



6 And A Half Things To Make Your Next Generation Data Warehouse Successful

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Session ID 82943, May 9th, 2019

PUBLIC

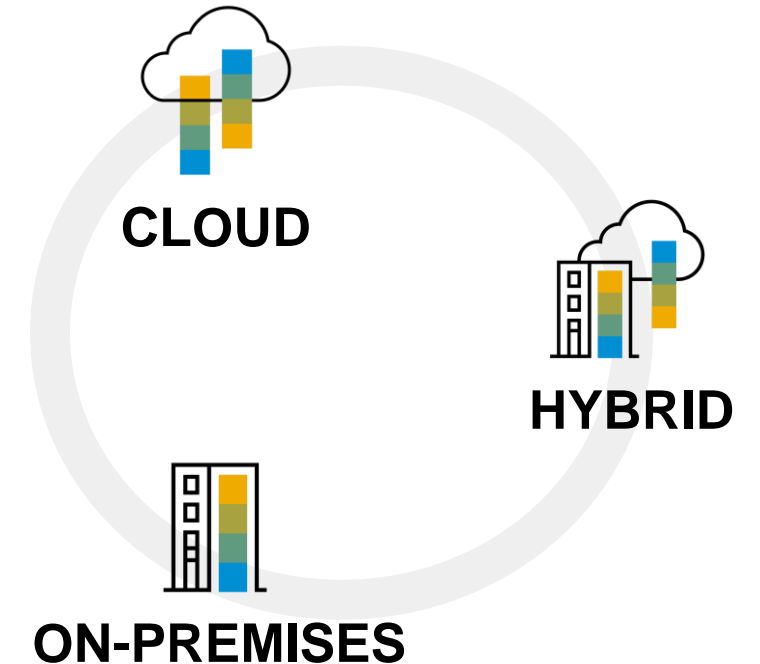
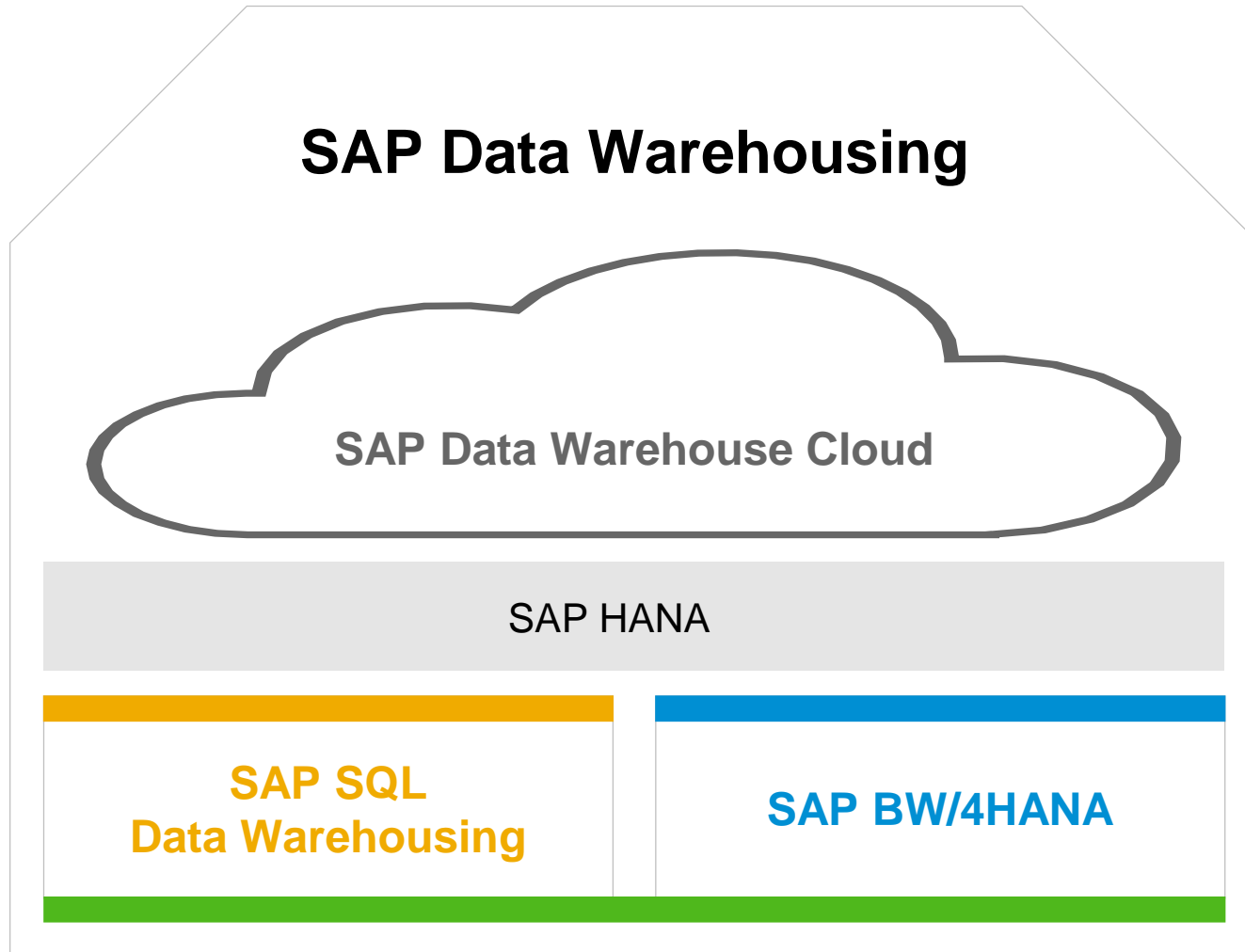
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SAP Data Warehousing Approaches



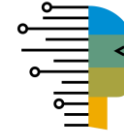


**What are these six and
a half things**

1

AGILE

What does **Agility** mean?



