Ensuring Process Safety & Asset Integrity Leveraging Plant Asset Information

Adrian Park Vice President, SmartPlant Enterprise Solutions, Intergraph Process, Power & Marine



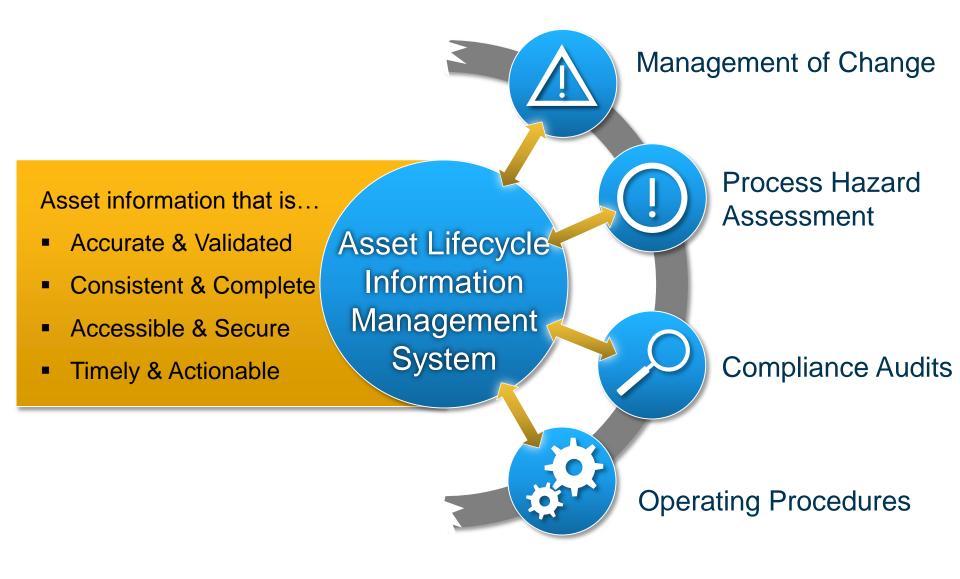




1992 U.S. Occupational Safety and Health Administration OSHA 29 CFR1910 119	2007			
	Center for Chemical Process Safety CCPS	2008 British Standards Institute PAS55 Adopted as	2010 UK Energy Institute	2011 U.S. Bureau
		ISO 55000 in 2014.		of Ocean Energy Management BOEMRE 30 CFR Part 250, Subpart S

Importance of Asset Life-cycle Information for Asset Integrity



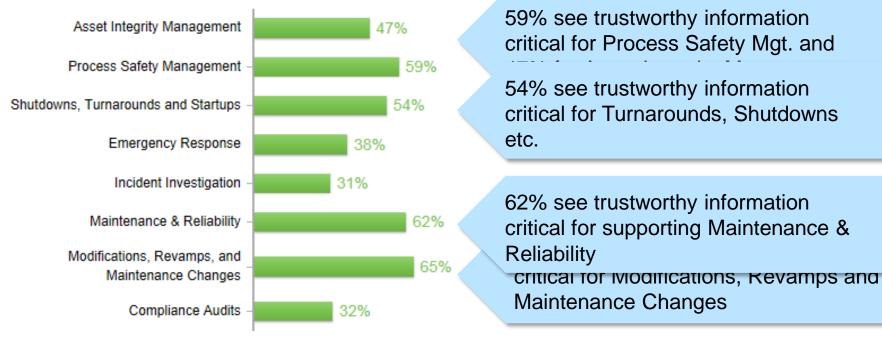






Key Drivers for Trustworthy Information

For which plant activities is the need for ready access to trustworthy information most critical?

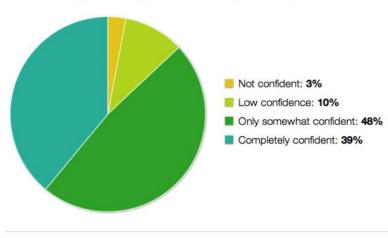


Note: this is a multiple-choice question - response percentages may not add up to 100.

