

# **SAP Hybrid Analytics: Strategy and overview**

April, 2019 Adrian Westmoreland, SAP

**PUBLIC** 



## Today's Speaker



Adrian Westmoreland
Product Management
SAP Analytics Cloud

Adrian Westmoreland has been with SAP for about 21 years with a focus on Analytics throughout his entire career. He has held different roles within SAP over several years including pre-sales and product management building a strong relationship with customers from various industries around the globe. His expertise is based on many years of consistently delivering successful products and solutions. Currently Adrian is part of the SAP Analytics Cloud product management team with a focus on SAP Analytics Hub and hybrid analytics.

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## Agenda



### **SAP Analytics Strategy is Hybrid**



Hybrid Analytics and Analytics Updates



Wrap-up

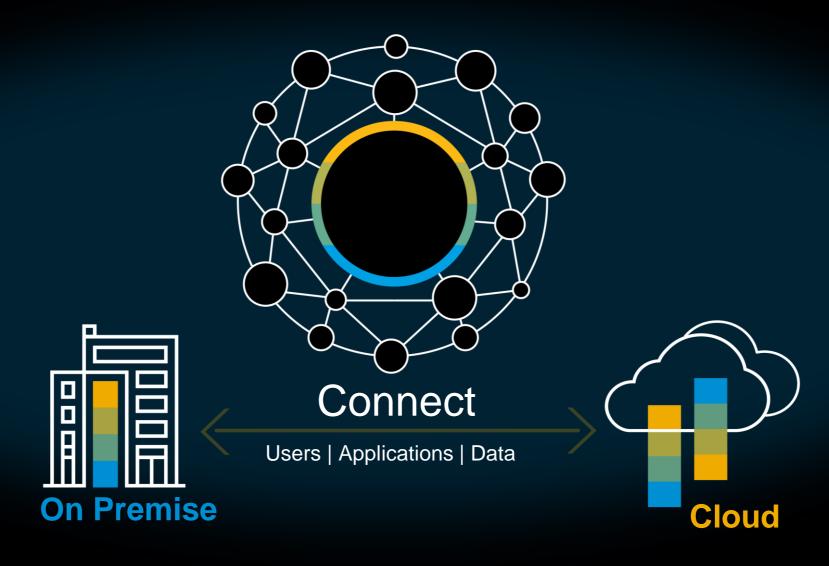
## The Digital Era is evolving into The Intelligence Era

**Mainframe & PCs Client Server & Internet** Cloud, Mobile & Big Data **Intelligent Technologies** 2010s - 2020s 1960s - 1980s 1990s - 2000s 2000s - 2010s **ENABLING TECHNOLOGIES**  Transistors & silicon Widespread PC adoption Mobile & Smartphone Machine Learning & revolution Broadband Internet ubiquity Artificial Intelligence Large scale Mainframe ERP and business process Cloud Computing IoT & Distributed Computing adoption Social Networks technologies computing Emergence of PC's Blockchain Big Data Plant floor automation **CUSTOMER VALUE CREATION** Industrial **Business Process** Digital Intelligent **Transformation Enterprise Automation Automation** 

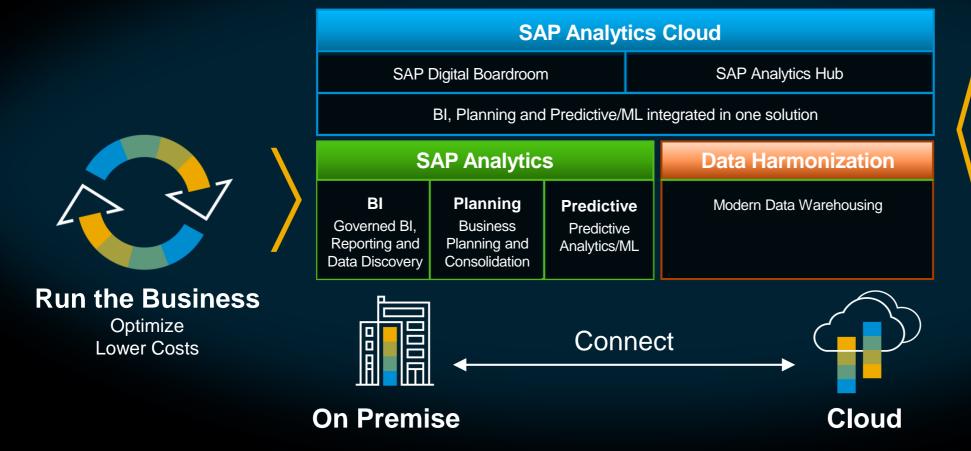
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## **SAP Analytics Strategy is Hybrid**



## **SAP Analytics** provide a solution for both scenarios





## Agenda



SAP Analytics Strategy is Hybrid



**Hybrid Analytics and Analytics Updates** 



Wrap-up

## **SAP BI Forrester Hybrid Research**

#### Key Results:

- 82% percent of companies agree that hybrid analytics/BI and data processing is a critical next step in the evolution of their analytics/BI
- The majority of companies (60%) see some sort of hybrid configuration as the next iteration of their analytics/BI
- Nearly two-thirds of companies anticipate that the future state of their analytics/BI and data processing will be comprised of a mix of on-premise and cloud resources
- 71% of companies said they would feel less concerned about running analytics in the cloud if they
  knew that no data (including query results) would ever cross the firewall
- 95% of respondents indicated that AI, machine learning, and IoT are important considerations for the future of their analytics/BI

Surveyed 485 analytics and BI decision makers with involvement in their organization's business technology and analytics/BI strategy. Companies surveyed were from the US, Canada, Mexico, Brazil, UK, Spain, Italy, France, Germany, India, China, Korea, Japan, and Australia and had employee counts of 1,000 or more.

