



InnoTeam: Energy

SAP O&G Updates

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PUBLIC

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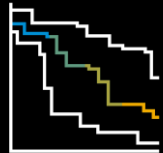
Agenda

- Trends
- Intelligent Enterprise
- Digital Core and S/4HANA
- Automations and RPAs
- Platforms, Networks and Collaboration
- Call to Action

Strategic Priorities : Response to Disruption

Lean

Survive with low commodity prices, possibly for longer



- Rigorously eliminate any waste, **manage by exception**
- Focus on core skills, extensively **outsource commodity tasks**

Agile

Scale without sacrificing efficiencies



- Leverage comprehensive, **real-time planning, forecasting**, modeling across enterprise
- **Create scalable processes** and systems through automation, AI/ML, and connected eco-system

Innovate

New business models



- **Leverage suppliers and customers** to create seamless, end-to-end processes
- Focus on **value creation for ultimate customer** (e.g., new **outcome-based offerings**)

Digital

Advanced technology as strategy enabler



- **Differentiated capabilities** will become a key factor for future success
- Digitization should be a lever for **innovation that improves productivity and efficiency** in the field and back office

Oil and Gas Industry Trends: Digital energy company future state vision

TODAY

Complex, siloed, customized
IT solutions & processes

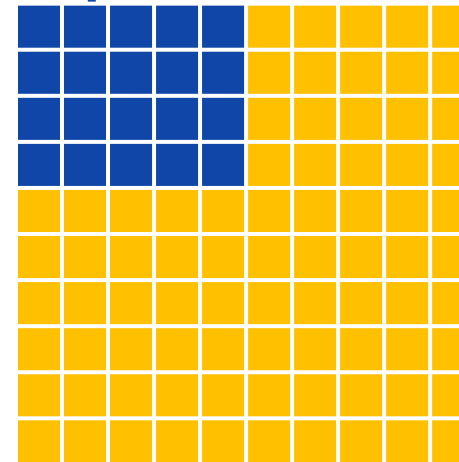


- Expensive and unsustainable
- Cannot adapt quickly to innovation
- Too many disparate applications

FUTURE STATE ~10 years

Simplified, market standard IT
solutions & business processes

Custom Solution **20%**



- Focus innovation on the 20% that differentiates company

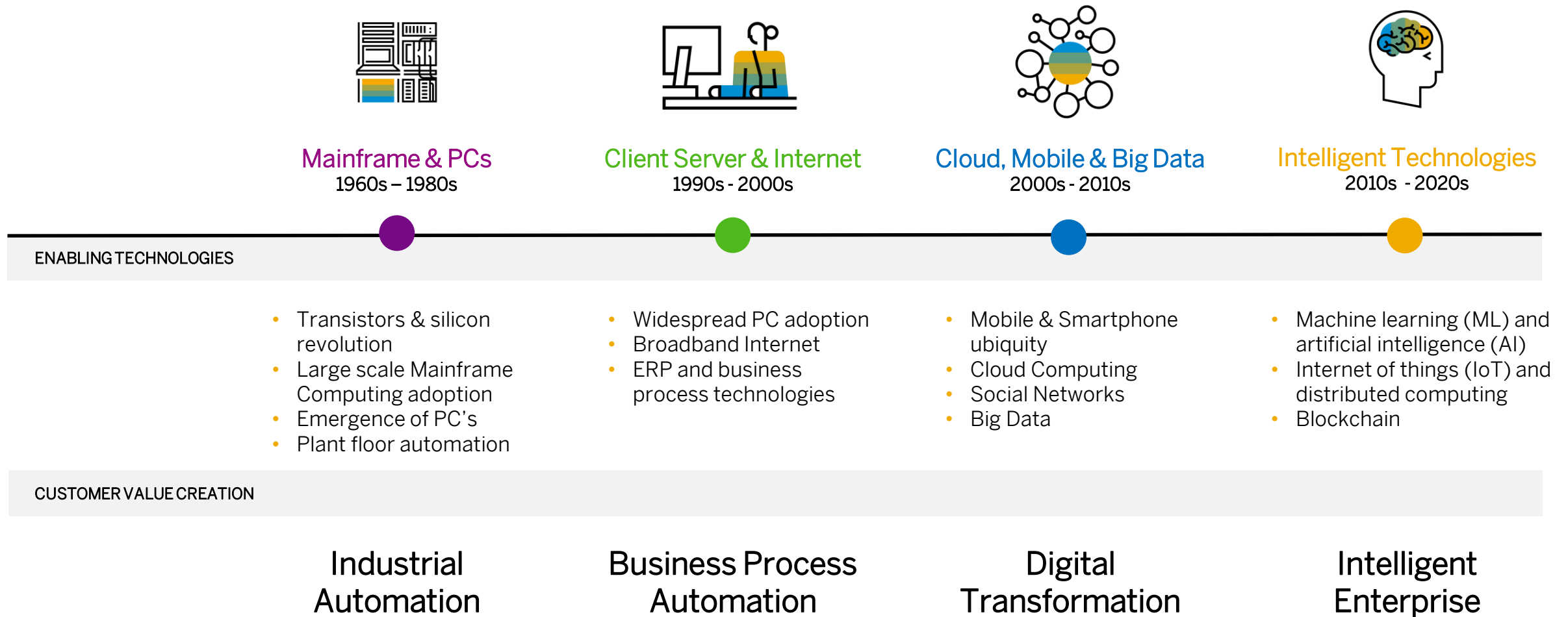
80% Market Standard



Shell sees a **“once in a decade” opportunity** to achieve **business simplification and value** for its asset management, procurement and finance processes leveraging the next generation **industry market standard** SAP solution, **SAP S4/HANA Public Cloud”**

Scott Wahl, Upstream CIO of Shell, in Interactive Session at SAPPHIRE NOW 2019

The Digital Era is Evolving into the Intelligence Era

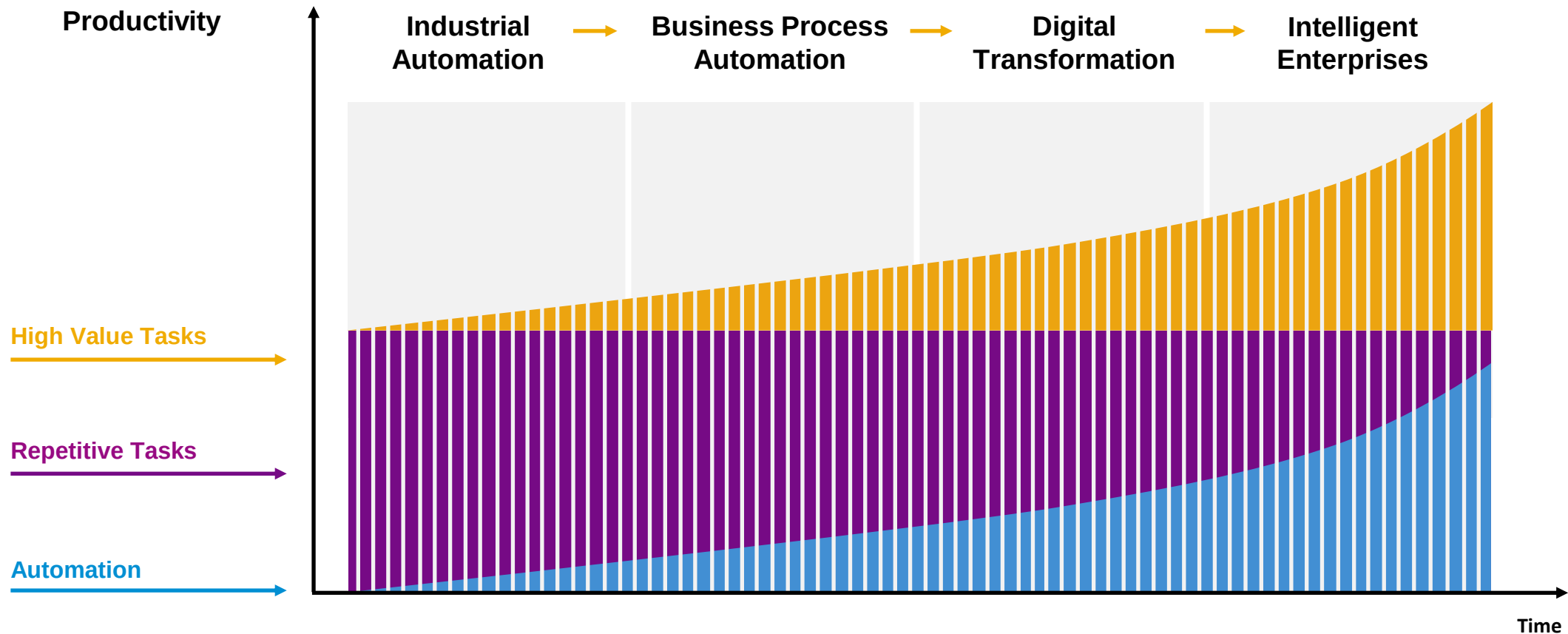


Intelligent Enterprises elevate employees to focus on higher-value tasks



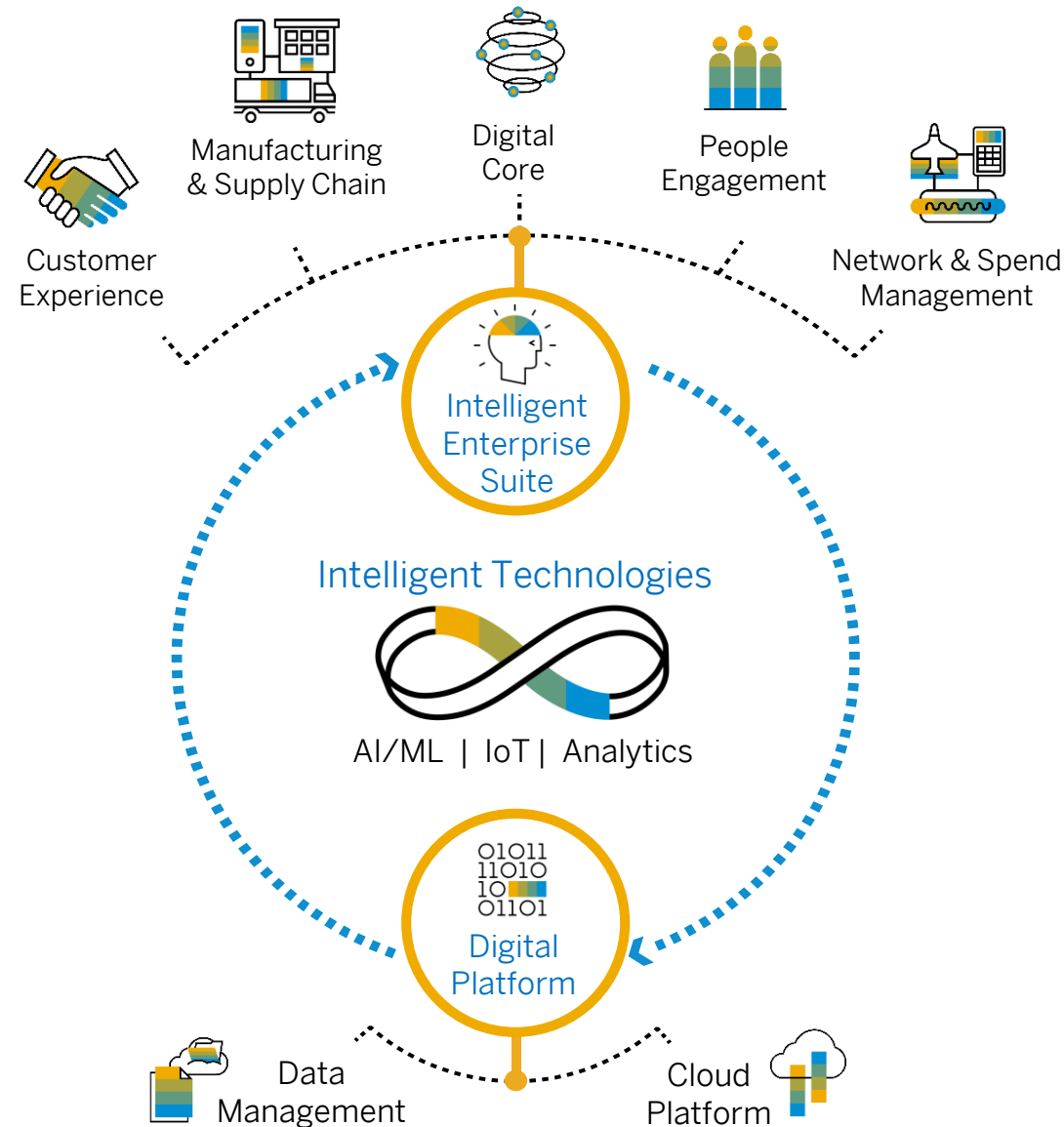
We want to be an *innovative energy* company, and the only way you can do that today is to take advantage of *digital technologies*. We knew we needed a partner to help us. *SAP* was the obvious choice. SAP is helping Shell *transform digitally* across the globe.

Jay Crotts, Group CIO of Shell, in video entitled, "[Royal Dutch Shell Best Run Business - End to End Transformation](#)"



SAP Strategy – Deliver the Intelligent Enterprise

THE INTELLIGENT ENTERPRISE features 3 KEY COMPONENTS:



1 Intelligent Enterprise Suite

2 Intelligent Technologies

3 Digital Platform



Listen – Understand – Act

Accelerating the new XM category by combining experience data and operational data to power the experience economy



Customer Experience



Product Experience



Employee Experience

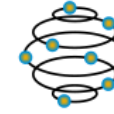


Brand Experience

DATA MGMT
CLOUD PLATFORM
AI



CRM



ERP



HCM



Spend Management

X

experience

DATA

⋮

75%
of the Fortune 100
9k
customers globally
100+
countries

**1.8 BILLION EXPERIENCE
TOUCHPOINTS RUN ON QUALTRICS**

O

operational

DATA

⋮

**77% OF THE WORLD'S
TRANSACTIONS RUN ON SAP**

Operational Data (O-Data™) tells you what is happening. - Experience Data (X-Data™) tells you why.

