



# Architecting for the Hybrid Multi-Cloud Enterprise

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June 18th, 2020

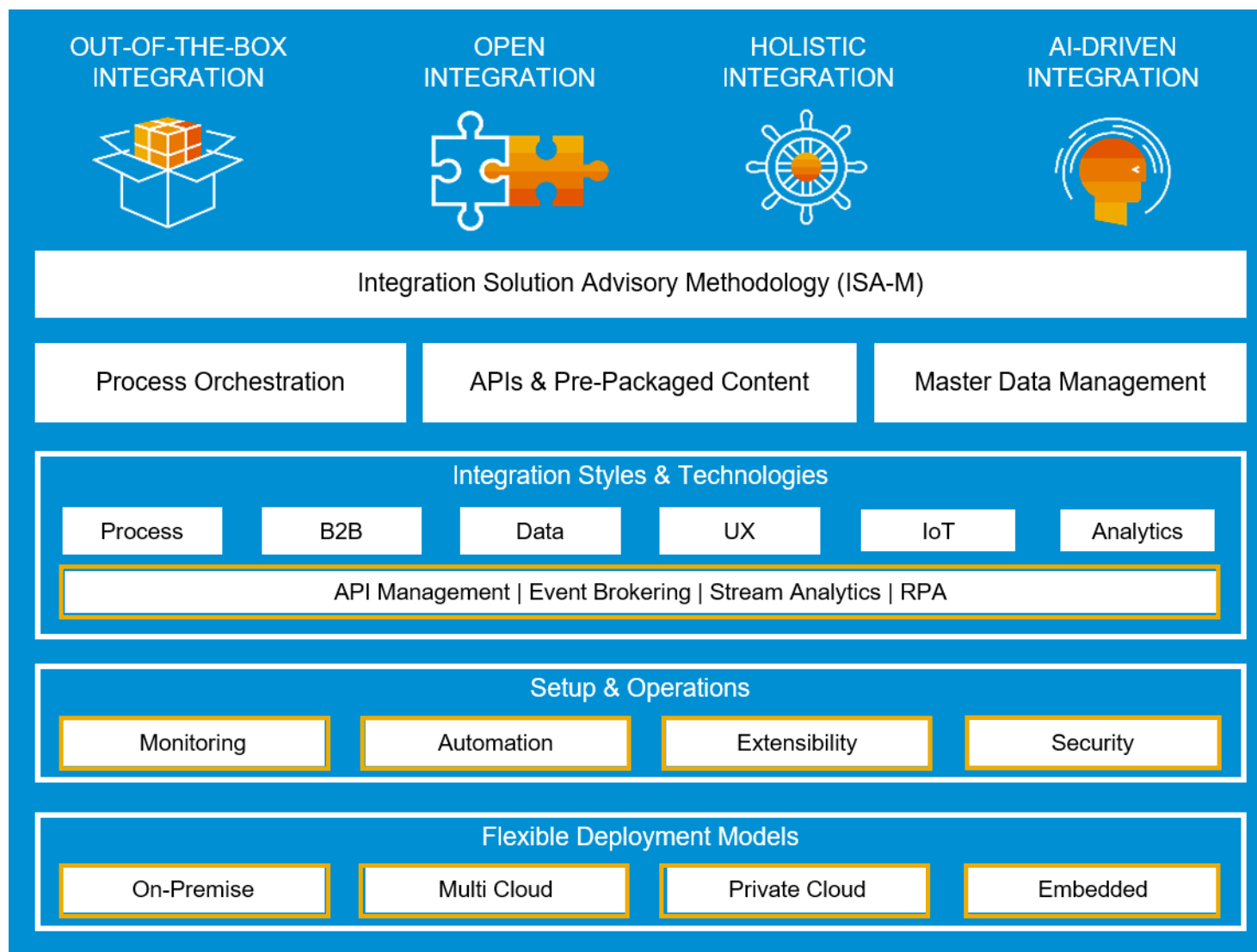
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Living in a Multi-Cloud Reality

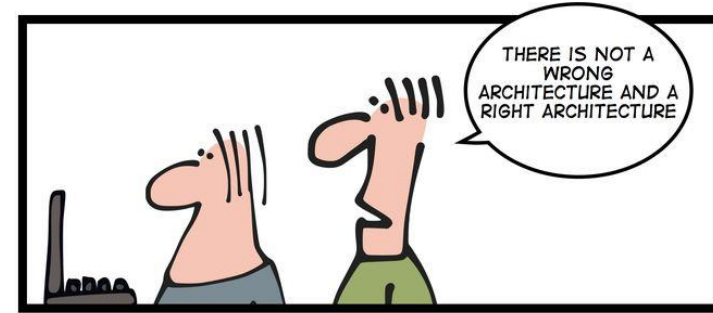
SAP's Cloud Centric Architecture Adoption

Making it All Work Together

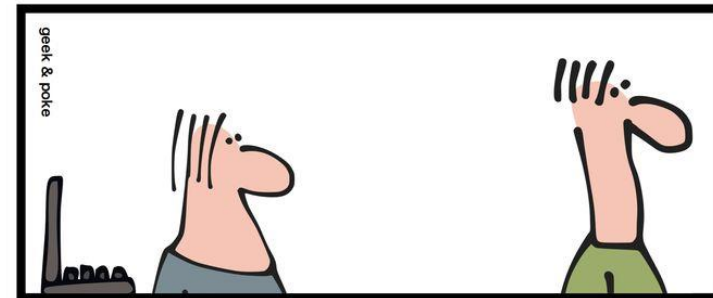
Things to Remember

# Selecting the correct architecture is so simple.....

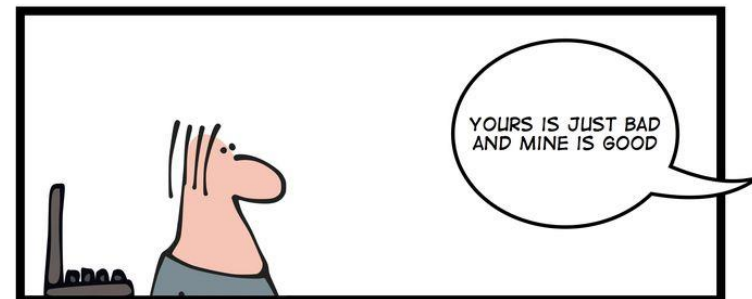
What is a good architecture?



