



equinor

SAP Analytics Cloud

Special Interest Group Session

SBN Conference, 23.10.2019



- Objectives for implementing SAP Analytics Cloud
- Data Connectivity
- Implementation Status
- Test Approach and Timeline
- Findings during testing
- Potential Use Cases for SAP Analytics Cloud
- Dashboard Examples

Our objective is to enable SAP Analytics Cloud as a **self-service analytics tool** and make this the preferred visualization tool in F&C (and other areas)

- Enable visualization and digital value creation through self service analytics
- Create stories based on Equinor's Financial Model and standards
- Consistent and trusted data - Access to live data and updated metadata (hierarchies)
- Security – Reuse the role concept in BW. No security breaches with data being available for unauthorized personnel
- Governance – Establish practice and standard templates available for use
- Flexible, yet scalable - Possibility to blend BW live data with imported data
- Get insight – Use Smart Insights and Smart Discovery features to get more insight to our data





SAP Analytics Cloud

Short Introduction

One | Simple | Cloud

Business Intelligence



Data Preparation
Enterprise Reporting
Data Visualization
Storytelling

Planning



Sharing
Simulation

Predictive



Forecasting
Automated Insights

Analytics Designer



Custom Apps
SDK Extensions

Digital Boardroom

Mobile

SAP Analytics Hub

SAP Analytics Cloud



On Premise



Hybrid



Cloud

Data sources

Live

Cloud data sources

SAP Cloud Platform¹

SAP S/4HANA Cloud

SAP Marketing Cloud

SAP Ariba

SAP SuccessFactors

SAP data sources

SAP HANA

SAP BW

SAP BW4/HANA

SAP S/4HANA

SAP BPC Embedded

SAP BusinessObjects Universe