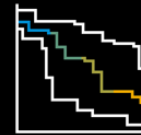


The **Intelligent** Enterprise

Lean yet Agile **Digital Core**

Lean

Survive with low commodity prices, possibly for longer



- Rigorously eliminate any waste, **manage by exception**
- Focus on core skills, extensively **outsource commodity tasks**

Agile

Scale without sacrificing efficiencies



- Leverage comprehensive, **real-time planning, forecasting**, modeling across enterprise
- **Create scalable processes** and systems through automation, AI/ML, and connected eco-system

A New Generation of Digital Core and Intelligent ERP has arrived

Innovations in SAP S/4HANA enable next generation business processes

Technology Drivers

60%

Of human tasks will be automated by 2025

97%

Image recognition accuracy today (better than human rate 95%)

95%

Speech recognition accuracy today (better than human rate 94%)

Next-Generation UX

A next-generation user experience based on **digital assistance and natural language conversations** leads to increased productivity and user satisfaction

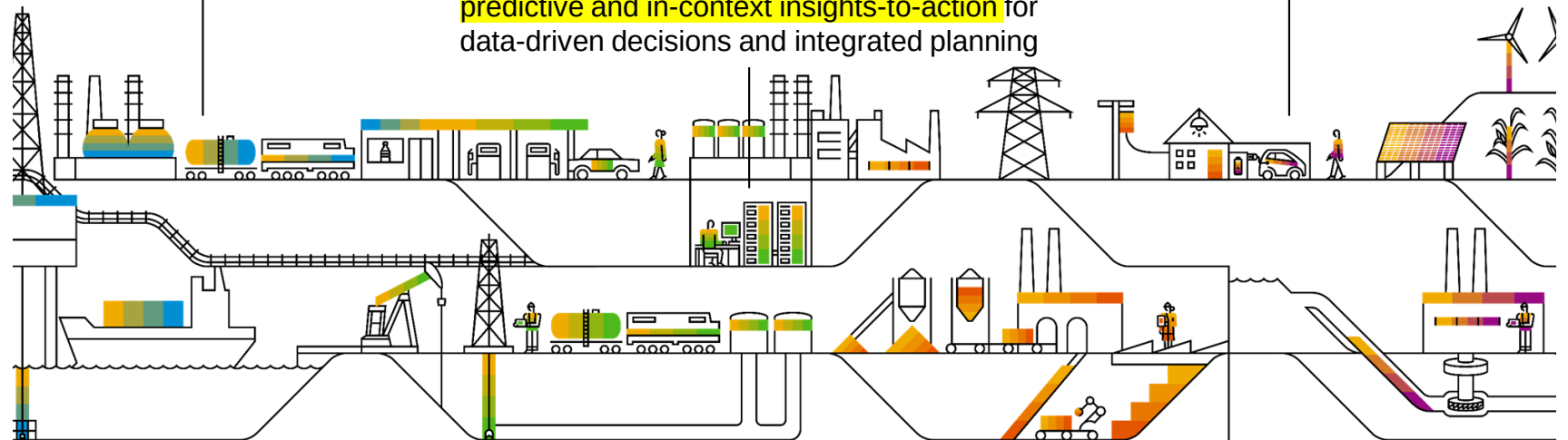
Intelligent Automation

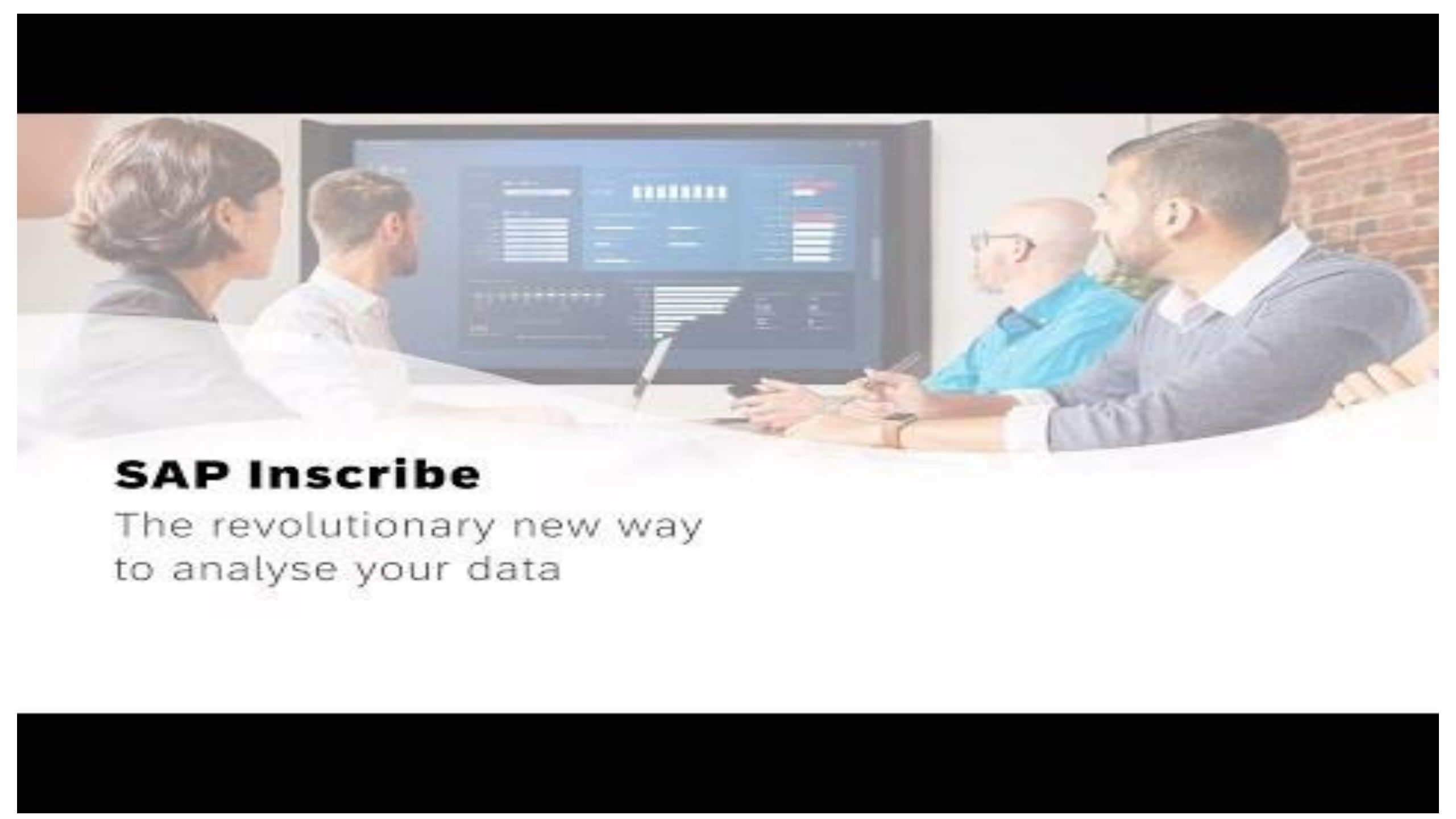
Innovations such as **artificial intelligence and robotic process automation** increase efficiency, leading to a 50%+ reduction of manual tasks

Next generation processes supported by

End-to-End Analytics

Embedded analytics enable **real-time, predictive and in-context insights-to-action** for data-driven decisions and integrated planning

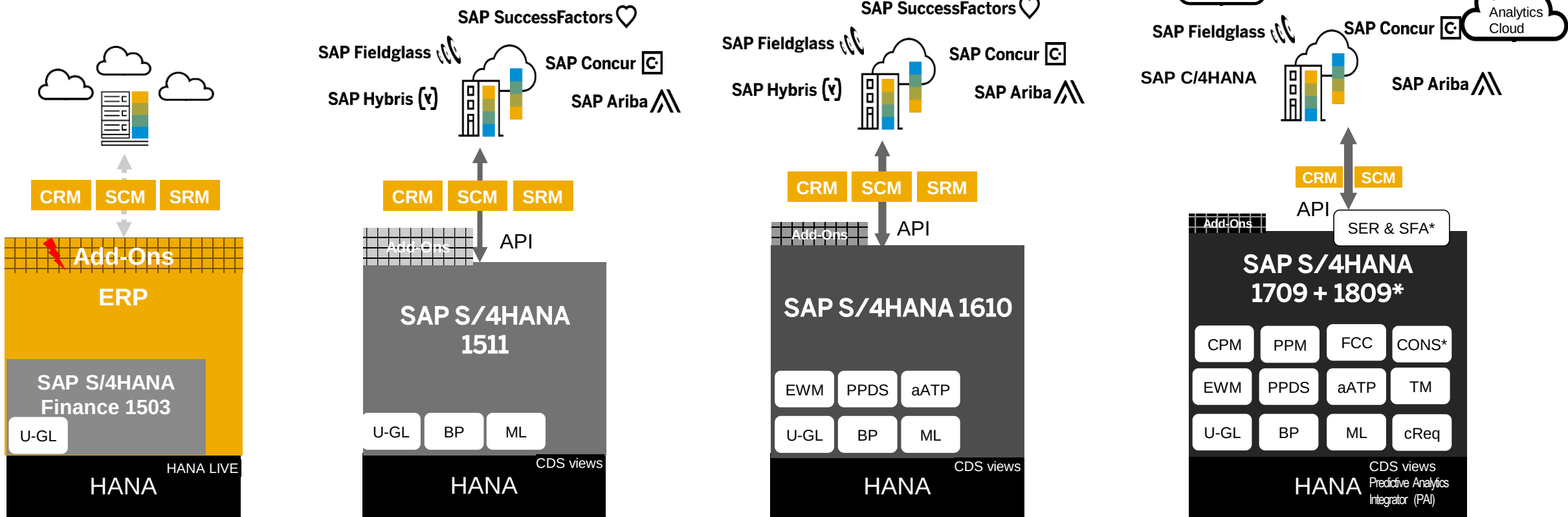




SAP Inscribe

The revolutionary new way
to analyse your data

The evolution of SAP S/4HANA: Architecture



SAP Value Map for Oil and Gas covers the Industry Priorities

Project Orchestration

Engineering

Portfolio and Project Management

Shutdown, Turnaround, and Outages

Project Logistics

Hydrocarbon Production

Hydrocarbon Production Management

Hydrocarbon Revenue Management

Field Logistics

Hydrocarbon Logistics

Commodity Management

Hydrocarbon Supply and Distribution

Hydrocarbon Processing Visibility

Secondary Distribution and Fuels Retailing

Commercial Sales and Marketing

Operational Integrity

Environment, Health, and Safety

Total Workforce Management

Asset Operations & Maintenance

Spare Parts and Materials Management

Human Resources

Core Human Resources and Service Delivery

Talent Management and Learning

Payroll and Time and Attendance Management

Talent Acquisition

People Analytics

Finance

Accounts Payable and Receivable

Real Estate Management

Financial Planning and Analysis

Accounting and Financial Close

Finance Operations

Treasury Management

Enterprise, Risk, and Compliance

Cybersecurity and Data Protection

Procurement

Supplier Management

Inventory and Basic Warehouse Management

Services Procurement

Central Procurement

Invoice and Payables Management

Procurement Analytics

Supplier Collaboration

Technology and Platform

Analytics

Application Platform and Infrastructure

Database and Data Management

IT Management

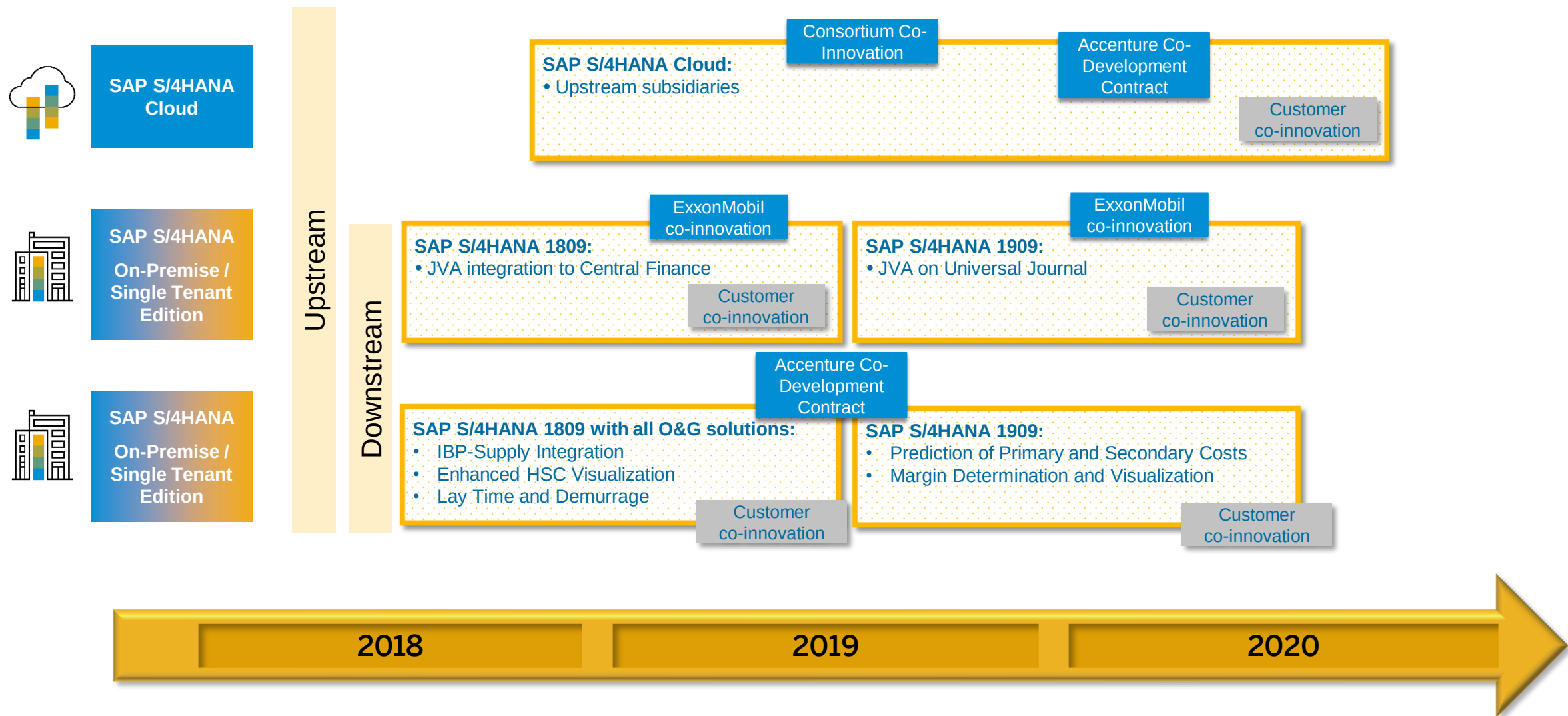
Security Software

IoT Business and Technology Services

■ Core industry priorities ■ Cross-enterprise supporting priorities ■ Technology and platform