IT ARCHITECTURE IS NOT ALWAYS SIMPLE



FORTUNATELY...



... MOST OF THE TIME IT IS

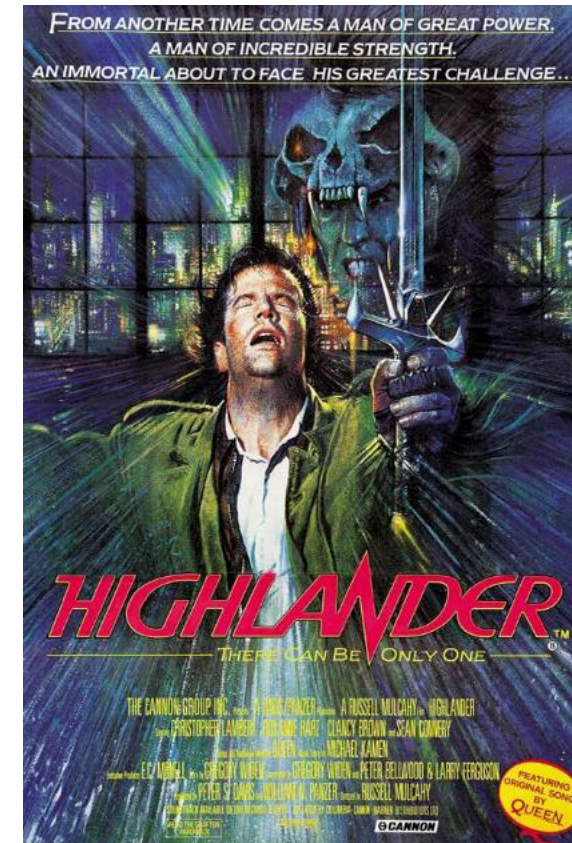
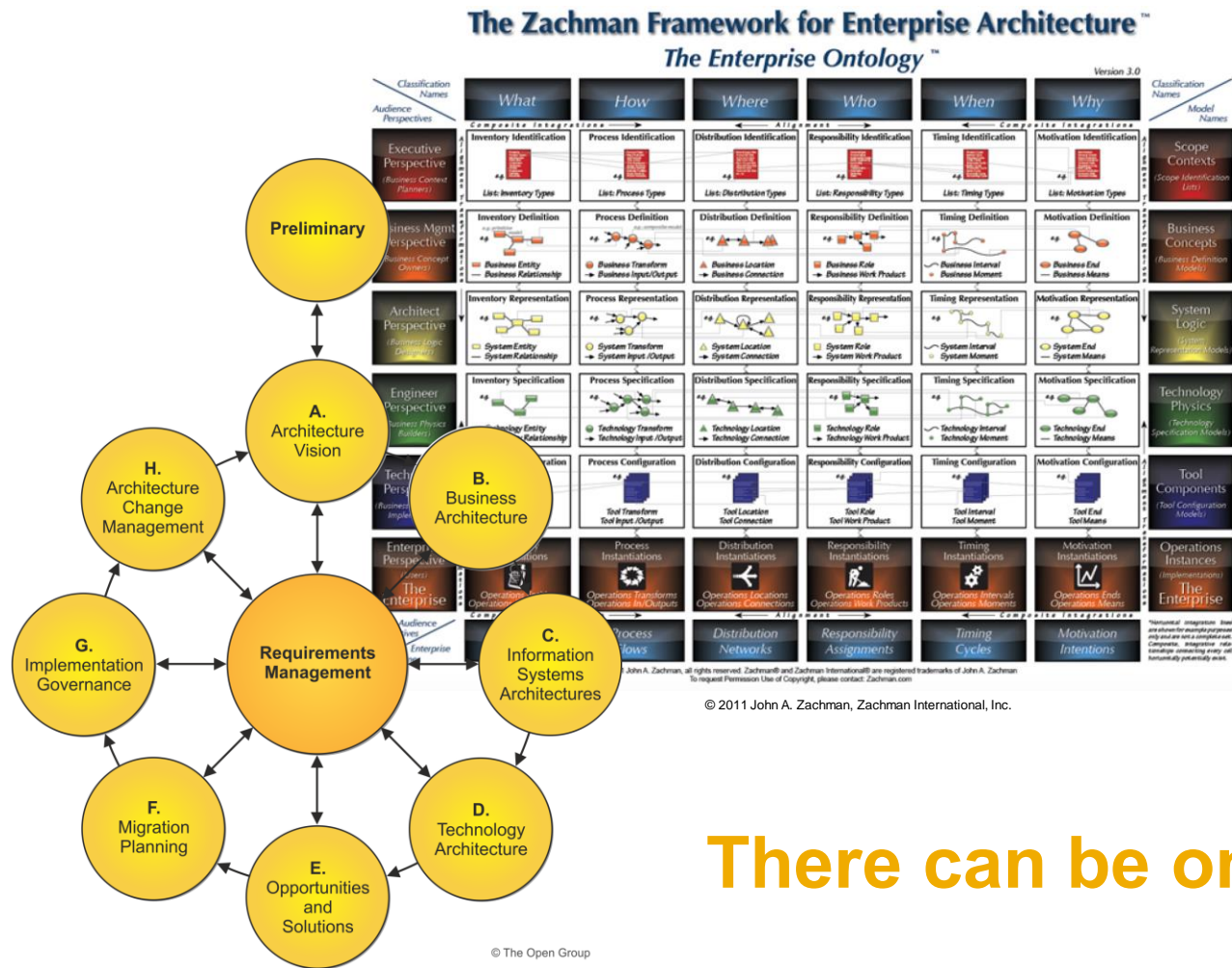
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# Living in a Multi-Cloud Reality







There can be only one...