Source: 🚯 Survey of 170 professionals in process industries

Image: Constraint of the second se

you that the appropriate personnel would be able to quickly lo the right information to support their response?



Source: Survey of 164 professionals in process industries

www.techvalidate.com/product-research/intergraph-information-management-owner-operator-solution

SOURCE: TechValidate survey of professionals in process industries (March 2014)

TVID: 600-

SmartPlant Enterprise for Owner Operators (SPO) Customer Statistic

Research by

88% of surveyed users agree with the following statement, "Using SPO we have confidence that we can find the information we need and are confident in the integrity of our plant information and documentation".

Source: Survey of 17 key users of SmartPlant Enterprise for Owner Operators (SPO)

Published: Sep. 10, 2014

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TVID: 5F4-BEE-09E

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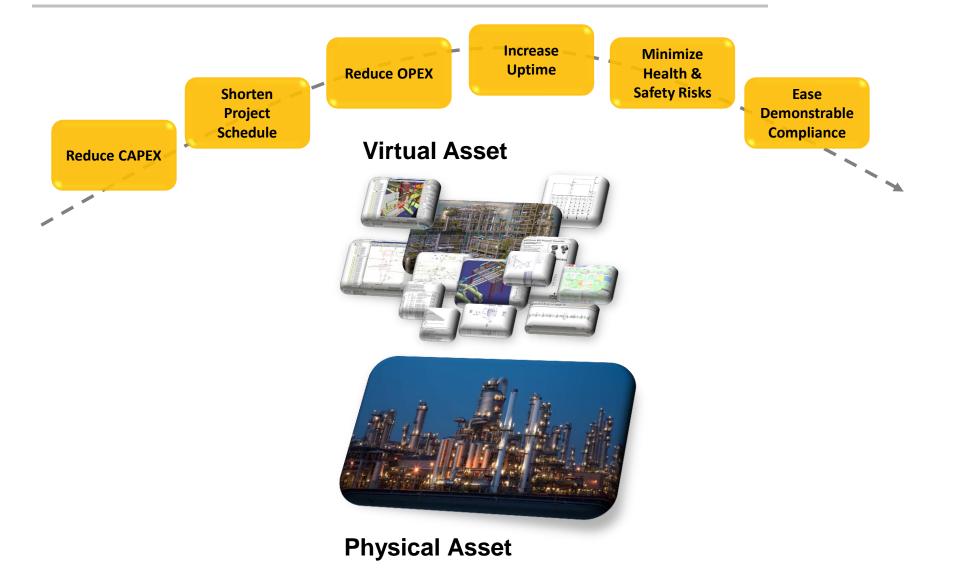




TechValidate[®]

Extracting Value from Engineering Information – A Significant Opportunity –





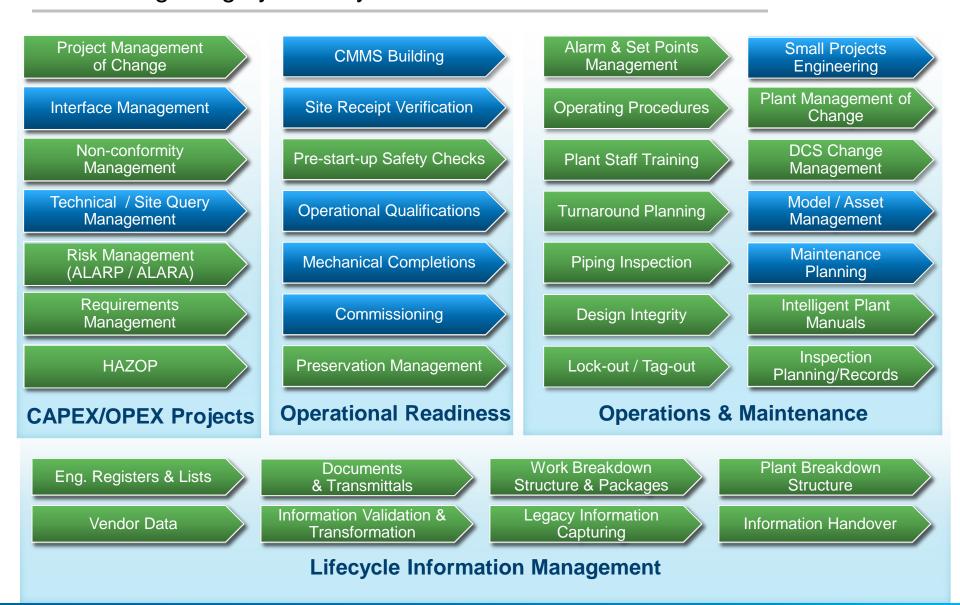
Achieving Asset Integrity – Enabling Integrity / Safety Relevant Work Processes –