Product Investments and Co-Innovation – SAP S/4HANA Oil & Gas

3 year S/4HANA Roadmap



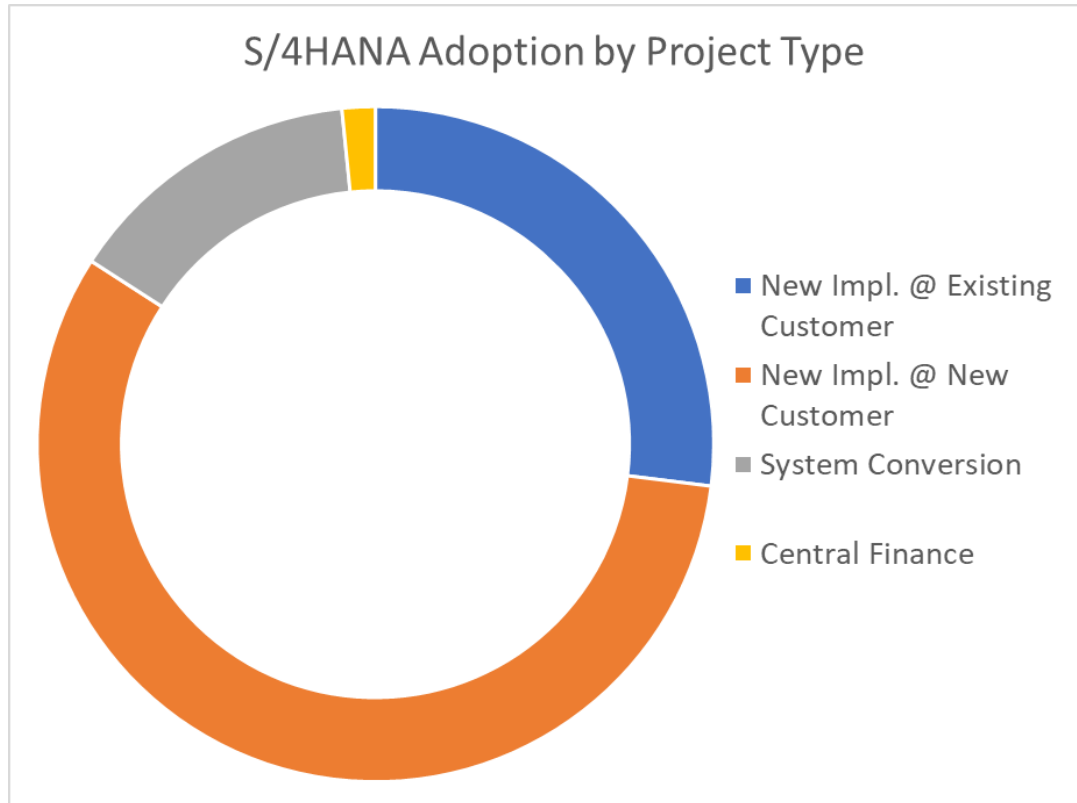
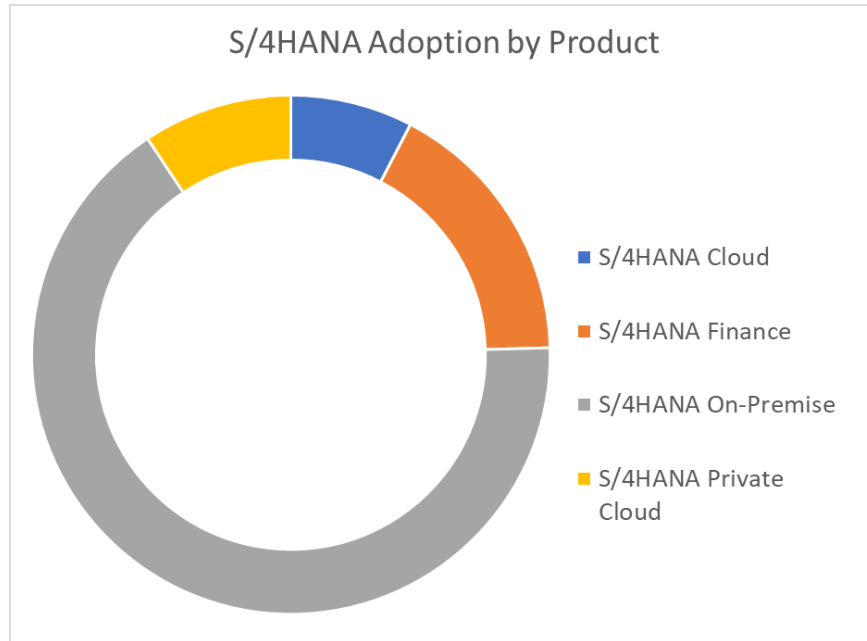
S/4HANA deployments for O&G

S/4HANA deployment options for O&G

PL Item (component)	S/4HANA on-prem	HEC	STE	MTE
SAP S/4HANA Oil & Gas for hydrocarbon management (HPM)	Available - 7019044	Available - 8005043	Available - 8007010	NOT available/planned
SAP S/4HANA Oil & Gas hydrocarbon supply and primary distribution (TSW)	Available - 7019043	Available - 8005042	Planned with March 2019 price list	NOT available/planned
SAP S/4HANA Oil & Gas for secondary distribution management (SDM)	Available - 7019210	Available - 8005299	Planned – no concrete date	NOT available/planned
SAP S/4HANA Oil & Gas for retail fuel network operations (RFNO)	Available - 7019211	Available - 8005300	Planned – no concrete date	NOT available/planned
SAP S/4HANA Oil & Gas for upstream contracts management (JVA)	Available - 7019041	Available - 8005040	Planned with March 2019 price list	Planned - JVA functionality will be part of SAP S/4HANA Cloud for upstream oil and gas - 8006361
SAP S/4HANA Oil & Gas for upstream revenue management (PRA)	Available - 7019042	Available - 8005041	Merged - Planned with March 2019 price list	NOT available/planned
SAP S/4HANA Oil & Gas for upstream operations management (UOM)	Available - 7019280	Available - 8005403		NOT available/planned
SAP Remote Logistics Management for O&G (RLM)	Available through compatibility pack – New Field Logistics solution planned	Available through compatibility pack - 8001623	Please contact IBU O&G	Planned - covered by new Field Logistics solution which will be part of SAP S/4HANA Cloud for upstream oil and gas - 8006361
SAP Commodity Management option for Energy for S/4HANA	Available - 7018872	Available - 8005599	Planned – no concrete date	NOT available/planned

O&G S/4HANA customer adoption – as of end Q4 2018

280+ S/4HANA projects in O&G



Normbenz



WHITE STAR
PETROLEUM

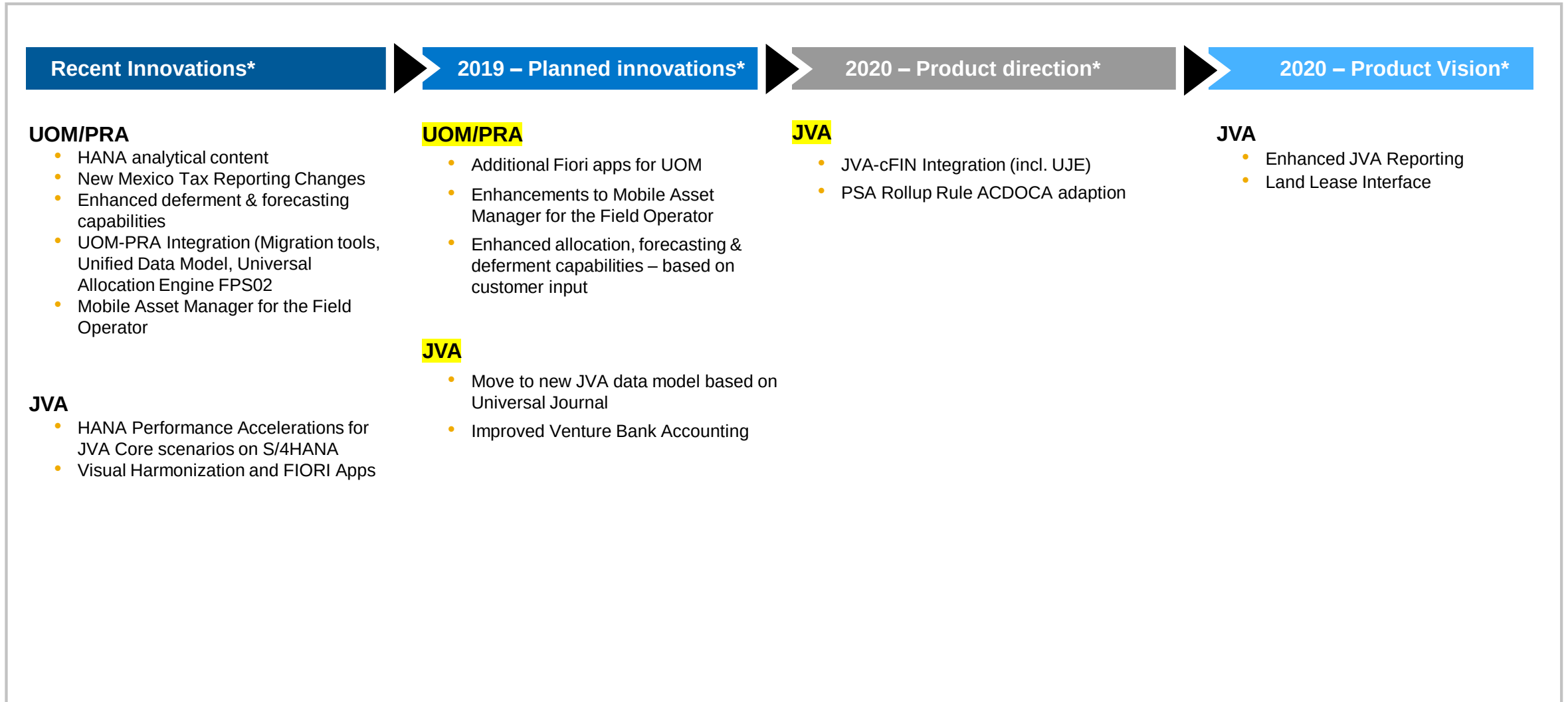


Upstream Roadmaps for Oil and Gas Business



SAP S/4HANA On-premise for Oil & Gas

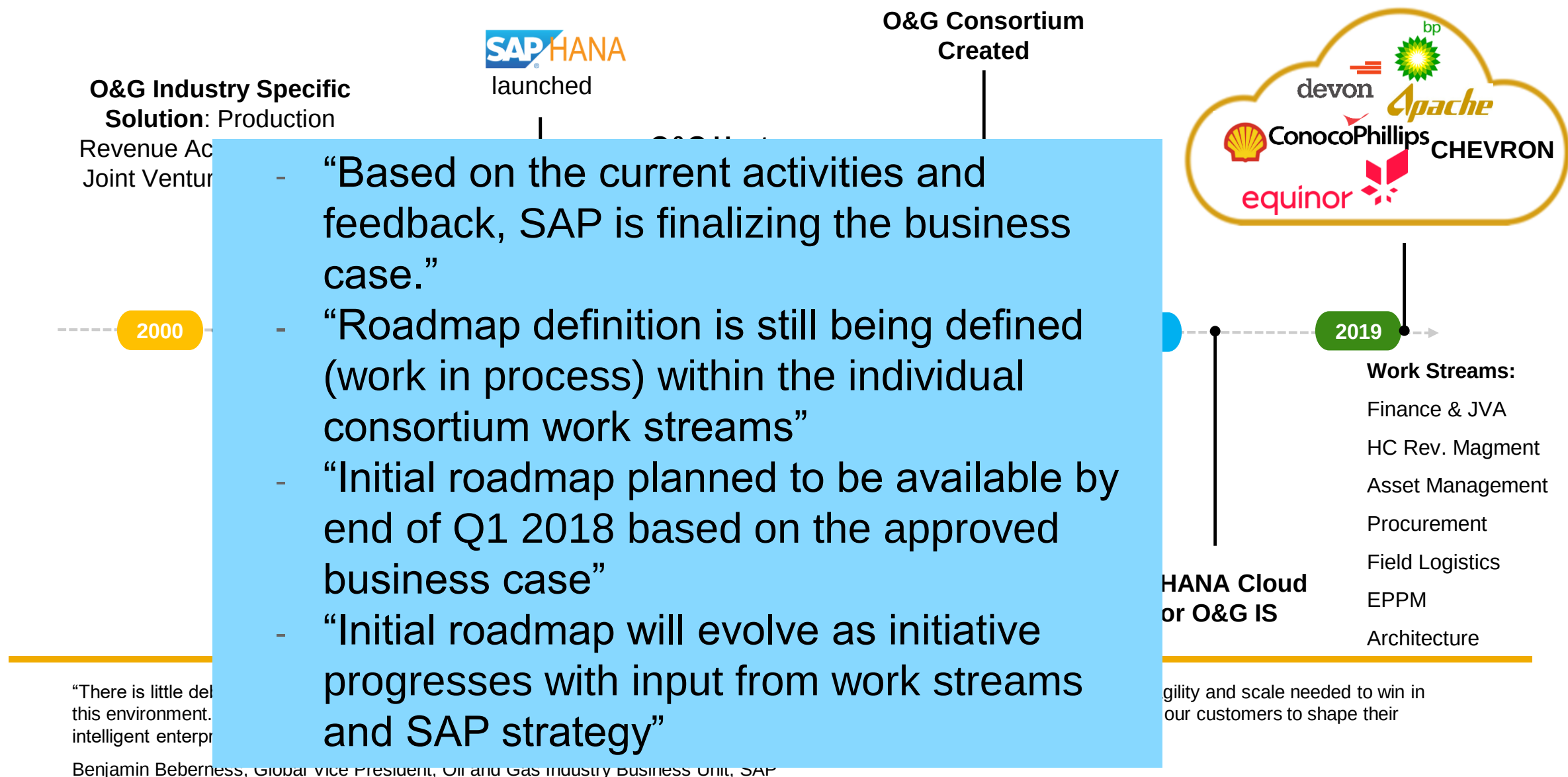
Upstream Product Roadmap Details



*See [Feature Scope Description](#) of S/4HANA 1610,1709 and 1809 for full scope.

** This is the current state of planning and may be changed by SAP at any time without notice.

SAP and the O&G Industry Strategic Partnership



SAP S/4HANA Cloud for upstream oil and gas

Product Delivery Phases

Lab Preview

Draft

Product Vision (May 2021)

Product Direction (May 2020)

Planned Release (November 2019)

Basic Subsidiary Scope

JVA/Finance : JVA (International Scope), Universal Journal Adaptation/Enhancements to core Finance processes to support JVA

Procurement : Core processes for procuring direct/indirect materials and simple services, Integration with Plant Maintenance and Asset Intelligence Network, Digital Field Ticketing

Field Logistics : Core Inventory processes

Independent Operating Entities – Basic Scope

JVA/Finance : JVA (North America Scope), eBilling/Additional innovation in Finance

Asset Management : Core capabilities in Priority 1 and Priority 2 processes

Procurement : Architecture definition of core procurement processes to support complex service procurement integrating S4HC, ARIBA and Fieldglass solutions

Field Logistics : Supply processing, Goods receipt/transfers at base and remote locations, Returns to Vendor

Hydrocarbon Revenue Management * :

NA Revenue : Core package (UOM-PRA in Cloud, Out-of-the-box integration with FI/JVA, Data Aging, APIs for 3rd party integration, Migration support) and Innovation package 1 (Revenue Workplace, Central Master Data, Interest Payment Calculation Framework, Regression Testing Workbench, Standardized templates)

International Revenue/PSA : Core processing engine and support for select countries

Foundation Master Data : Modeling of Well/WC, Surface/Subsurface Equipment, Asset Network in Asser Central, APIs to support integration with PRA and Asset Management

Independent Operating Entities – Full Scope

JVA/Finance : APIs to support integration with 3rd party Land/Lease, Additional JVA Fiori Apps/Reports/Additional innovation in Finance

Procurement : Complex services procurement, Additional innovation items and round-off items

Asset Management : Additional capabilities in Priority 2 processes

Field Logistics : Assembly/Enhancements and Downgrades, Additional Returns scenarios, Investment Recovery, Physical inventory, Rental monitoring, project stock, consignment stock, Transportation scenarios

Hydrocarbon Revenue Management * :

NA Revenue : Innovation package 2 (Revenue Simulation/Forecasting and Accruals, Product Supply, Standard Payout Tracking)
International Revenue/PSA : Core engine enhancements, Support for additional countries in scope.

