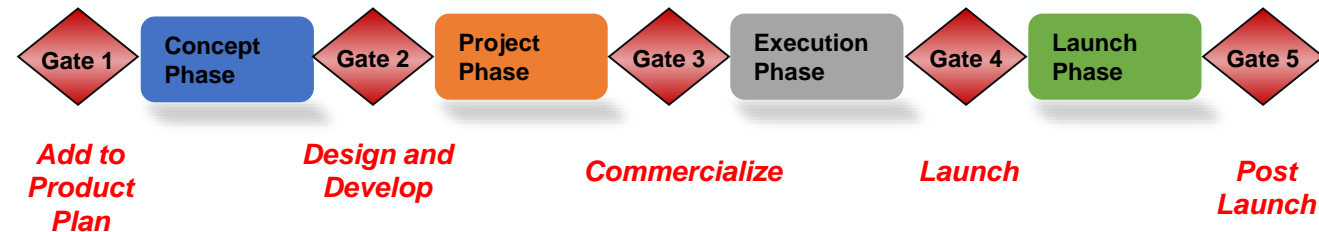


# Delta's Stage Gate Process

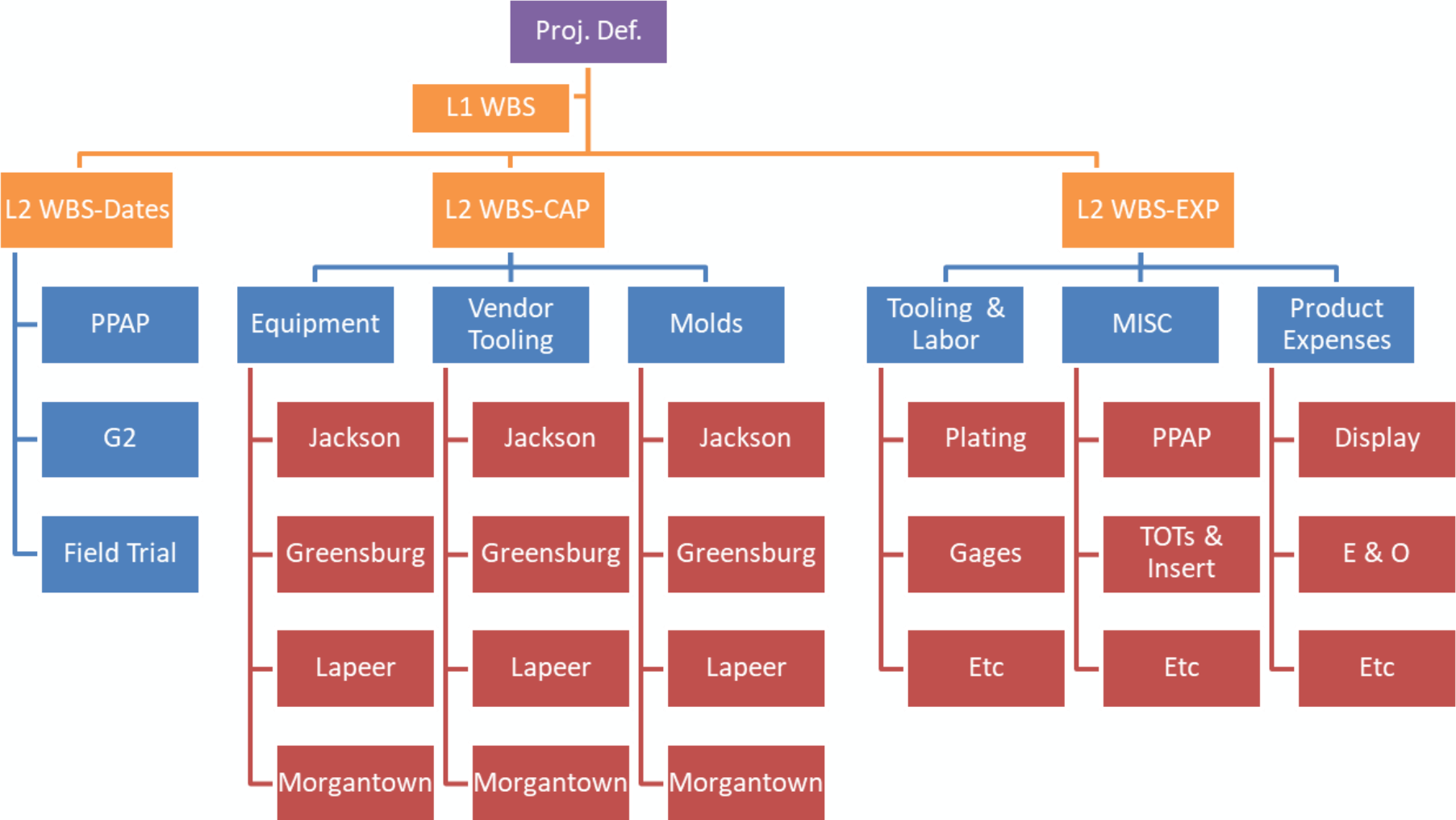
**New Process**



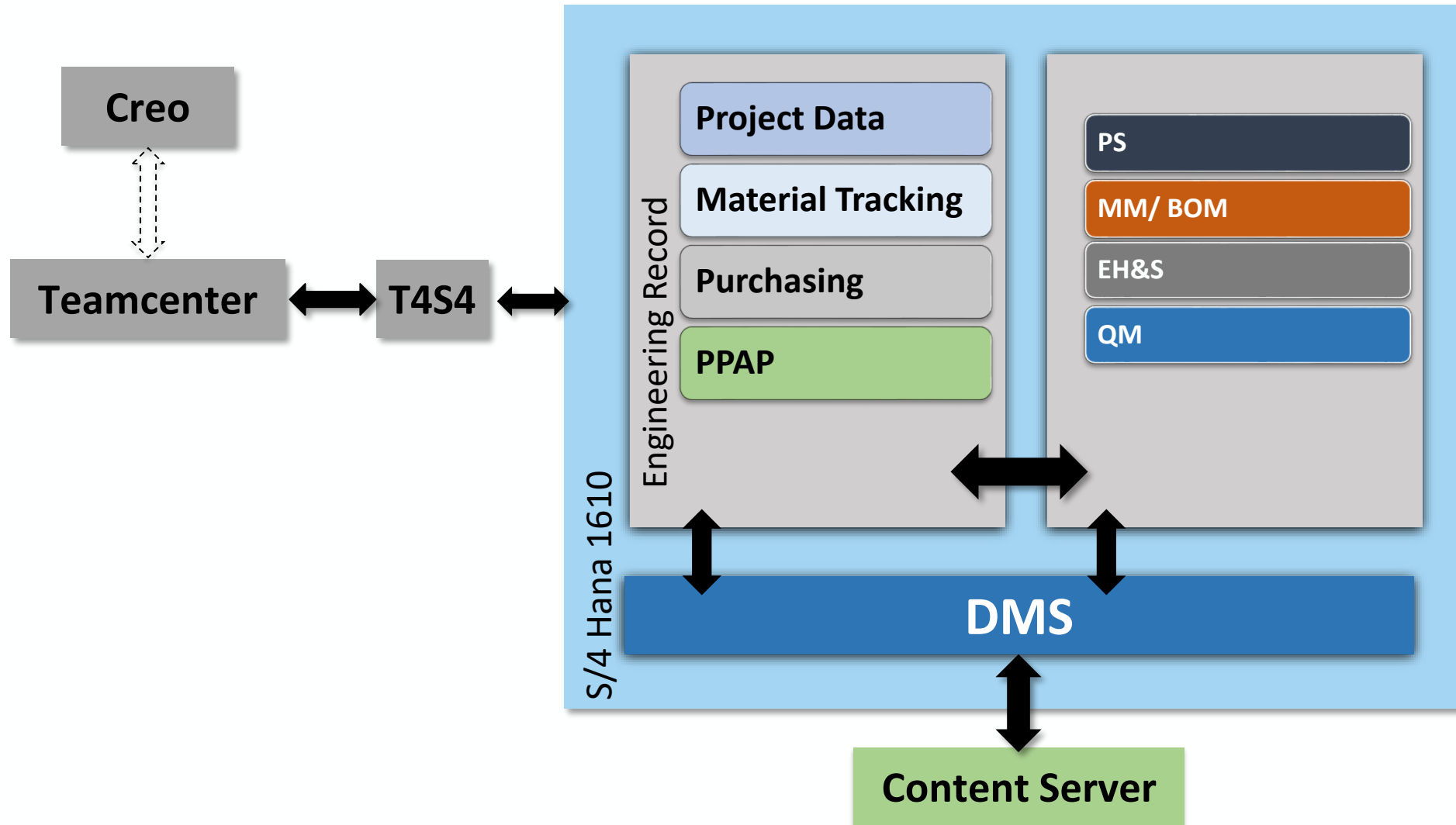
**Old Process**



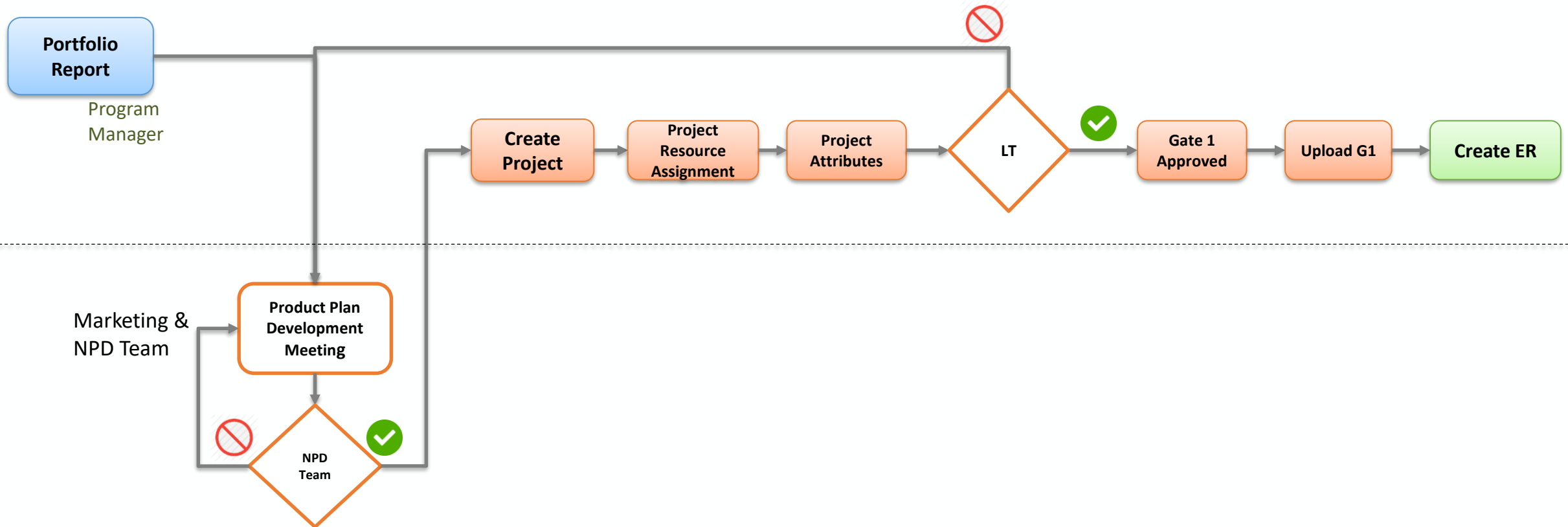
# Project Structure Hierarchy



# Engineering Record for ECM process



# “ER Creation” Process



# ER created from Project

## Change Engineering Record: 38

Record Number 38    Description TEST for issue 5    Engineering Record Type ZNPD    Status In Process    Run-In Date 2017.06.27

