# **UGKnowledge**

Knowledge @ SAP User Groups





## **SAP HCP – Webinar Series 4 SAP User Groups**

#### Moderator: Jos Houben

SAP HCP
Digital Future Enabled by SAP HANA Cloud Platform

SAP HCP and HEC: How they compare and combine

**Building new Analytical Solutions on HCP** 

Building Cloud extensions with HCP

Building on-premise extensions on HCP

SAP HCP – Using HCP for Mobile Apps

SAP HCP – Addressing Security Concerns

Prakash Darji

Mar 17

Uddhav Gupta / Maria Yu

Mar 29

Jana Richter

Apr 4

Filip Misovski

Apr 6

Bertram Ganz

Apr 12

Holger Gauss/Dirk Olderdissen

Apr 14

Martin Raepple

Apr 19



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# Agenda

Setting the stage – what is SAP HANA Cloud Platform?

Value proposition Analytics + Agile Data Marts in the cloud

Relevant capabilities in SAP HANA Cloud Platform

- Load data
- Create views
- Create visualizations + dashboards
- Embed in context

Roadmap

Summary



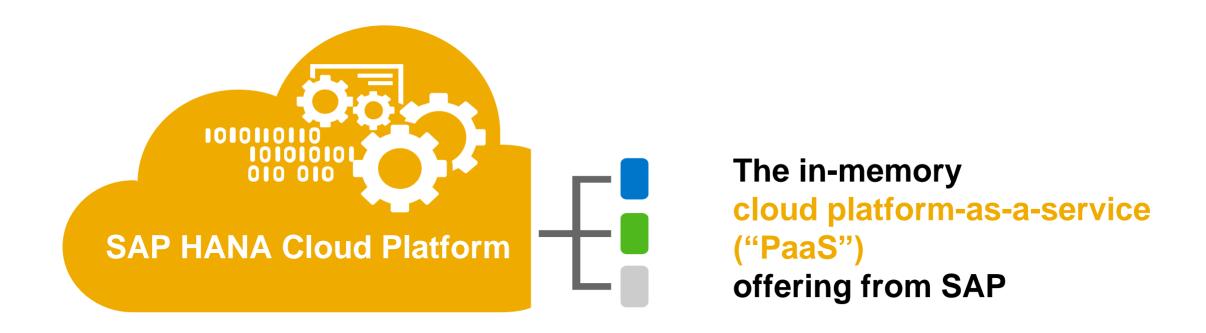
# Setting the stage



#### **SAP HANA Cloud Platform**

#### Introduction

Build, extend, and run next-generation applications on SAP HANA in the cloud



hcp.sap.com

## **Typical Scenarios on SAP HANA Cloud Platform**

#### Extend your business to the cloud



# Mobile-ready, feature-rich UIS

= productivity and customer satisfaction



#### **Seamless**

# business process extensions and integration

= greater agility



# Real-time analytics

= success in your window of opportunity

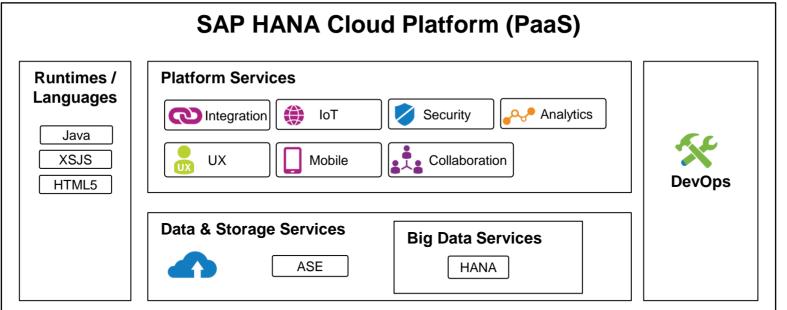


Rapid
application
build and deployment
= quicker time to value

#### SAP HANA Cloud Platform - Overview Current State









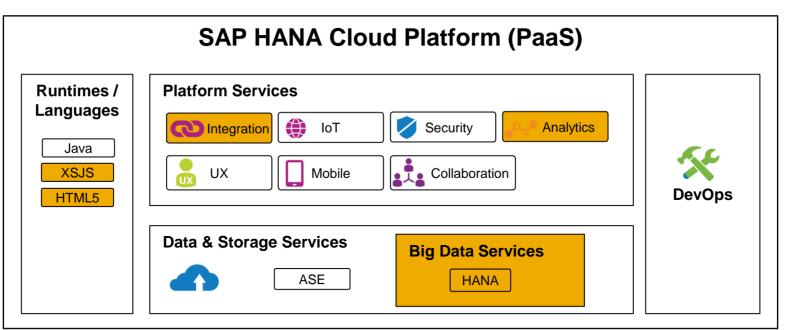
IaaS Layer

#### SAP HANA Cloud Platform - Overview Current State

#### Focus of this session









IaaS Layer



# Value proposition Analytics + Agile Data Marts in the cloud



# **Use Case (Illustration)**

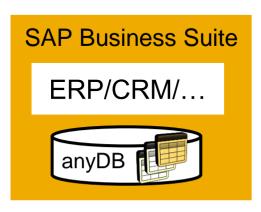
Variety of data sources (some examples) → Model views + create dashboards **Embed in context OnPremise** SAP HANA Cloud Platform (Platform-as-a-Service) SAP Systems account anyDB Fiori launchpad Success embed SAP Cloud SAP HANA **Factors** Cloud Load data (replicate) **Portal** SAP HANA SAP HANA views **Things** (sensor data) SAP Cloud Tweets & apps (SaaS)

