



# Streamline Cash Management & Liquidity Forecast with SAP S/4 HANA

Renee Fan, Director, Financial Systems & Controls, Freeport LNG  
Joe Lincoln, SVP Treasury, Serrala

Session ID #ASUG83984



# About the Speakers

## Renee Fan

- Director, Financial Systems & Controls at Freeport LNG Development, L.P.
- A CPA with 20+ years of experience in IT and ERP systems
- A hands-on director and process architect who enjoys exploring SAP's unlimited capability
- Fun Facts: Travel and Photography; Experimenting recipes for quick yummy dishes

## Joe Lincoln

- SVP Treasury at Serrala
- Over 23 years experience in treasury ERP
- Nationally ranked college swimmer who enjoys downhill skiing, hiking and international travel



# Key Outcomes/Objectives

Share a journey of successful implementation of SAP S/4HANA treasury capabilities

- Discuss the pros, cons, and implications of potential system architecture (Classic ECC, ECC & S4 Sidecar, or S4 Integrated)
- Discuss the differences between S4 versions & alternative solutions
- Discuss project planning, system preparations, and resource engagement, skill sets, change management, training needs, etc.



# Agenda

1

**Freeport LNG Overview – Now and Future**

2

Cash Management/Reporting/Analysis Challenges

3

Treasury Transformation – a Side-Car Workstation

4

Project Experience & Challenges

5

Benefits of New Cash and Liquidity Solution

# Freeport LNG Development, L.P. Overview

- Corporate Headquarters in Houston
- The LNG export terminal on Quintana Island – 70 miles south of Houston
- Founded in 2002 to operate an LNG import and regasification terminal
- Began construction of a 3-train LNG export facility in 2014
- The LNG export facility scheduled to commence operations – Q3 2019
- Will liquefy and export natural gas with a capacity approximately 15mtpa
- Train 4 in development, expected construction in 2019 and operation in 2023
- Better U.S. Foreign Trade Balance
- Global Environment Benefits – Cleaner Air

# Freeport LNG - Now



NOW → Constructing 3 trains to transform an LNG import terminal into an export facility

# Freeport LNG - Future



Future → 3-train facility will produce/export approximately 15 mtpa of LNG, starting between Q3 2019 (Train 1) and Q2 2020 (Train 3).



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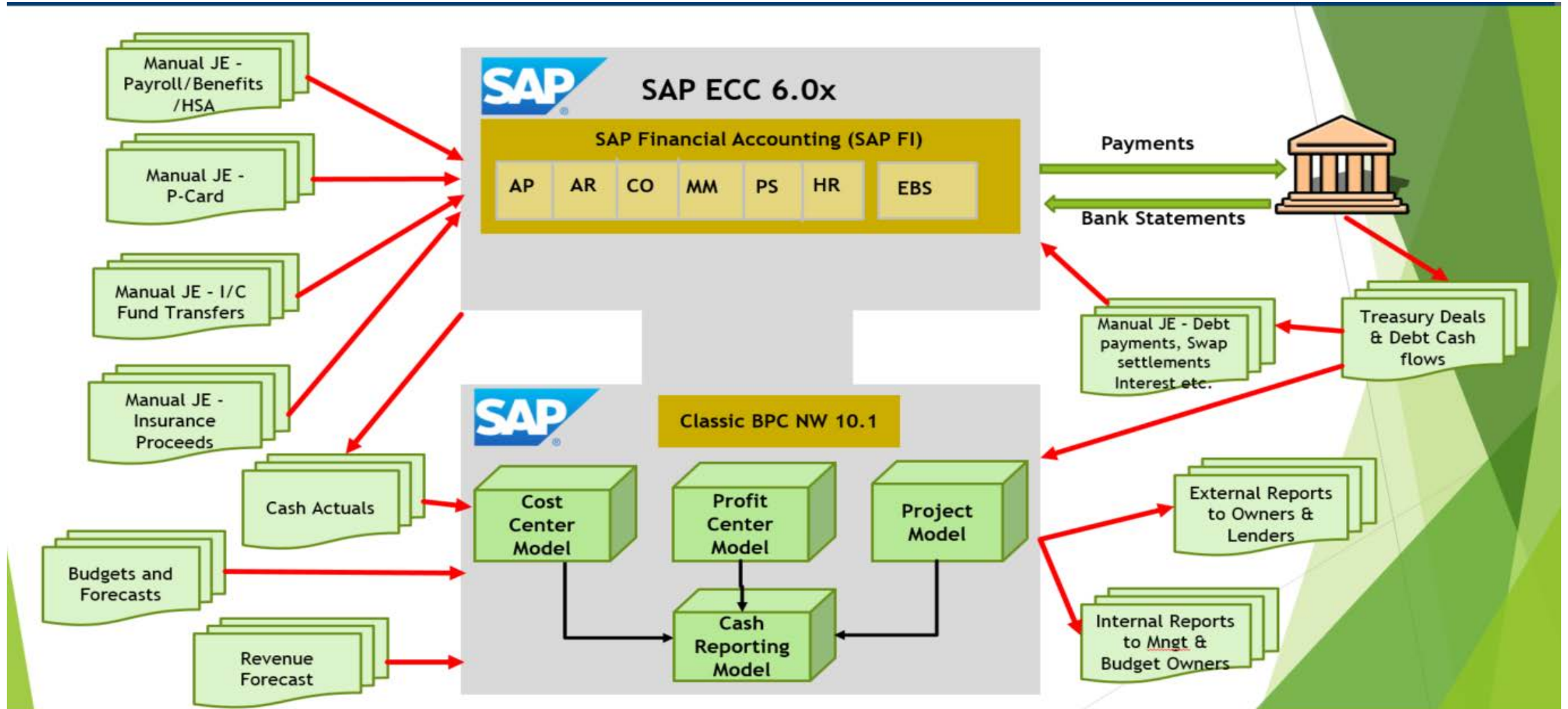
Benefits of New Cash and Liquidity Solution