Foundation Master Data : Modeling of additional objects in Asset Central, APIs to support integration with JVA, Field Logistics

EPPM : Capital Projects

* International Revenue/PSA strategy/scope and NA Revenue scope is subject to customer confirmation.



In Planning
SAP LABS PREVIEW

SAP S/4HANA 1809

Oil & Gas Innovation



SAP Oil & Gas Supply Chain Visualization

Value Proposition

Drivers & Motivation

- **Improving scheduling** via higher utilization of relevant and influencing data
 - **Recognition** of potential penalties
 - **System support** for resolving supply chain situations
 - Provide **state-of-the-art** visualization and KPIs
- 

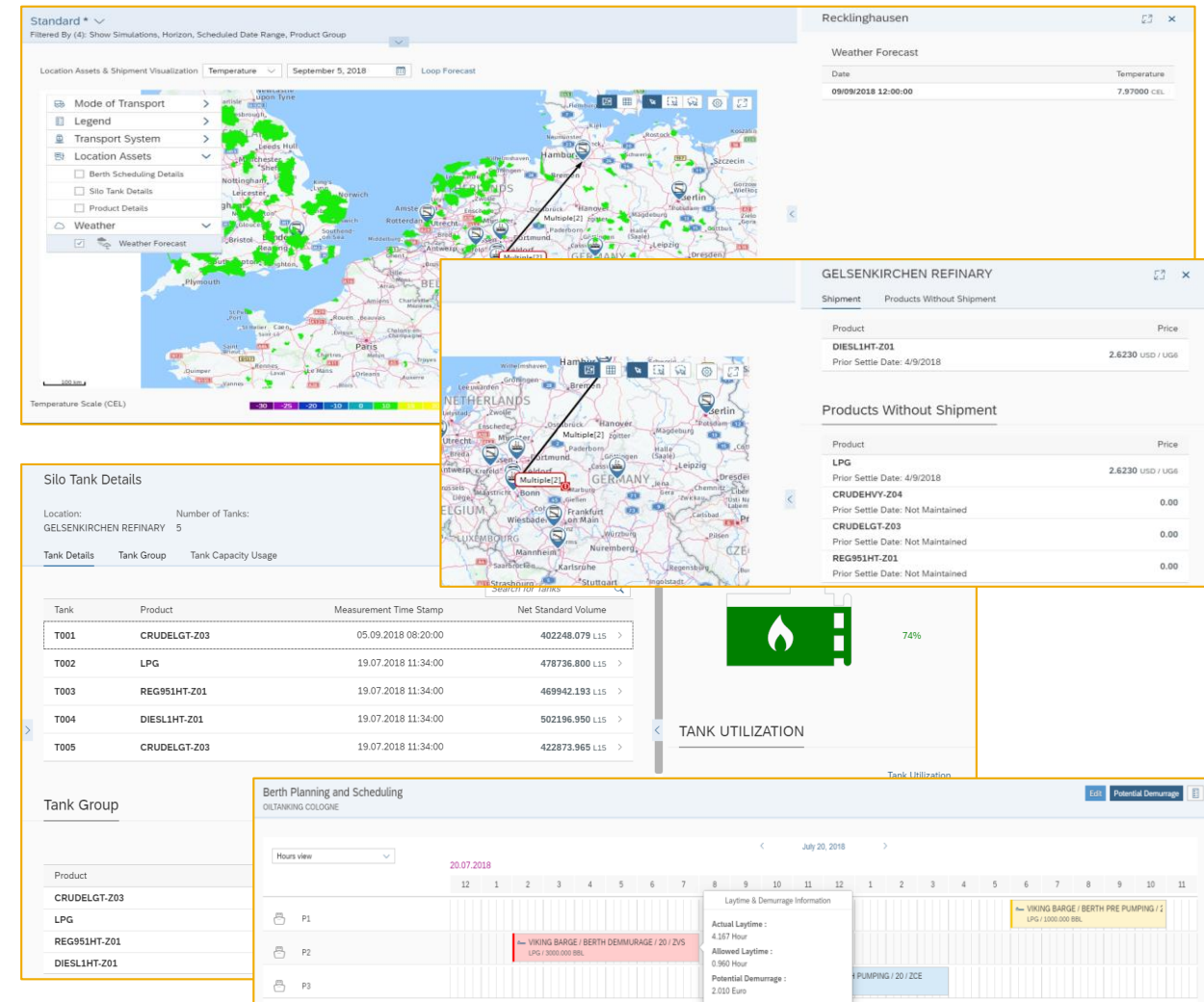
Benefits & Value

- **Optimized scheduling** through combined view of relevant data like commodity prices and inventories facilitating scheduler decision
- **Real-time stock visibility** in silo tanks
- **Minimizing penalties and lead-time** through early adjustments using real-time operational data as well as weather conditions
- **Improved collaboration** through pro-active alerting and notification service
- **Detect bottle necks** in the supply chain planning, scheduling and execution

SAP Oil & Gas Supply Chain Visualization

New Features

- **Berth scheduling** including visualization of vehicle allocation, plan/actual laytime, mooring progress and potential demurrage information
- **Silo tank measurements** including visualization of tank characteristics, recent measurements and stock analysis (products / tank utilization)
- **Transshipment impact analysis** and shipment correction
- **Geospatial visualization of inventory and price**
- **Commodity price integration** (rack / index)
- **Notification service of impacts** to business partners
- **Visualization of weather forecast data**
- **Visualization of IPW (inventory Planning Workbench) simulations**



SAP Oil & Gas IPW-IBP Integration

Value Proposition

Drivers & Motivation

- **Support scheduler** as well as **planning department**
 - **Long term** and **short term demand forecast**
 - **Constrained supply planning** based on heuristics and optimization
 - Utilization of **new simulation capabilities** within IPW
- 

Benefits & Value

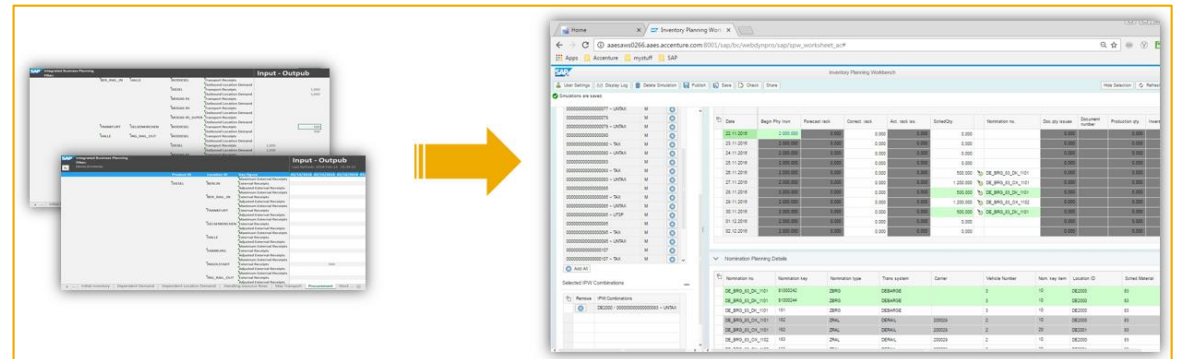
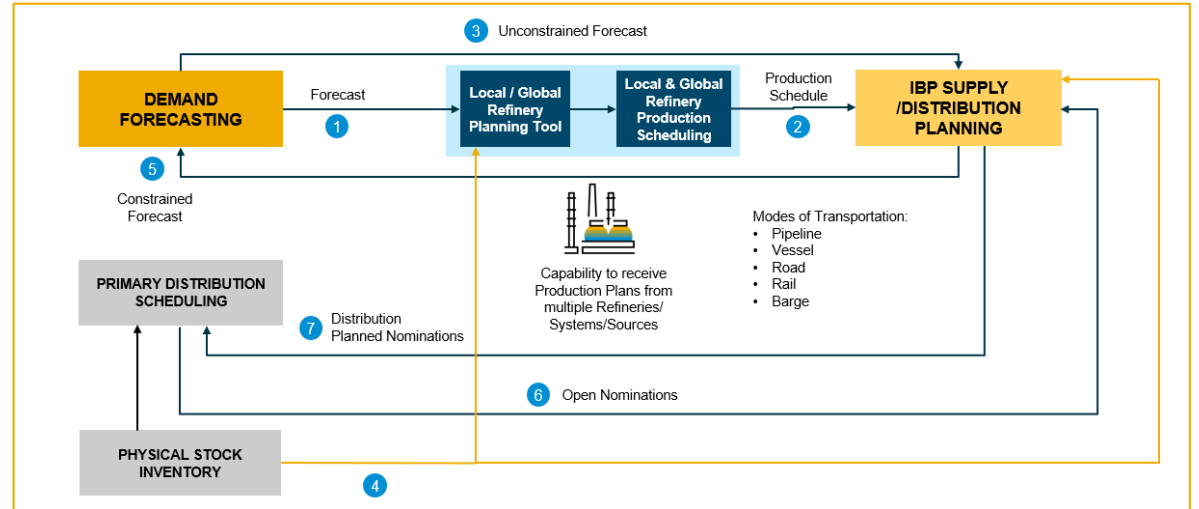
- **Facility** for **accurate** and **reactive forecasting**
- **Early detection** of demand / supply bottle necks
- **Improved accuracy of schedules** through integrated forecast data
- Consider constraints, costs and prices to **provide a first cut distribution plan**

SAP Oil & Gas IPW-IBP Integration

New Features

- **Inclusion of Supply Planning**
 - **Modelling & integration of oil supply chain in time series based planning**
 - **Use of physical inventory, production plan and current schedule**
 - **Representation of constraints and costs**
 - **Decision support for safety stock**
 - **Generation of simulation in IPW**

Note: The solution requires implementation work by the customer to complete the modelling.



SAP Oil & Gas Inventory Planning Workbench (IPW)

Value Proposition

Drivers & Motivation

- **Support scheduler** as well as **planning department**
- **Monitor** inventory situation and **set up alerts** specific to products and terminals
- Streamlined **nomination maintenance** and **inventory monitoring** for multiple products and terminals
- Support **multiple simulation versions** to improve scheduling usability



Benefits & Value

- **Early detection** of demand / supply bottle necks
- **Simplified** nomination maintenance
- **Early detection of inventory issues** via projected inventory alerts
- **Improved usability** and **collaboration** via global variants and simulation versions

SAP Oil & Gas Inventory Planning Workbench (IPW)

Key Features (improved)

- **Global Simulations** to have share simulations across users and applications
- **Extended** rack and physical inventory calculation
- **Improved** user experience including:
 - Seamless scrolling
 - Responsive browser screen integration
 - Faster initial data load

Date	Begin Phy Invn	Actual Qty	End Phy Invn	SchedQty	Doc.qty:issues	Correct. rack	Nomination ...	Nomination ...	Production qty.	Act. rack iss.
04.09.2018	0,000	0,000	0,000	0,000	0,000	0,000			0,000	0,000
05.09.2018	0,000	0,000	0,000	15,000,000	0,000	0,000	10591	10591	0,000	0,000
06.09.2018	0,000	0,000	0,000	0,000	0,000	0,000			0,000	0,000
07.09.2018	0,000	0,000	0,000	10,000,000	0,000	0,000		\$14964	0,000	0,000
08.09.2018	0,000	0,000	0,000	0,000	0,000	0,000			0,000	0,000
09.09.2018	0,000	0,000	0,000	0,000	0,000	0,000			0,000	0,000

Nomination no.	Nomination key	Nomination type	Trans system	Shipper	Carrier	Vehicle Number	Location ID	Non
10591	\$14964	CRCR	MARAT-Z4	SHPPER-Z4	CARR-Z4	IV-1709-01	LOCRA5-Z4	10

SAP Oil & Gas Lay time and Demurrage

Designed for the Shipment Specialist, Terminal Operator, Backoffice

SAP Schedule Hydrocarbon Trips

Standard * ▾

Search [] Nomination Number: [] Shipment Number: [] Outbound Delivery: [] Trip External Number: [] Trip Reference: [] Vehicle Type: [TRUC]

Adapt Filters (1) Go

Reference Documents (10) Standard ▾

	Nomination Number	Shipment Number	Outbound Delivery	Trip ID	Trip External Number	Trip Status	Trip Item	Trip Item Status
☐	RUSLAN01			7	00000000000000000008	In process	0000000020	In process
☐	RUSLAN01			352	00000000000000000353	Completed	0000000010	Settled
☐	RUSLAN01			352	00000000000000000353	Completed	0000000010	Settled
☐	RUSLAN02			354	00000000000000000355	In process	0000000020	In process
☐	TEST_NOMPEGDEL_RRO			13	14	In process	0000000010	In process
☐	CF_8			159	00000000000000000160	Completed	0000000010	Settled
☐	CF_8			210	00000000000000000211	Completed	0000000010	Settled
☐	CF_8			344	TEST_RAJ_3	Completed	0000000010	Settled
☐	CF_8			212	00000000000000000213	In process	0000000010	In process
☐	CF_8			343	TEST_RAJ	In process	0000000010	In process

SAP Laytime & Demurrage

Ravi ▾

Search [] Editing Status: [All] Trip ID: [] Trip External Number: [] Trip Type: [] Vehicle: [] Status: []

Adapt Filters (1) Go

Trips (271) Standard ▾

	Trip ID	Trip External Number	Trip Type	Vehicle	Vehicle Type	Status	Created On	Demurrage Amount
☐	594	DPP_UNBLK	TNOM	VH_UNBLK_1	SHIP	Completed	31.08.2018	0,00 USD >
☐	592	00000000000000000593	TNOM	4	TR40	Created	31.08.2018	0,00 USD >
☐	581	TRIP_BP_UNBLOCKING	TNOM	BOUNTY-201	SHIP	Created	28.08.2018	0,00 USD >
☐	591	DPP_UNBLK_1	TNOM	VEH_11	SHIP	Completed	27.08.2018	0,00 USD >
☐	571	TRIP_NOM_VEH	TNOM	VEH_5	SHIP	Completed	21.08.2018	0,00 USD >
☐	572	TRIP_NOM_VEH_4	TNOM	VEH_4	SHIP	Completed	21.08.2018	0,00 USD >
☐	562	DEMO_NOM1	TNOM	OV-1709-03	SHIP	In process	03.08.2018	7.050,00 USD >
☐	561	LA_TRIP	TNOM	BOUNTY-201	SHIP	In process	03.08.2018	0,00 USD >

SAP Oil & Gas Cost Framework – Lay time and Demurrage Value Proposition

Drivers & Motivation

- Demurrage and detention is a significant expense in a hydrocarbon supply chain and involves a lot of negotiations and discussions between the involved parties
- There is no defined process to streamline the demurrage related activities done in an organization
- Demurrage and detention calculation should be supported for all relevant MoTs