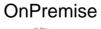
\* Planned capabilities / services

feeds

### Setup and required components

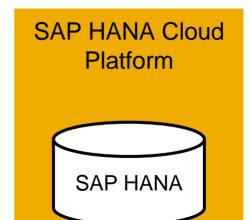
Replicate business data





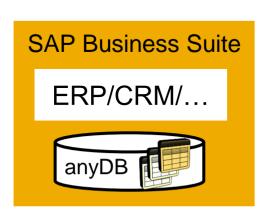


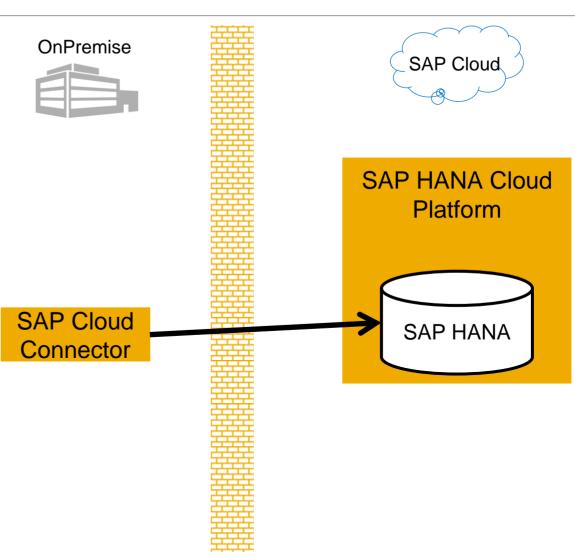




### Setup and required components

Replicate business data





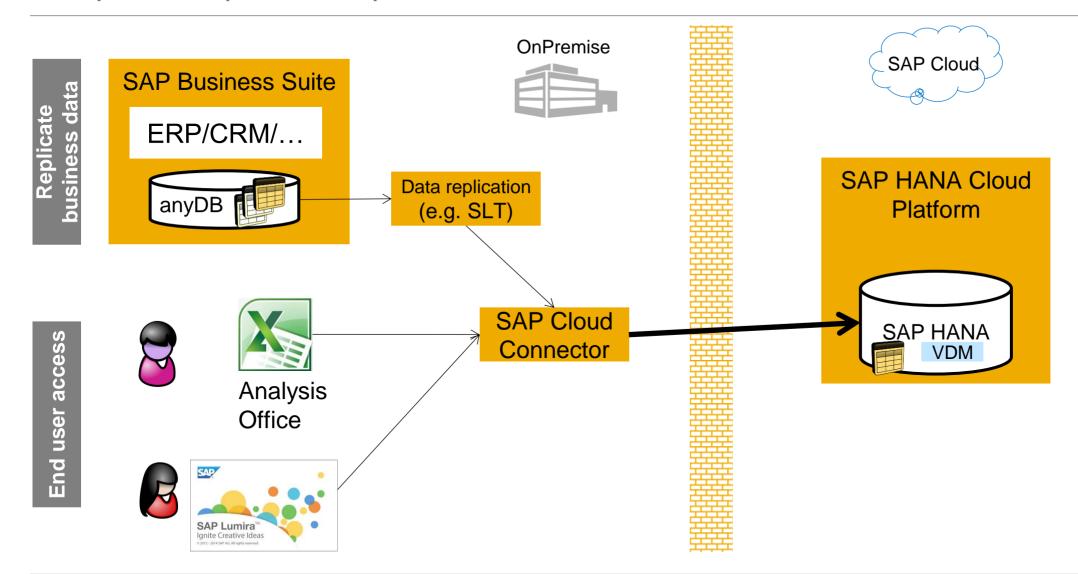
#### Setup and required components

OnPremise SAP Cloud **SAP Business Suite** business data Replicate ERP/CRM/... SAP HANA Cloud Data replication (e.g. SLT) **Platform** SAP Cloud SAP HANA Connector