# Accounting/Finance Reporting & Analysis Challenges

- Cash actuals manually converted from GAAP-based accounting
- Treasury deals maintained and calculated on spreadsheets
- Annual budgets and 5-year forecast manually compiled with minimum system data
- 6-month liquidity needs for the projects manually compiled
- Monthly cash calls manually compiled
- No transparency on cash flows and their associated sources and uses
- Period end closing with tight timelines
- Massive Internal/External Reporting obligations fulfilled by very lean teams
- SAP FICO/MM/PM implemented within 6 months in 2015
- Functionality required for future LNG operations yet to be implemented

# Initial System Landscape & Financial Operations



# High Level Objectives

- Implement straight-through processing (STP) to reduce use of spreadsheets
- Standardize processes and information flow to achieve data transparency
- Maintain single source of truth in SAP
- Administrate financial instruments and centralize debt management in SAP
- Combine financial and accounting data to reduce manual efforts and cycle lengths
- Report actual cash flows based on electronic bank statements
- Enhance electronic bank statement reconciliation
- Monitor bank balances and cash positions in real time
- Support internal and external reporting obligations with consistent system data
- Support cash-based budget and forecasts with reliable system data



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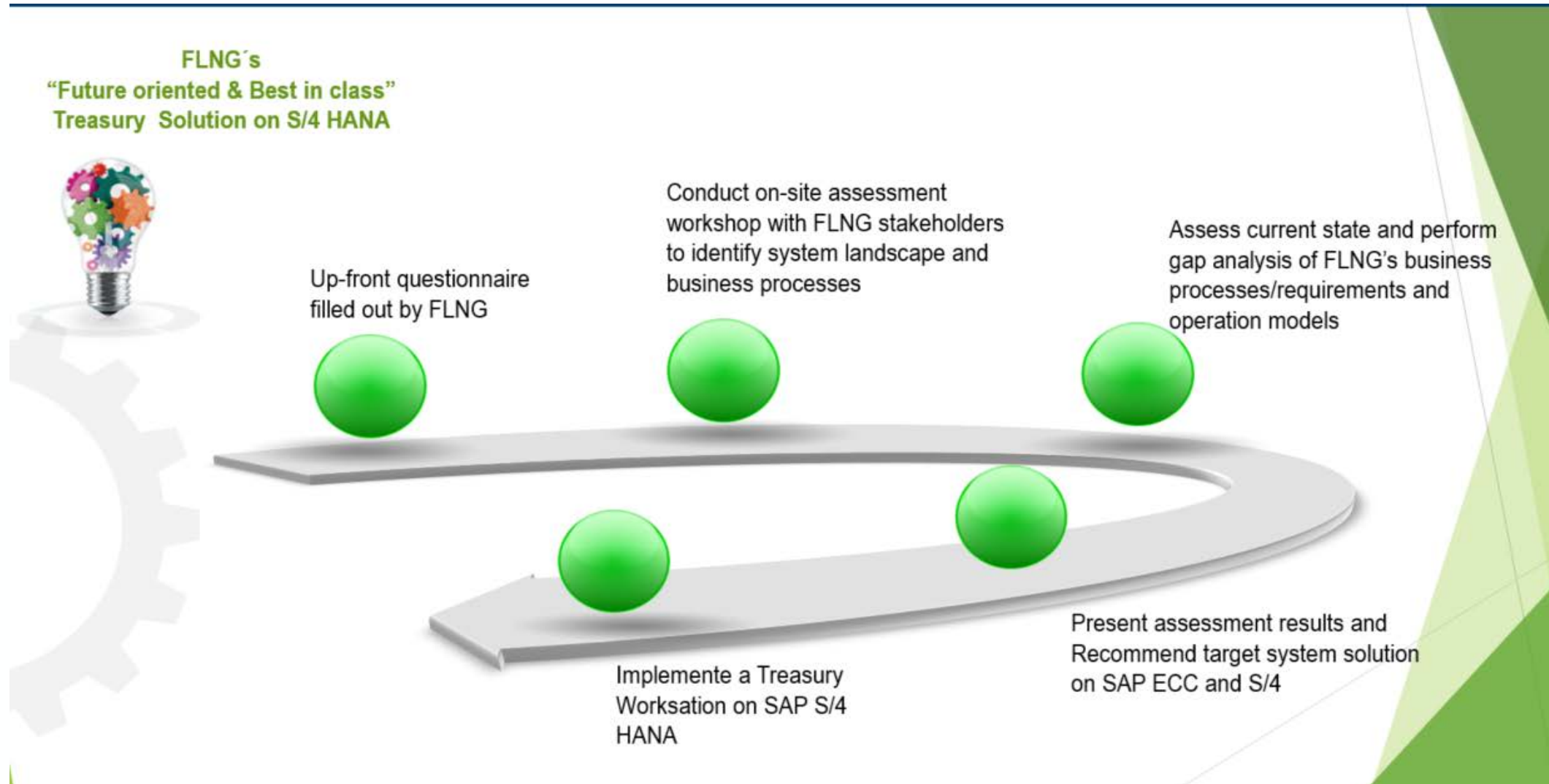
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Benefits of New Cash and Liquidity Solution