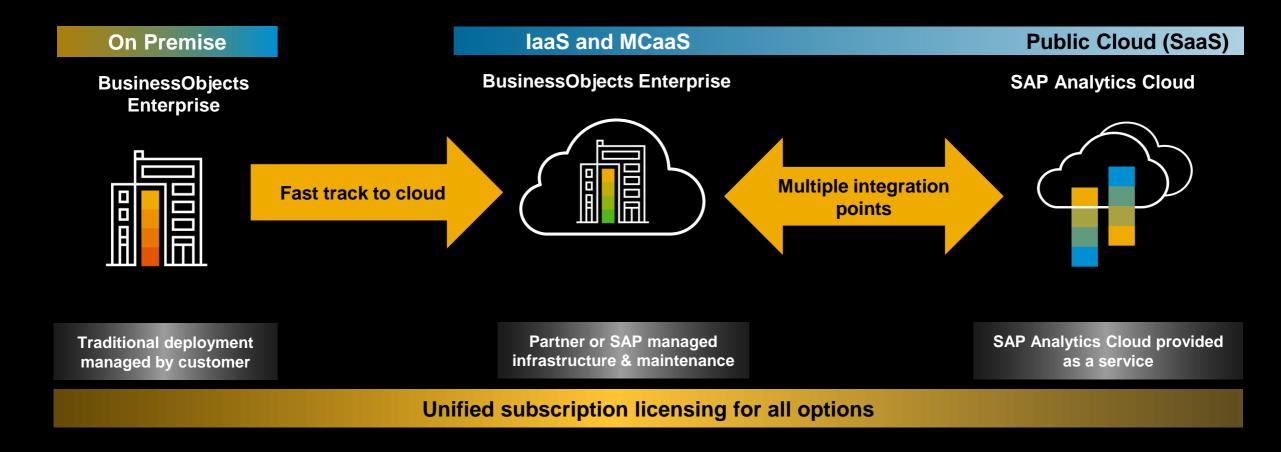
## **SAP Hybrid BI Digital Innovation Without Disruption**

- Deploy Analytics on premise or in the cloud
- Flexible pricing options: multiple licensing options, ultimate flexibility
- SAP Analytics Hub: a single front end for all analytics content
- SAP Analytics Cloud: Remote Data Connections Data stays resident and live on-premise
- Innovation with SAP Analytics Cloud
- SAP BusinessObjects BI (BOE): the Cornerstone of SAP Analytics Hybrid Strategy

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## SAP Hybrid Analytics: Deploy Analytics on premise or in the cloud



#### The right solution for each customer situation



#### **BOE Hosted in SAP Cloud**



#### **BOE** on premise

- Perpetual licensing
- On-premise functional scope
- Customize, modify, and extend
- Release cycle 6 to 12 months, speed of adoption depends on customers' schedule
- Runs on customer preferred infrastructure

## **SAP BOE** in HANA Enterprise Cloud

- BYOL or subscription, for select material codes
- On-premise functional scope
- Customize, modify, and extend
- Annual release cycle, speed of adoption on customers' schedule
- Customer specific system landscape
- Runs on SAP HANA Enterprise Cloud
- SAP-managed services on private cloud infrastructure (SAP, AWS, or Microsoft Azure)

## SAP BOE, single tenant edition

- Subscription licensing
- On-premise functional scope
- Extensibility Framework and extensions via SCP
- Predefined Landscapes (based on T-shirt sizes)
- Half year release cycle, customers chooses upgrade window within 12 months
- Low TCO and fast time to value
- Dedicated system landscape on cloud infrastructure

#### **SAP Analytics Cloud**

- Subscription licensing
- Lowest TCO and fastest time to value
- Quarterly release cycle (ability to test new features with fast track tenant)
- Public cloud infrastructure
- Predefined content for many industries and lines of business
- Many extension options via SCP and SAC content store

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## Flexible Pricing Options: Multiple Licensing Options, Ultimate Flexibility

1

## New On-Premise BI Licenses

- Reduced list price
- Reduced functionality
- Updated pricing reflects product strategy

2

#### **On-Premise Conversion**

- Right-size both quantity and functionality
- This down-conversion reduces on-premise BI maintenance spend
- Customers only pay maintenance for what is used

3

#### **Cloud Extension Policy**

- Cover the reduced maintenance with a new cloud contract
- Partial maintenance reductions are only possible when combined with a new cloud contract

### New On-Premise SAP BusinessObjects BI License Model

**SAP BusinessObjects** Web Intelligence

**New Webi-only edition** 

**Web Intelligence** 

**SAP Application Data Access** 

**BI Platform** (Mobile BI, Live Office) SAP BusinessObjects **Enterprise Price Reduced** 

No Dashboards or Explorer

**SAP BusinessObjects BI, Edge edition Price Reduced** 

No Dashboards or Explorer

**Lumira Discovery Lumira Designer Analysis for Office Web Intelligence Crystal Reports Analysis for OLAP**  **Data Integrator** (Max 8 cores)

(Max 8 cores)