Items    Process Route    Notes    Documents    Administrative Data    **Material Tracking**    PPAP    Purchasing

View: [Standard View]

Material	Material Type	Plant	Unrestricted Stock	Procurement Type	Special Procurement Type	Material description	Purchasing Group	Display Volume	EAU	Work Center
X00090770-05	ZHLB	1310	0.000	F		Spout		20.000	40.000	
B10311-6032R-WH	ZFRT	1310	0.000	F		60X32" BATHTUB RIGHT DRAIN		0.000	10.000	
X00020561BL-10	ZHLB	1010	0.000	F	Z1	HEAD ASSY-SOAP DISP	LC1	0.000	0.000	
RP1001BL	ZFRT	1020	0.000	E		SOAP/LOTION DISPENSER	LC1	0.000	0.000	
RP62795NK	ZFRT	1010	0.000	E		Lift Rod Assembly		0.000	0.000	
X00020561BL-10	ZHLB	1310	0.000	X		HEAD ASSY-SOAP DISP	LC1	0.000	0.000	
X00001713	ZHLB	1310	1,000.000	E		BONNET	LC1	0.000	0.000	T08LBBG
RP1001BL	ZFRT	1010	0.000	F		SOAP/LOTION DISPENSER	LC1	0.000	0.000	
X00001713	ZHLB	1090	9.000	E		BONNET	LC1	0.000	0.000	
RP1001BL	ZFRT	1090	0.000	F		SOAP/LOTION DISPENSER	LC1	0.000	0.000	