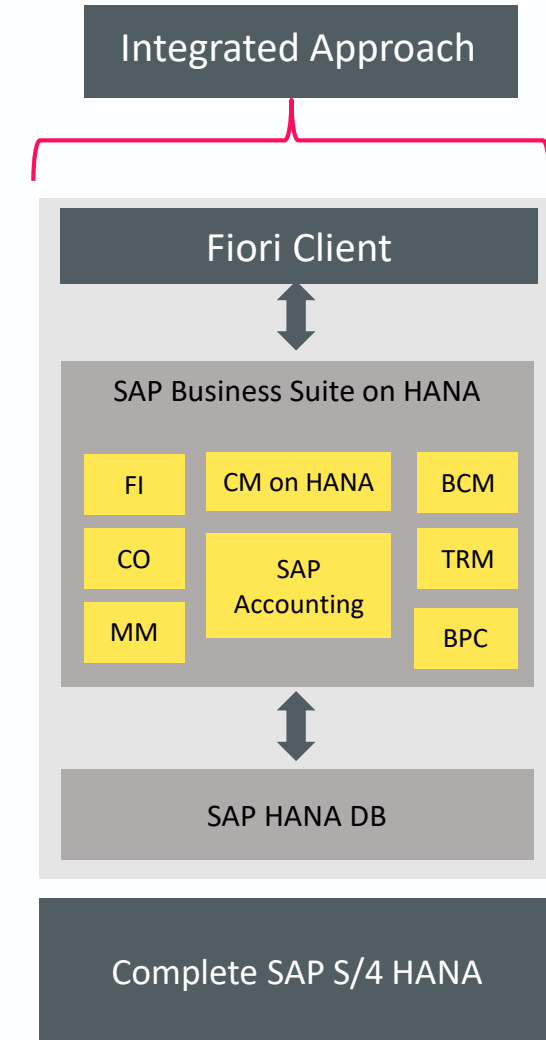
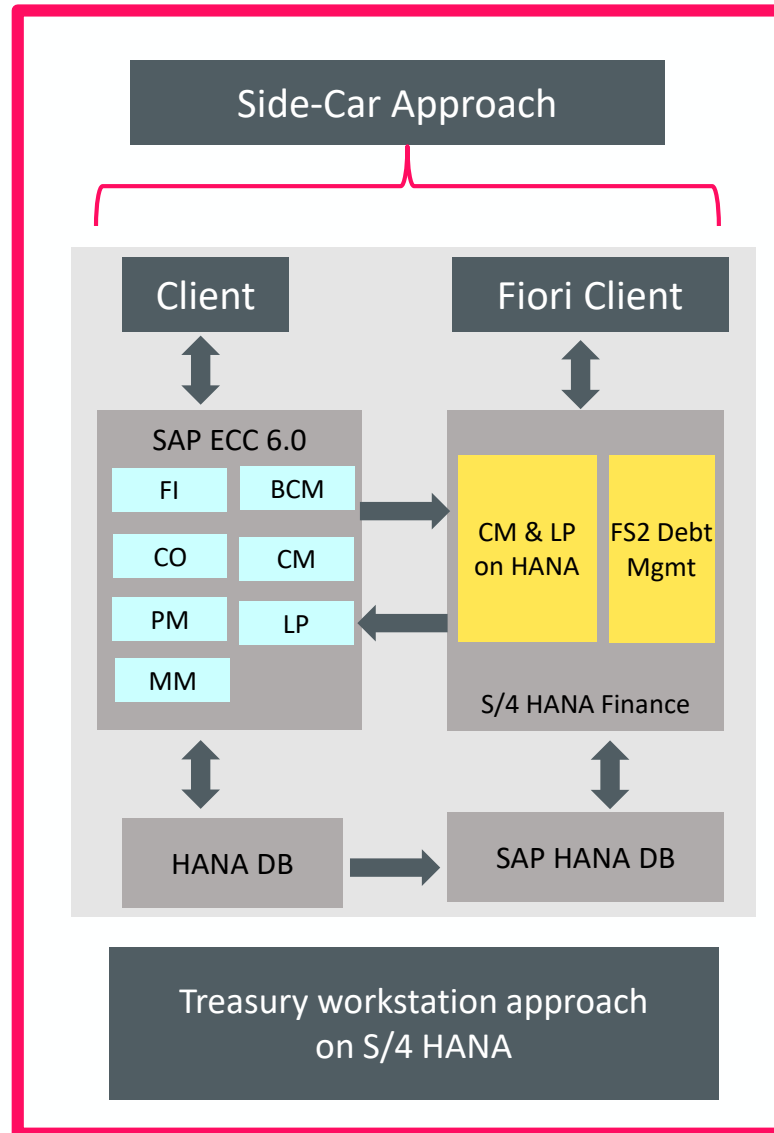
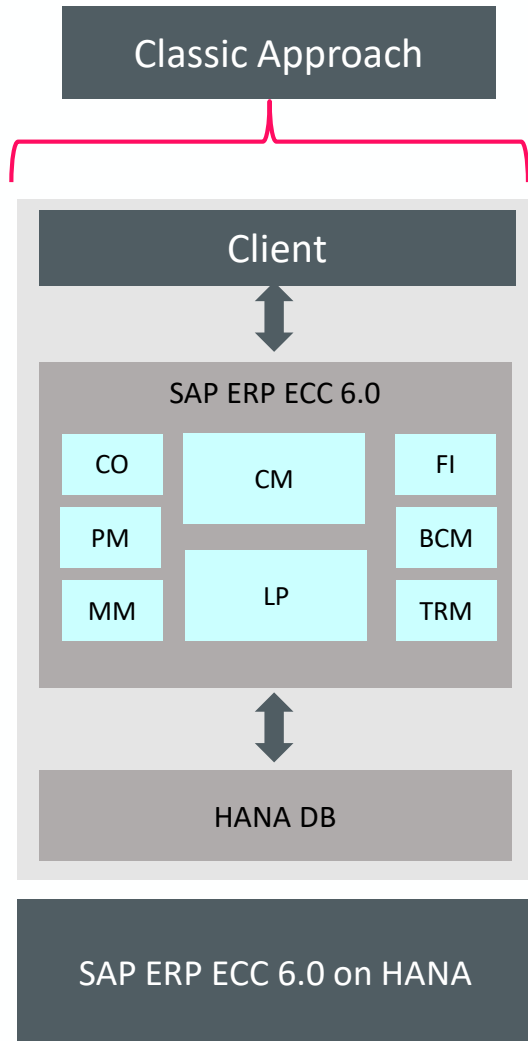
# Challenges to Find the Right Direction