Benefits & Value

- Reconciliation of demurrage and detention costs allows
 - Traceability to individual movements
 - Traceability to a route, carrier, location and stakeholders
- Capture demurrage and detention costs for different movement objects (nomination, TD shipment and delivery)

SAP Oil & Gas Cost Framework – Lay time and Demurrage

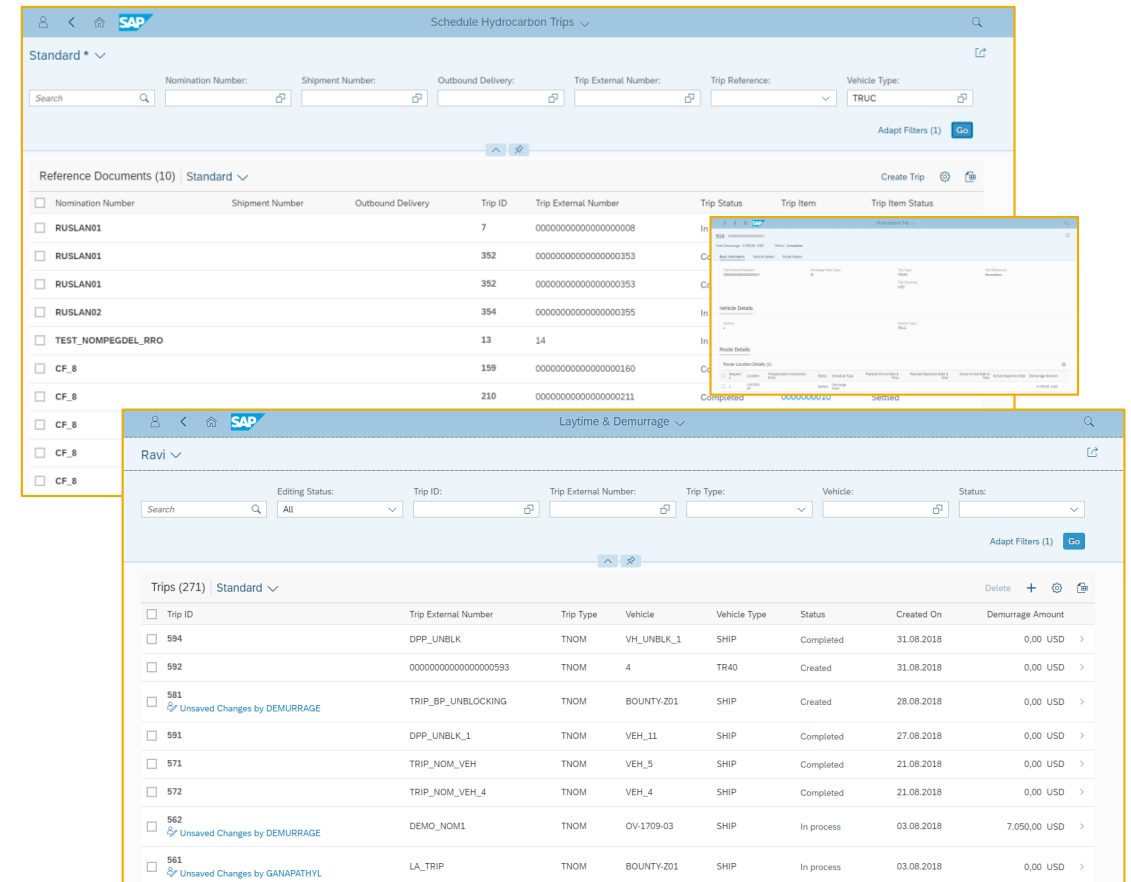
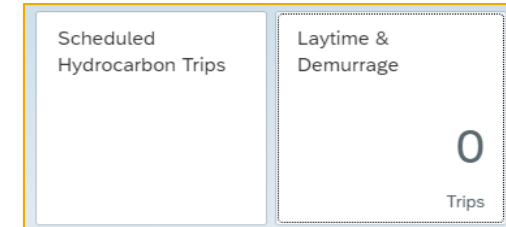
Key Features

Fiori App – Laytime and Demurrage

- The new object called 'Trip', which supports the time recording, demurrage calculation and posting
- Multiple **Nominations**, **Shipments** or Outbound **Delivery** documents can be **combined in a Trip**
- **Events enabled** at Trip level to record time
- Both **payable and receivable calculation enabled** with integration to SD and MM pricing and doc flow

Fiori App – Schedule Hydrocarbon Trips

- **Worklist** with Nomination, Shipment and Outbound Delivery items
- Create Trip with Reference



SAP Oil & Gas Mobile Ticket Data Capture App*

Designed for the Terminal Operator

* new features released with 1809

Create Ticket Details

ROUTE 1:N TEST

Scheduled Quantity: 3000.000 BBL
Actualized Quantity:
Quantity In Process:

Ticket Status:
Due

Nomination Details

Date: 14.07.2017
Terminal: LOCBAL-24
Type: D
Material: CRUDE OIL HEAVY

See More

Movement Details

*Actual Quantity:
BBL

*Actual Unit of Measure:
BBL

Send Cancel

Create Ticket Details

ROUTE 1:N TEST

Movement Details

Start Date/Time:
dd.MM.yyyy HH:mm:ss

*End Date/Time:
dd.MM.yyyy HH:mm:ss

Last Ticket:
OFF

Physical Parameters

Physical Parameter	Value	UoM
Material temperature	20.00	CEL
Test temperature	15.00	CEL
Test relative density	821.230	KGV
Air buoyancy indicator	OFF	

Send Cancel

Create Ticket Details

ROUTE 1:N TEST

Physical Parameters

ON

BSW fraction: 1 V%

Meter correction factor: 1.000000

Base relative density: 821.200 KGV

Additional Quantities

Quantity	UoM
	BBL
	BBL
	KG
	L
	L12

Send Cancel

SAP Oil & Gas Mobile Ticket Data Capture App

Value Proposition

Drivers & Motivation

- Support **terminal operator's daily activities** with ad hoc ticket data capture
- Allow capturing **relevant ticket data** while executing a movement
- Enabled with **offline capability** for low-connectivity areas
- **Seamless flow of information** between terminal and SAP back office



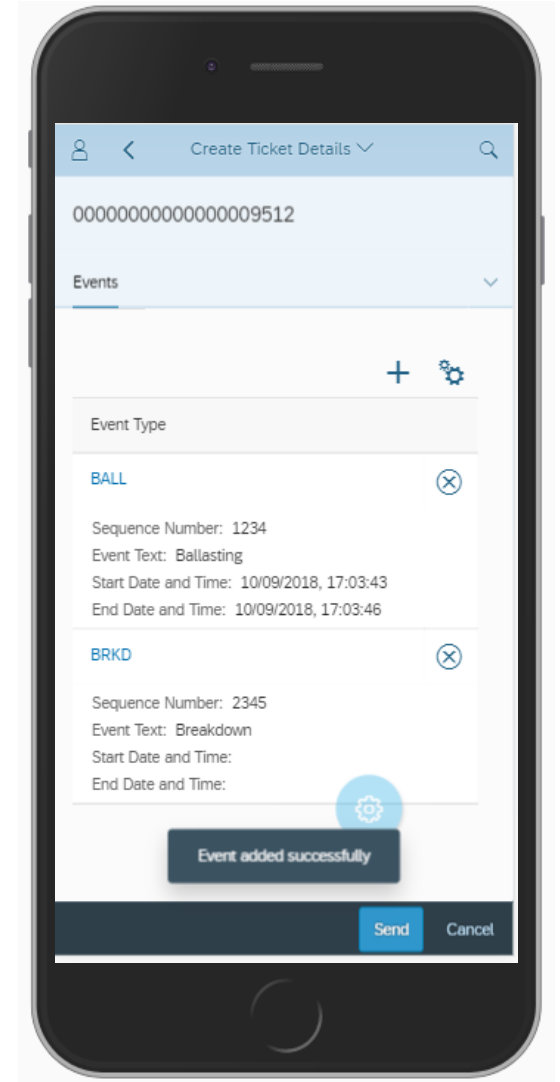
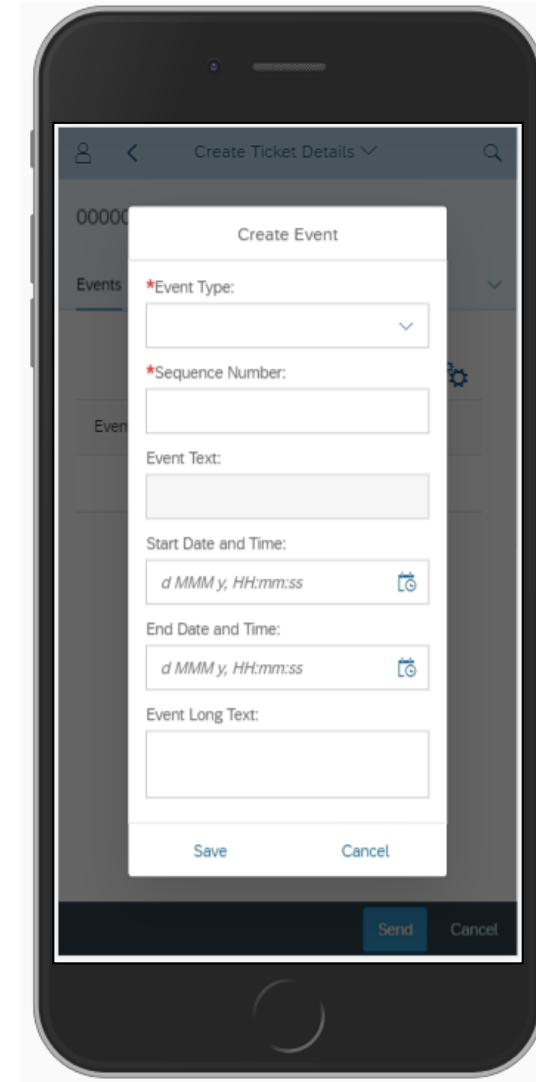
Benefits & Value

- **Ease of use**, minimizing manual intervention or errors
- **Data flow** is near to **real time**
- **Accelerated** and efficient **Order to Cash** cycle
- **Offline data capture** capability for areas with limited connectivity

SAP Oil & Gas Mobile Ticket Data Capture App

New Features

- Capture of **multiple loading and unloading tickets** for the same nomination (item) while working in offline mode
- Capture of **loading and unloading events** along with actual dates in **offline and online mode**



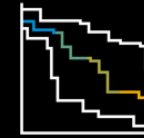


The **Intelligent** Enterprise Building **Automation** and **Scalability**



Lean

Survive with low
commodity prices,
possibly for longer



- Rigorously eliminate any waste, **manage by exception**
- Focus on core skills, extensively **outsource commodity tasks**

Agile

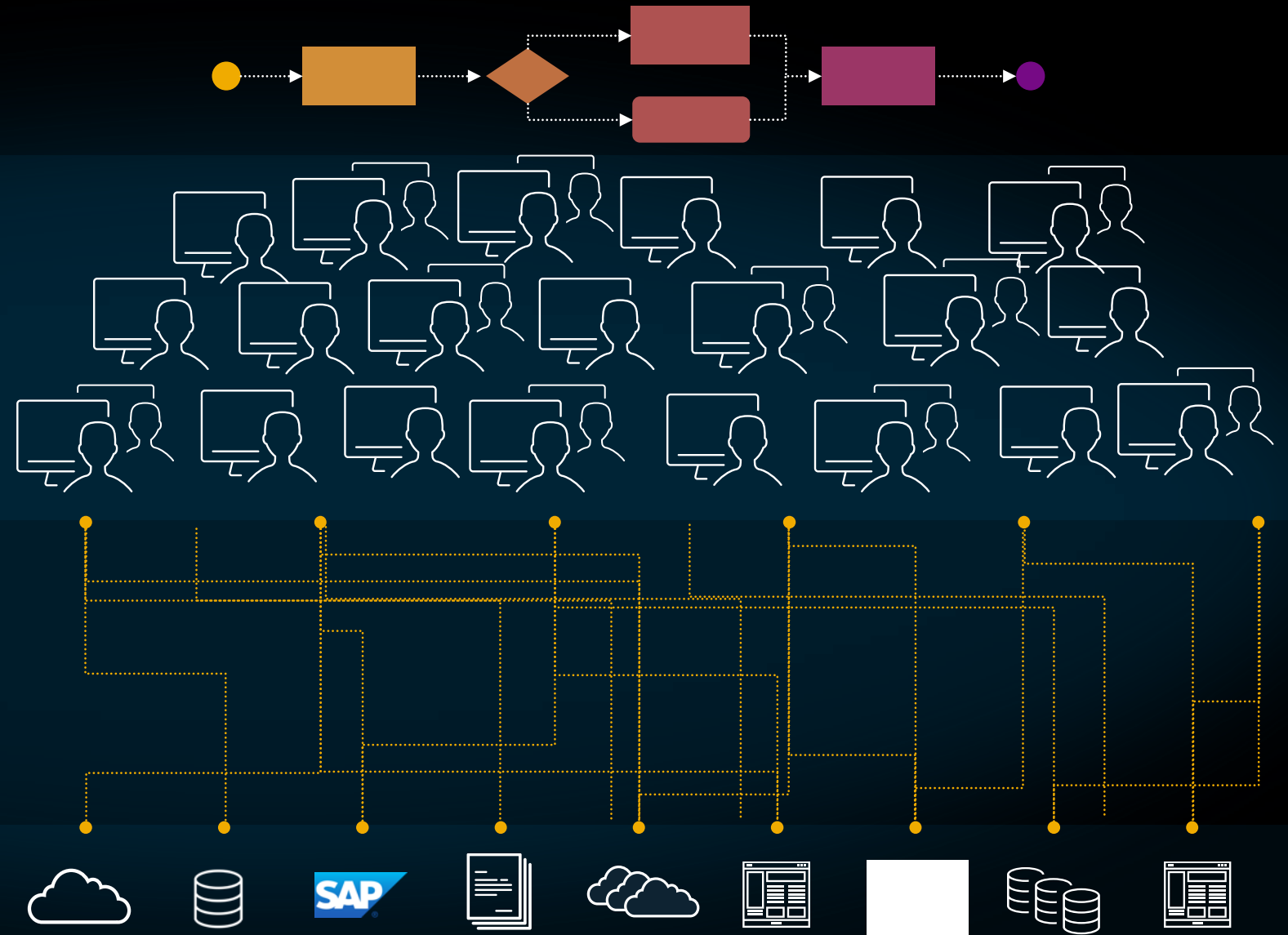
Scale without
sacrificing
efficiencies



- Leverage comprehensive, **real-time planning, forecasting**, modeling across enterprise
- **Create scalable processes** and systems through automation, AI/ML, and connected eco-system