Agility in terms of

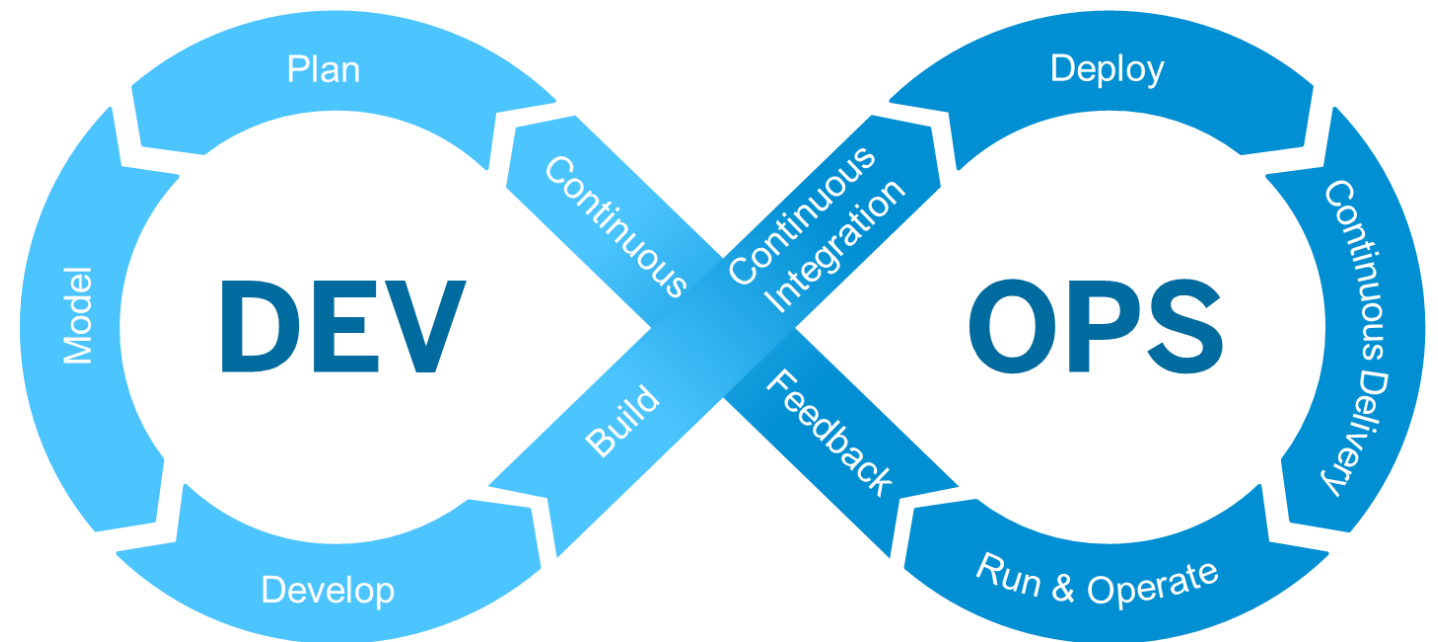
- Faster time to market
- Building business centric and data driven multi-model apps – not another silo
- Quickly respond to changing business needs



Agile Development in a DevOps style can be the answer

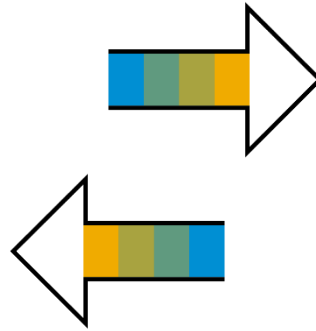
Unifying software development (Dev) & operations (Ops)

- Improved deployment frequency
- Faster time to market
- Shortened lead time between fixes
- Automate repetitive tasks
- Tool based development process



Agile Development is also a major change in culture

NEVER
CHANGE
A RUNNING SYSTEM



CHANGE
AS OFTEN AS
POSSIBLE

What does **Agility** mean?



Agility in terms of

- Faster time to market
- Building business centric and data driven multi-model apps
 - not another silo
- Quickly respond to changing business needs
- Agile deployment
 - Development in short cycles, many versions (frequency)
 - Business involvement early + often



TIME TO VALUE



2

FLEXIBLE

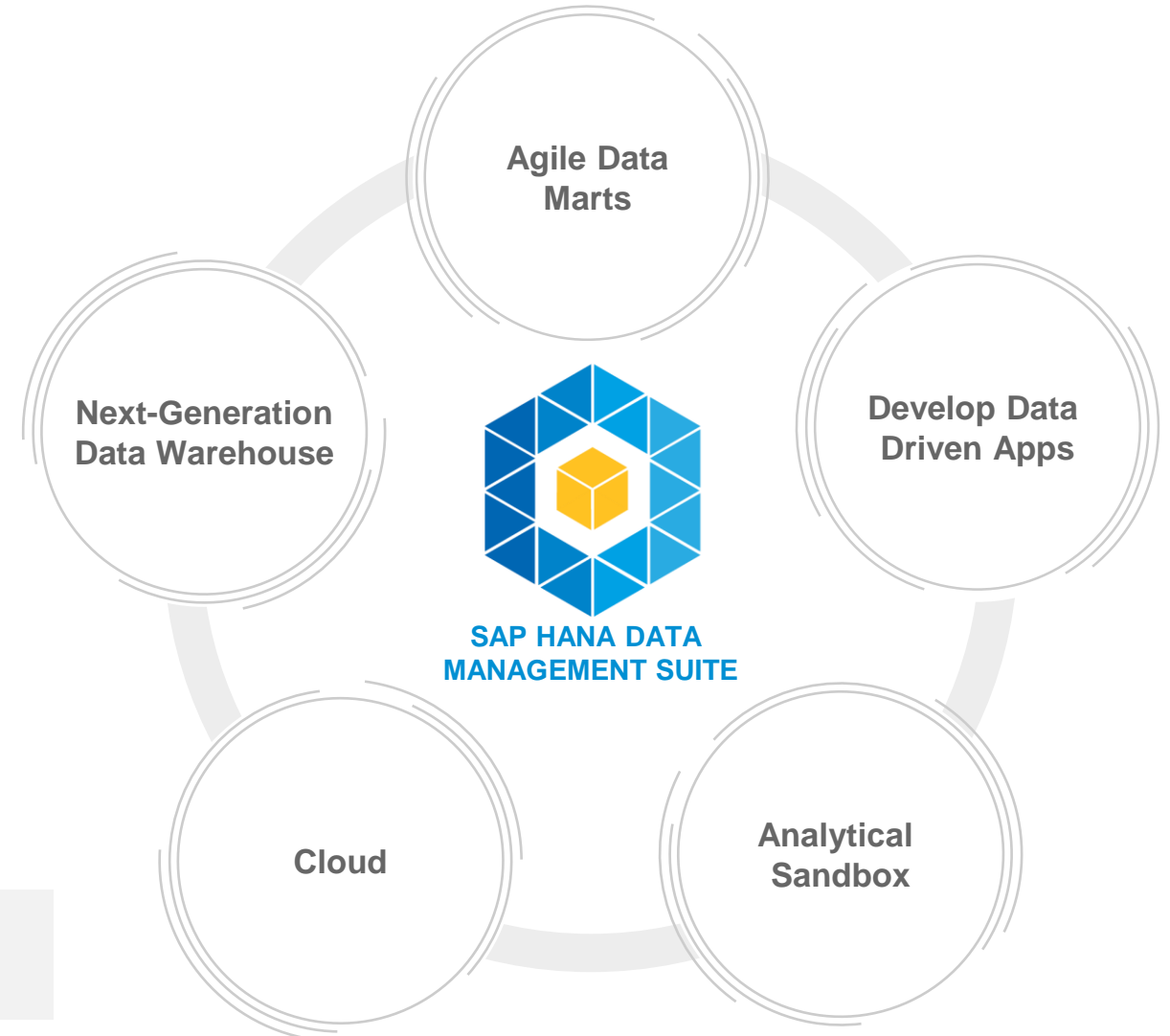
What does **Flexibility** mean?