Access via SDI for SAP Cloud Platform & SAP HANA²

Apache Hive

AWS

SAP Vora

SAP Sybase ASE, IQ, ESP

OData

Microsoft SQL Server

Spark SQL

Oracle

Teradata

MaxDB

IBM DB2

MySQL

Netezza

Facebook

Google+

Twitter

Partner delivered

APOS

DB2

Denodo

Microsoft Analysis Services

Microsoft Azure

Microsoft SQL Server

MongoDB

MongoDB Atlas

MySQL

Netezza

Oracle

Oracle Essbase

Oracle Exadata

SAP IQ

SAP SQL Anywhere

Redshift

Teradata

Google BigQuery

Cloudera

Hortonworks

Amazon S3

Import

Cloud data sources

SAP Hybris Cloud for Customer

SAP Cloud Platform¹

SAP Business ByDesign

SAP S/4HANA Cloud

SAP Marketing Cloud

SAP SuccessFactors

SAP Fieldglass

SAP Workforce Analytics

Concur

Google BigQuery

Google Drive

Google Sheets

Salesforce

OData

Dow Jones DNA

3rd party Cloud Storage

3rd party CRM

SAP data sources

SAP BPC NW & MS

SAP HANA

SAP ECC

SAP BusinessObjects Universe

SAP BW

SAP S/4HANA

SAP BW4/HANA

Other data sources

IBM

Microsoft SQL Server

MySQL

Netezza

OData

Oracle

CSV

Excel

Progress OpenEdge

Same data sources as SAP BI 4.2³

Partner delivered

APOS

Web Intelligence

CDATA

QuickBooks

Microsoft SharePoint

NetSuite CRM & ERP

Oracle Marketing Cloud

MongoDB

DataDirect Cloud

eloqua

Google Analytics

Microsoft Dynamics CRM

Hubspot

Marketo

SugarCRM

■ Delivered

■ Planned within the next 6 months

■ Partners

1. Requires SAP Cloud Platform DBaaS license

2. SAP Cloud Platform connects to data using Smart Data Integration and Smart Data Access Adapters

3. This does not require the BI platform

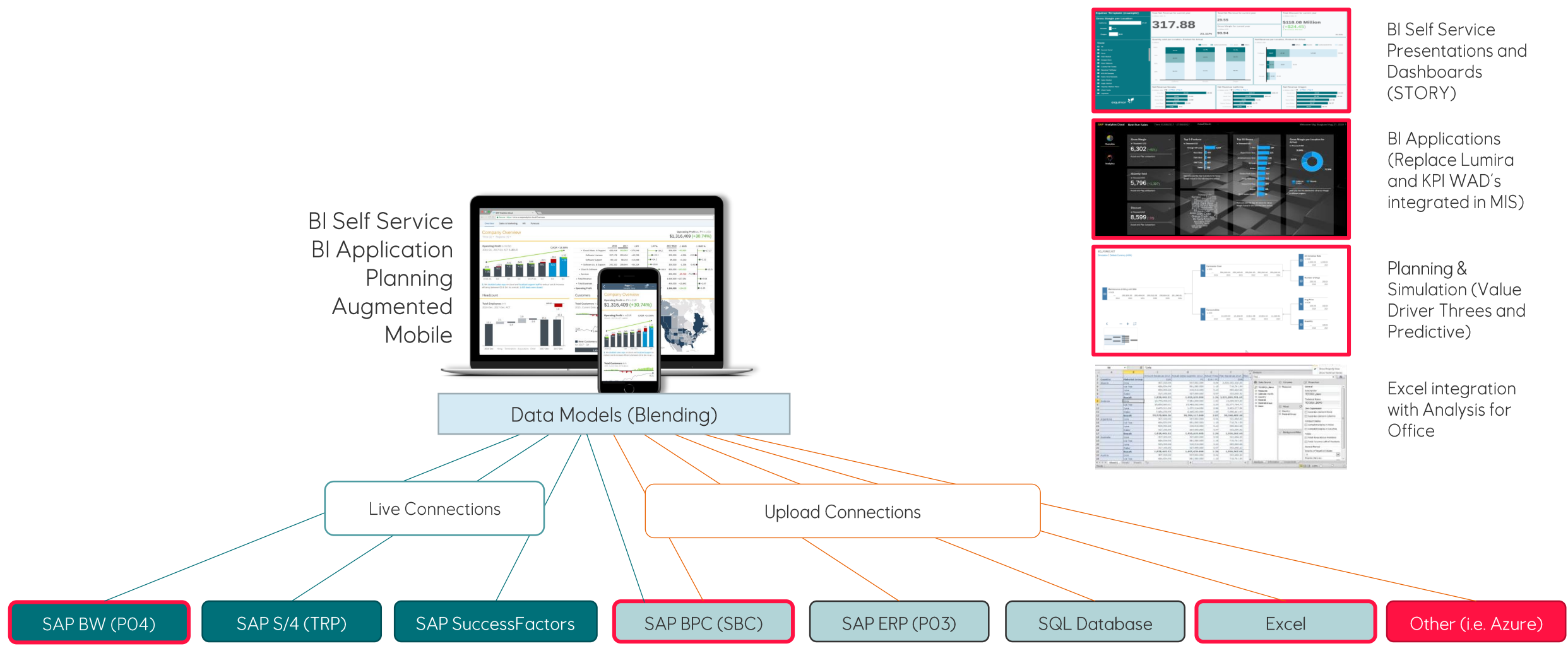
This is the current state of planning and may be changed by SAP at any time.