**PowerDesigner** (1 CSBL)

**Lumira Server** 

**SAP Application Data Access** 

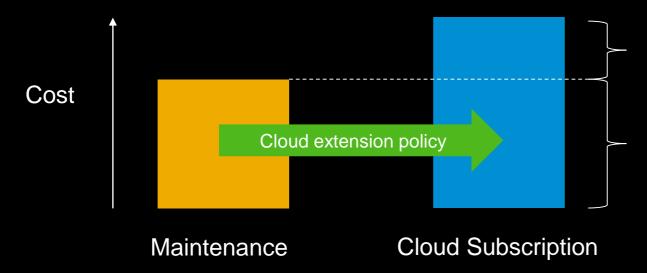
**BI Platform** (Mobile BI, Live Office)

## **Available today - Cloud Extension Policy**

Objective: Help customers transition from on-premise license + maintenance to cloud subscriptions

#### Program:

- Allow for partial cancellation of on-premise maintenance when replaced by a cloud subscription
- The value of the cloud subscription must exceed the value of the on-premise maintenance.
- Cloud subscriptions include operations and infrastructure in addition to support and new versions



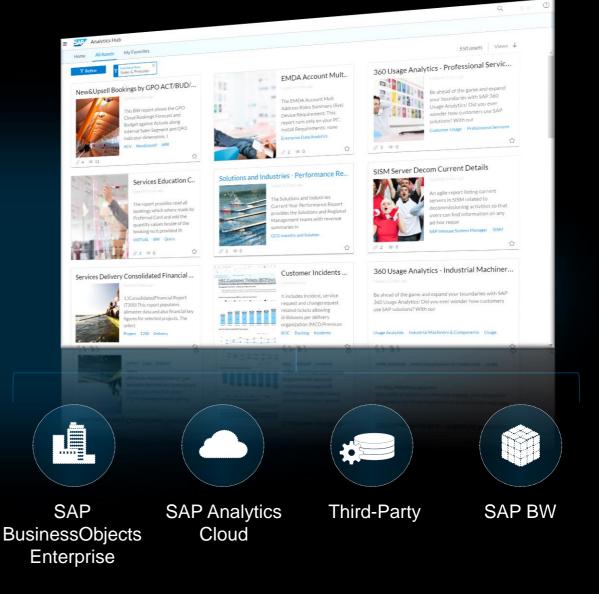
- License
- Infrastructure (servers, data center)
- Operations (patching)
- Support
- New versions

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## SAP Analytics Hub: a single front end for all analytics content

- Simplify access to all analytics
- **Enable BI Governance**by moderators in the community
- Avoid chaos, increase usage





## Simplify access to all analytics

- Find the analytics you need when you need them – in your home page
- Browse through visual cues to uncover analytics you didn't know
- Tailor the experience to best fit your unique business needs



## **Demo: SAP Analytics Hub**





### Stay ahead of the game

#### Start your journey to the cloud

- Saas solution on SAP Cloud Platform
- Easy to adopt solution, only the metadata is exposed
- Easy to setup, get up and running quickly, no infrastructure or upgrades to manage

#### **Bring order to chaos**

- Define the structure and the roles
- Avoid report duplication, enforce conformity of information and consistent KPI definitions
- Implement a self governed community

#### Stay ahead of the game

Monitor and understand analytics usage





#### **Easy to Setup**

#### **User Administration**

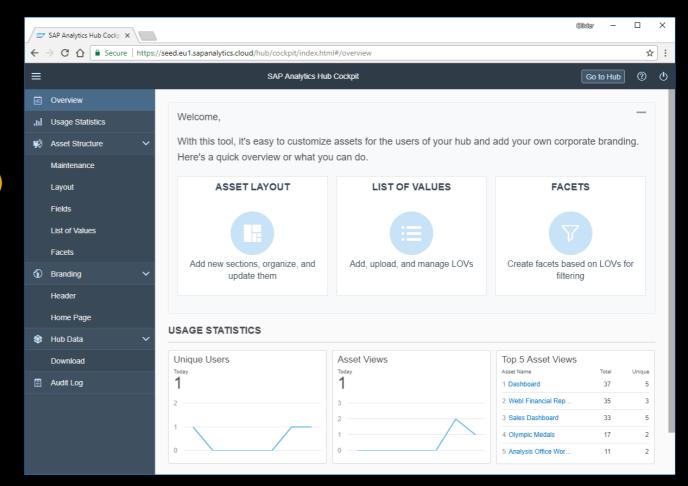
- Once you receive the email, the tenant is created
- Add users and define their role

#### Configuration through the cockpit (1709)

- An asset profile is created by default
- The fields for an asset are customizable
- The taxonomy (facets and values) is as well
- Name and logo, can be changed

#### **Monitor**

- Review usage
- Audit user actions
- Export hub content



## **SAP Analytics Hub Architecture**

- SAP Analytics Hub is sold under a SAP Analytics Cloud (sub)license but is run as an independent service.
  - Customers will manage users via SAP Analytics Cloud.
  - The SAP Analytics Hub application URLs will be masked by SAP Analytics Cloud.
  - SAP Analytics Hub is released Quarterly

- SAP Analytics Hub remains an independent application.
  - SAP Cloud Platform application running as a multi tenant service.
  - You can use SAP Analytics Hub without using SAP Analytics Cloud

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## Vision: SAP Analytics Hub