2

Flexibility in terms of

- Use cases and (containerized) Deployment
- Multi-model applications (OLAP | OLTP | HTAP)
- Flexible modeling (data vault | 3NF | dimensional)
- Connect different data persistencies & data sources (real-time, batch, remote)



CONNECTED DATA

3

SECURE

What does Security mean?



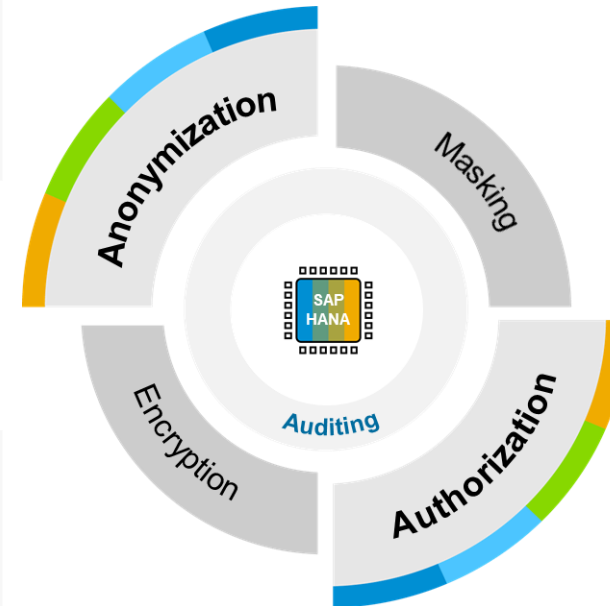
3

Security in terms of

- Secure data access
- Encryption
- Data privacy (masking, anonymization)
- Auditing
- Data governance, compliance & lineage (Reliability of the data)

The first data platform with real-time anonymization to allow for real insight without exposing real data

Dynamic data masking to hide and protect sensitive information



Comprehensive encryption for data at rest and in motion

SAP's security authorization model reuse allow any app to access SAP data securely

Monitor and record selected actions performed

TRUSTED DATA



4

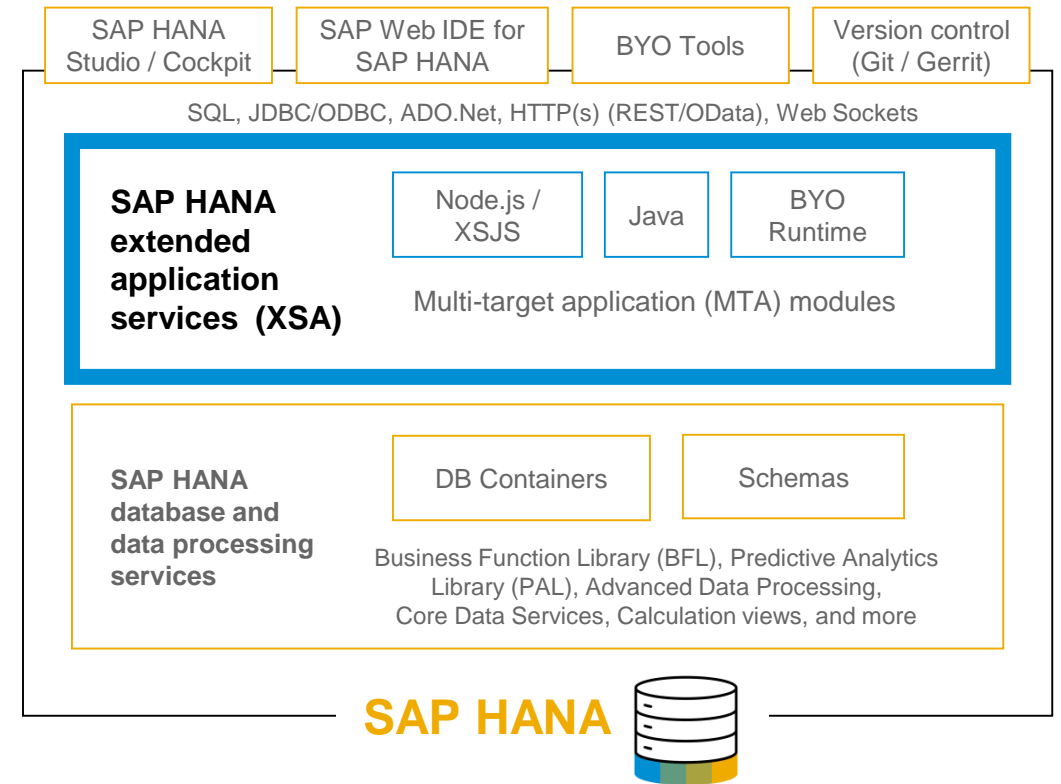
OPEN

What does **Openness** mean?