Achieving Asset Integrity – Enabling Integrity / Safety Relevant Work Processes –



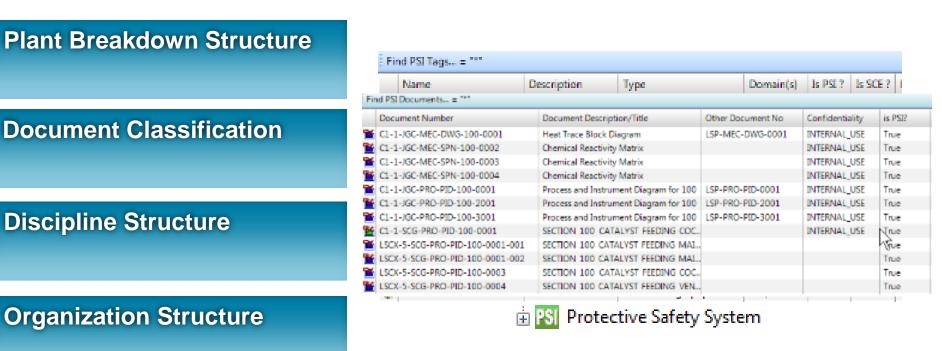


Enables Process Safety Management Programs OSHA 29 CFR1910 defines 14 elements





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Tag Classification

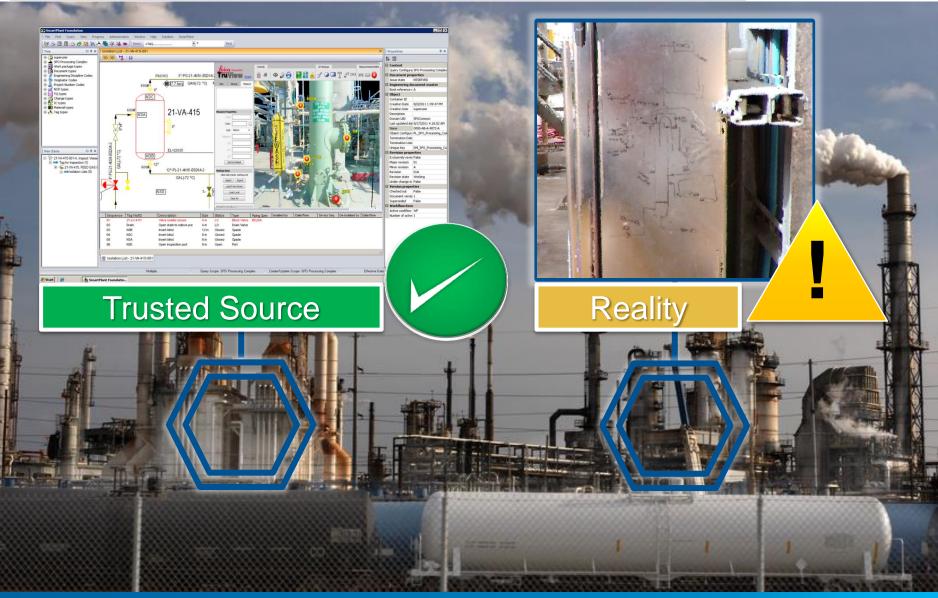
PSI and Safety Critical Equipment Registers