## **SAP Analytics Hub - Roadmap**

Enhanced SAP Analytics Cloud Home page experience optimized for the BI consumer

Provide a SAP Analytics Hub like experience for SAP Analytics Cloud

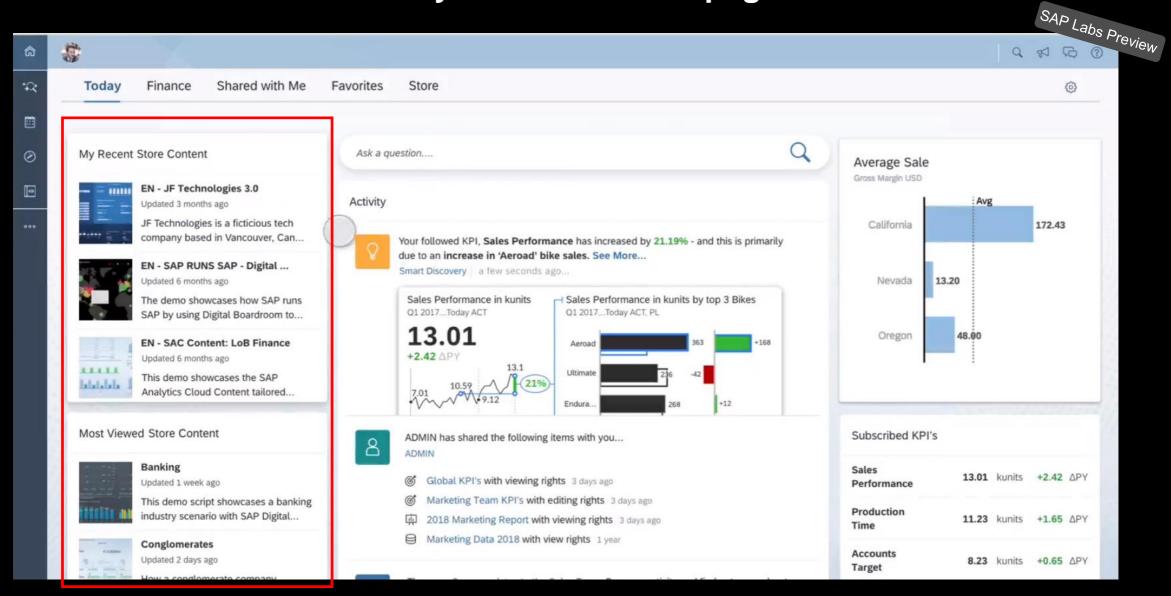
Tight integration with BI content repositories

- SAP BusinessObjects, SAP Analytics Cloud
- Continue to support Partner API's

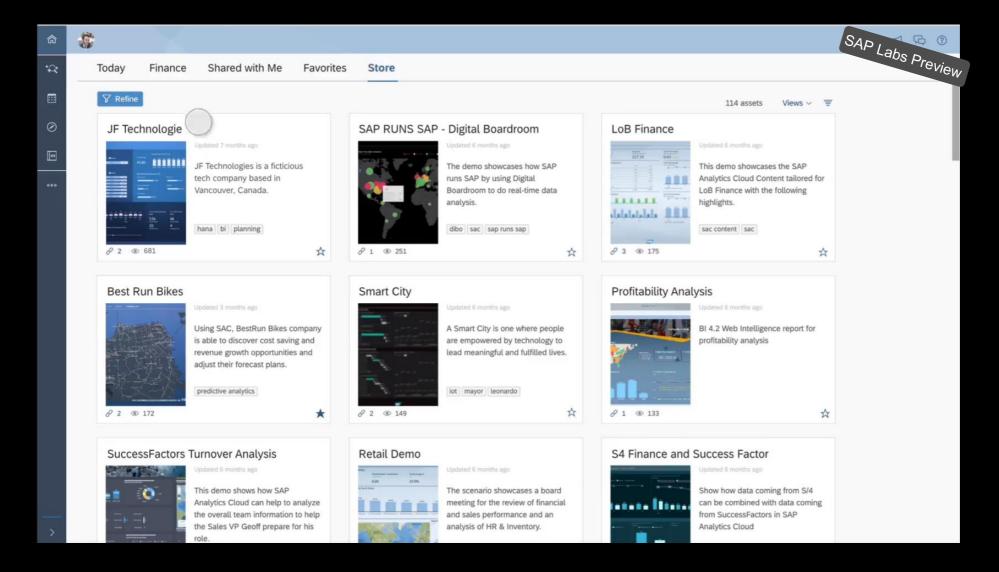
Shared User Experience for Hub and SAP Analytics Cloud