Openness in terms of

- Open connectivity (ODBC, JDBC, RESTful Web Services)
- Choice of languages (SQL, Java, node.js, python, ...)
- Support structured and multi-structured datatypes
- Open Source repositories and CI/CD tooling



LEVERAGE EXISTING SKILLS

5

CONTENT

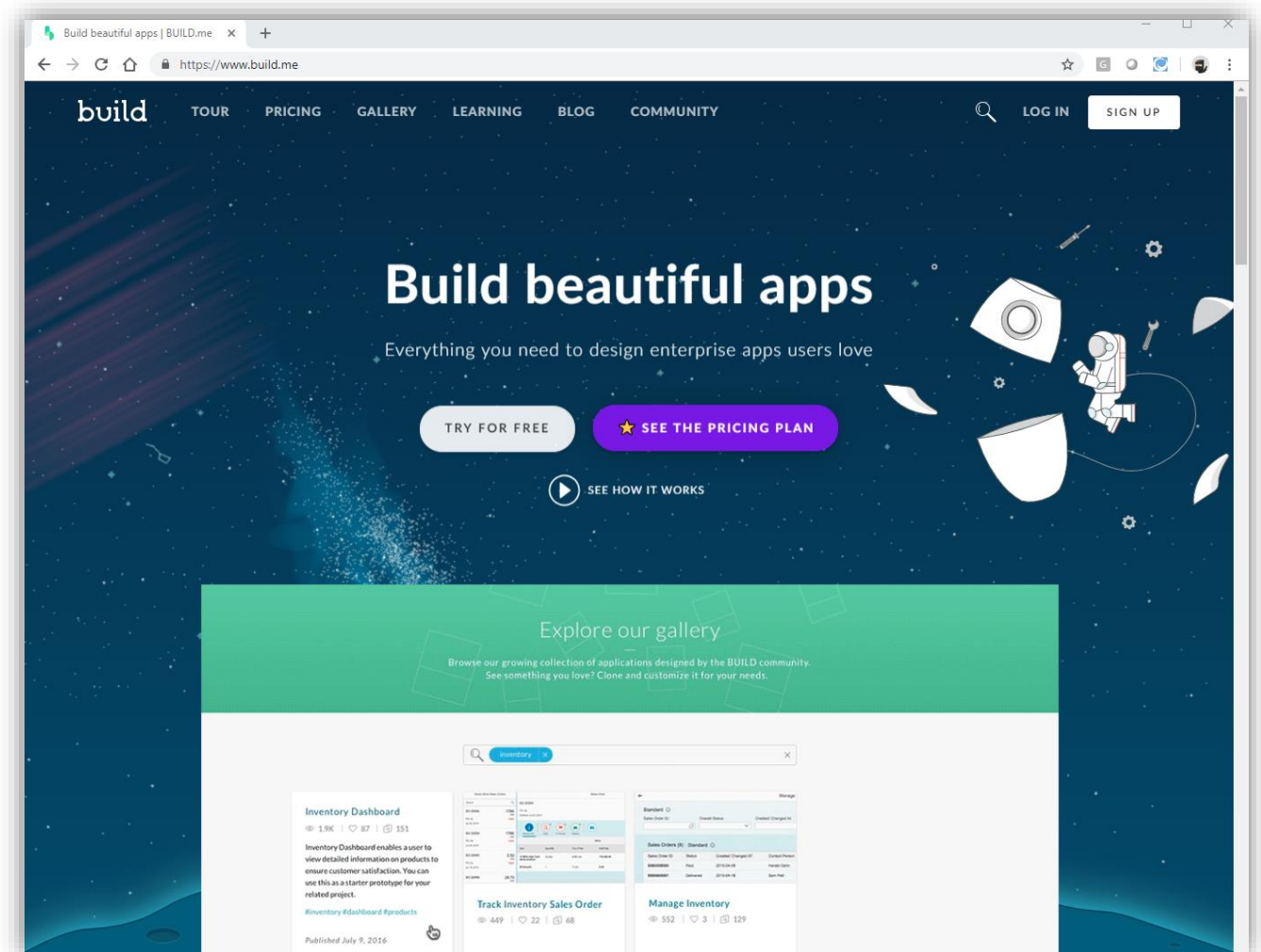
What does **Content** mean?



5

Content in terms of

- Industry models, LOB and Partner content for a quick start
- Reverse engineering
- Design Frameworks



Leveraging Platform Capabilities

5



Support All Data

Multi-model support to combine structured and semi-structured data



Spatial

Combine business data with geographical data



Graph

Build and analyze relationships in data on the fly



Text & Search

Full-text search, navigation, and access to structured and unstructured data



SAP HANA Data Management Suite

Manage data at scale

Intelligent data tiering and advanced compression for cost-effective scale



Predictive & Machine Learning

Proactive and intelligent decisions using predictive and machine learning models



Streaming

Real-time analysis of data streams



Time Series Data

Capture and analyze a sequence of successive data points



What does **Content** mean?