PSI Categories

PSI Documentation

Vision vs. Reality

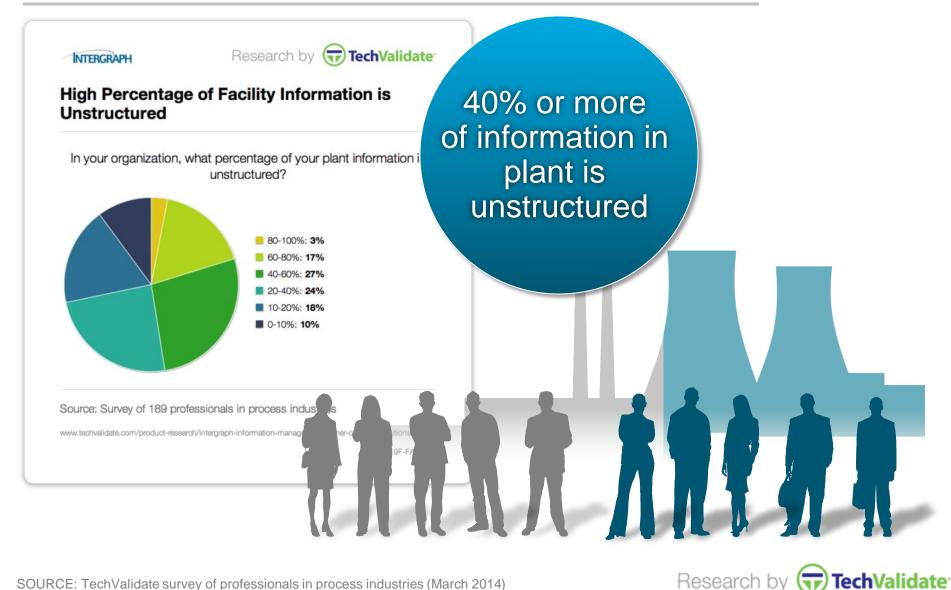




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TechValidate Survey Results



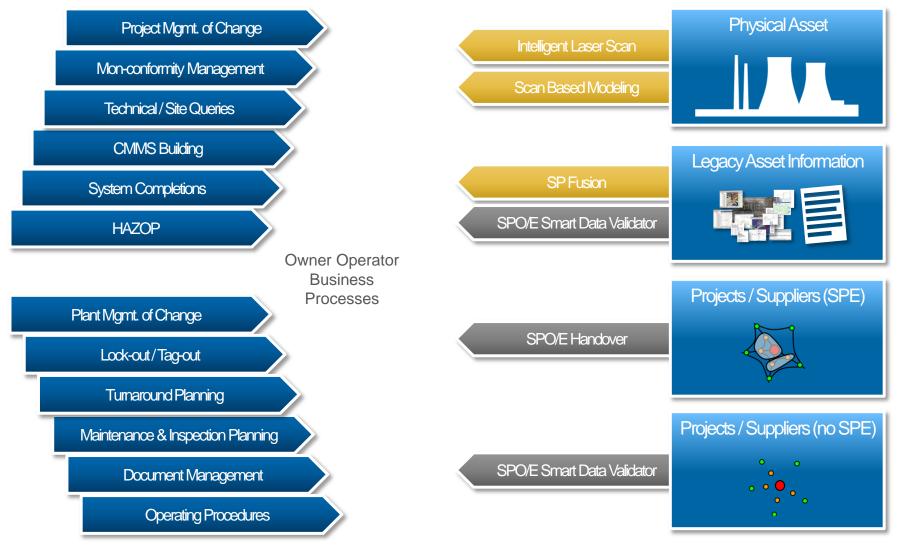


SOURCE: TechValidate survey of professionals in process industries (March 2014)