Shared SSO, Users, Header, and Administration

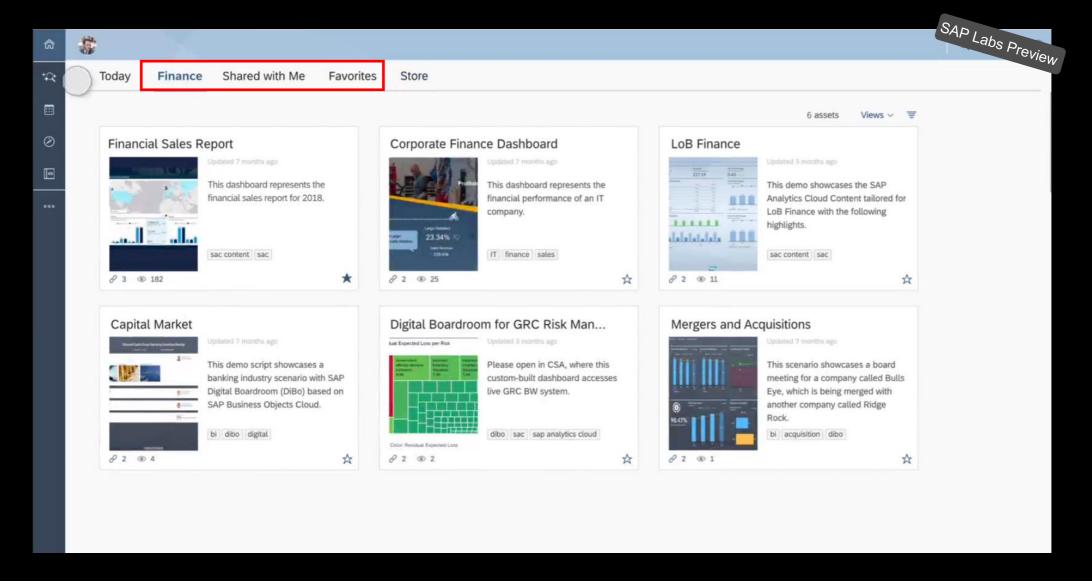
## **Hub content on the SAP Analytics Cloud Homepage**



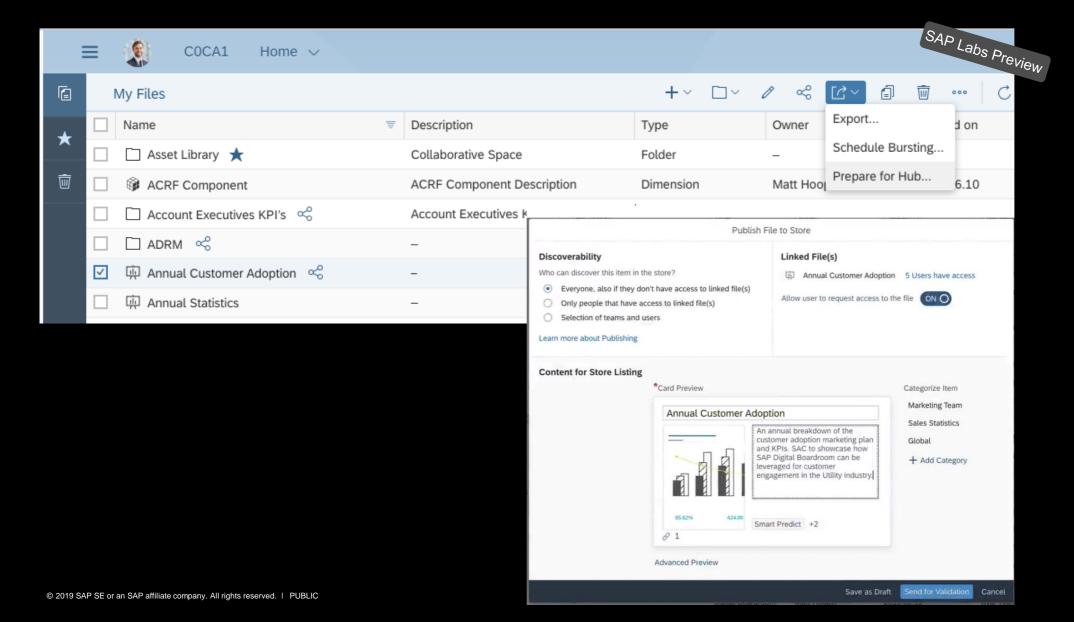
## **Hub Store integrated into the SAP Analytics Cloud Experience**