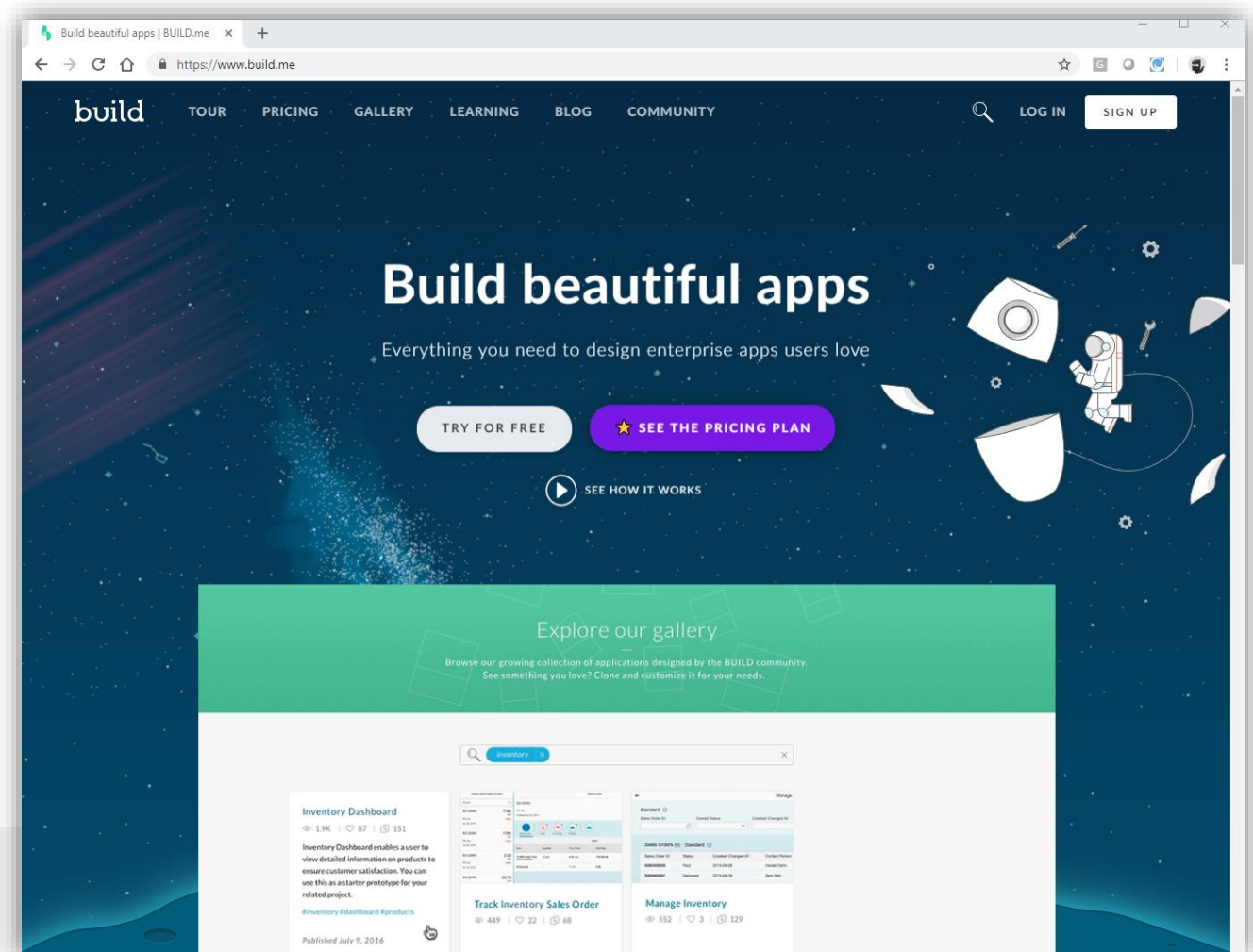
5

Content in terms of

- Industry models, LOB and Partner content for a quick start
- Reverse engineering
- Design Frameworks
- Leveraging Platform Capabilities



ENRICH & ENHANCE



6

AUTOMATION

What does **Automation** mean?



Automation in terms of

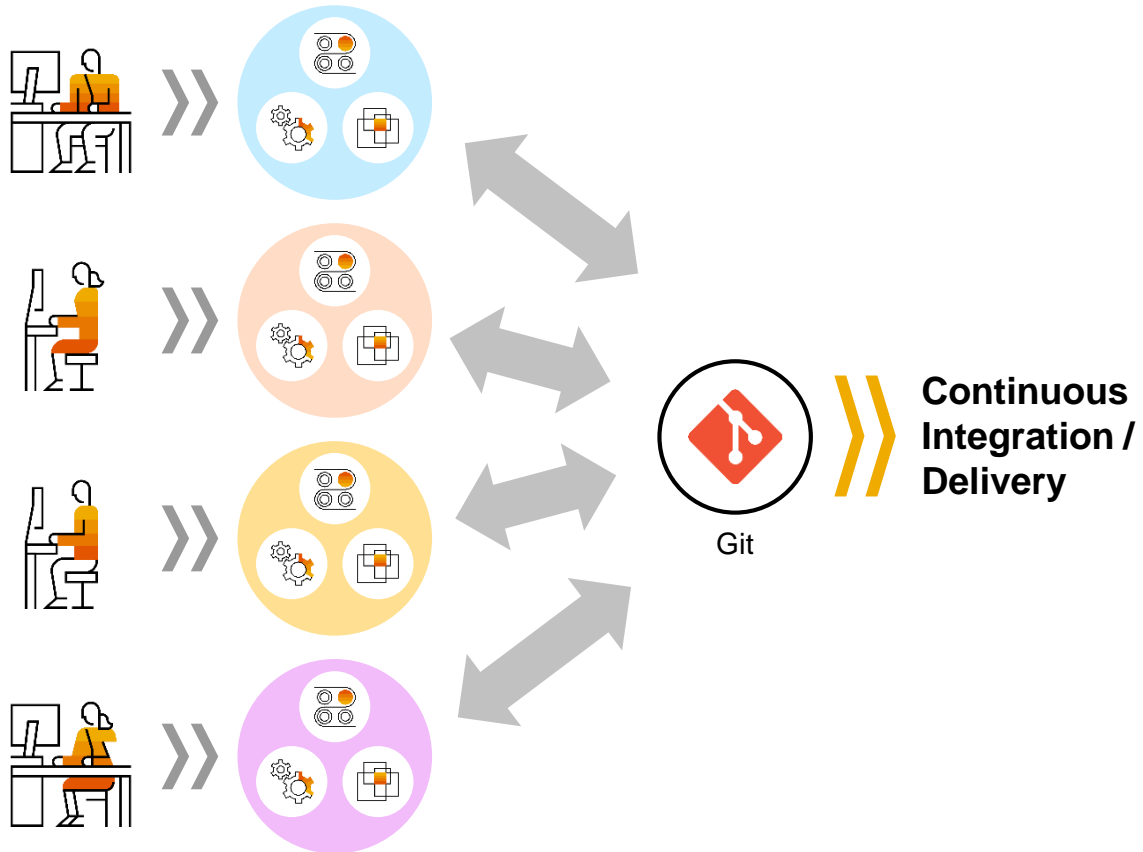
- Reduction of manual & repetitive tasks
- Minimize admin work
- Intelligent data distribution
- Open for open source and partner automation tooling