#### Setup and required components

OnPremise SAP Cloud **SAP Business Suite** business data Replicate ERP/CRM/... SAP HANA Cloud Data replication anyDB **Platform** (e.g. SLT) SAP Cloud SAP HANA Connector **VDM** Hdbalm **HANA Live** 

#### Setup and required components



#### Setup and required components

OnPremise SAP Cloud **SAP Business Suite** business data Replicate ERP/CRM/... **SAP HANA Cloud** Data replication anyDB **Platform** (e.g. SLT) Custom app SAP Cloud SAP HANA Connector

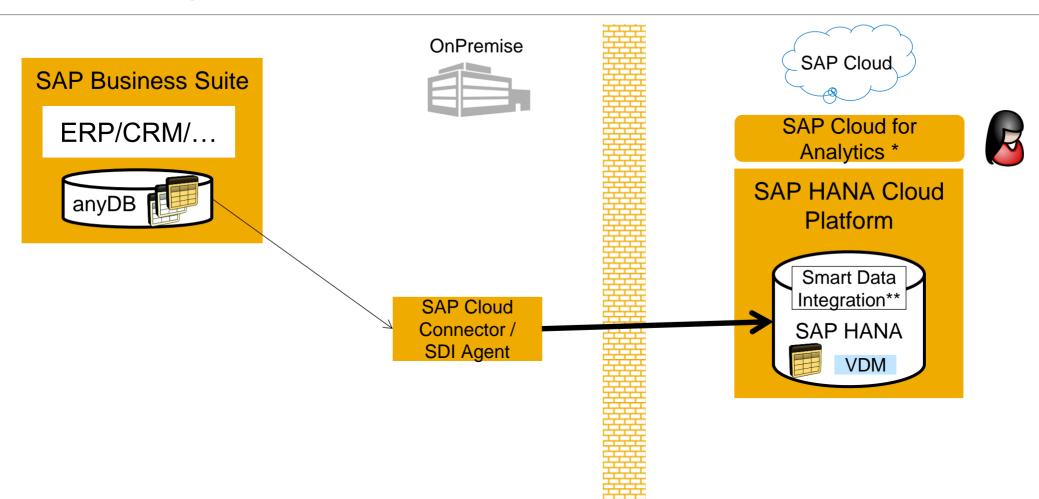
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#### Scenario – Outlook