### Personalized Content for Teams and Individuals



## Publishing content from SAP Analytics Cloud to Hub Store

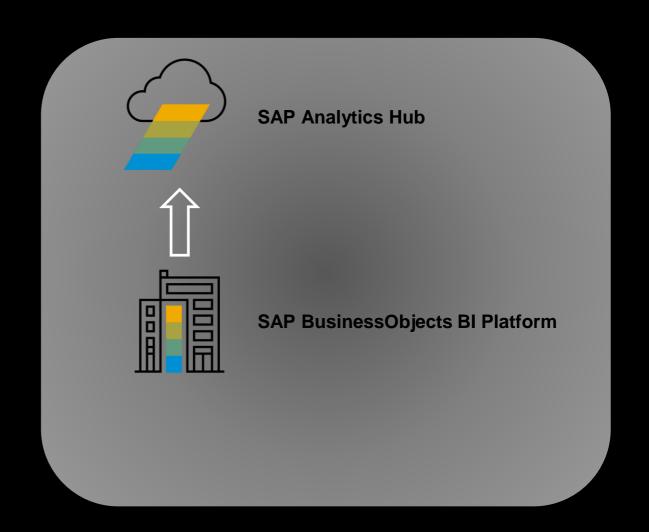


### **SAP BusinessObjects BI 4.3**

Analytics Hub integration

### Select and identify BOE content

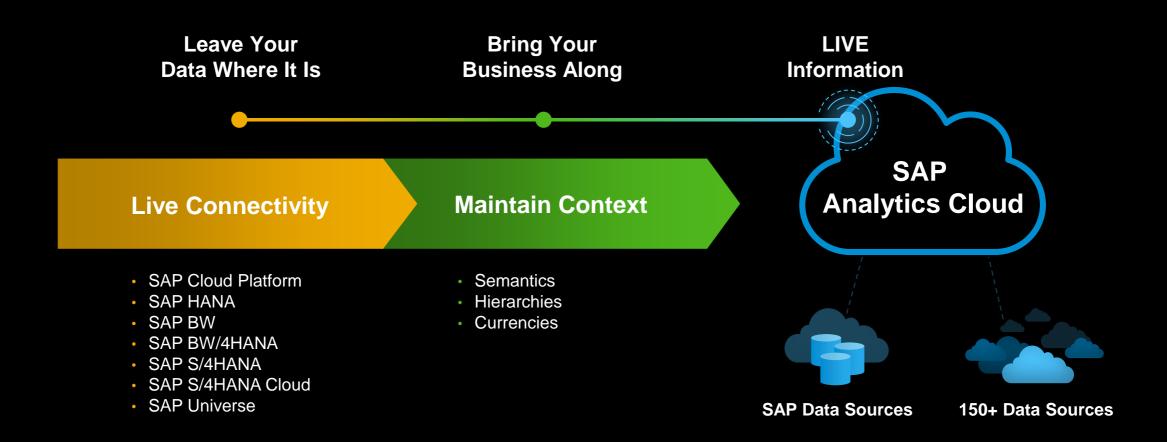
- Pushed automatically to appear as Hub assets
- Remain synchronized and up to date



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## **Context is the Competitive Differentiator**



## **SAP Analytics Cloud:** Remote Data Connections – Data stays resident and live on-premise

#### Live Cloud data sources SAP Cloud Platform<sup>1</sup> SAP S/4HANA Cloud SAP SuccessFactors SAP Ariba SAP data sources SAP BW SAP BW4/HANA SAP S/4HANA SAP BusinessObjects Universe SAP HANA SAP BPC Embedded Access via SDI for SAP Cloud Platform & SAP HANA<sup>2</sup> SAP Sybase ASE, IQ, ESP Microsoft SQL Server Spark SQL Apache Hive SAP Vora **OData** MaxDB **AWS Oracle** Teradata MySQL Google+ IBM DB2 Facebook Twitter Netezza Partner delivered DB2 Microsoft Azure Microsoft SQL Server MongoDB MySQL Netezza Denodo Microsoft Analysis Services MongoDB Atlas Oracle Essbase Google BigQuery Oracle Oracle Exadata SAP IQ SAP SQL Anywhere Redshift Teradata Cloudera Hortonworks Amazon S3 Planned within the next 6 months Partners Requires SAP Cloud Platform DBaaS license

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

#### Live connections

Q4/2018

#### Q1/2019

#### **Future Direction**

#### **Integration with SAP BW**

#### **Enhanced analytic capabilities**

- Time Series chart
- Search to Insight via natural language query
- Data blending between SAP BW live data models with imported data models

#### Integration with BW concepts

- Prompting support: BW Dynamic Filters
- Enhanced date-based calculations and filtering

#### **Integration with SAP HANA**

#### **Data connectivity**

 Live connection to SAP HANA 2.0 in SCP Cloud Foundry (via Hana Analytics Adaptor)

#### **Enhanced analytic capabilities**

- Browser-based data blending
- Prompting support: Dynamic Input Parameters

#### **Integration with SAP Universes**

#### **Enhanced analytic capabilities**

- Calculated dimensions creation in Story
- Measure-based filters support
- Calculation Editor: Aggregation calculations

#### **Integration with SAP BW**

#### **Enhanced analytic capabilities**

- Additional chart types: waterfall, variance, geo map
- Complex filtering support with multiple dimensions
- Data blending enhancements:
  - Between SAP BW live data models from same BW system
  - Between SAP BW live data modes from different BW systems
  - Between SAP BW live and SAP HANA live data models

#### Integration with BW concepts

 Respect text presentation setting from BW query in Charts

#### **Integration with SAP Universes**

#### **Live Universe Connectivity release 2.0.0**

Enhanced performance

#### Integration with SAP BPC Embedded

#### **Data connectivity**

 SSO support for live connections to SAP BPC Embedded

#### Integration with SAP BW

#### **Standard Adhoc Analysis**

- Launch BW queries through URL with parameters
- Slice & dice analysis of data from BW queries

#### Integration with SAP HANA

#### **Data connectivity**

 Simplified live connection setup to SAP HANA 2.0 in SCP Cloud Foundry

#### **Integration with SAP Universes**

#### Continued investment of analytic capabilities

- Chart to chart filtering based on different models
- Threshold on measures
- Ranking
- Drill support on Universe hierarchies
- Search to Insight

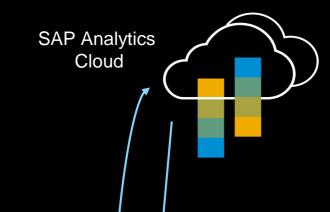
#### **Continued integration with Universe concepts**