# Leveraging Cloud...

## SOME BENEFITS

### SaaS

- Operational flexibility
- Financial flexibility
- Speed

### PaaS

- Full stack development ease
- Access to innovation technologies
- Speed

### IaaS

- Cost reduction/optimization
- Lower Risk/operational
- Elasticity/growth

## SOME CONSIDERATIONS

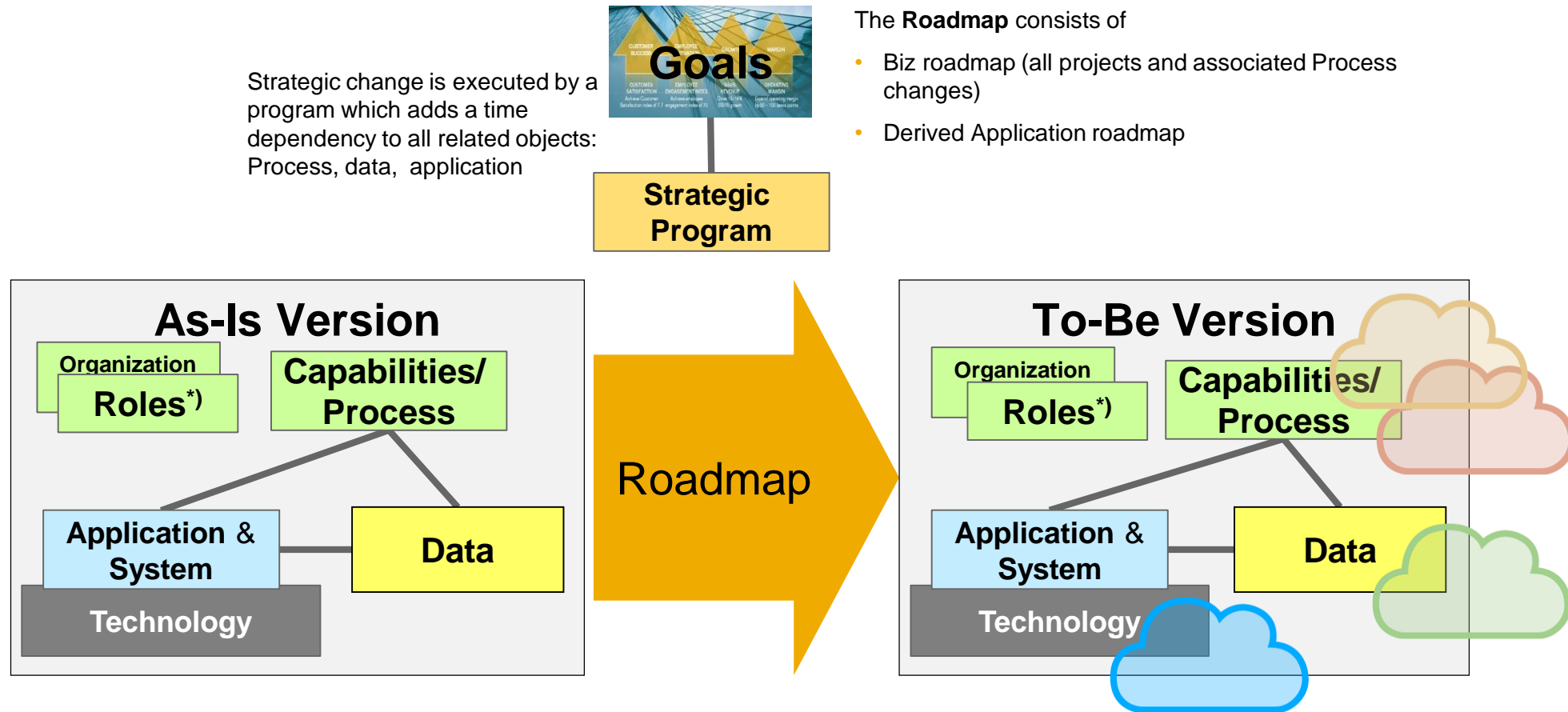
Ungoverned proliferation – increase per user costs  
Data proliferation and silos  
Business process fragmentation

Talent/skills shortfalls  
Inconsistent adoption  
Lock in

Unconstrained usage



# Enterprise Architecture Facilitates Strategic Change



“The whole idea of Enterprise Architecture is to enable the Enterprise to address orders of magnitude increases in complexity and orders of magnitude increases in the rate of change.” **John Zachman**

Gartner predicts that the 10 biggest public cloud providers will command, at a minimum, half of the total public cloud market until at least 2023.

Most organizations adopt a multicloud strategy out of a desire to avoid vendor lock-in or to take advantage of best-of-breed solutions,”

Enterprise IT spending for cloud-based offerings will grow faster than traditional (noncloud) IT offerings through 2022

“There are many nuances between platforms, and trying to build services in more than one simultaneously is challenging,”

© Gartner



# What we have heard from our customers

Enterprises are migrating to cloud providers at an accelerated pace . . .

**80%**

of enterprises will no longer use traditional data centers by 2025<sup>1</sup>

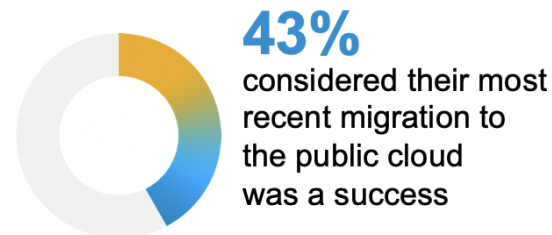
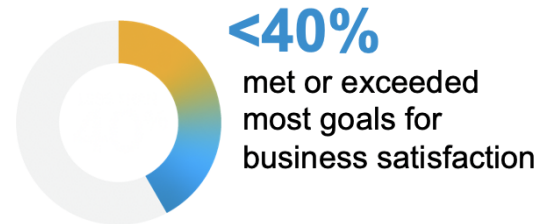
**68%**