#### Planned cloud capabilities

Replicate business data



\* Currently restricted availability



# Relevant capabilities in SAP HANA Cloud Platform

Load data

Create views

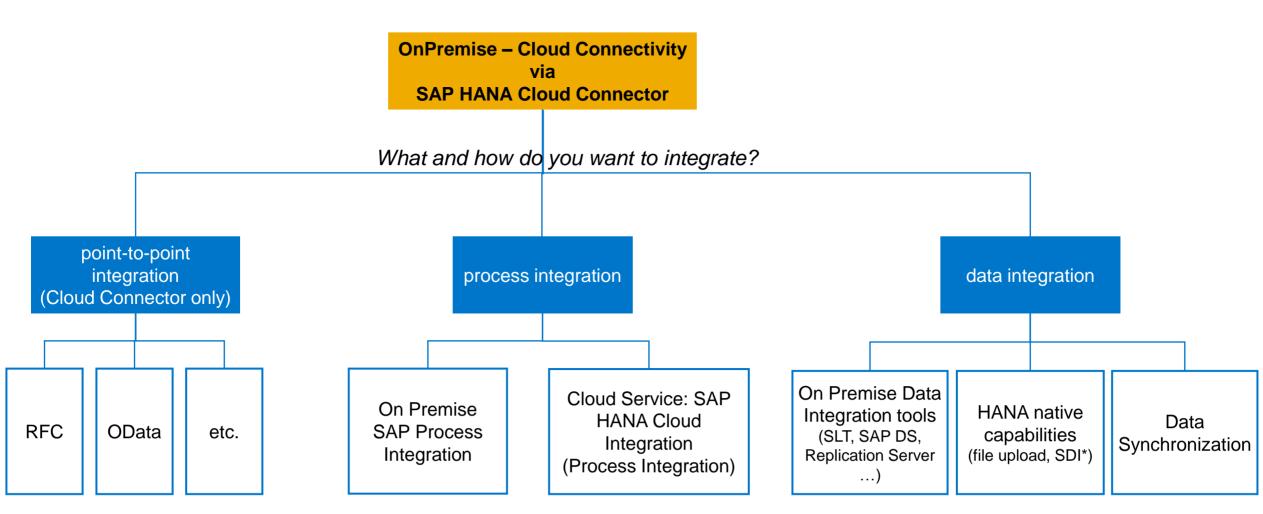
Create visualizations + dashboards

Embed in context



## **Integration options**

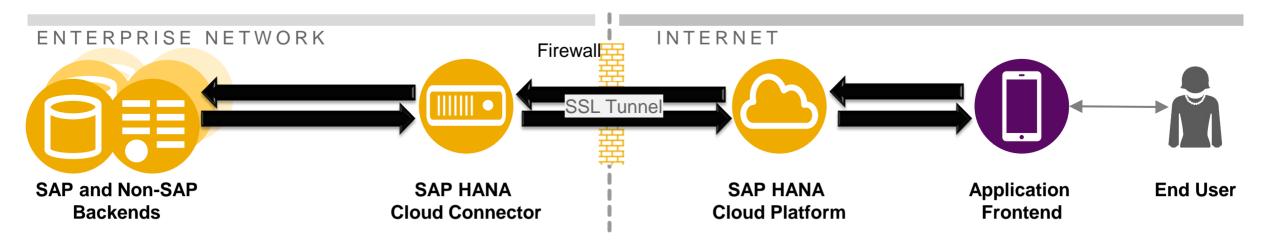
### SAP HANA Cloud Platform & On Premise systems



<sup>\*</sup> Planned capability

## **Hybrid Setups**

#### On-Premise – Cloud Connectivity



#### SAP HANA Cloud Connector can establish secure connectivity for hybrid cloud – On-Premise setups

- Allows access from whitelisted applications on SAP HANA Cloud Platform to whitelisted backend systems (option to restrict to selected OData services and RFC calls)
- Allows access from backend systems to whitelisted database on SAP HANA Cloud Platform

#### **Options to monitor the Cloud Connector status:**

- Via SAP HANA Cloud Platform Cockpit (Connectivity tab)
- Via basic healthcheck URL

#### SAP HANA Cloud Integration available as additional service for process integration capabilities

## Data integration tools from SAP

### Some options

#### **Target**

SAP HANA (in HCP)
via SAP HANA Cloud Connector

# **SAP Landscape Transformation Replication Server**

Real-time data replication

only SAP systems (and supported databases)

#### **SAP Data Services**

Batch type data replication

Data transformations and cleansing

Most native connector (ODBC)