Asset Lifecycle Information Handover



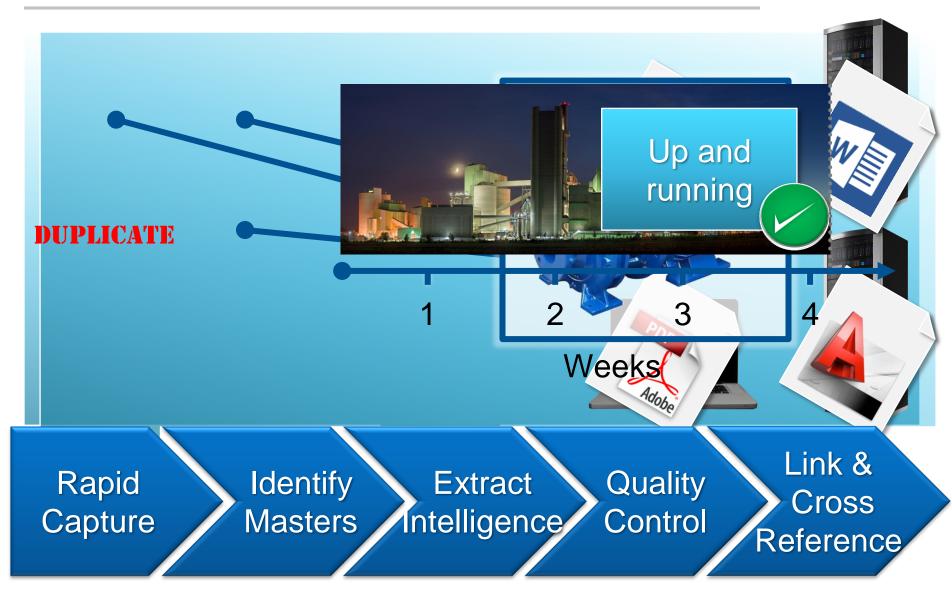


SmartPlant Enterprise for Owner Operators

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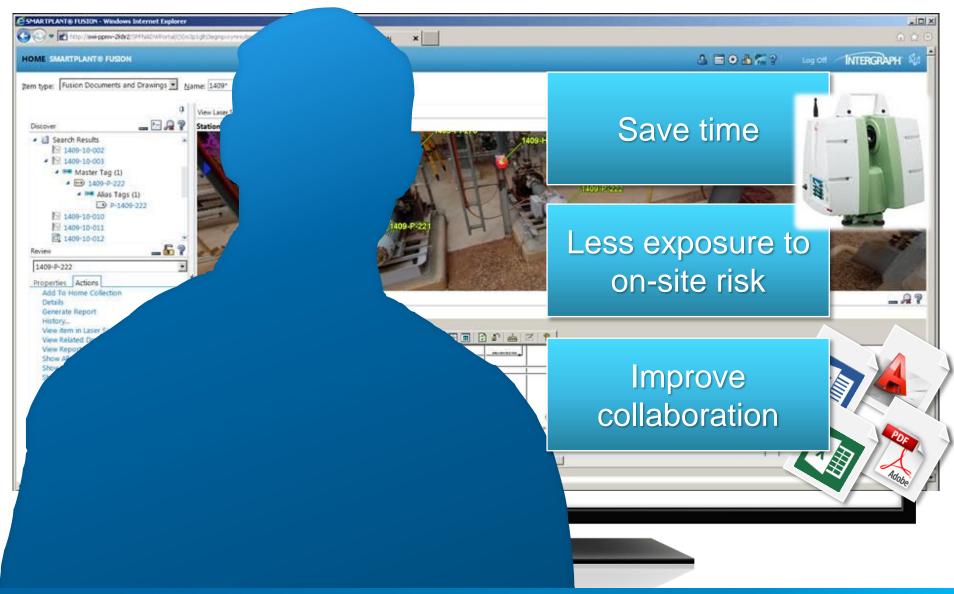
SmartPlant Fusion – Extracting Intelligence from Legacy Documents