# Roadmap to Treasury System Solution



# Deployment Options: Defining the Best Solution



# Evaluation of Treasury as a S/4HANA Side-Car Solution

## Pros

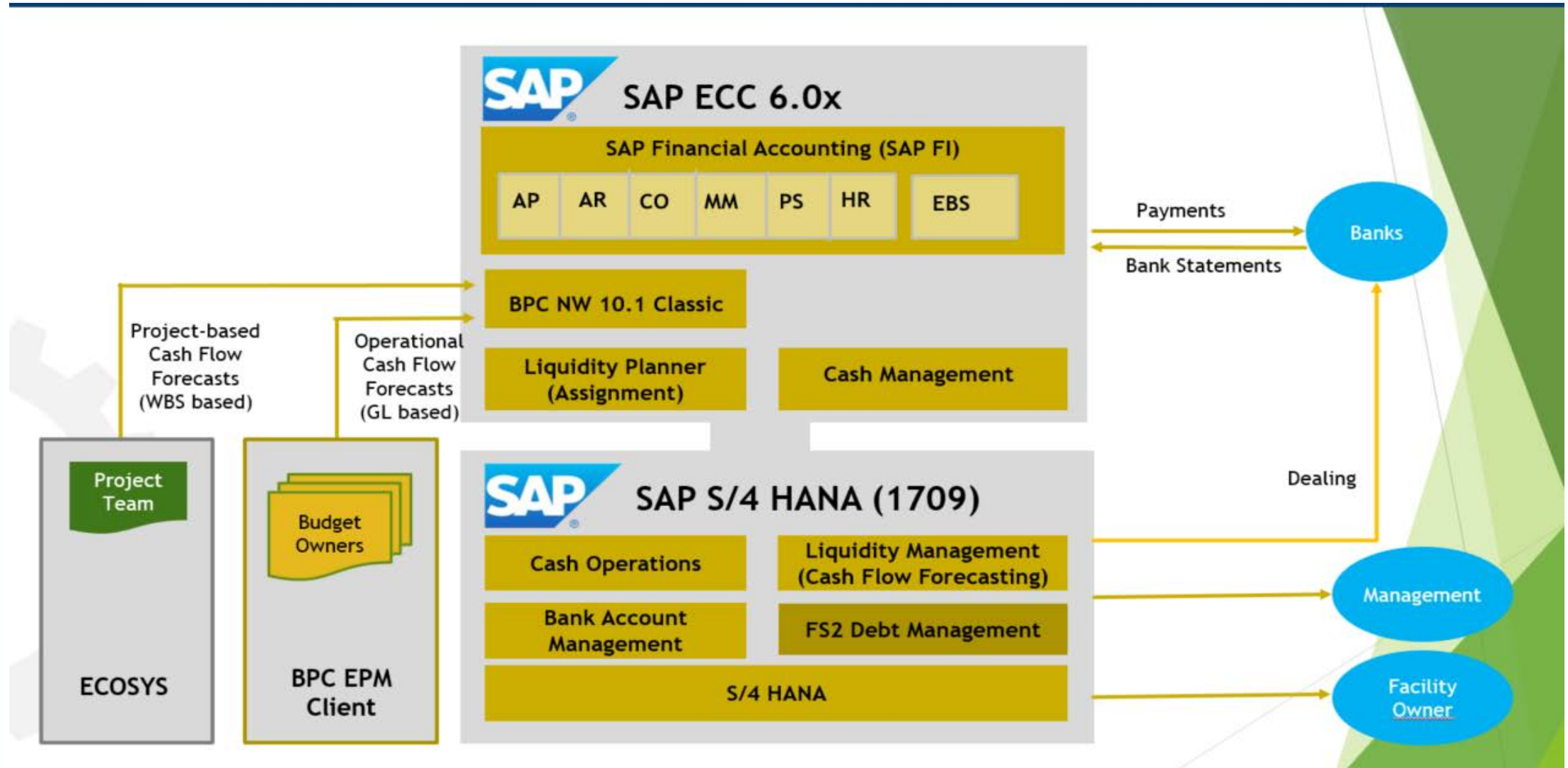
- Cash/Liquidity Project timelines aligned to LNG operation commencement schedules
- The most mature / stable option of all 3 to utilize S/4 HANA
- Benefit from the best of both ECC & S/4 worlds – new S/4 features & ECC stability
- Low risk implementation with no dependence on S/4 HANA Finance Universal Journals