# SAP Sybase Event Stream Processor

Real-time replication of event streams

Several connectors available

Other SAP or Non-SAP solutions available

Trigger-based

ETL, Batch Event Streams

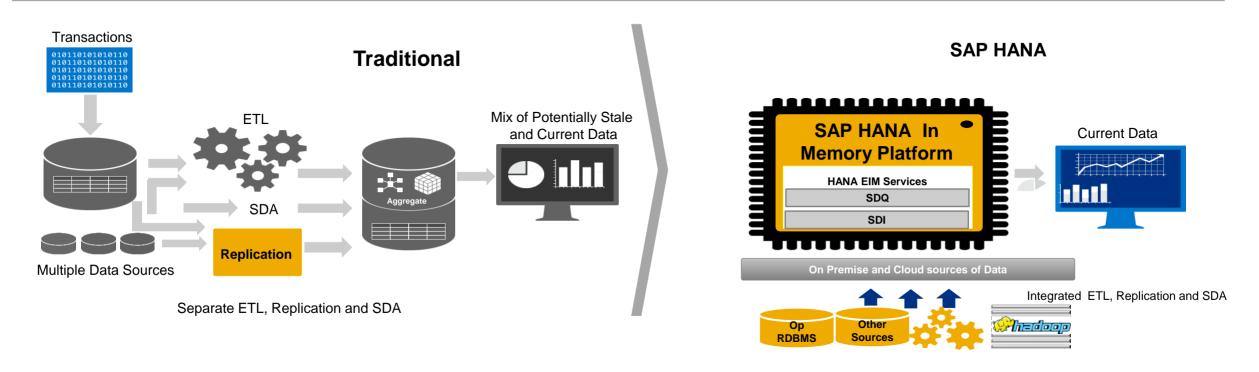
**Data Source** 

SAP/ Non-SAP System

data

# **SAP HANA Enterprise Information Management (EIM)**

Outlook - planned capabilities for SAP HANA Cloud Platform



- Simplified Landscape Federation, Replication & Transformation, all within the SAP HANA platform
- Accelerated In memory performance and lower latency
- Open Framework Supports data of any shape, style and size with an SDK for new data sources



# Relevant capabilities in SAP HANA Cloud Platform

Load data

Create views

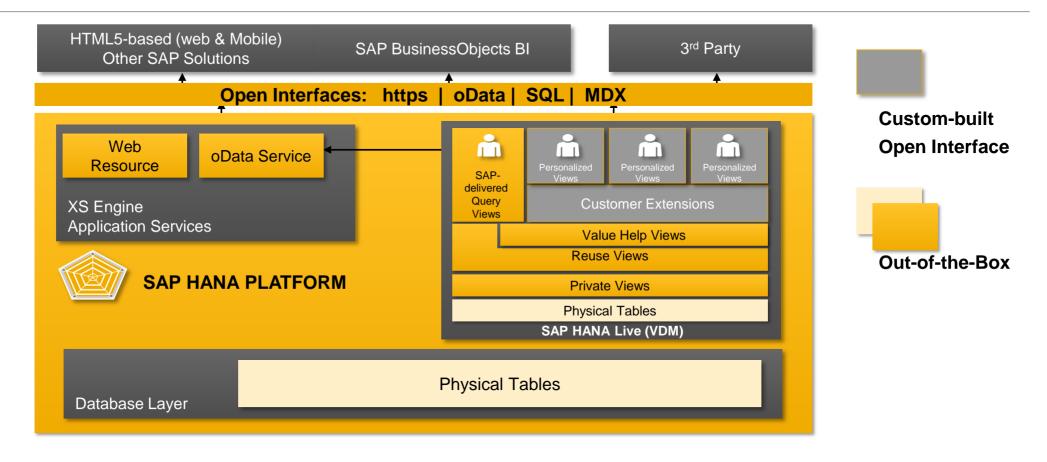
Create visualizations + dashboards

Embed in context



#### **SAP HANA Live architecture**

#### Foundation for new class of applications



Atomic instantaneous Pre-defined



# Relevant capabilities in SAP HANA Cloud Platform

Load data

Create views

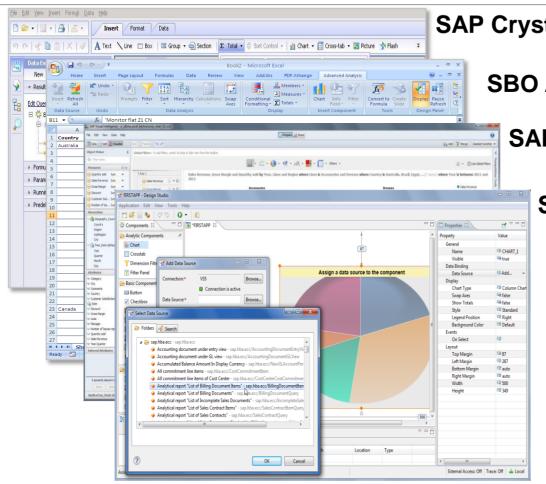
Create visualizations + dashboards

Embed in context



# SAP and SAP BusinessObjects (SBO) Clients

Clients recommended for the use with SAP HANA Live



**SAP Crystal Reports** 

**SBO Analysis Office** 

**SAP Lumira** 

**SBO Design Studio** 

Connect local BI client tool via central SAP HANA Cloud Connector

But: be aware that performance is sensitive to network conditions when using local clients connecting to remote databases (in cloud)!