6 | Document Title

Internal

dd.mm.yyyy

Potential use of SAP Analytics Cloud in Equinor



Finished Tasks

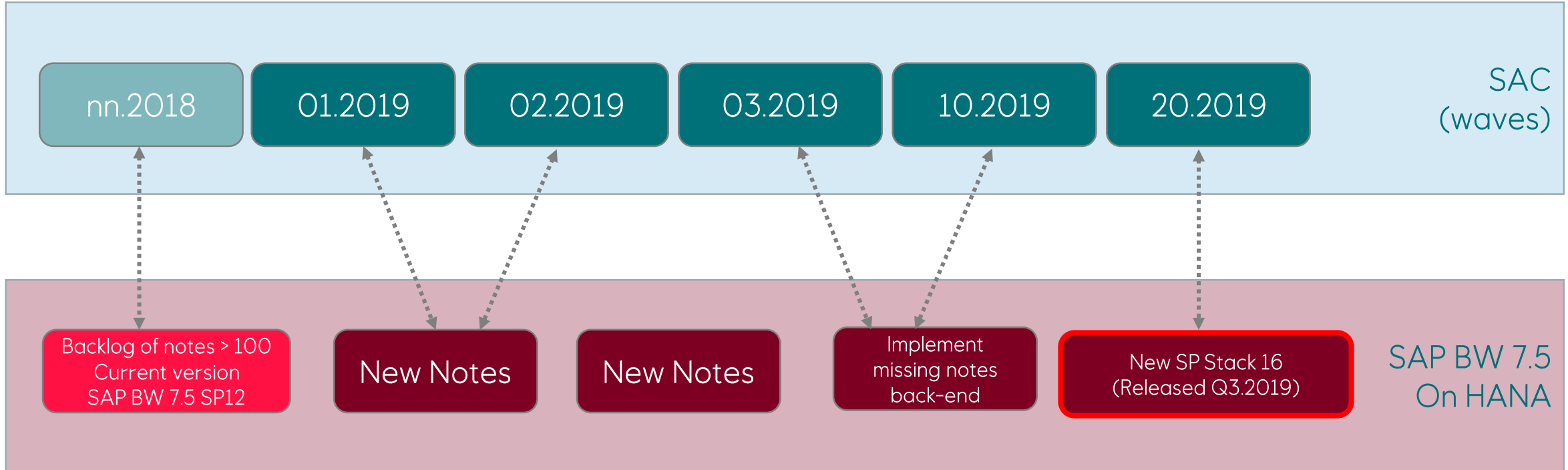
- Set-up SAP Analytics Cloud tenant with SSO
- Set-up connection to BW with SSO (P04 / Q04)
- Initial roles defined
- Initial team/folder structure defined
- Implemented back-end notes for BW live connection (> 200)
- Set-up dynamic user creation & team assignment
- Security assessment for live connections and iOS app finalized
- Security assessment for import of data

Ongoing Tasks &/or issues

- Prepare for SP16 upgrade (VR02.2020). Upgrade in Sandbox first.
- Set-up of Analytics app (iOS) with SSO to BW
- Enable data blending in SAC
 - BW Live model to BW Live model
 - BW Live model with imported data
- Explore Analytics Designer for building SAC applications/Enterprise Dashboards
- Set-up architecture for data import scenarios
- Set-up connection to S4/HANA (TRP system)

Info: Link between Upgrades in SAC and BW 7.5

SAC is upgraded with new versions every 14 day (fast track), every quarter (normal track)
Some required new notes and components in back-end



SAP Note 2541557 - Support further SAP Analytics Cloud BW features

Implement and run ABAP report Z_SAP_BW_NOTE_ANALYZER to check for new support notes and new functionality notes released back-end (up to SP16)