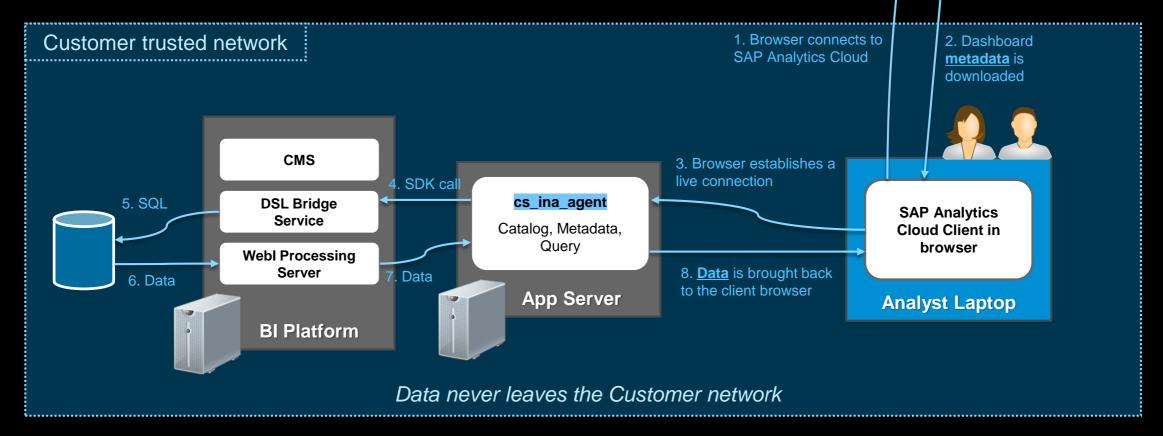
Support for Universe Details

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

#### **Live Universe Connection**

Accessing on premise universe data without moving it to the cloud





### **Demo: Live Universe Connectivity**



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### SAP BusinessObjects BI 4.3: The Cornerstone of SAP Analytics Hybrid Strategy

SAP continues to invest into the on-premise BI Suite

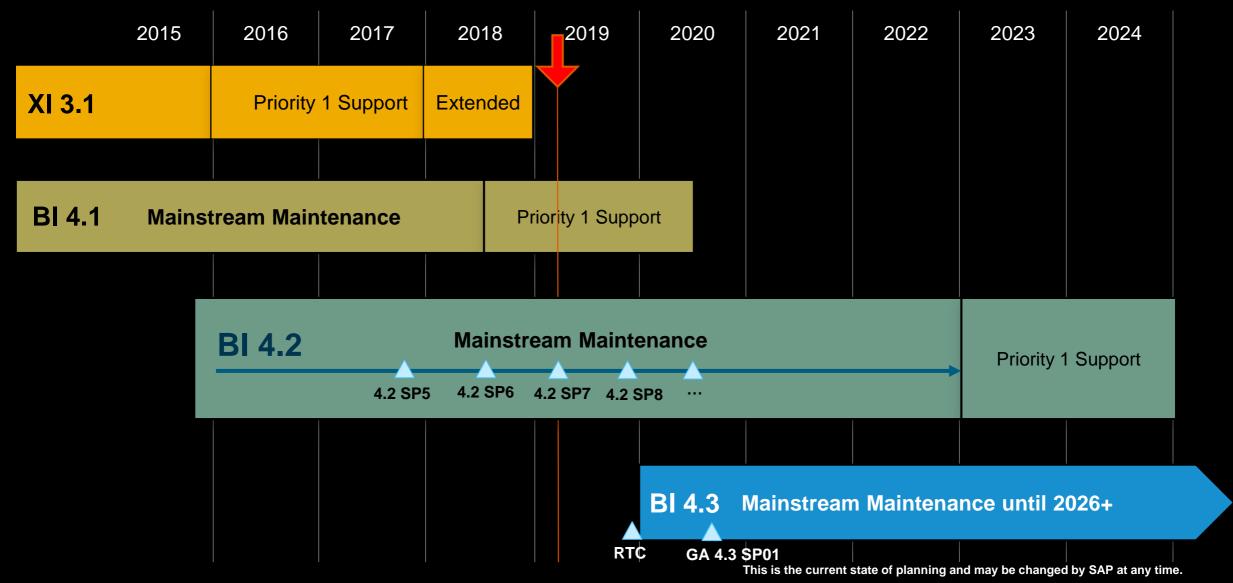
- SAP plans to release the next version of the BI suite by Q4 2019
- BusinessObjects BI 4.3 will then become generally available in Q2 2020
- As per the <u>Maintenance Policy</u>, the maintenance will be extended to 2026 at a minimum

While easing the adoption of SAP Analytics Cloud by on-prem customers.

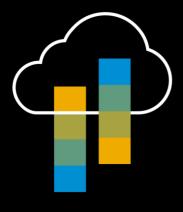
 Customers will get a head start in their cloud analytics journey by leveraging existing onprem assets