- Plan holistically and methodically move other ECC components to S/4 in the future
- Leverage existing BPC functionality and requires no new licenses

## Cons

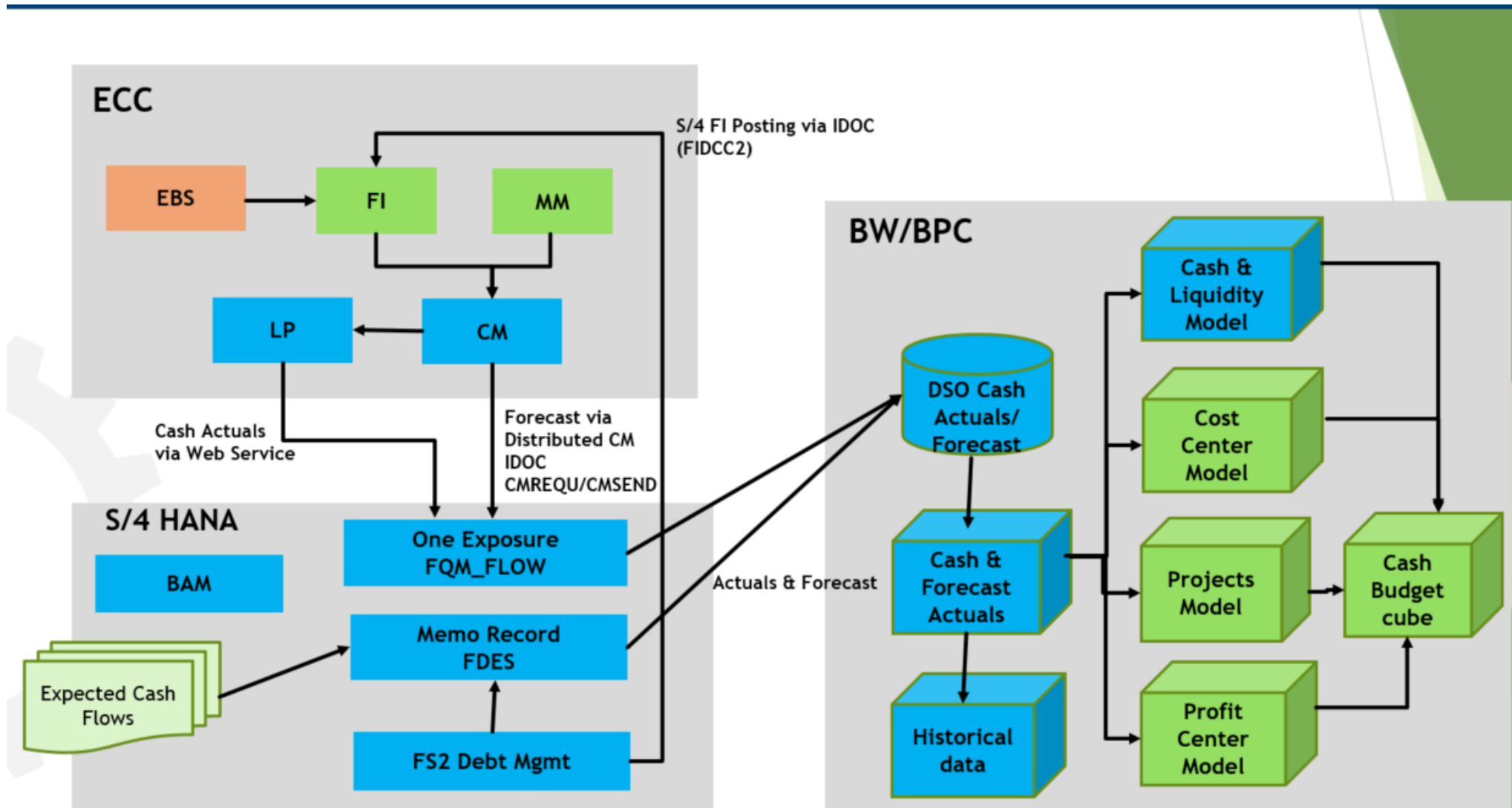
- Extended ALE interfaces to transmit data between ECC, S/4, and BW
- S/4 drill down features not fully realized because transactions are in ECC
- Maintenance of two system landscapes (ECC & S/4) until the full implementation of S/4