6

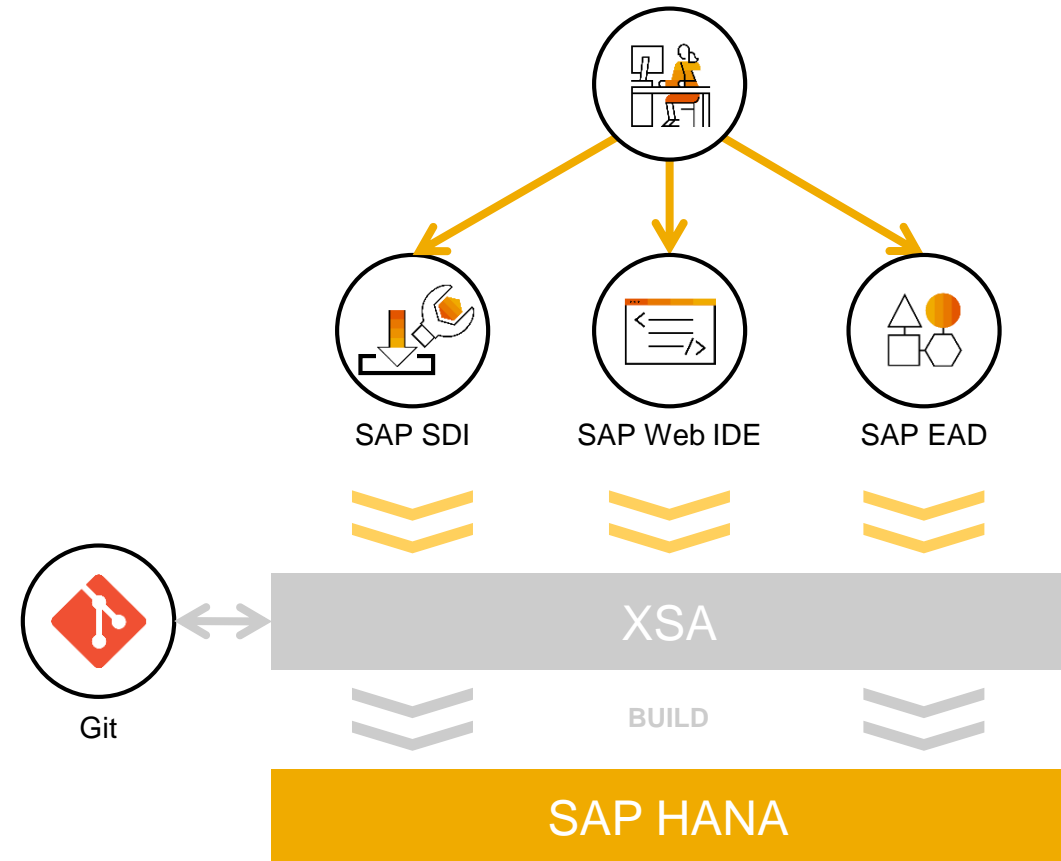


Modern DWH development

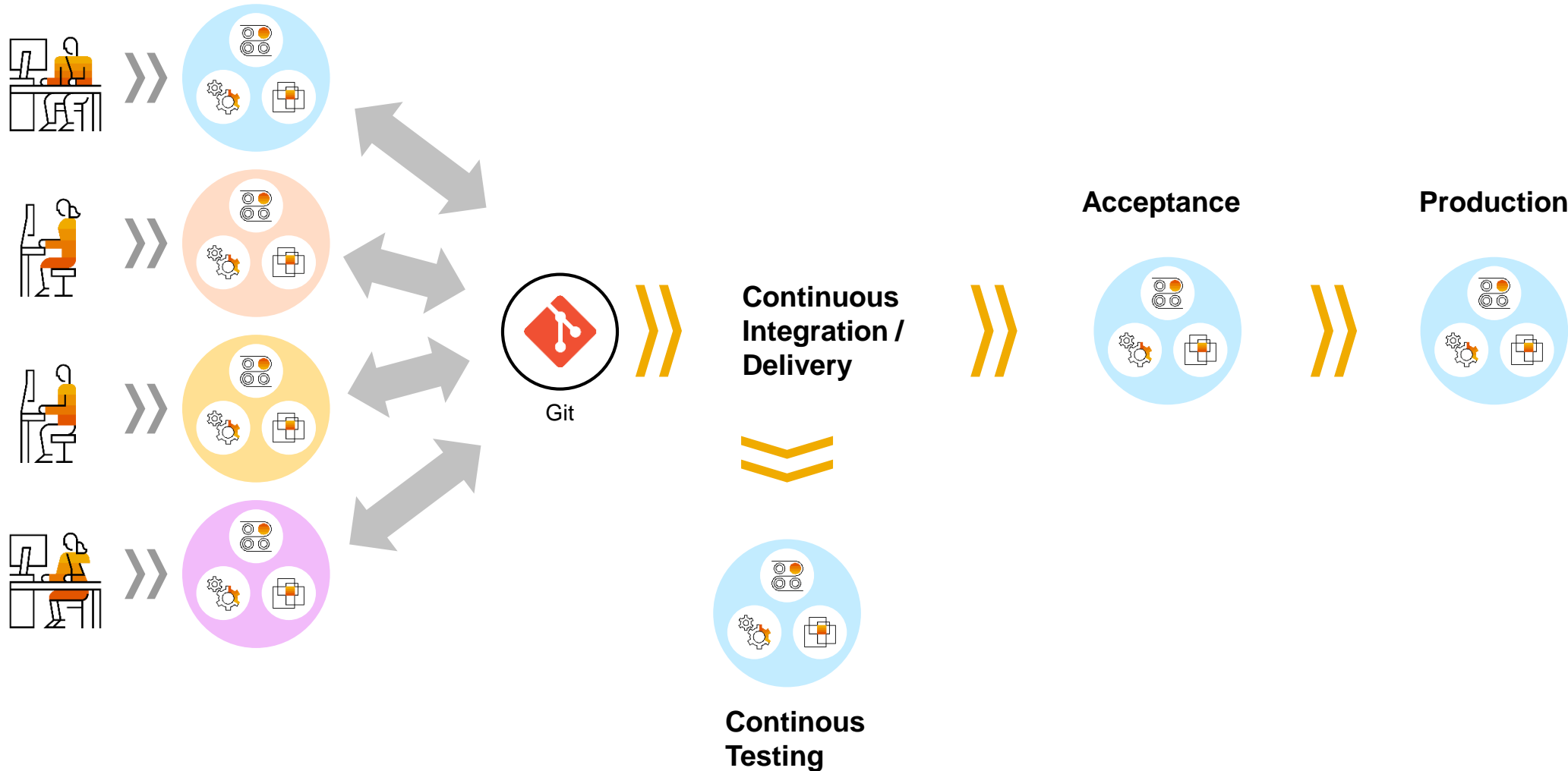
Developer and feature isolation enabling parallel development and test



Application development in the XSA environment



Continuous Testing, Integration & Delivery



What does **Automation** mean?



6

Automation in terms of

- Reduction of manual & repetitive tasks
- Minimize admin work
- Intelligent data distribution
- Open for partner automation tooling



FOCUS ON BUSINESS VALUE



■ 5

PERFORMANCE

What does **Performance** mean?