## Create your own analytical application

Leverage SAPUI5 libraries to easily create charts and visualizations







views
sap.ui.commons
sap.m
controller

OData
calculation view

SAP HANA in SAP HANA Cloud Platform

Create Fiori-like user interfaces including charts - easily visualize data persisted within SAP HANA (in SAP HANA Cloud Platform).

Additional steps involved:

- Expose SAP HANA calculation views with OData service
- Bind data using SAPUI5-controllers
- Create visuals using SAPUI5-views

For samples of SAPUI5 controls see:

https://sapui5.hana.ondemand.com/explored.html#/entity/sap.viz.ui5.controls.VizFrame/samples

Alternatively: create HTML5 application in WebIDE + bind to data in HANA

## **Predictive Analysis Library**

#### Capability for SAP HANA Cloud Platform - predictive services on top

Create dashboards for existing data – and based on that make predictions for future trends. The Predictive Analysis Library is a built-in and native SAP HANA library to perform in-database data mining and statistical calculations.

#### **Key capabilities**

- Support over 60 algorithms in the area of:
  - Association
  - Classification
  - Clustering
  - Preprocessing
  - Regression
  - Social Network Analysis
  - Statistics
  - Time series

#### **Benefits**

- Native predictive algorithms
- In-database processing for powerful and fast results
- Quicker implementations and embed predictive into applications, solutions, and BI environments



## **SAP Cloud for Analytics**

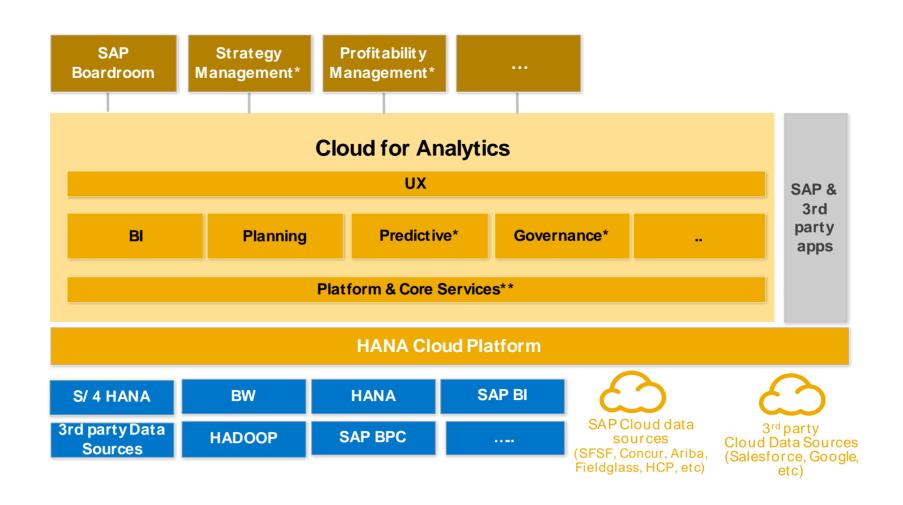
#### Analytics capability for SAP HANA Cloud Platform