of cloud services today are delivered by Hyperscalers<sup>2</sup>

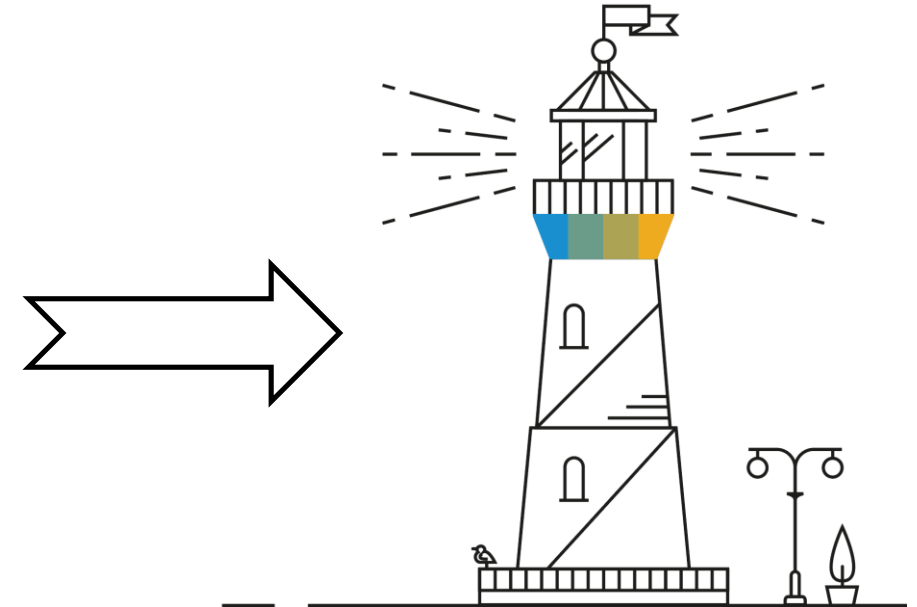
<sup>1</sup> Gartner, "The Data Center is Dead," July 2018

<sup>2</sup> Mission Critical Magazine, "Experts Predict the End is Nigh for Enterprise Data Centers, Long Live the Hyperscaler," October 2018

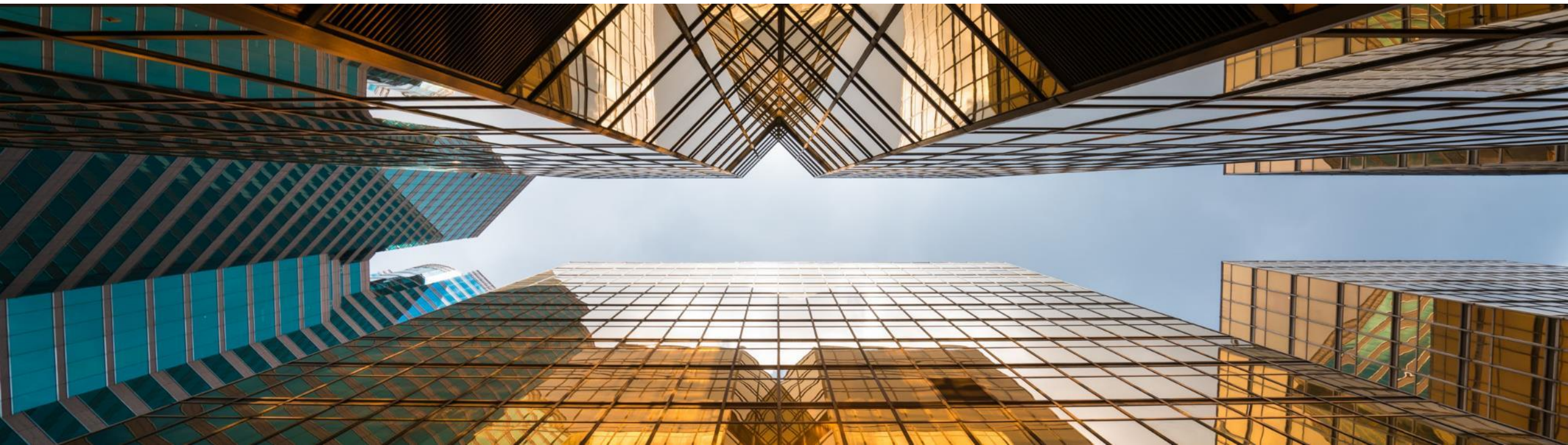
. . . But customer feedback has been mixed at best . . .



<sup>3</sup> The Wall Street Journal, "Lift-and-Shift Cloud Strategies Can Be Costly," December 2018



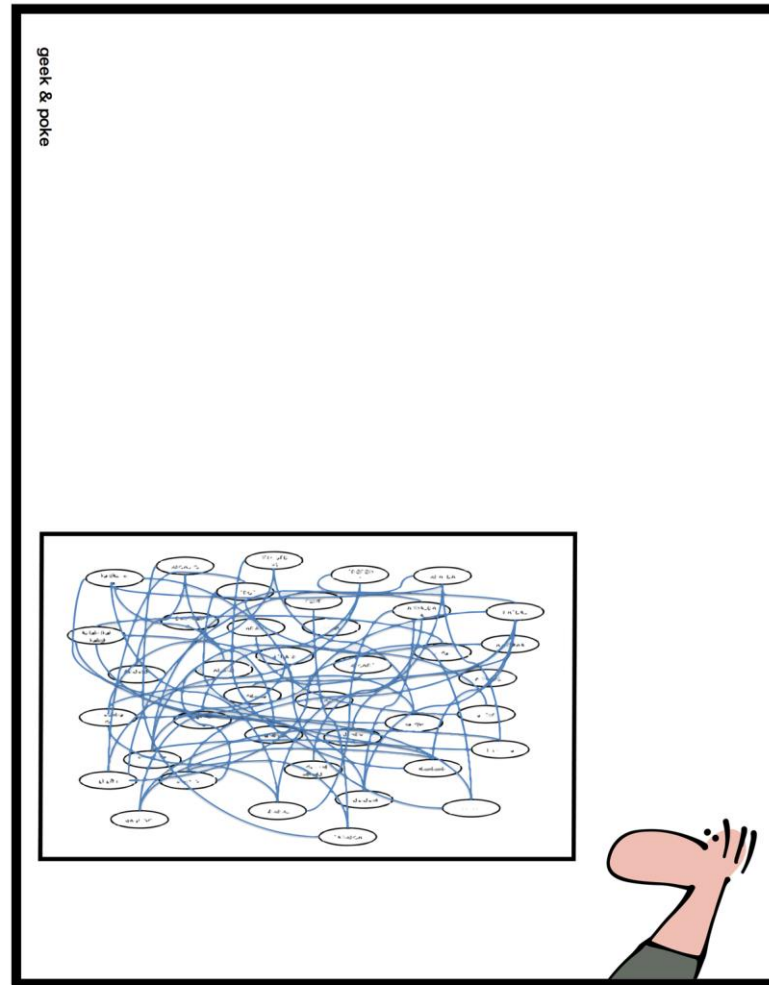
# SAP's Cloud Centric Architecture Adoption