# Treasury as a Side-Car Workstation



# Cash Management & Liquidity Forecast Data Flow



# Major Delivered Functionality

## ECC Cash Management

- ✓ Automate EBS reconciliation using search strings for manual transactions
- ✓ Integration of actual cash flows from bank statements
- ✓ Integration of forecast cash flows from FI and MM

## ECC Liquidity Planner

- ✓ Automatic determination of Liquidity item for actual & forecast cash flows
- ✓ Automatic feed of cash/liquidity data to S/4, subsequently to BW/BPC

## FS2 Debt Management On S/4

- ✓ Record financial deals with the relevant maturities and conditions
- ✓ Automatic calculation of interest and amortization schedules
- ✓ Automatic postings of month end accruals, debt payments, swap settlements
- ✓ Integrate cash flows and forecast to S/4 Cash Management

# Major Delivered Functionality

S/4 HANA  
Bank Account  
Management

- ✓ Central entry point for all bank account data and signatory
- ✓ Individual Bank Account Management workflow processes

S/4 HANA  
Cash Operations

- ✓ Integration of CM relevant information (FI documents, SAP subledger documents, memo records, payments) within the S/4 HANA “OneExposure”
- ✓ Central visibility of the group-wide cash position and cash pooling

S/4 HANA  
Cash Analyzer

- ✓ One stop display of sources and allocations of cash flows
- ✓ Direct cash flow statement
- ✓ Individual cash analysis per entity, project, cost center, and liquefaction train

BW / BPC

- ✓ Automatic feed of cash actuals and forecast into BW DSO and BPC cubes
- ✓ Automatically generate cash based reports and variance analysis

# Cash Flow Analyzer

SAP Cash Flow Analyzer

Standard \* ▾ Hide Filter Bar Filters (3) Go

Company Code: Currency: USD \*Time Period: D7 \*Value Date: 01.10.2018 Bank Account:

Standard \* ▾ Display Hierarchy Switch Views < > ⚙️ 📄

Flow Direction	Planning Level	Liquidity Item	Liquidity Item Description	Overdue	01.10.2018	02.10.2018	03.10.2018	04.10.2018
▾	Currency: USD			49.565.255,47 USD	49.233.033,25 USD	49.233.033,25 USD	49.233.033,25 USD	49.233.033,25 USD
▾	Company Code: SY01			48.863.874,56 USD	48.531.652,34 USD	48.531.652,34 USD	48.531.652,34 USD	48.531.652,34 USD
▾	Bank Account: 2345678912			48.863.874,56 USD	48.531.652,34 USD	48.531.652,34 USD	48.531.652,34 USD	48.531.652,34 USD
				0,00 USD	0,00 USD	48.531.652,34 USD	48.531.652,34 USD	48.531.652,34 USD
→				-	-	-	-	-
→	B5			-14.312.200,00 USD	-14.312.200,00 USD	-	-	-
←	B5			116.365.279,38 USD	116.365.279,38 USD	-	-	-
				48.863.874,56 USD	48.531.652,34 USD	48.531.652,34 USD	48.531.652,34 USD	48.531.652,34 USD
←	B5	OE.III	Inflow Interests	1.722,22 USD	1.722,22 USD	-	-	-
←	DB	TE	Inflow Treasury	13.320.000,00 USD	13.320.000,00 USD	-	-	-
←	OB	TE	Inflow Treasury	10.000,00 USD	10.000,00 USD	-	-	-
←	TB	TE	Inflow Treasury	9.006.936,75 USD	9.006.936,75 USD	-	-	-
←	TK	TE	Inflow Treasury	51.709.588,42 USD	51.709.588,42 USD	-	-	-
→	DB	TA	Outflow Treasury	-75.001.230,00 USD	-75.001.230,00 USD	-	-	-
←	DB	TA	Outflow Treasury	1.000.000,00 USD	1.000.000,00 USD	-	-	-
→	OB	TA	Outflow Treasury	-15.000,00 USD	-15.000,00 USD	-	-	-
→	TB	TA	Outflow Treasury	-1.000.000,00 USD	-1.000.000,00 USD	-	-	-

# Cash Flow Line Items

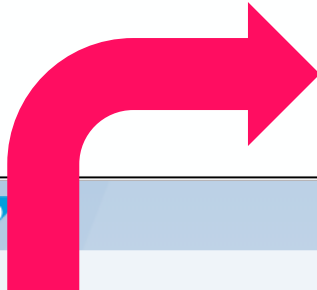
Standard \* ▾

\*Value Date:  Company Code:

Certainty Level:  Overdue Date:

Documents (160) | Standard \* ▾

Source...	Source Application Description	Liquidity Ite
	Cash Position from Distribute...	Bank Transfers
	Cash Position from Distribute...	Bank Transfers
	Cash Position from Distribute...	Bank Transfers
	Cash Position from Distribute...	Bank Transfers
	Cash Position from Distribute...	Leases
	Cash Position from Distribute...	Project items



Check Cash Flow Items ▾

Company Code: 1100  
Value Date: 14.03.2018

General Information

Source Application: Cash Position from Distributed Cash  
Certainty Level: CMIDOC  
Planning Level: B3  
Planning group:  
House Bank: MZUS1  
Account ID: MI830  
User Name: S4\_RFC  
Item Text: 00004211/0000699511

ACH Out

Journal Entry Information

Journal Entry:   
Journal Entry Type:  
Fiscal Year: 2018  
Period:  
Posting Date:  
Journal Entry Date:  
Transaction Code:  
Journal Entry Header Text: B/  
Item Text: 00004211/0000699511  
G/L Account: 111033

Source...	Source Application Description	Liquidity Ite								
	Cash Position from Distribute...	Bank Transfers	1100	Freeport LNG Dev...	901		B1	19.05.2018	-10.000.000,00 USD	USD
	Cash Position from Distribute...	Bank Transfers	1100	Freeport LNG Dev...	901		B7	02.05.2018	-21.420.071,67 USD	USD
	Cash Position from Distribute...	Bank Transfers	1100	Freeport LNG Dev...	901		B7	01.05.2018	-21.420.071,67 USD	USD
	Cash Position from Distribute...	Bank Transfers	1100	Freeport LNG Dev...	901		B7	01.04.2018	-29.167.870,35 USD	USD
	Cash Position from Distribute...	Leases	1100	Freeport LNG Dev...	907	K	B5	18.03.2018	-2.211,20 USD	USD
	Cash Position from Distribute...	Project items	1100	Freeport LNG Dev...	907	K	B5	17.03.2018	-112,49 USD	USD
									-292.691.478,83 U...	USD