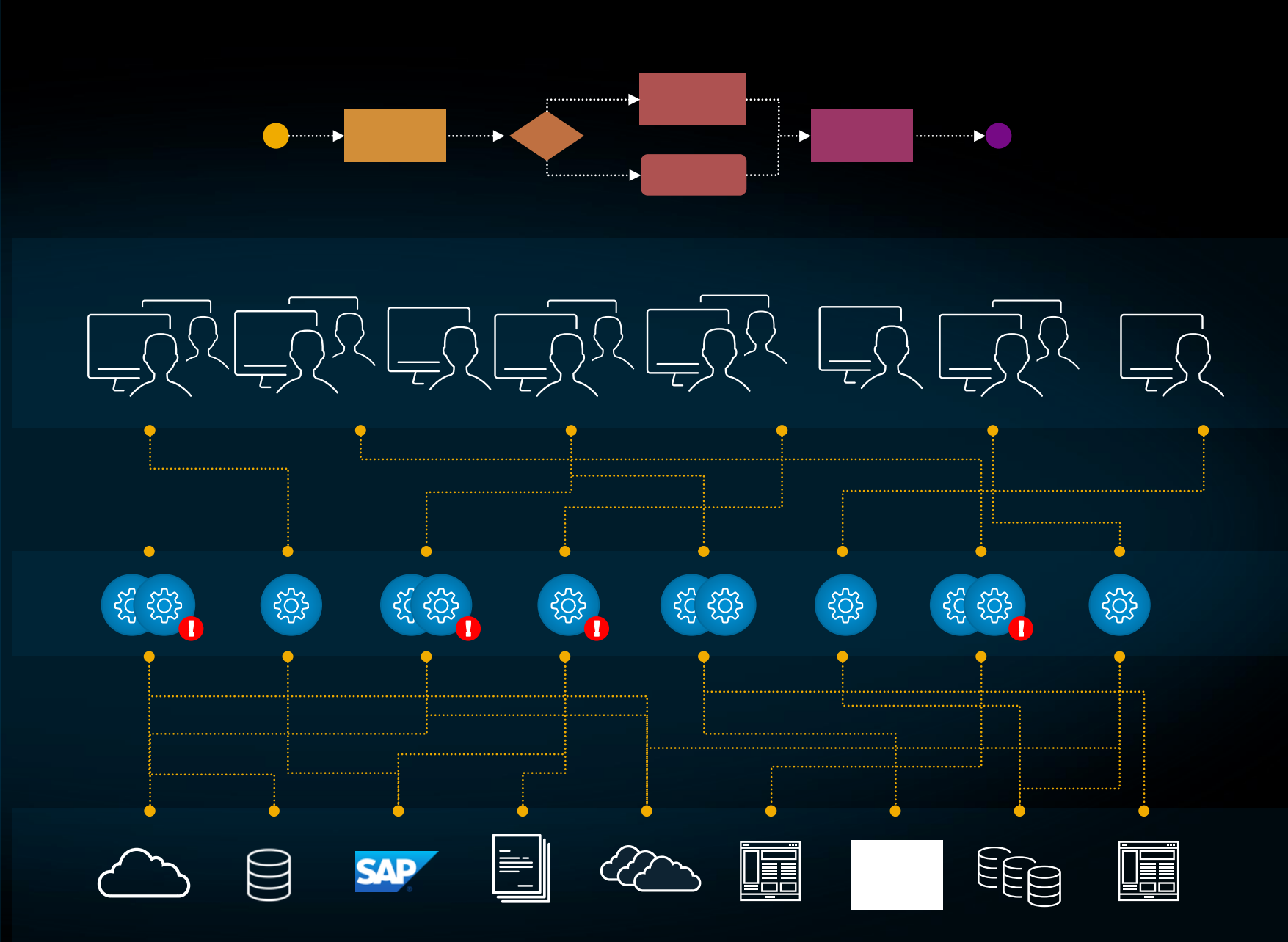
Processes Today

- Processes today are **complex**.
- They are still too **manual**.
- This leads to **errors** and **inefficiencies**.



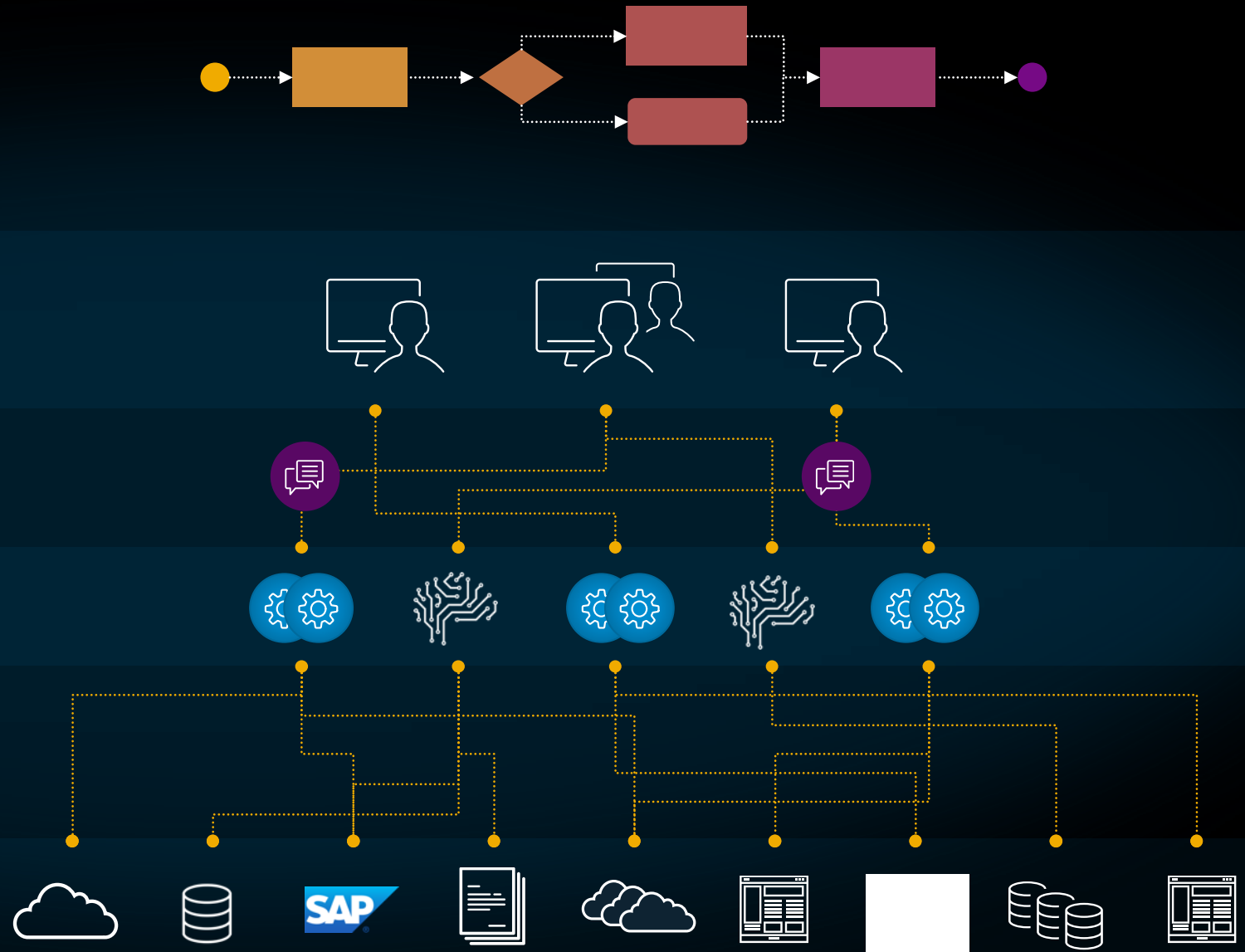
Standard RPA

- Removing manual steps may drive efficiency. But it often leads to complexity under the hood.
- What happens when a UI changes or a system is upgraded?



Add intelligence

- SAP simplifies implementation by using **native APIs**.
- Interactions are natural with **Conversational AI**.
- Automations get intelligent with **Machine Learning** capabilities.



Intelligent Technologies work together for End-to-End Automation

Interact

Conversational AI (CAI)

Chatbots to interface and hand-over to execution bot



Interfacing

Execute

Intelligent RPA

Multiple bot workflows for handsfree execution



Performing tasks

Optimize

Machine Learning (ML)

Self-learning bots with dynamic adaptability

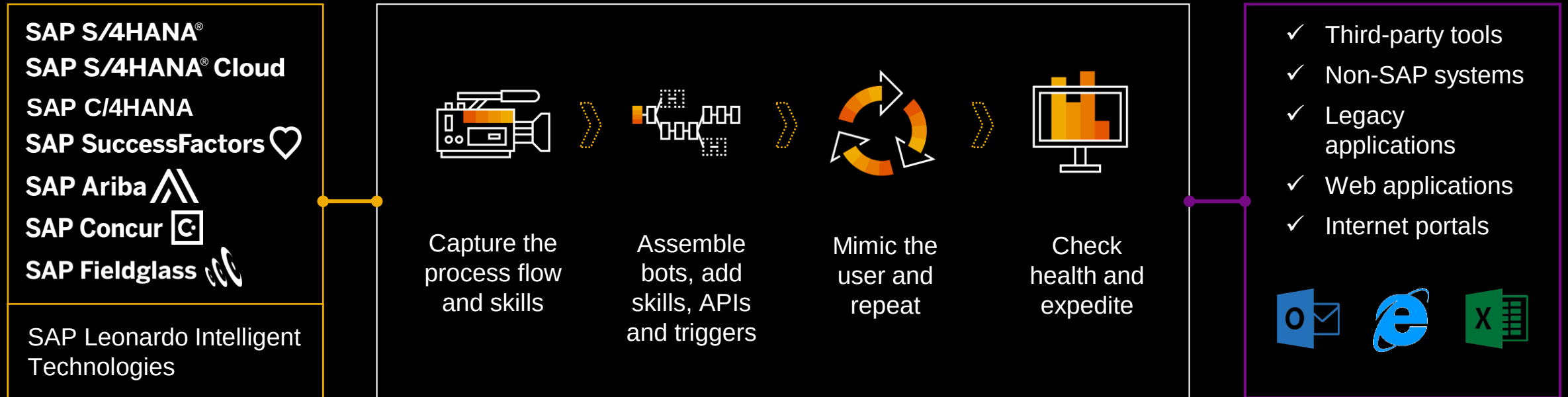


Learn from exceptions

← Intelligent RPA seamlessly integrated →

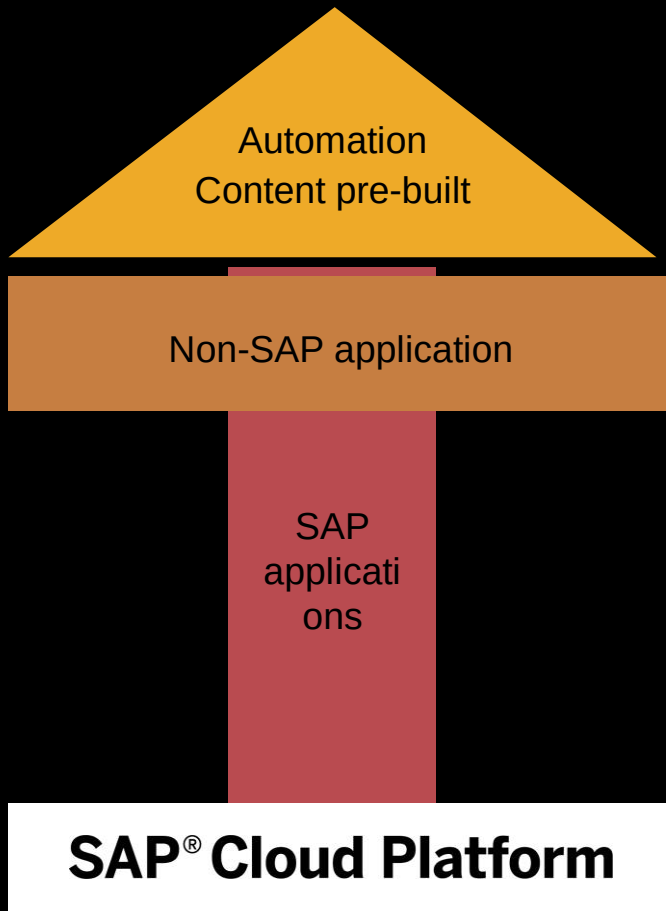
SAP Intelligent Robotic Process Automation

Unified cloud solution including on-premise automation tools



SAP® Cloud Platform

SAP Intelligent RPA Makes a **Key Difference**

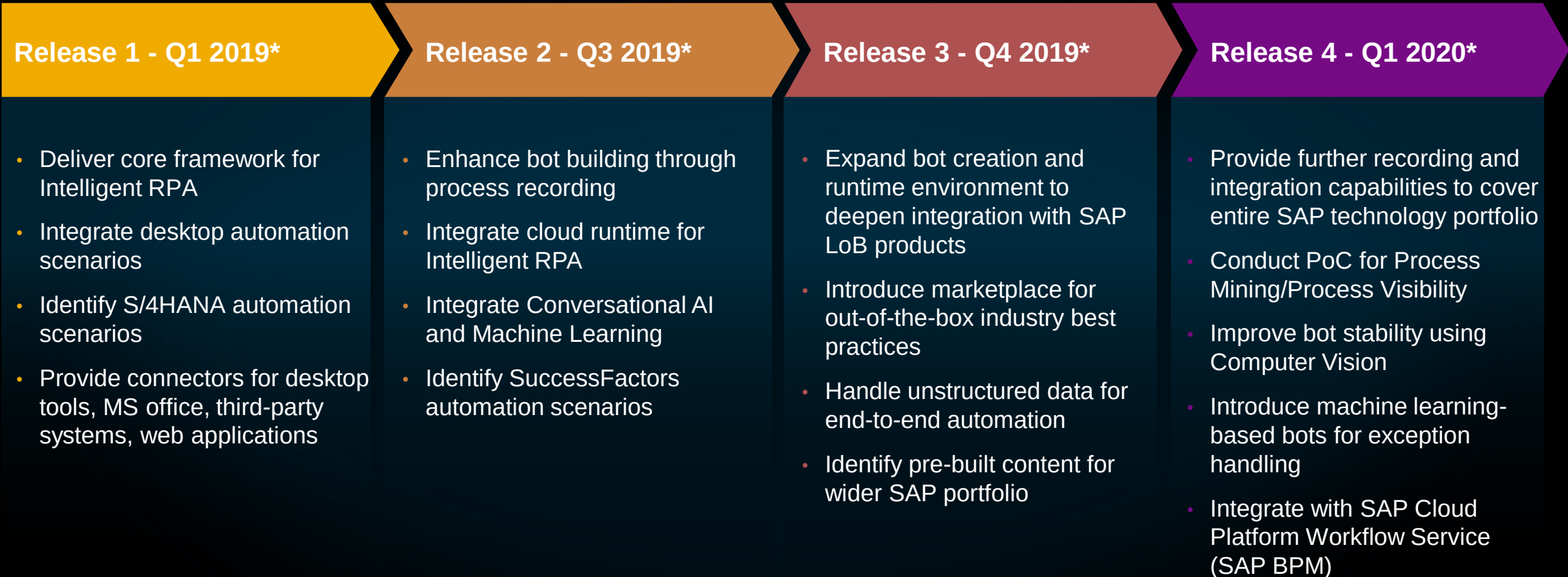


- **Out-of-the-box** automation with prebuilt bots for SAP products
- **Cross-Application, Cross-LoB** solution
- Best-in-class **integration** with SAP applications
- **Only** cloud-first RPA vendor in the market
- Option for end-to-end automation:

Intelligent RPA + ML + CAI

Roadmap and Vision of SAP's Intelligent RPA solution

Subjected to change



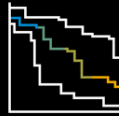
*This is the current state of planning and may be changed by SAP at any time without notice



The **Intelligent** Enterprise Enabling **Collaboration**

Lean

Survive with low
commodity prices,
possibly for longer



Agile

Scale without
sacrificing
efficiencies



Innovate

New business
models



Digital

Advanced
technology as
strategy enabler

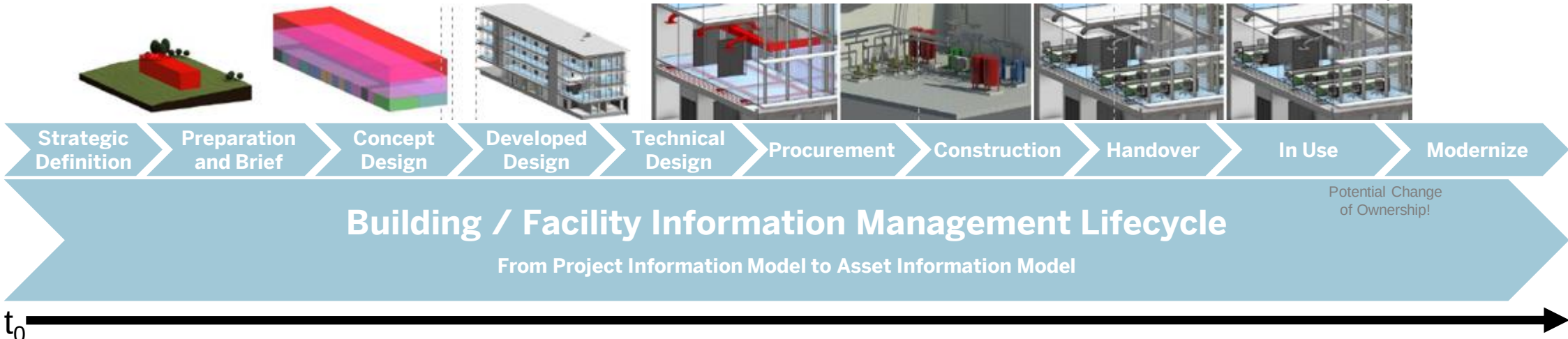
01011
11010
10101
01101

Project Collaboration and Digital Twin within the lifecycle

Project Information Network
Collaborations



RIBA 2012

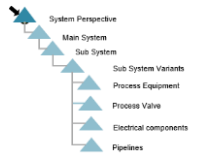


Project Information Network
Digital Twin / BIM Repository

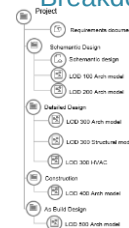
Spatial breakdown
Digital room book



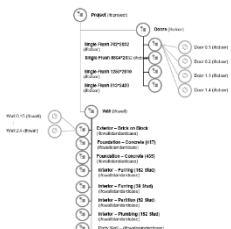
System / Functional Breakdown



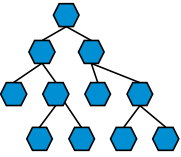
Document / Model Breakdown



Component Breakdown



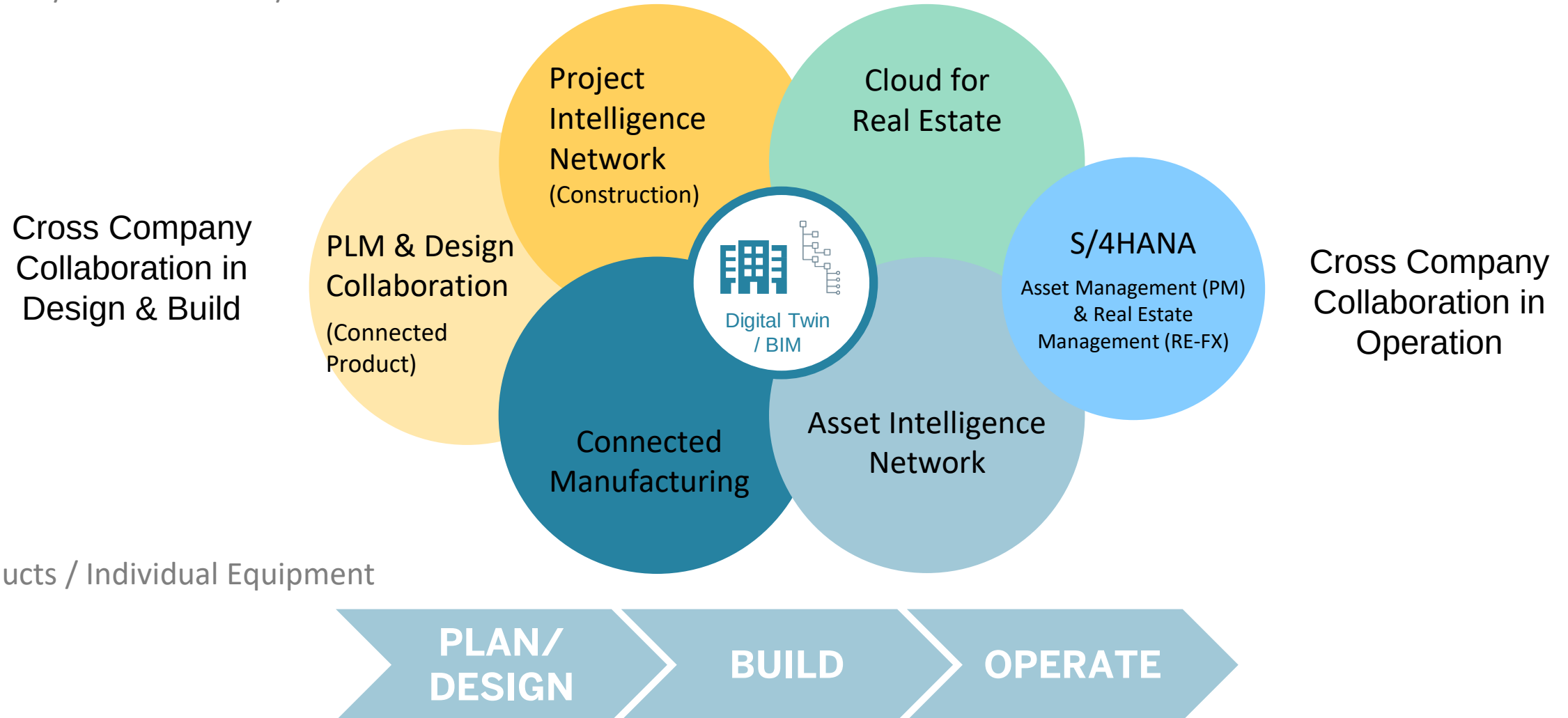
AIN/EAM driven breakdown



Functional Location & Equipment's

E2E Facility Lifecycle Support – Overall Context

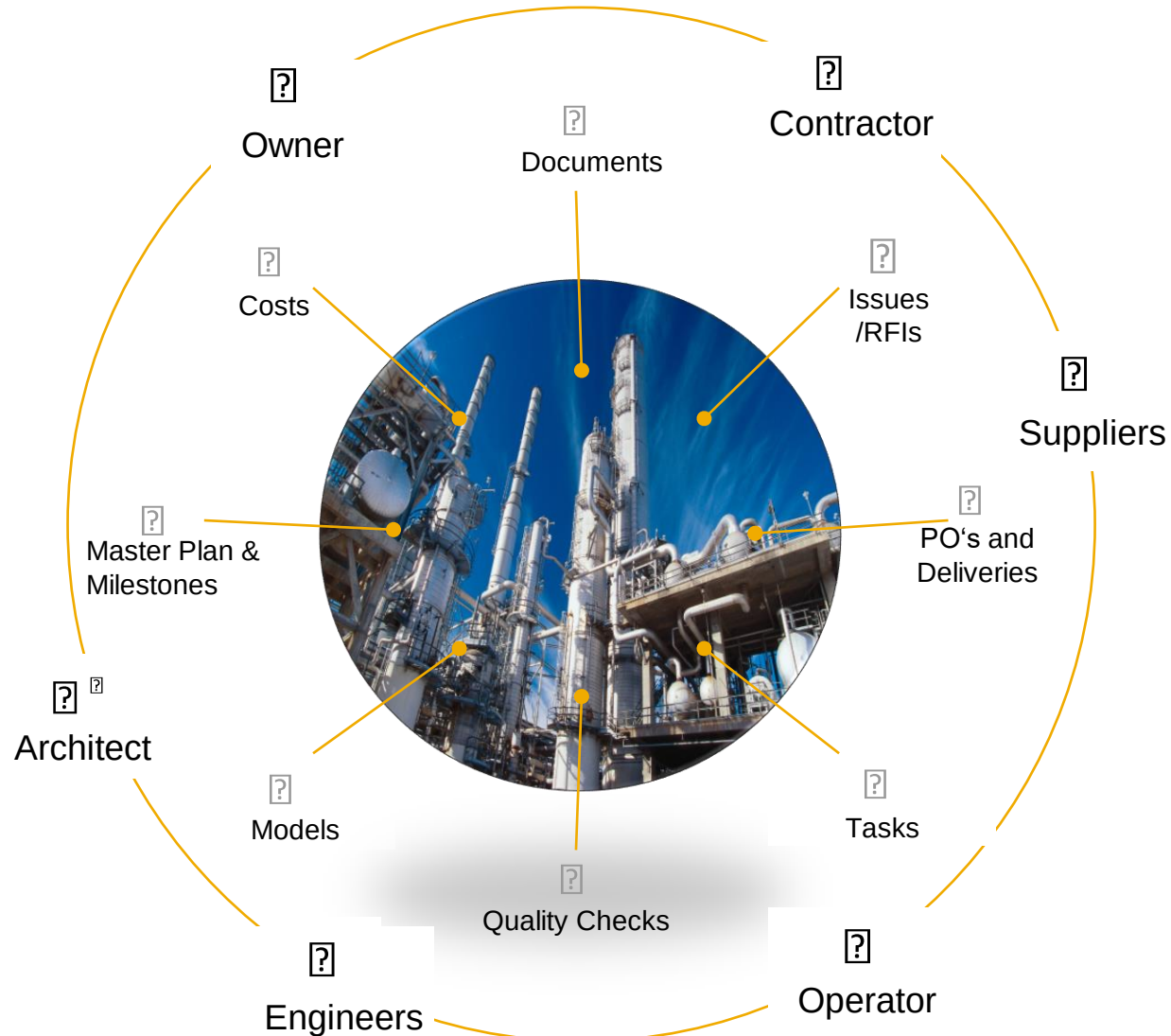
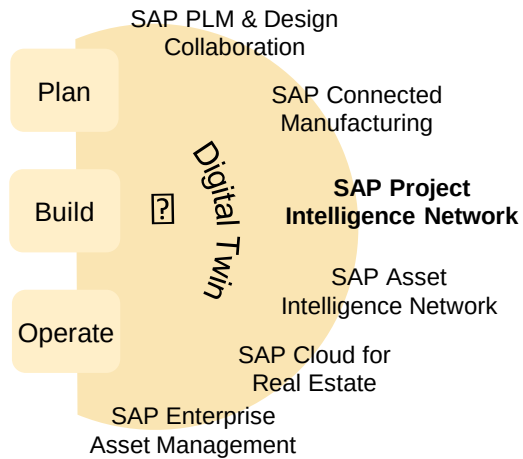
FACILITY/ LARGE ASSETS / INFRASTRUCTURE



SAP Project Intelligence Network for Construction

Multiple Players Collaborating in One Integrated Network

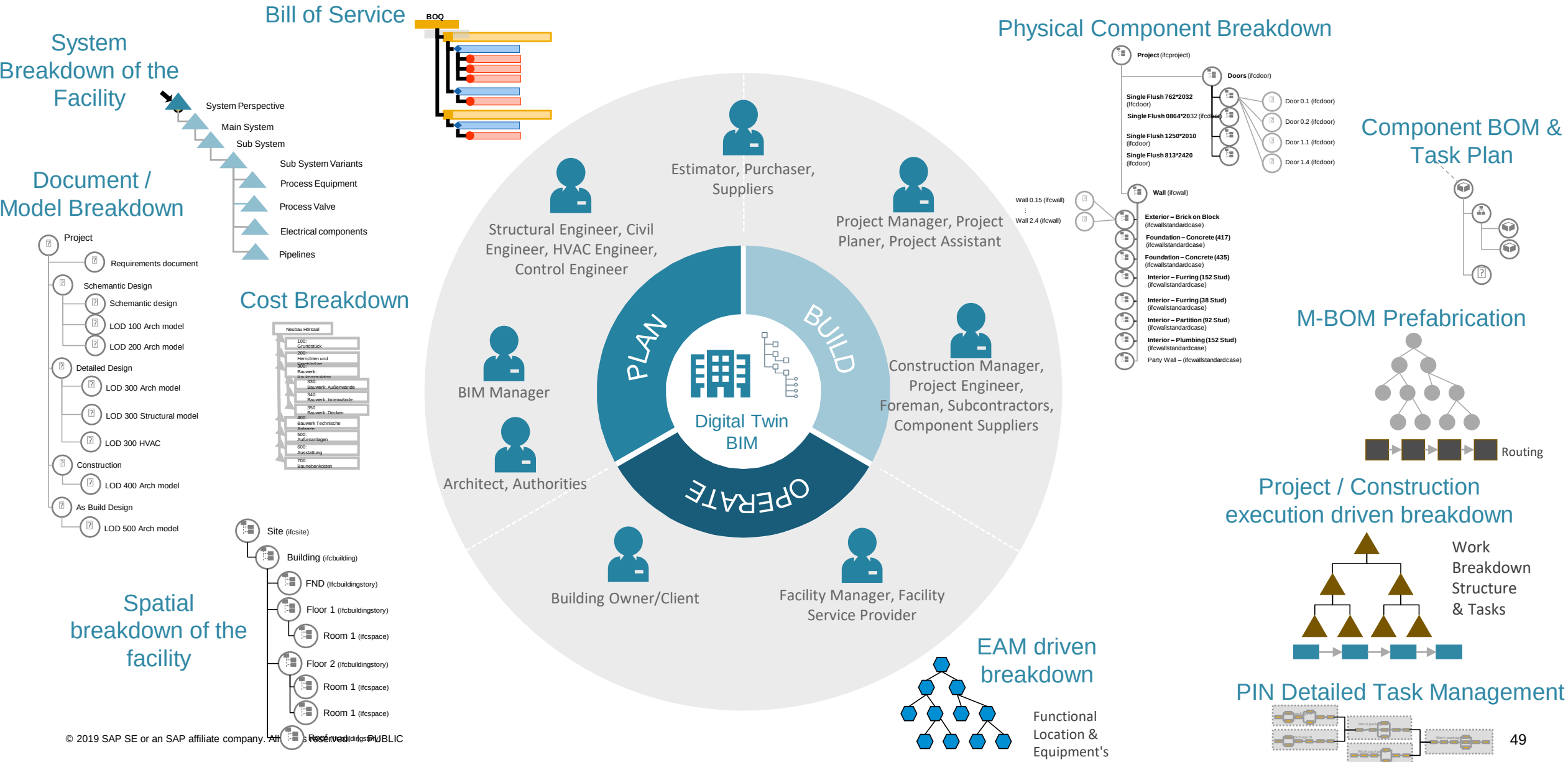
Life Cycle Support For Assets and Facilities