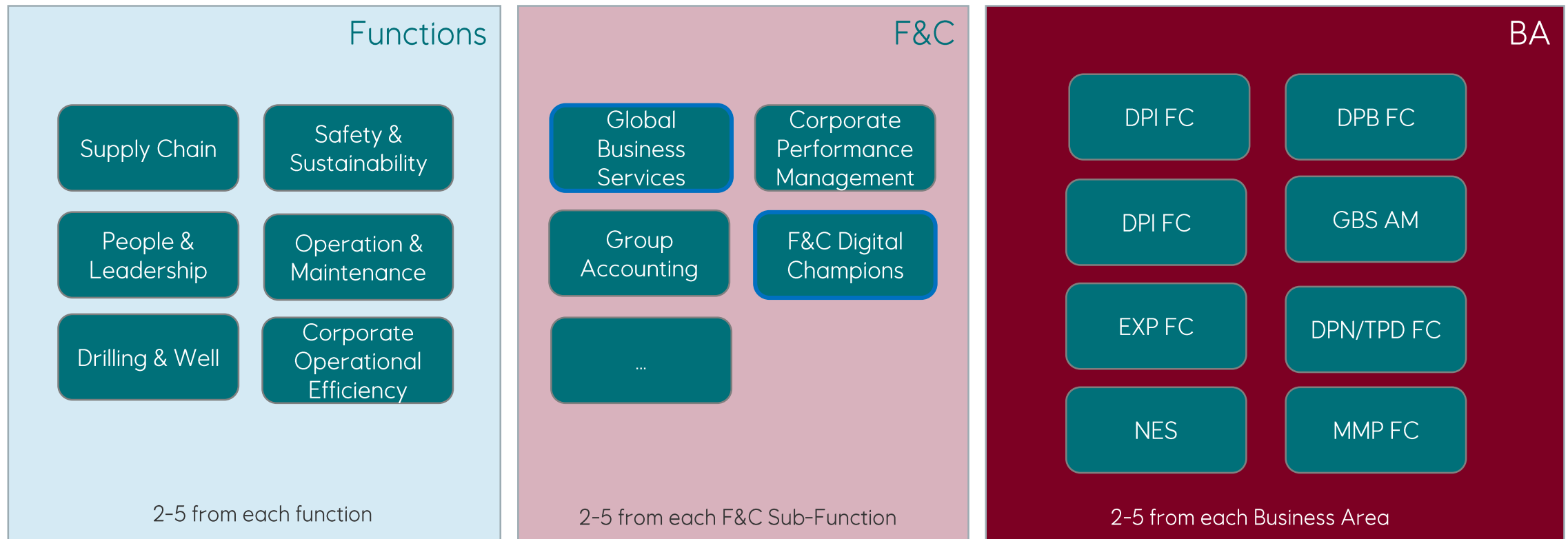
SAP Note 2511489 - Troubleshooting performance issues in SAP Analytics Cloud

Best practice on how to build queries and optimize performance in SAC

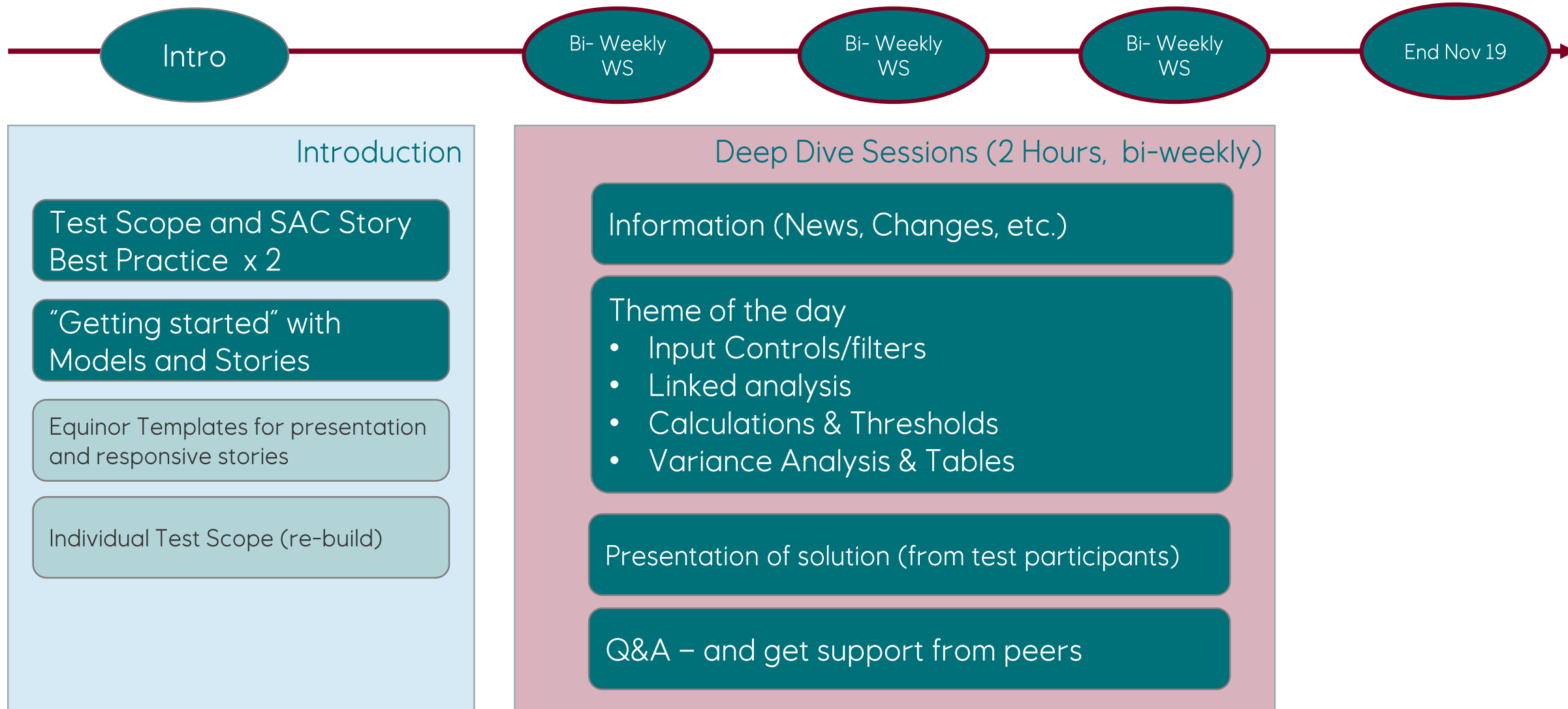
SAP Note 2715871 - BW - SAP Analytics Cloud remote blending