# Information in the ER – Header

- Shipping status of the project – Red/Yellow/Green
- Supplier & Plant PPAP Dates
  - Planned Gate 3 Dates
  - Current Forecast Dates

**Display Engineering Record: 1234**

[Edit](#) [Refresh](#) [Hide Header Data](#) [Additional Functions](#) [Material Load](#) [Related Links](#)

Record Number 1234    Description TEST for attributes    Engineering Record Type ZNPD    Status Change Request in Process    Run-In Date 05/28/2017


**Header Data**

Engineering Record Description:	TEST for attributes	Long Text	Engineering Record Status:	20-Change Request in Process
			Target Run-In Date:	05/28/2017
Lead Change Number:	500000000002	<a href="#">TEST for attributes</a>		
Change Number Status:	01	Active		
Shipping Status:	1		G3 MFG PPAP Appvl:	05/31/2017
Current MFG PPAP App:	05/02/2017		G3 PFG PPAP Approval:	05/25/2018
Current PFG PPAP App:	05/19/2017		1010:G3 Cmp PPAP App:	05/28/2017
1010:Cur Cmp PPAP AP:	05/25/2017		1020:G3 Cmp PPAP APP:	05/23/2017
1020: Cur Comp PPAP:	05/27/2017		1060: G3 Cmp PPAP Ap:	05/28/2017
1060:Cur Cmp PPAP Ap:	05/19/2017		1310:G3 Cmp PPAP Apv:	06/22/2017
1310:Cur Cmp PPAP Ap:	05/28/2017		1310: G3 Comp Finish:	05/17/2017
1310:Cur Fin Cmp PPA:	05/31/2017		Program Manager:	

Items    Process Route    Notes    Documents    Administrative Data    **Material Tracking**    PPAP    Purchasing    Classes    Characteristic Values

# Project Dashboard

- All Projects Dashboard
- Single click to see all project information
- Drilldown navigation to each project
- Financial Data by Capital & Expense

**Project Dashboard** 


View: **Financial View**

Project Number	Project Description	Total Capital Budget	Total Capital Commitment	Total Capital Actual	Total Expense Planned Cost	Total Expense Commitment	Total Expense Actual
2961	Esque	0.00	0.00	0.00	0.00	0.00	0.00
3006	Tiger Team CS Improvements	0.00	0.00	0.00	0.00	0.00	0.00
3012	New Series(PFG+MFG) - ITC2 Test	0.00	0.00	0.00	0.00	0.00	0.00
3013	ITC3 - MFG/PFG Trade Projects	330,000.00	9,006.00	100,500.00	315,000.00	0.00	548.27
3014	Foundations Toilet to Amazon and THD.com	0.00	0.00	0.00	0.00	0.00	0.00

**SAP NetWeaver Business Client**

Developer Tools | Product Engineering | Product Structures | PCV Administration | Recipe Development | User Group | Enterprise Search | **Program Manager** | BOM Maintenance | Product Engineer | Program Management | Business Workflow Development

Change Engineering Record | Create Engineering Record | Display Engineering Record | **Project Dashboard**

**Project Dashboard** 

View: **Standard View**

Project Number	Project Description	Project Team	Project Type	System/User Status	Est. No Of SKU's	Est No Of RP's	Gate 2 Forecast Date	Gate 2 Status to Gate 1
2961	Esque	TRADE KITCHEN		Released/Gate 4 Approved	16			Green
3006	Tiger Team CS Improvements	SPECIAL INITIATIVE		Released/PMP Approved	2			Yellow
3012	New Series(PFG+MFG) - ITC2 Test	BRIZO		Created/Gate 2 Approved	3	2		RED
3013	ITC3 - MFG/PFG Trade Projects	TRADE BATH	NPD	Released/Shipping	2	1	01/08/2018	GREEN

# Engineering Record Overview

## ER Lead Change # is referenced on Level 1 WBS Element

The image displays two overlapping SAP screenshots. The background screenshot is titled "Display Engineering Record: 3443". It shows the following details:

- Record Number: 3443
- Description: Q4 2018 THD Bath Stackout
- Engineering Record Type: ZNPD
- Status: In Process
- Run-In Date: 10/17/2018

Under the "Header Data" section, the "Lead Change Number" is set to 11, which is highlighted with a red box. Other fields include "Change Number Status" (01 Active), "Shipping Status" (YELLOW), and various approval checkboxes.