Intuitive Single Point of Access

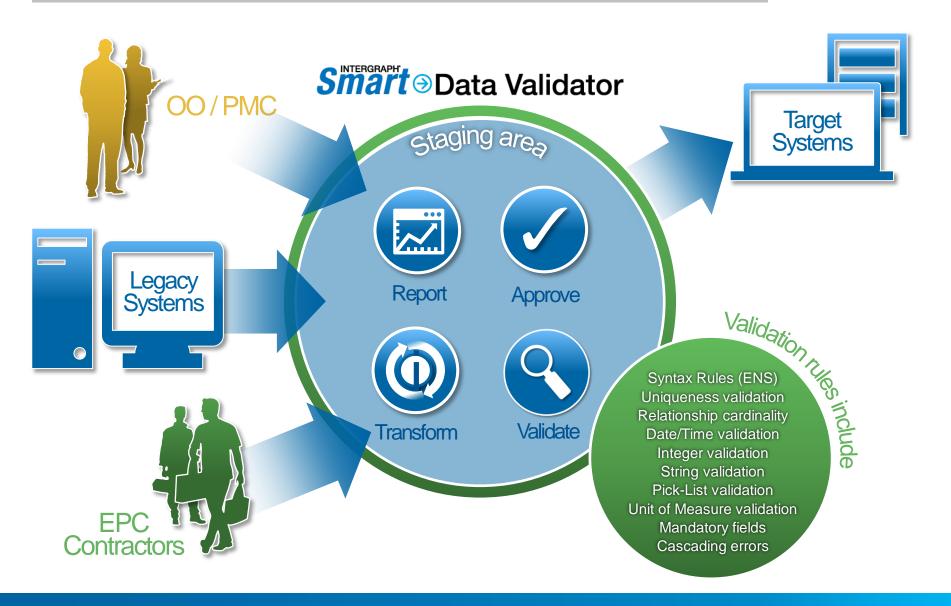




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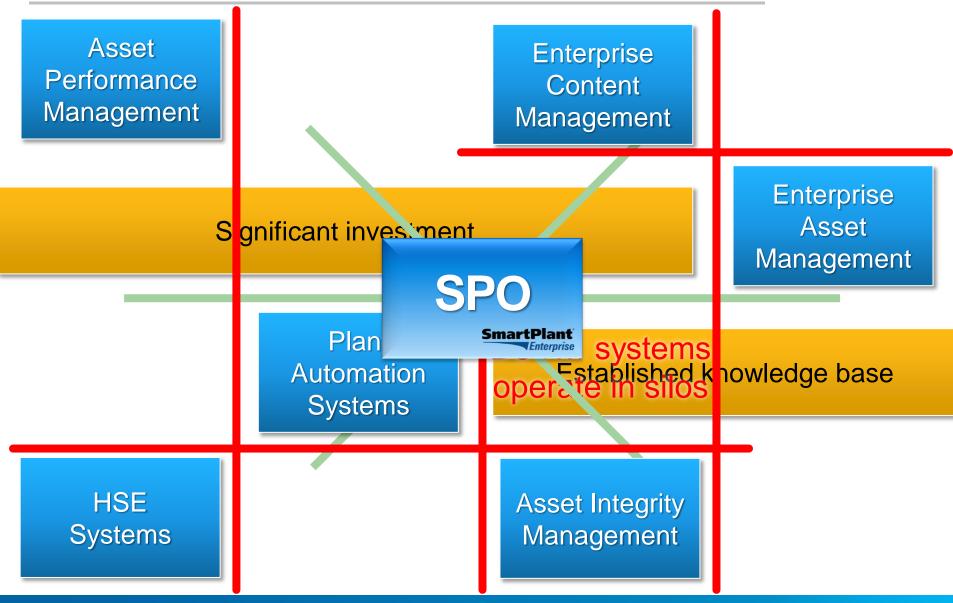
Validation from Multiple Sources





SPO in the Enterprise IT Landscape





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Management of Change in SPO Operating Plant



Create Change Request

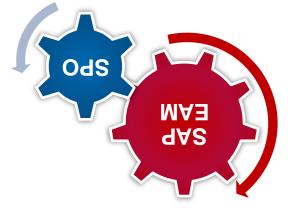
- Relate to affected objects
- Initiate workflow