#### **SAP BusinessObjects BI Timeline**

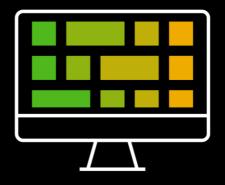


### SAP BusinessObjects BI 4.3 Key Themes



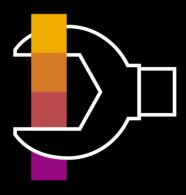
#### **Hybrid**

Provide a tighter integration between BusinessObjects Bl and SAP Analytics Cloud



#### **User Experience**

Harmonize user experience and foster BI adoption with a Fiori like experience



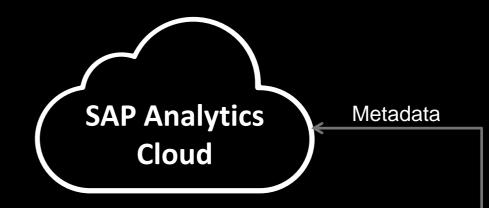
#### **Enterprise Readiness**

Enhance ease of deployment and support latest industry standards

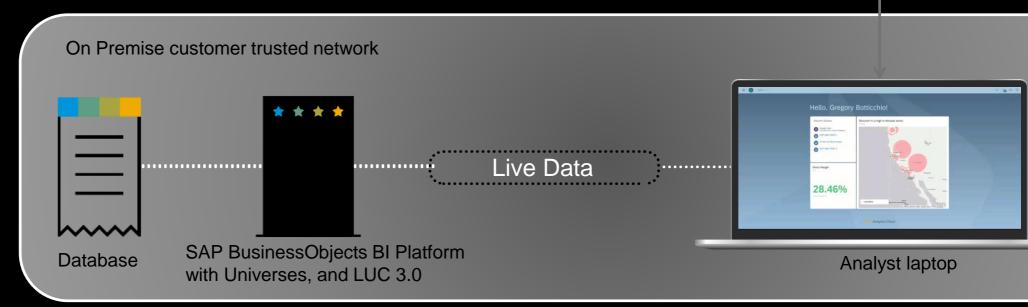
#### **SAP BusinessObjects BI 4.3**

Live Universe Connector 3.0

- Access on premise universe data without moving it to the cloud
- Apply Data Level Security
- Use powerful query capabilities
- Create visualizations using business terms

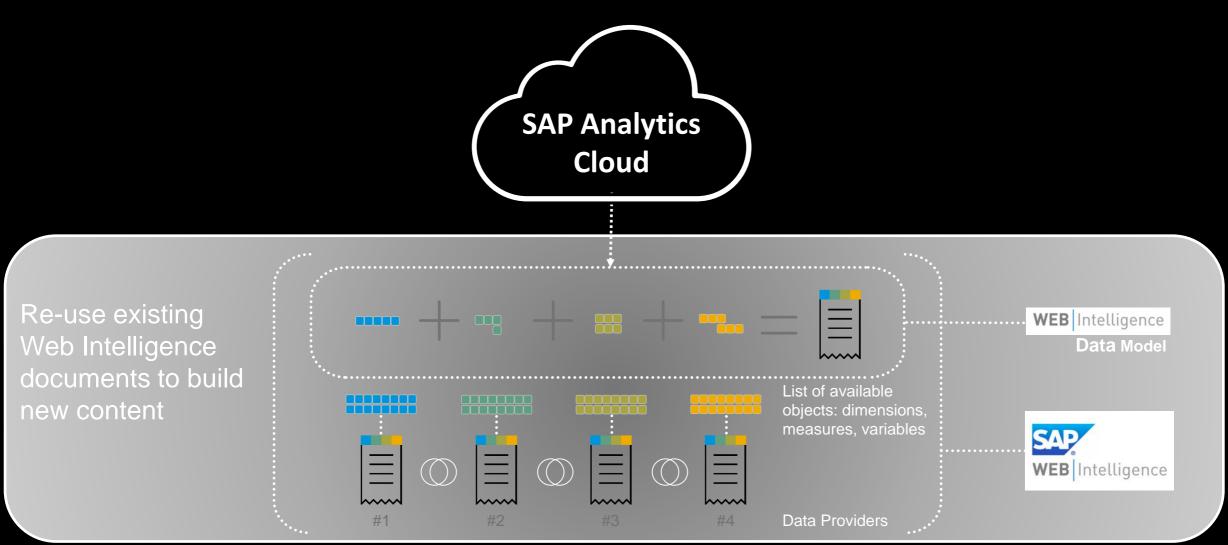


Data never leaves the customer's network



#### **SAP BusinessObjects BI 4.3**

Consume Web Intelligence data models in SAP Analytics Cloud

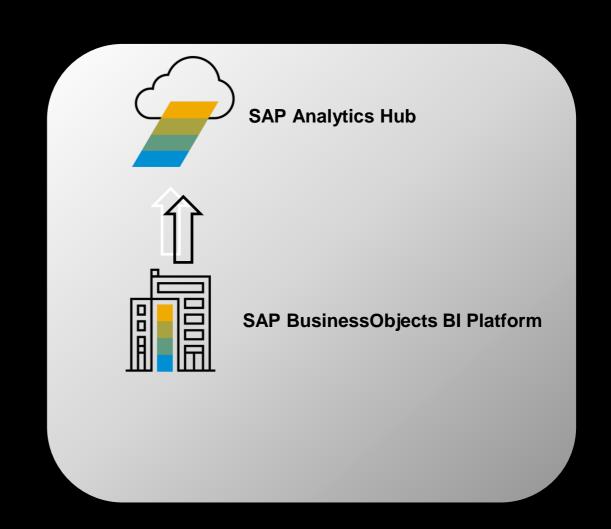


#### **SAP BusinessObjects BI 4.3**

Analytics Hub integration

#### Select and identify BOE content

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#### Agenda



SAP Analytics Strategy is Hybrid



Hybrid Analytics and Analytics Update



Wrap-up

#### SAP BusinessObjects BI and SAP Analytics Cloud – "Better Together"

- Most Complete BI Solution Available supporting the full range of use cases for Reporting, Data Discovery, Analytic Applications, and Office Integration.
- Live Connectivity to SAP Data All other competitors require extraction and movement of SAP data to the cloud which presents performance and security concerns for customers.
- SAP Hybrid Approach with "Fast Track to Cloud" Important bridge for customers to enable digital transformation including analytics
- Al-Infused Analytics and Analytic Tools (leap frogging best-of-breed players) with smart data discovery and SAP application integration
- Ability to support a complete Digital Transformation which is a disruptive wave that SAP can deliver today

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# Thank you.