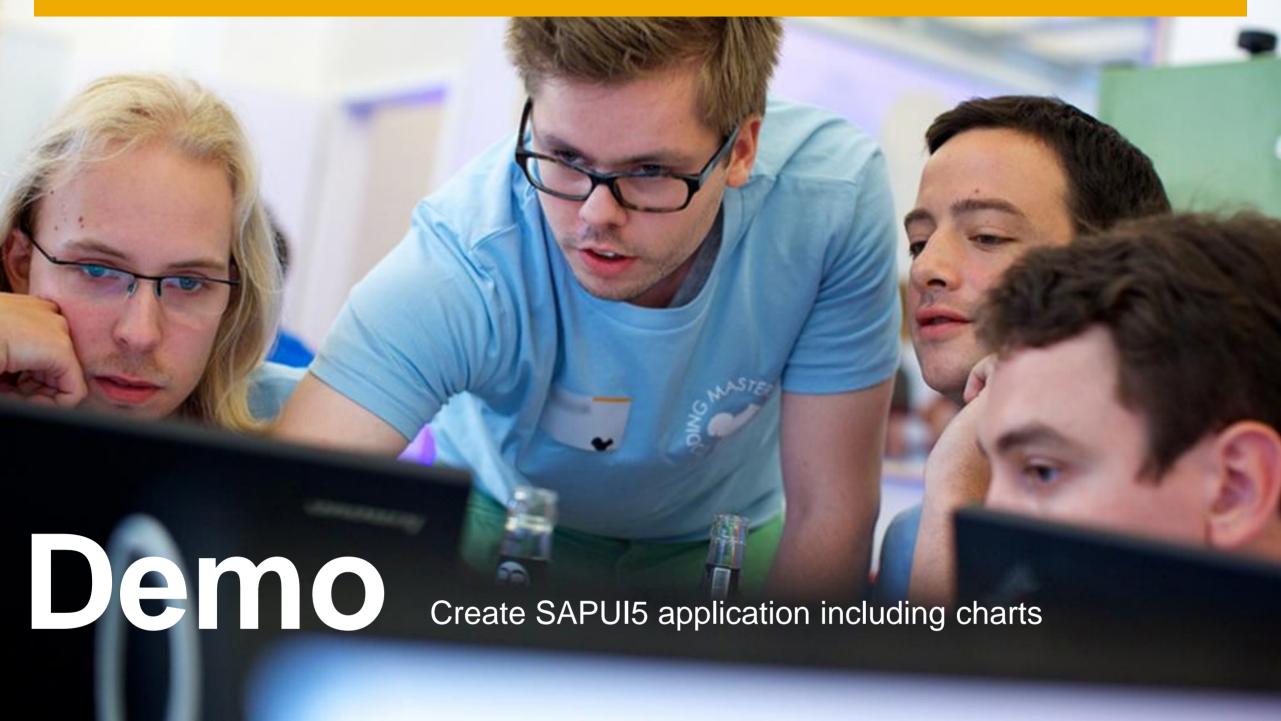
...to SHOP floor



<sup>\*</sup> Launch date TBC

<sup>\*\*</sup>not sold separately







# Relevant capabilities in SAP HANA Cloud Platform

Load data

Create views

Create visualizations + dashboards

Embed in context



#### **Portal Services**

#### Embed visualizations into SAP HANA Cloud Portal

Integrate your analytics applications or dashboards into business sites

SAP HANA Cloud Portal provides an easy way for creating cloud-based business sites for your customers, partners and employees.

#### **Key capabilities**

- A service of the SAP HANA Cloud Platform
- Designed for mobile as a leading design principle
- Integrated with on premise and cloud based systems (SAP and non-SAP)
- For extending SAPs SaaS offerings (e.g. SuccessFactors, C4C)
- Role-based user authorization

#### **Benefits**

- Multi-language site support
- Fast branding and customization
- Sites and Fiori experiences entry points
- Integrated developer flows with SAP Web IDE





# Roadmap



## **Analytics capabilities in SAP HANA Cloud Platform**

Road map overview – incl. key themes and capabilities in this context

#### **Today**

#### **Planned Innovations**

#### **Future Direction**

- Connect On-Premise data integration or ETL (extract, transform, load) tools via SAP HANA Cloud Connector to SAP HANA in HCP
- Internet-of-Things: HCP platform services to integrate sensor data
- Data import leverage SAP HANA native capability

- Data Integration
- Smart Data Integration as part of SAP HANA Enterprise Information Management (EIM) leverage SAP HANA native capability
- Smart Data Quality as part of SAP HANA Enterprise Information Management (EIM) leverage SAP HANA native capability

#### Charts, Dashboards & Analytics

- Custom development: Create own SAPUI5 based analytical applications on top of SAP HANA data
- Connect On-Premise SAP Business Objects clients to SAP HANA in HCP
- Predictive Services embed predictive into applications, solutions, and BI environments
- SAP Cloud for Analytics, HCP edition
  - Collaborative analysis and planning
  - Visualization and storytelling

- SAP Cloud for Analytics:
  - Location Analytics
  - Enhanced analytics
  - Drill-down to source system
  - Big data optimization (Hadoop integration etc)

04. April 2016

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



# Summary



## **Summary**

#### Key takeaways

Create your own analytical applications on top of SAP HANA in SAP HANA Cloud Platform today!

Various options available to load data into SAP HANA, create Fiori-like user interfaces including charts and embed into a bigger context, e.g. Fiori launchpad.

Exciting roadmap with available and planned innovations, e.g. for

- 3
- data integration
- predictive services that can be used on top of your SAP HANA Cloud Platform applications
- SAP Cloud for Analytics to provide easy-to-use toolset for analysts



# Thank you

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