The foreground screenshot is titled "Project Builder: Project 3443". It shows a project structure table:

Project Structure: Description	Identification
Q4 2018 THD Bath Stackout	3443
▶ PMP & Stackout	3443

Below the table, the "Identification and view selection" section shows "WBS element" 3443 and "Detail: PMP & Stackout". The "Assignments" tab is active, showing the following data:

Organization	CO area	Company code	Plant	Location	Factory Calend.
	1000	1000			

Under "Profit Center", the "Object Class" is "OCOST Overhead" and the "Currency" is "USD". The "Change Number" is 11, which is also highlighted with a red box.



# Workflow Automation for NPD

- Workflows are initiated from the Materials Tab.
  - ✓ Traffic Light Indicators display if workflows have been initiated, In-Process or completed

**Display Engineering Record: 3443**

**Record Number** 3443   
 **Description** Q4 2018 THD Bath Stackout   
 **Engineering Record Type** ZNPD   
 **Status** In Process   
 **Run-In Date** 10/17/2018

Items    Process Route    Notes    Documents    Administrative Data   
 **Material Tracking**    PPAP    Purchasing

View: \* [Standard View]   
   
   
   
   
   

Material	Rev Level	Revision Date	Matl Type	Plant	Initial WF	Final WF	Unrestrict Stk	Quality Stock	Environme...	Procureme...
D25911LF-16	A	04/11/2018	ZFRT	1310	🟢🟡🔴	🔴🔴🔴	0	0		F
D25911LF-12	A	04/11/2018	ZFRT	1310	🟢🟡🔴	🔴🔴🔴	0	0		F
D25741LF-...	A	04/11/2018	ZFRT	1310	🔴🔴🔴	🔴🔴🔴	0	0		F
25911LF			ZFRT	1310	🟢🟡🔴	🔴🔴🔴	0	0	X	F
DB2511LF-...	A	04/11/2018	ZFRT	1090	🔴🔴🔴	🔴🔴🔴	312	0		F
D25911LF-16	A	04/11/2018	ZFRT	1090	🟢🟡🔴	🔴🔴🔴	0	0		F
D25911LF-12	A	04/11/2018	ZFRT	1090	🟢🟡🔴	🔴🔴🔴	0	0		F
D25741LF-...	A	04/11/2018	ZFRT	1090	🔴🔴🔴	🔴🔴🔴	0	0		F
DB2511LF-...	A	04/11/2018	ZFRT	1390	🔴🔴🔴	🔴🔴🔴	1,536	0		F
D25911LF-16	A	04/11/2018	ZFRT	1390	🟢🟡🔴	🔴🔴🔴	0	0		F



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Lesson Learned

Q&A

# Lessons learned from 1610 Implementation

- Must use the “new stuff” to really see significant performance increases
  - Engineering Records with Large Number of Materials
  - Mass creation of Project & WBS elements and Status update
  - Period End Process transactions: CJ8GH,CJB1, etc.
  - CDS views for reporting
- Some ECC transactions have been sunset in S/4: MMSC
  - Many MB1A, MB1B, MB1C, etc. migrated to MIGO

# Lessons learned from 1610 Implementation

- Production versions are MANDATORY in S/4:
  - A production version is required in order for MRP to explode the BOM during planning
  - This includes phantom assemblies (a production version without a routing is created)
- Data Cleansing needs occur sooner and dedicated resources

# Lessons learned from 1610 Implementation

- Map out ahead of time what you want to be able to report on using BI
  - Many more options are now available in S/4 core
  - Can be much faster depending on underlying table structure (CDS)
  - Can be very confusing to implementation team as both systems can frequently be viable for the same reporting requirements, hence the need for an overall reporting strategy
- Cultural change is needed to leverage BI tools
  - Organization was report driven and not used to self-service in many areas

# Lessons learned from 1610 Implementation

- Pay careful attention to 3<sup>rd</sup> party software to ensure they are certified
- S/4 MM/PP processes are much the same as they were in ECC (without FIORI)

# What Made Successful

- Core team of dedicated process experts from each business area
- Core team and Consulting partner worked as a one team
- Executive leadership buy in and parent company support
- Deep understanding of Business use cases and develop the solution accordingly

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# Presentation Materials

Access the slides from 2019 ASUG Annual Conference here:

<http://info.asug.com/2019-ac-slides>

# Q&A

For questions after this session, contact us at [email] and [email].

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