Efficient Collaboration for Smoother Project Delivery

- ✓ One communication channel for all project stakeholders
- ✓ Take better control of project schedule, budget and quality
- ✓ More transparent risk management
- ✓ Gain operational insights through centrally managed information
- ✓ Improve construction productivity
- ✓ General contractors can improve customer satisfaction
- ✓ Owners benefit from lower asset lifecycle costs

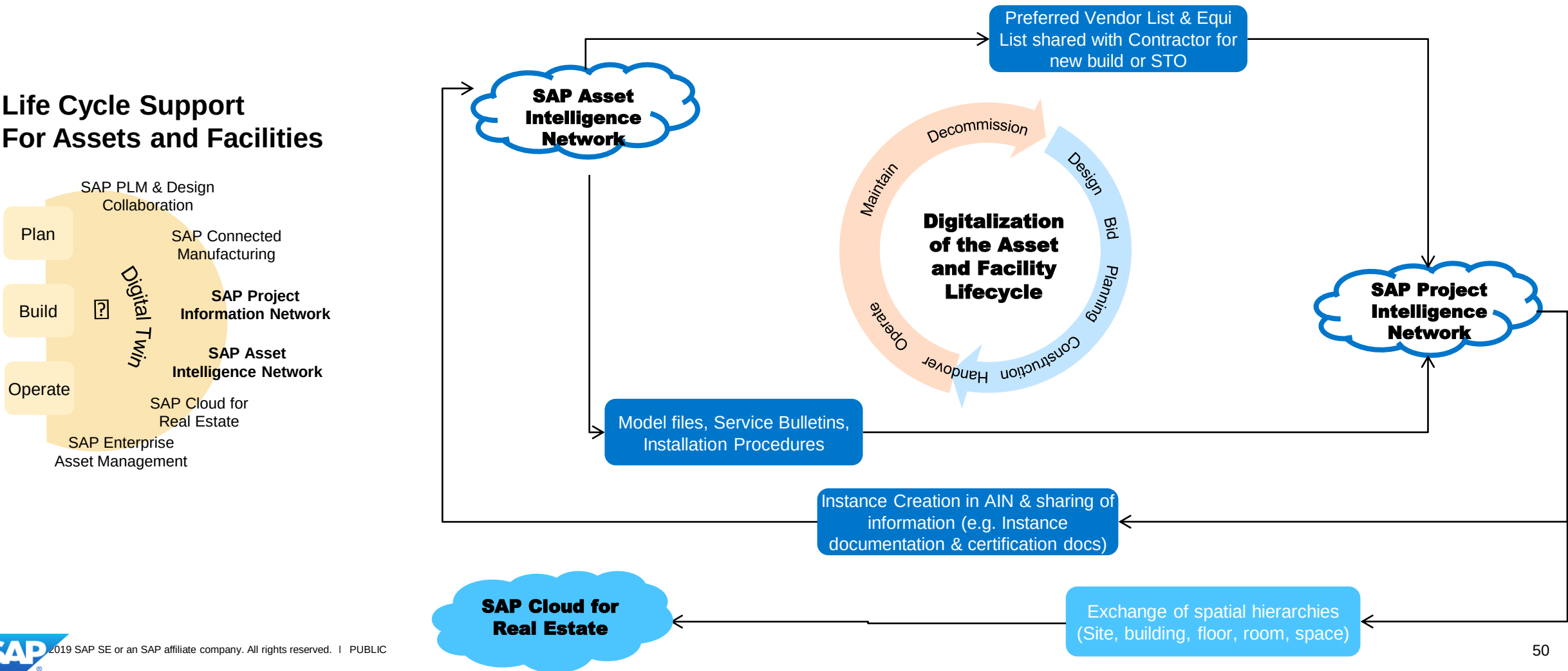
DIGITAL TWIN REPOSITORY – DATA MANAGED ACROSS THE LIFE



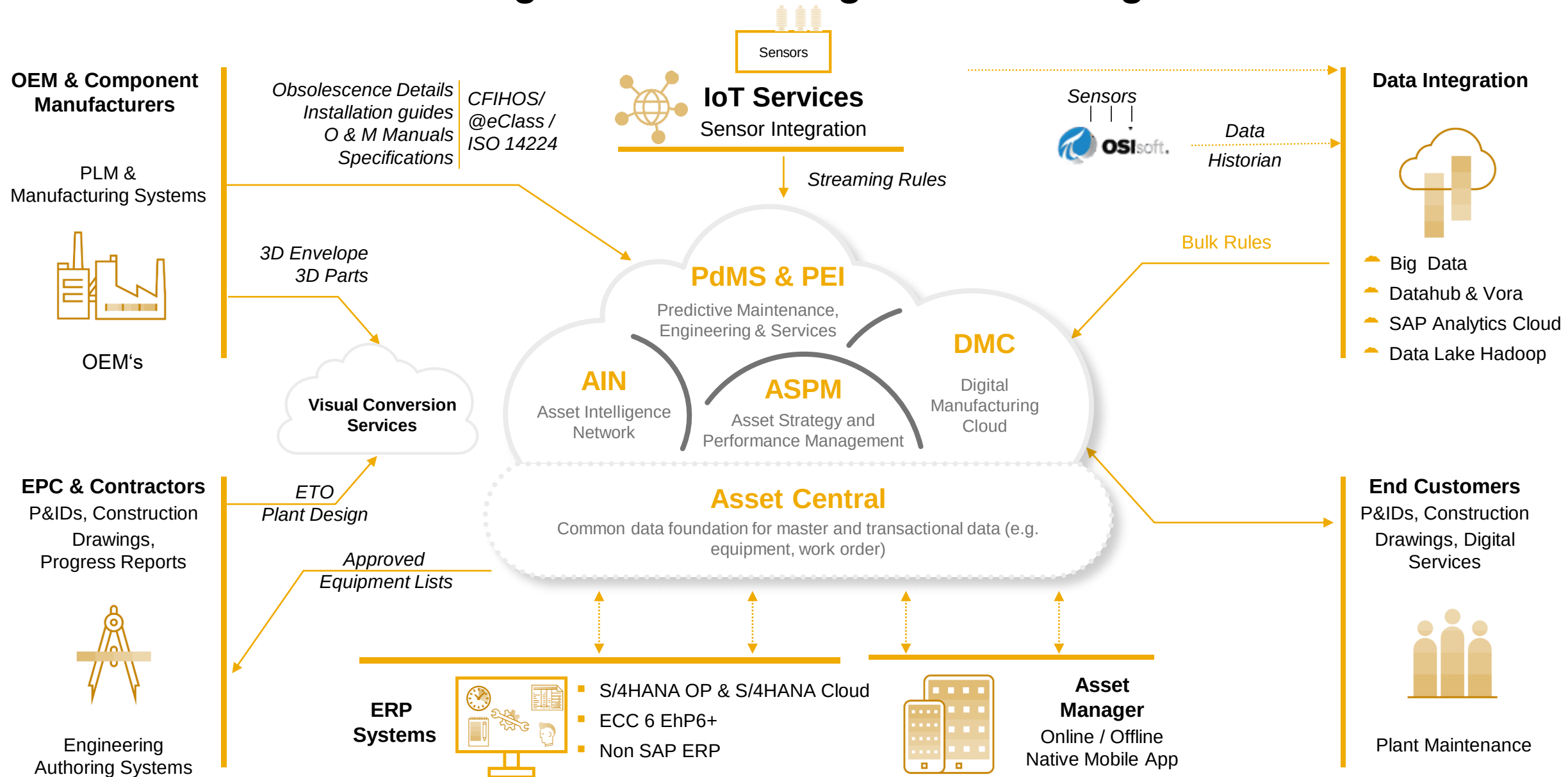
Handover into Operations and Maintenance

Multiple Players Collaborating in One Integrated Network

Life Cycle Support For Assets and Facilities



E2E Architecture for Intelligent Asset Management and Digital Twin





Call To Action

Transformation Navigator Guide - Linking strategy with customer data with way forward

Business Guide – Why?

- Business capabilities that are supported by the recommended Product Map
- Business Case to calculate your transformation project

Technical Guide – What?

- Summary of SAP product recommendations based on your current installation
- Industry reference landscape

Transformation Guide – How?

- Transformation projects including conversion types
- Available services and license model

[Get started on your transformation journey](https://go.support.sap.com/transformationnavigator/#/welcome)

<https://go.support.sap.com/transformationnavigator/#/welcome>



Get started on your digital transformation journey

We'll help you choose the right SAP products and solutions for your digital transformation journey.



Create Your Product Map



Build Your Business Case



Plan Your Journey



Transition to SAP S/4HANA

3 different options to move to SAP S/4HANA

System Conversion



SAP ERP System



SAP S/4HANA On-Premise

Bring your business processes to the new platform

- A complete technical in-place conversion of an existing SAP Business Suite ERP system to SAP S/4HANA.
- Adopt new innovations at your speed

New Implementation



SAP ERP or Third-party System



SAP S/4HANA On-Premise

SAP S/4HANA Cloud

New implementation / re-implementation

Reengineering and process simplification based on latest innovations

- Implement innovative business processes with best-practice content on a new platform
- Perform initial data load
- Retire old landscape

Landscape Transformation



ERP System Region A



ERP System Region B



ERP System Region C



SAP S/4HANA On-Premise

Value driven data migration to the new platform

e.g. consolidation of current SAP Business Suite landscape into one global SAP S/4HANA system or selective data migration based on legal entities



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SAP Bulletin for Oil and Gas Your window into the world of Oil and Gas

In this Issue:

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2. Customer/Success Story
3. SAP S/4HANA
4. Cloud/Digital Transformation/Blockchain
5. SAP Leonardo
6. Cyber Security
7. Oil and Gas Interest Stories
8. Conference News
9. Top Reasons O&G Companies Should Attend the Best Practices for Oil and Gas Conference
10. Upcoming Event

Thank You.

Joseph Rouhana

Nordic Industry Lead and Value Advisor

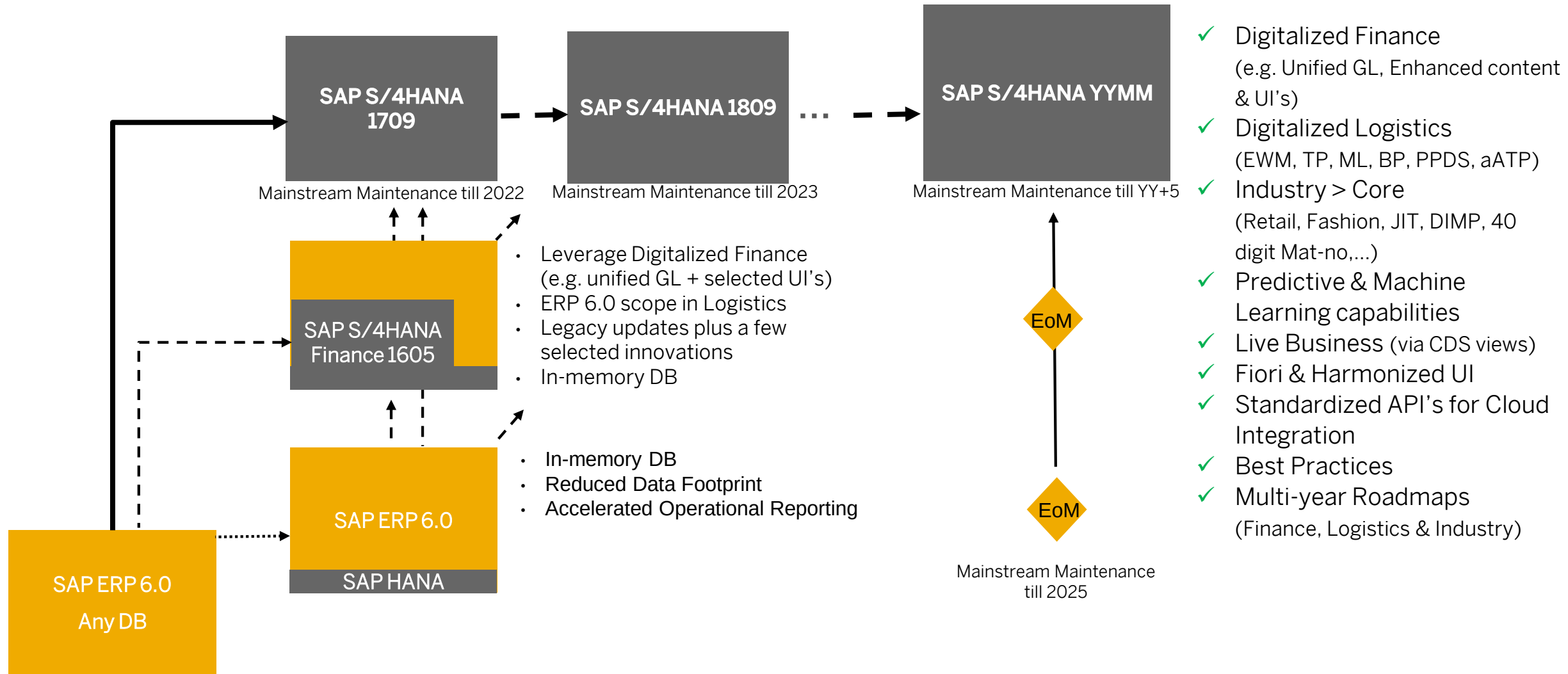
Joseph.Rouhana@sap.com

+4791617753



Your Path to S/4HANA

Paths from ERP to SAP S/4HANA



Landing pages for SAP S/4HANA



Getting Started

- openSAP “Your Path to SAP S/4HANA”: <https://open.sap.com/courses/s4h5>
- Learning Hub: <https://training.sap.com/us/en/courses-and-curricula/s4hana> (on-premise) and <https://training.sap.com/us/en/courses-and-curricula/sap-s-4hana-cloud-0> (cloud)

Product

- Landing pages: <http://www.sap.com/s4hana>, www.sap.com/s4-onpremiserelease (oP), www.sap.com/s4-cloudrelease (cloud)
- SAP Help Portal: https://help.sap.com/viewer/p/SAP_S4HANA_ON-PREMISE (oP) and https://help.sap.com/viewer/p/SAP_S4HANA_CLOUD (cloud)

Project

- Transition to SAP S/4HANA: <https://go.support.sap.com/roadmapviewer> (“Roadmap Viewer”)
- SAP S/4HANA Cookbook: <https://wiki.scn.sap.com/wiki/display/ATopics/SAP+S4HANA+Cookbook+-+What+is+SAP+S4HANA>
- SAP Value Assurance Services: <http://sapsupport.info/offerings/s4hana-service-packages>