Review

- Change Board Review
- Discipline Review

Approve/Reject

- Approve for Engineering
- Approve for Implementation



Implementation

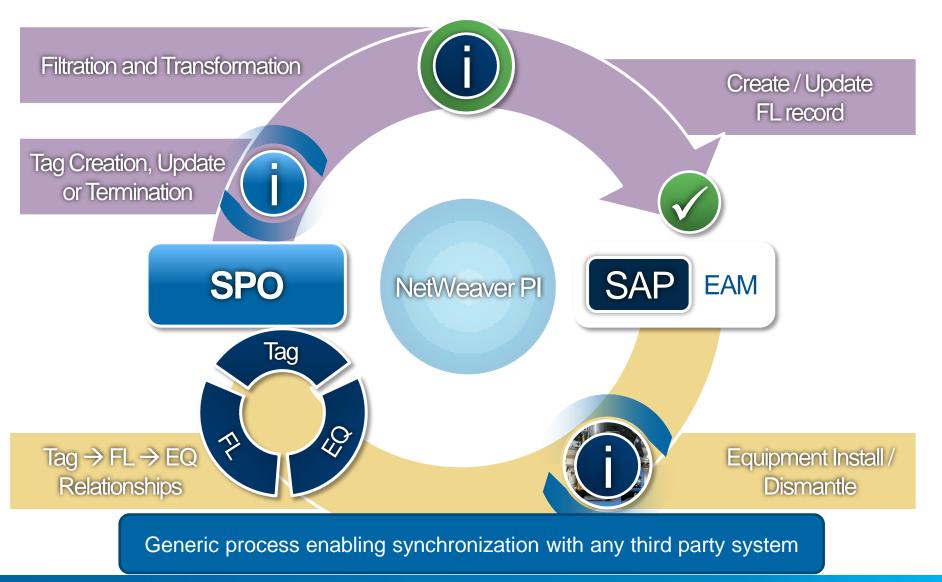
- Complete Engineering
- Implement as Notification or Turnaround
- As-built update

Implementation

- Notification
- Job Package for Turnaround

Synchronization of design basis with SAP

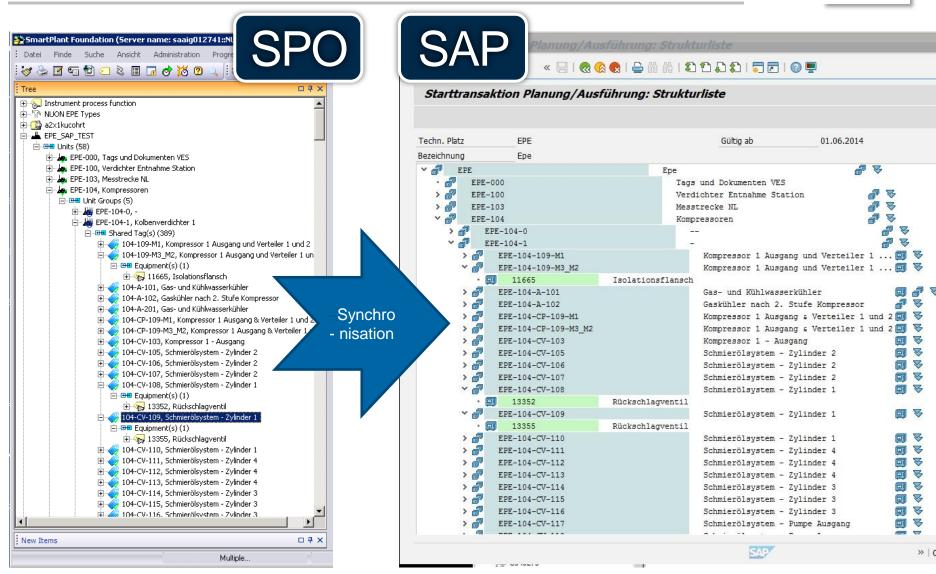




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Synchronizaton with SAP





Engineering Information for Asset Integrity Management

- Summary & How to get started -



We will help you to improve: Engineering Information Management is a key enabler for Safety and Asset Integrity Step by step ۲ Management Asset Lifecycle Information Management **Fast Track** • represents a big opportunity for you Do you know where you stand? Standardisation and Governance 4.0 3,5 **Capability Building Document Integrity** 1.8 2,0 1,7 1,5 1,0 0,5 0,0 1,5 1,8 **Management of Change Data Integrity** 1,4 1,8 Information accessibility Information sustainability





SAFETY.

QUALITY.

PRODUCTIVITY.