# Business and IT alignment is so easy...

## SIMPLY EXPLAINED

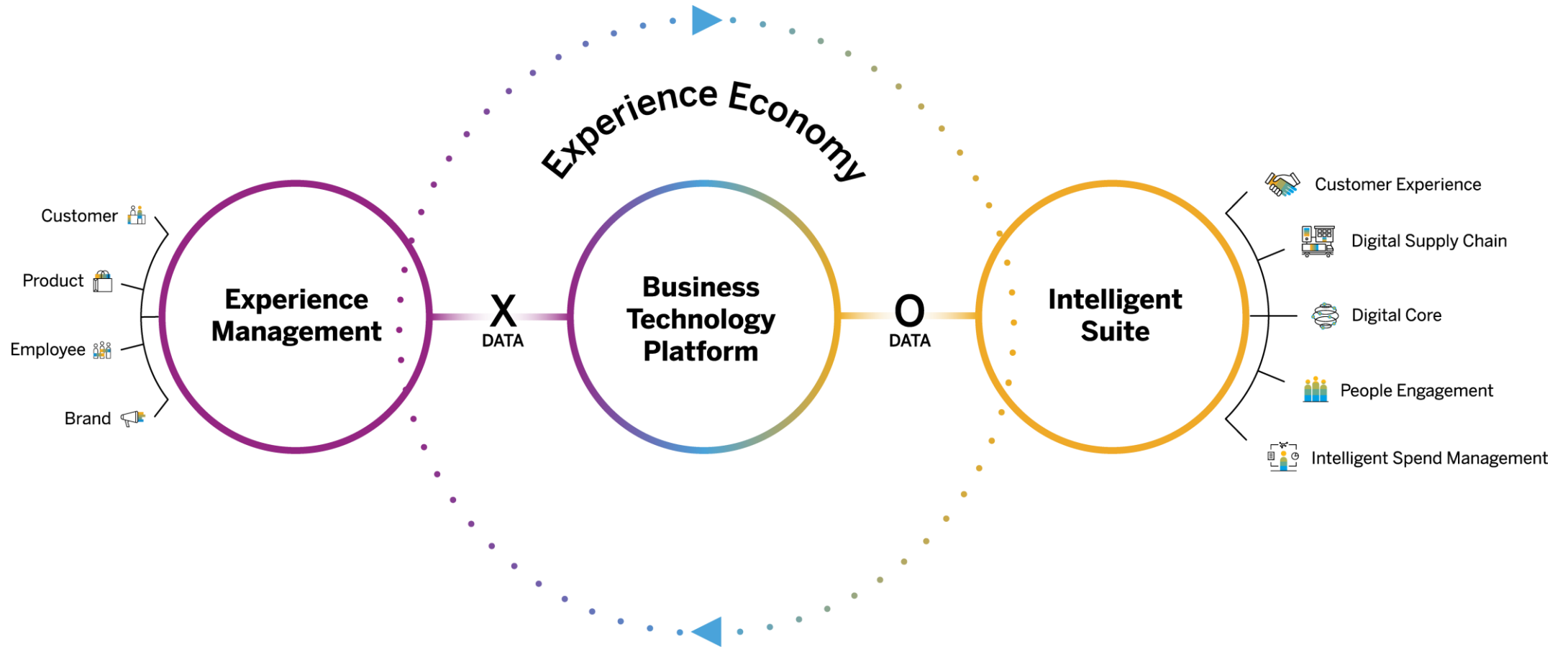


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BUSINESS IT ALIGNMENT

# Intelligent enterprises

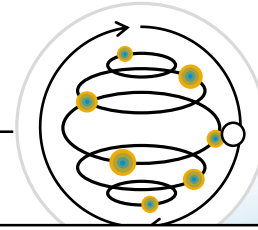
Turn insight into action, to win in the experience economy



**Listen, Understand & Act**

# SAP S/4HANA: the right solution for your needs

As a Service



SAP S/4HANA®

As a Product

**ONE Codeline**

**ONE Data Model -- ONE Semantic -- ONE UserExperience**

## SAP S/4HANA Cloud SaaS

## SAP S/4HANA AnyPremise on any infrastructure

<b>Implementation</b>	Greenfield with data / configuration migration
<b>Upgrades</b>	2-4 x year, managed by SAP
<b>Scope</b>	Full S/4HANA scope of core ERP & extended LoB content
<b>Extensibility</b>	In-App & Side by side via SCP / Extensibility Framework
<b>Deployment</b>	IaaS
<b>Configuration</b>	Standardized, Best Practice / Model Company based Restricted IMG access
<b>Operations</b>	99.9% Availability and High-Availability
<b>Security</b>	SAP Cloud security and data center strategy as SPOC
<b>Licensing</b>	Subscription-based



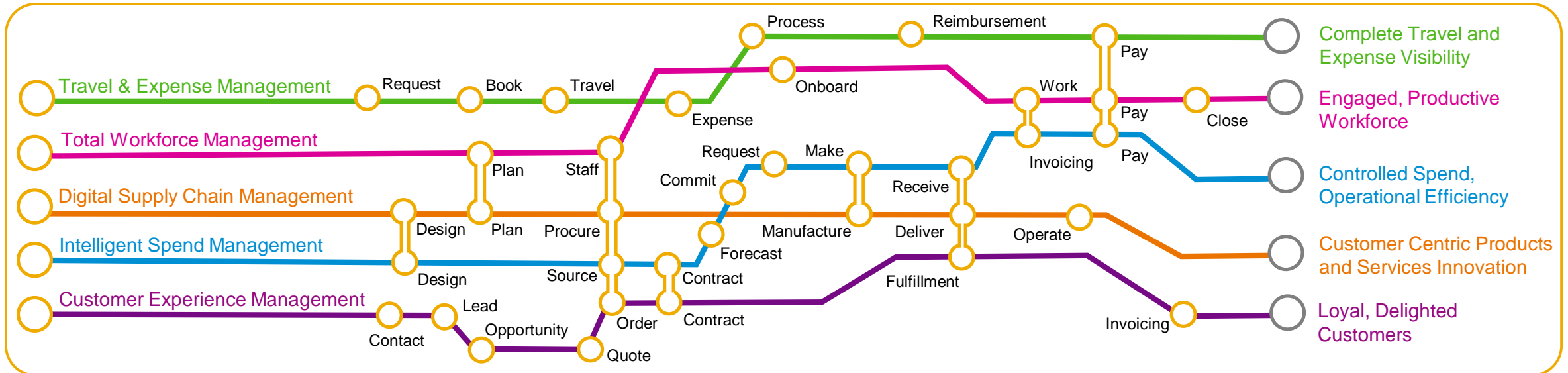
<b>Implementation</b>	Greenfield or conversion of existing implementations
<b>Upgrades</b>	Customer driven and managed
<b>Scope</b>	Unlimited variety of SAP and Partner Add-ons
<b>Extensibility</b>	Unlimited customer specific customization, modification and extensibility
<b>Deployment</b>	IaaS, Customer Data Center, Hosting Providers
<b>Configuration</b>	Model Company as starting point (recommended) Open IMG access
<b>Operations</b>	Customer and provider defined
<b>Security</b>	Shared customer / IaaS obligation
<b>Licensing</b>	BYOL + infrastructure subscription