Test Participants

- Test phase: 30 Concurrent licences (approximately 50 users registered now)
- Test participants representing different functions and business areas



Test Approach – Timeline

















Findings during testing

- Overall, very good performance when working with BW Live Data. Also when building stories with multiple data sources.
- Easy to set up linked dimensions between charts and models.
- Not all existing BW queries works as expected. Some issues with structures, default variable settings and hierarchies. Might be a need to rebuild some of our queries.
- Stories with responsive pages can be hard to work with

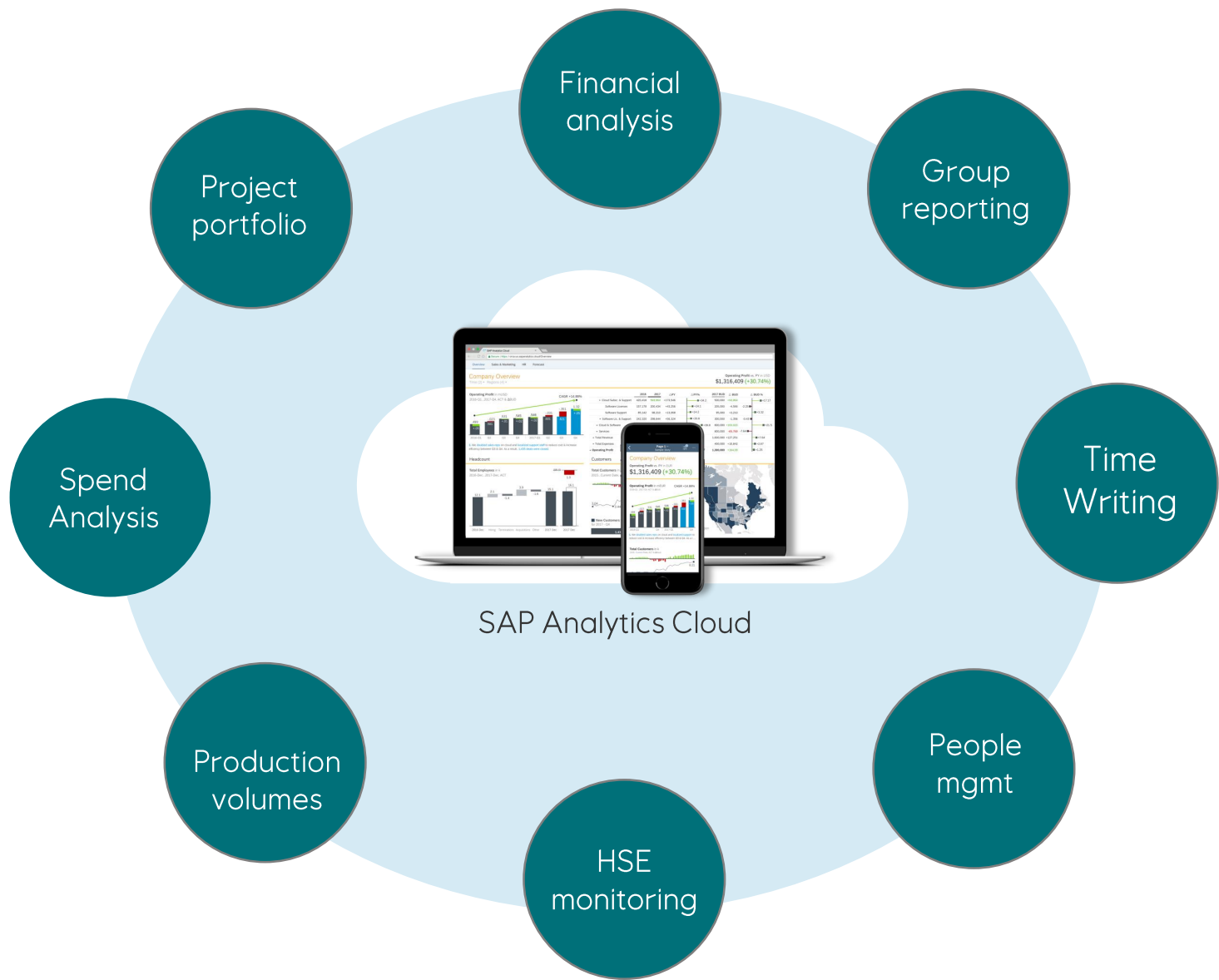
Known Limitations

- Smart Discovery and Smart Insights features are currently not supported for BW Live Data
- BW Queries with Structures are supported – but there are some limitations. (Data mode not supported, sorting of measures is not supported with structures)
- Variance charts with time dimension currently not supported for BW Live data. Hopefully solved by SP16. Variance for measure-to-measure is supported.
- Chart, table, and filter widgets do not support sorting based on the Time data

Test Status

Must have	Status	Nice to have	Status
<ul style="list-style-type: none">• Default values in queries working as expected		<ul style="list-style-type: none">• Undo/back-button	
<ul style="list-style-type: none">• Linked Analysis for all dimensions		<ul style="list-style-type: none">• Search to insight (indexing of models)	
<ul style="list-style-type: none">• Data blending between live & live and live and imported		<ul style="list-style-type: none">• Geo charts (live-data) (SP16)	
<ul style="list-style-type: none">• Calculations (live features), including restricted measure		<ul style="list-style-type: none">• Range filters for measures	