.5

Performance in terms of

- Good performance is expected – even for complex analyses
- Query concurrency
- Self-optimizing views
- Reliability and system stability is mandatory

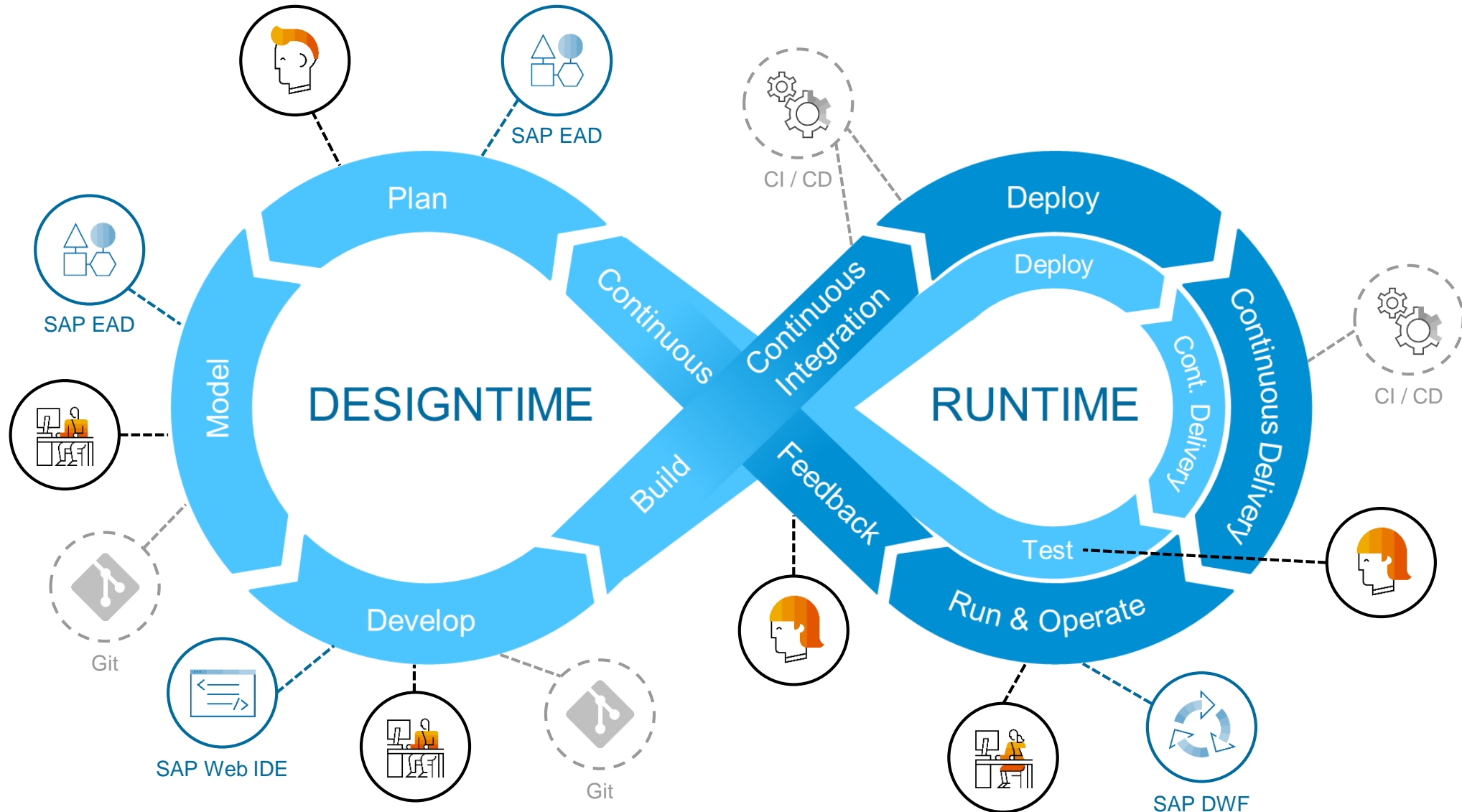


JUST EXPECTED

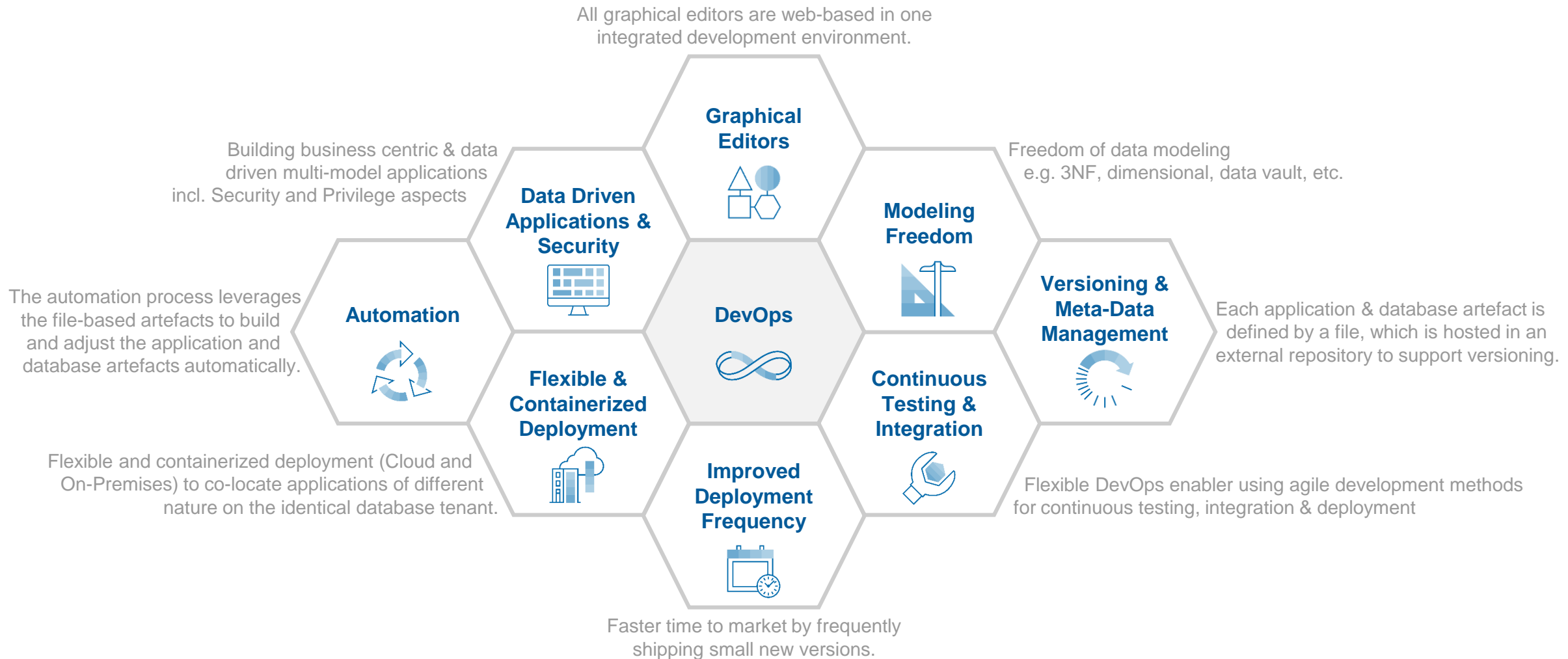


**How can you leverage the
SAP SQL Data Warehousing**

Building Agile & Data Driven Applications with SAP HDMS Toolset



Why should you choose SAP SQL Data Warehousing using SAP HANA Data Management Suite



More Information



The screenshot shows a SAP blog post titled "SAP SQL Data Warehousing with HANA" by Klaus Peter Sauer. The page includes a header with navigation links, a main title, author information, and social media sharing options. The content area features a large image of a lighthouse.

Landing Page

<https://blogs.sap.com/2017/12/19/sap-sql-data-warehousing-with-hana/>

The screenshot shows a SAP community page titled "SAP SQL Data Warehousing". It features a header with navigation links, a main title, and a brief introduction. Below the text are three icons representing different aspects: a lightning bolt for the trial version, a server rack for tool support, and a cloud for implementing a big data warehouse.

Community Page

<https://www.sap.com/community/topics/sql-data-warehousing.html>

The screenshot shows the SAP Help Portal for the "SAP HANA Data Warehousing Foundation". It includes a header with navigation links, a main title, and a search bar. Below the search bar are three sections: "What's New", "Getting Started", and "Additional Information", each with a list of links to relevant documents.

Documentation

https://help.sap.com/viewer/p/SAP_HANA_DATA_WAREHOUSING_FOUNDATION

The screenshot shows a SAP blog post titled "SAP SQL Data Warehouse trial" by Axel Meier. The page includes a header with navigation links, a main title, author information, and social media sharing options. The content area features a large image of a person's face.

Trial Version

<https://blogs.sap.com/2018/05/31/sap-sql-data-warehouse-trial/>

The screenshot shows a YouTube playlist titled "SAP HANA Academy - Big Data Warehousing". It features a header with navigation links, a main title, and a list of seven videos. The first video is "SAP HANA Academy - Big Data Warehousing : Overview".

SAP HANA Academy

<https://www.youtube.com/playlist?list=PLkzo92owKnVyWRik3dLVj1ol3MrA7UzMR>

The screenshot shows the SAP Training page for "SAP HANA Data Warehousing Foundation". It includes a header with navigation links, a main title, and a search bar. Below the search bar are three sections: "Classroom Training", "Virtual Live Classroom", and "Customer Specific Training", each with a list of links to relevant training materials.

SAP Training HDW410