# SAP's Intelligent Enterprise Framework Helps Build Agility, Responsiveness and E2E Visibility Across the Value Chain

## SAP “Metro Map” for E2E Business Processes

Seamlessly connecting your customers, partners, suppliers and employees across each end-to-end process, while providing complete enterprise-wide transparency



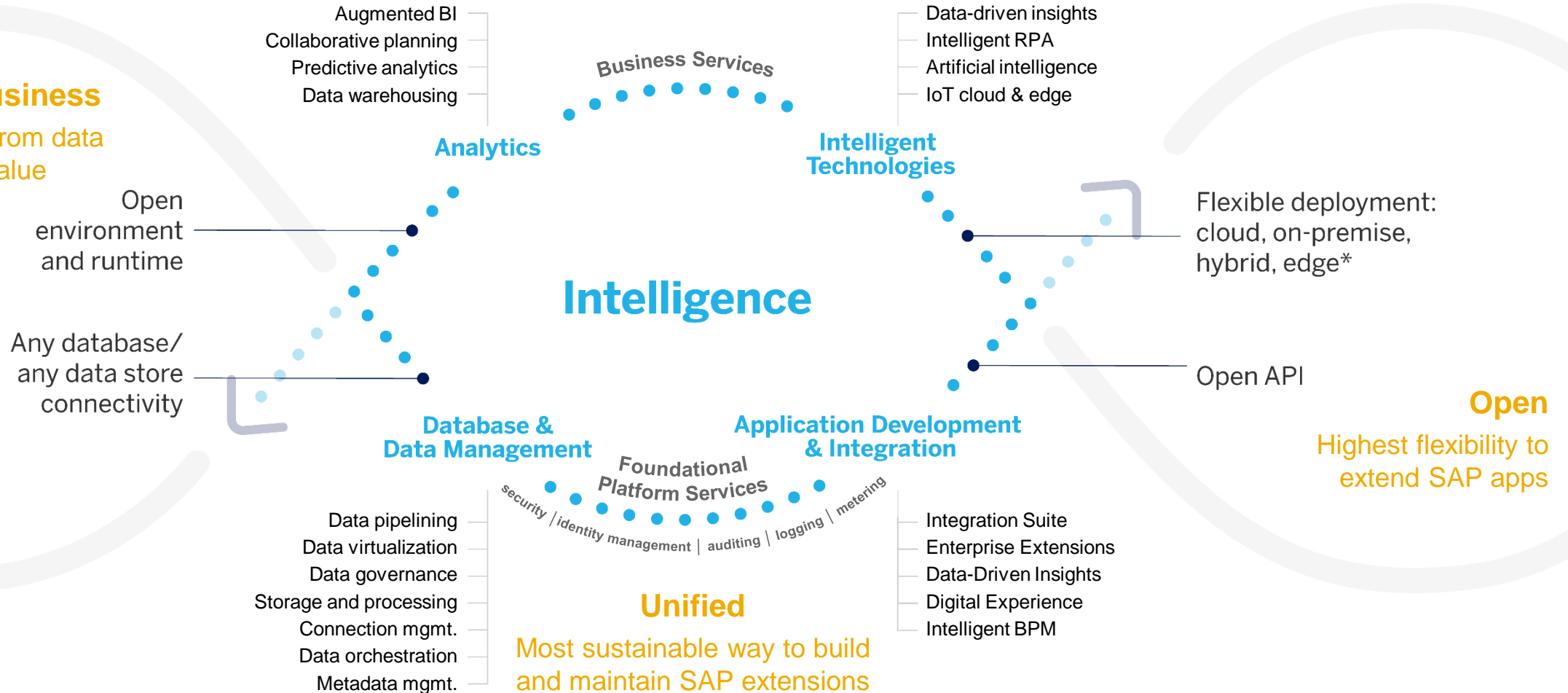


# SAP Business Technology Platform

## Powered by SAP Cloud Platform

### Built for business

Fastest way from data  
to business value

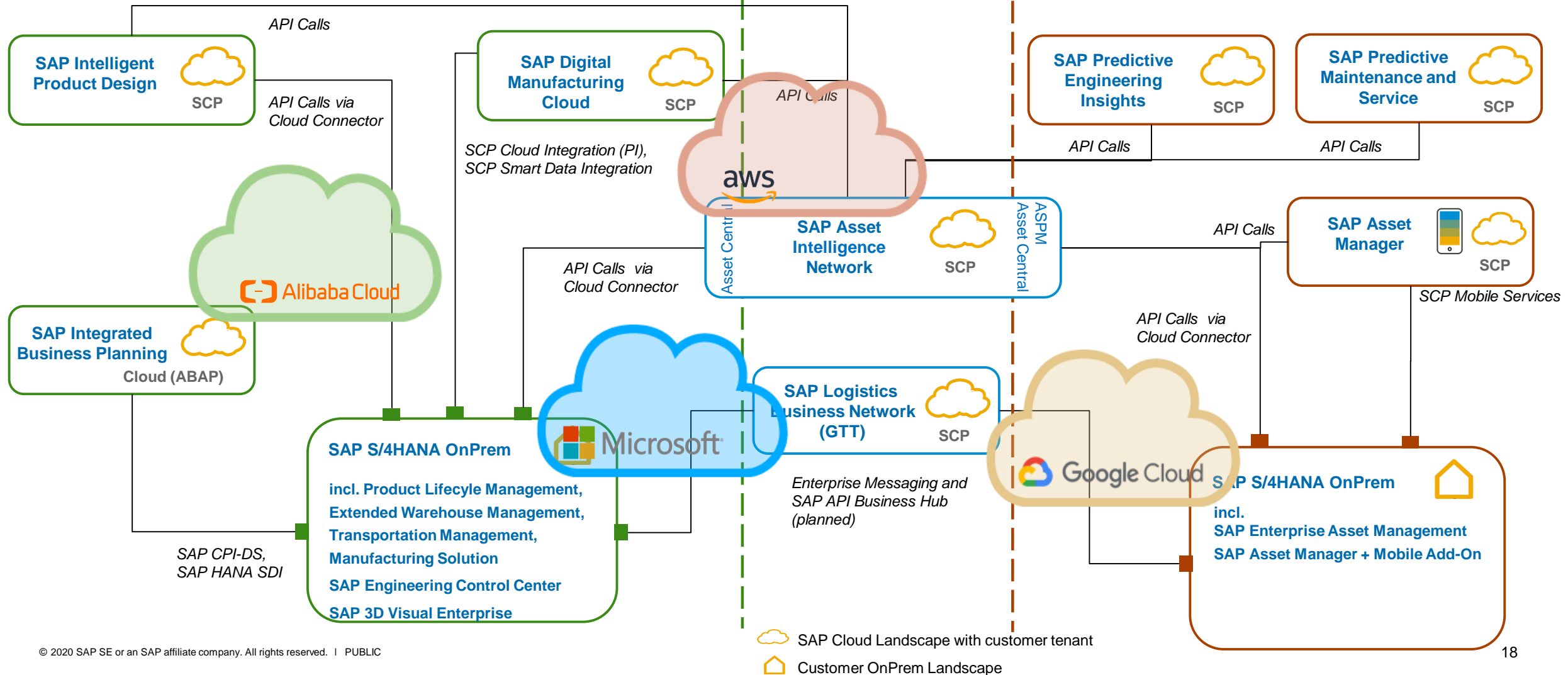


# Sample Architecture Deployment – Digital Supply Chain

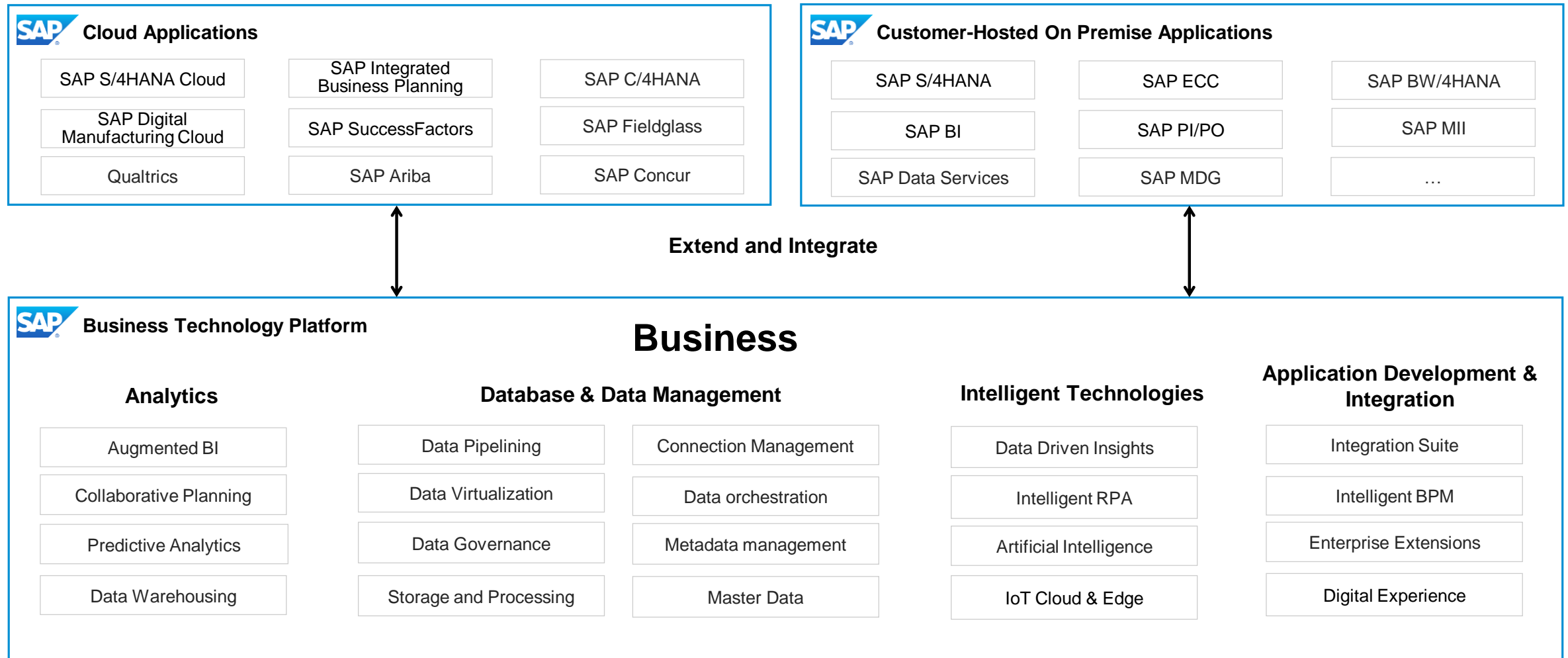