<ul style="list-style-type: none">• Variance (with time for SP16) in charts and tables		<ul style="list-style-type: none">• Restricted measures (based on calculations) (SP16)	
<ul style="list-style-type: none">• Variance (measure to measure) in charts and tables			
<ul style="list-style-type: none">• Input control on pages and charts/tables			
<ul style="list-style-type: none">• Filters (selection and exclude)			
<ul style="list-style-type: none">• Search features in filters (in dimensions)			
<ul style="list-style-type: none">• Mobile access and performance on mobile solutions			
<ul style="list-style-type: none">• Hierarchies (1 issue with time-dependent org. hierarchy)			
<ul style="list-style-type: none">• Better use of time dimension with filters (SP16)			
<ul style="list-style-type: none">• Threshold values (for conditional formatting)			
<ul style="list-style-type: none">• BW / BPC Import scenario			

Potential use cases for SAP Analytics Cloud



SAP Analytics Cloud Special Interest Group

Mandate:

Promote learning and share experiences on implementation and use of SAP Analytics Cloud



SUGGESTED TOPICS

- SAC Implementations – Lessons learned
- Data Connectivity / Data Integration
- Design Thinking / Story Building
- Analytics Designer
- Planning
- Value Driver Tree / What-If Simulations
- SMART Augmented Analytics
- Predictive Scenarios
- SAC Mobile App
- Analytics Hub



WHO

All members in SBN, SAP customers and partners who are interested to learn more about SAP Analytics Cloud



ORGANIZATION

Driven by the members. SBN will participate as facilitator and coordinator



HOW

Face-to-face meetings, Webinars, Video-conferences, Skype, Go-to-Meetings



WHEN / WHERE

Quarterly Meetings, visits hosted by members



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