<https://training.sap.com/course/hdw410-sap-sql-data-warehousing-classroom-016-at-de/>

The Data Bits & Bites for Busy People

The **Data Bits & Bites** program is a weekly series of “WHAT IS” and “HOW TO” videos and live webinars on SAP Data Management and Database technologies.

SAP SQL Data Warehousing Sessions

- 31.01.** *How is an SAP HANA Data Warehouse Different?*
- 07.02.** *Conceptual Modeling with SAP Enterprise Architecture Designer*
- 14.02.** *Physical Modeling with SAP Enterprise Architecture Designer*
- 21.02.** *Clone, edit and build data warehouse artifacts with SAP Web IDE & Git*
- 28.02.** *How to Use Continuous Integration & Testing in your Data Management Environment*
- 14.03.** *How to Leverage Run & Operate in Your Data Management Environment*
- 28.03.** *Who is using SAP HANA for Data Warehousing and Why?*



DATA
BITS & BITES
FOR BUSY PEOPLE

Check out the sessions and sign up here:

<https://webinars.sap.com/data-bits-bites-sap-2019/en/home>

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As a Beta Experience Member, you'll be among the first to try out the SAP Data Warehouse Cloud Beta and provide feedback directly to our development teams.*



2. INTERACT WITH OUR EXPERTS

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3. STAY UP-TO-DATE

We'll keep you informed with helpful content on upcoming innovations and members-only events.



* Beta access is not guaranteed. Beta Experience Members must meet certain eligibility requirements to gain access to the SAP Data Warehouse Cloud Beta. Further terms and conditions may apply.

Q&A

For questions after this session, contact me at
klaus-peter.sauer@sap.com.

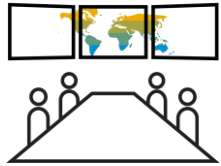
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Annual Conference mobile
app.



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Attend these sessions:



Escape From Data Sprawl with Real-Time Integration

Tues, May 7th at 12:30 pm-12:50 pm | PL801

Create a Unified Data Platform for Tomorrow

Wed, May 8th at 12:30 pm-12:50 pm | PL801

Explore Why You Should Run Your Data Warehouse in the Cloud

Wednesday, May 8th at 3:00pm-3:40pm | PL801

Six and a Half Things to Make Your Next-Generation Data Warehouse Successful

Thursday, May 9th at 12:00 pm-12:40 pm | Room 319

Hear from other customers:



Customer Panel

Discover What's Next for Data Warehousing

Wed, May 8th at 11:00 am-11:40 am | Theater 3

Featuring: ARI Fleet, Harland Clarke and Treehouse Foods

Talk to an expert:



Topic Stations

Data Management for Analytics PL837

All day, May 7th–9th | Show Floor

SAP Data Warehouse Cloud PL836

All day, May 7th–9th | Show Floor

Presentation Materials

Access the slides from 2019 ASUG Annual Conference here:

<http://info.asug.com/2019-ac-slides>

Thank you.

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