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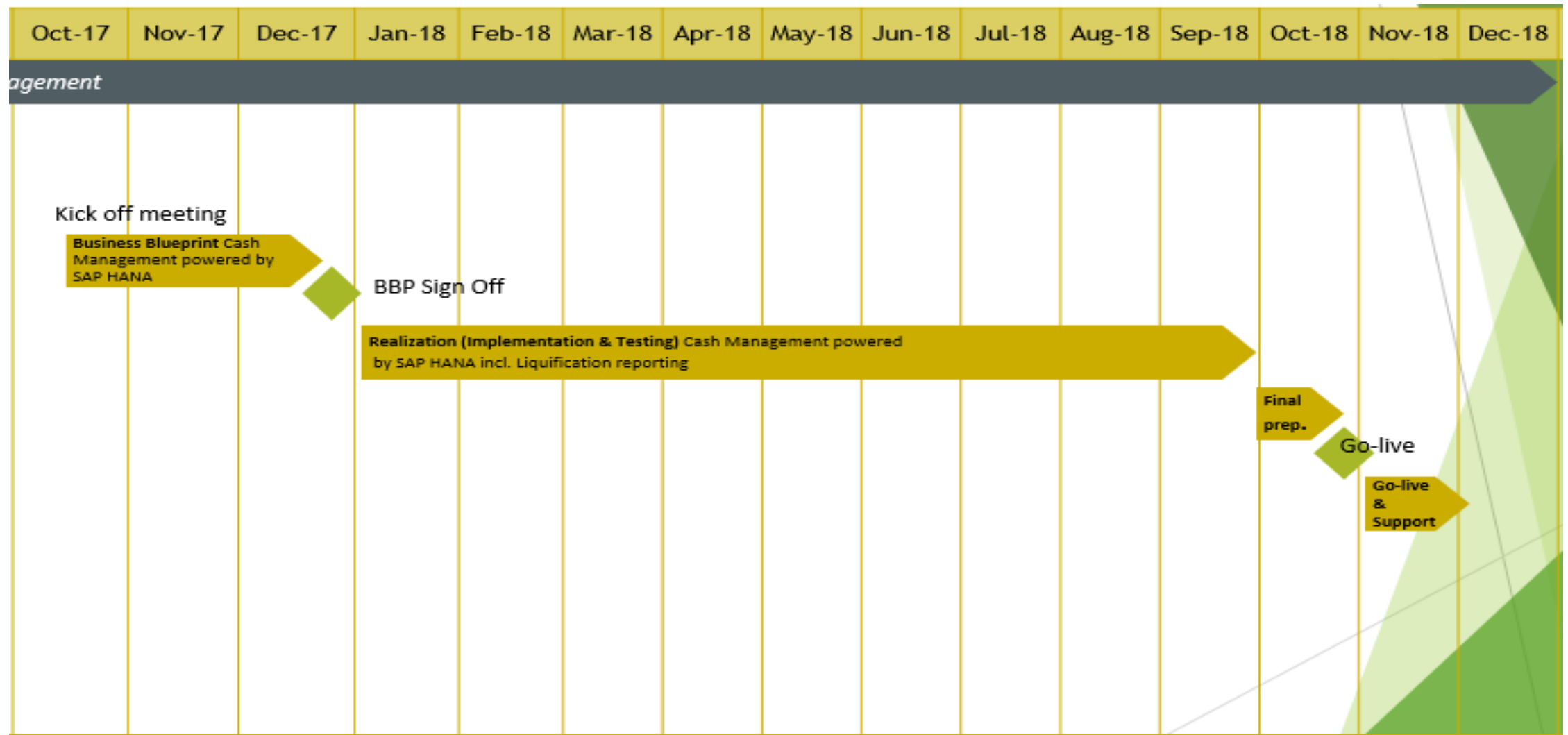
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**Project Experience & Challenges**

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Benefits of New Cash and Liquidity Solution

# Project Timelines





# Project Experience and Challenges

## What went well –

- Business dedications for definitive requirements & data validation
- Knowledgeable consultants with expertise in Treasury processes and technology
- Open mind to embrace process changes and adopt functionality to avoid massive custom developments
- Enthusiastic IT Basis resources to welcome technology challenges
- Plan ahead for infrastructure, resources, and time commitments of stakeholders
- Project scope control
- Data validation and reconciliation across ECC, S/4, BW, and BPC
- SAP Ambassador Program – strong support from SAP Treasury team

# Project Experience and Challenges

## Challenges

- S/4 Version (1610 vs. 1709) technical requirements
  - Database HANA 2
  - Linux Version 12
- New S/4 Technology and development methodology Changes
  - Fiori development in SAP cloud via “Cloud Connector”
  - Hana Studio/Eclipse for Fiori application development
  - S/4 box certification processes
  - S/4 Fiori application authorization



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# Benefits of Treasury as a Side-Car Solution

- Cost savings – the biggest benefit of the project
- Significant time and cost reduction associated with manual operations
- Significant time decrease for period-end closing
- Eliminate the need for additional headcount
- Redeploy accounting professionals from manual tasks to focus on analysis
- Support real-time reporting with reliable and consistent system data
- Straight-Through Processing (STP) Benefits
  - Provides transparent data in time for decision making
  - Improves security and controls including fraud risk reduction

# Take Aways

- Fully understand the pros, cons, limitations and implications of potential system architecture (Classic ECC, ECC & S/4 Sidecar or S/4 Integrated)
- The S/4 versions have significant differences, so be prepared for redesign or design alternative solutions
- Engage IT Basis in early project planning and system preparations
- Understand that some processes (both IT and business) will have to change to align to the SAP standards
- Use the project as an opportunity to implement more efficient / standardized treasury processes
- Train project resources on S/4 technology before project starts for better planning
- Ensure the project team is adequately staffed with appropriate skill sets

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session evaluation on the  
SAPPHIRE NOW and ASUG  
Annual Conference mobile  
app.





# 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

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[joe.lincoln@serrala.com](mailto:joe.lincoln@serrala.com)





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