## Manufacturer

## Business Network

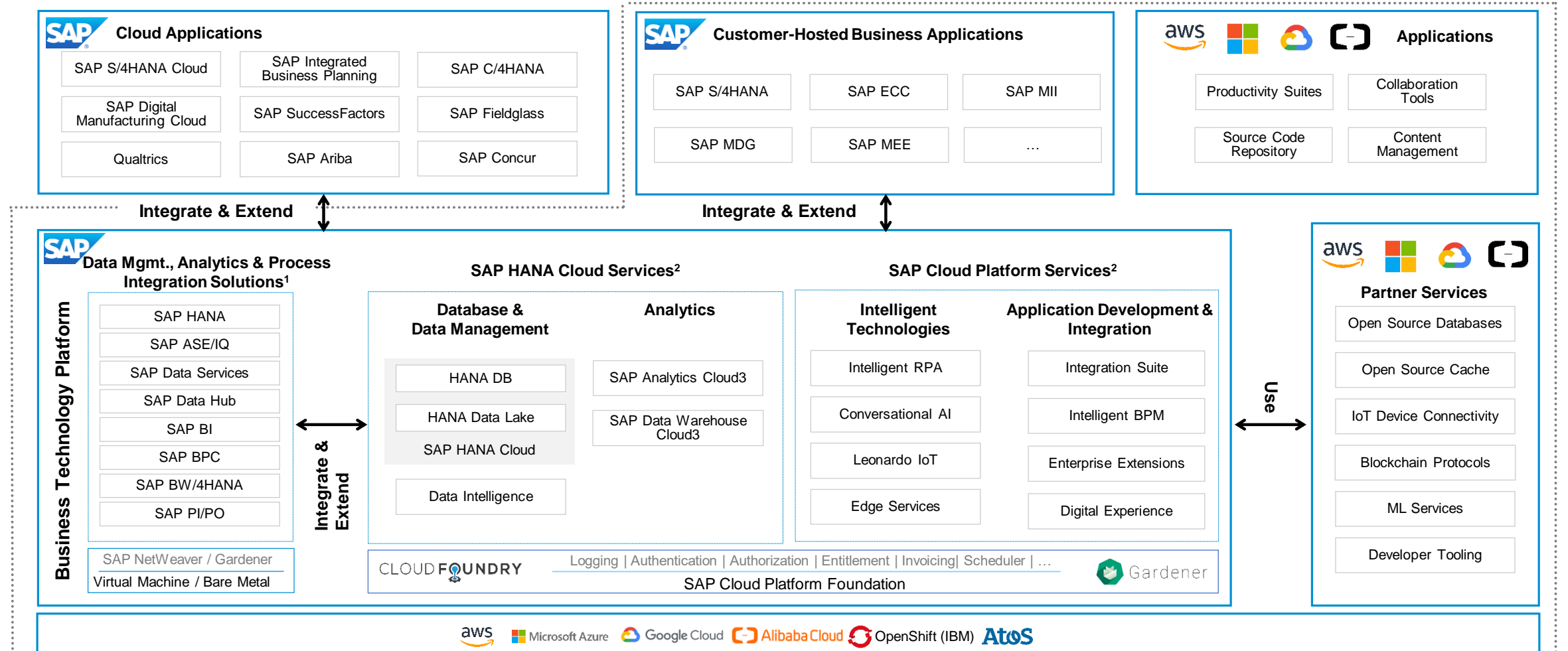
## Operator



# Business Technology Platform – Capability overview



# Business Technology Platform – Component deployment diagram



<sup>1</sup> Customer Managed

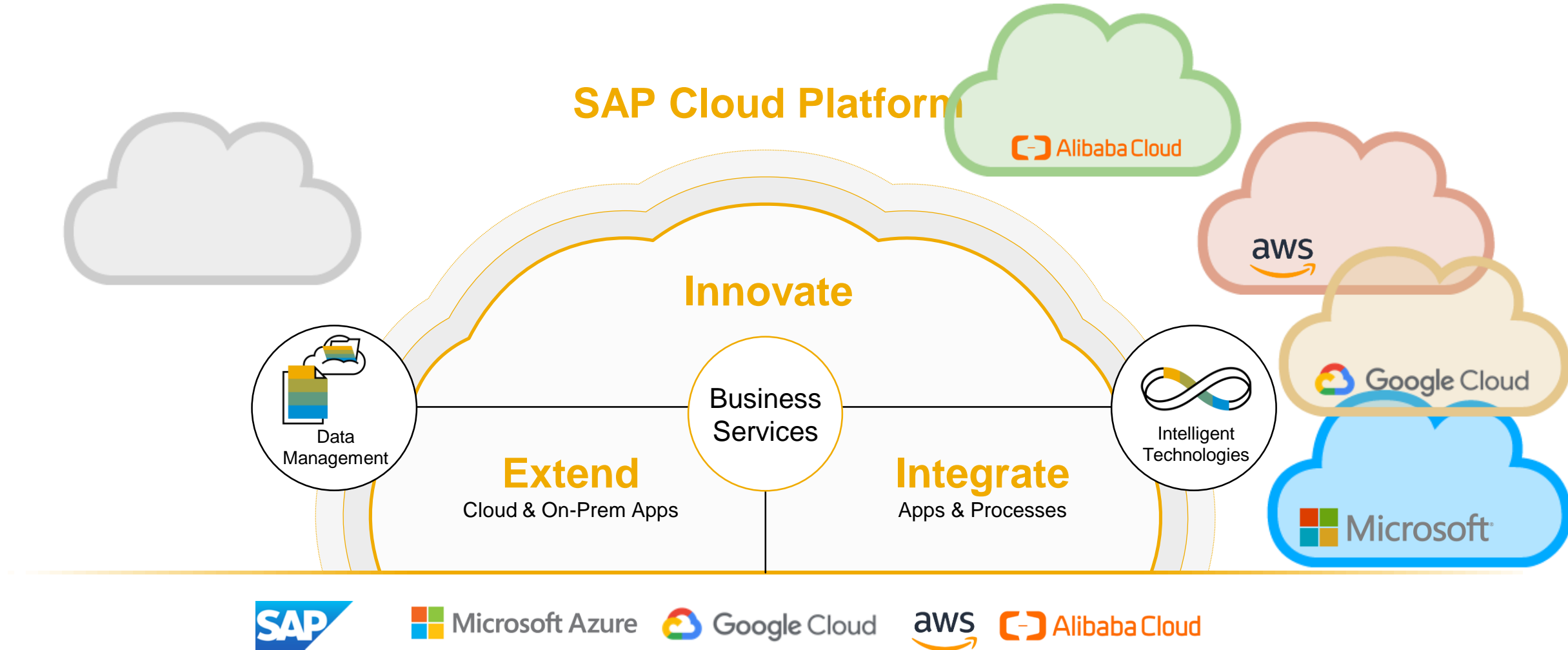
<sup>2</sup> SAP Managed

<sup>3</sup> SaaS Applications

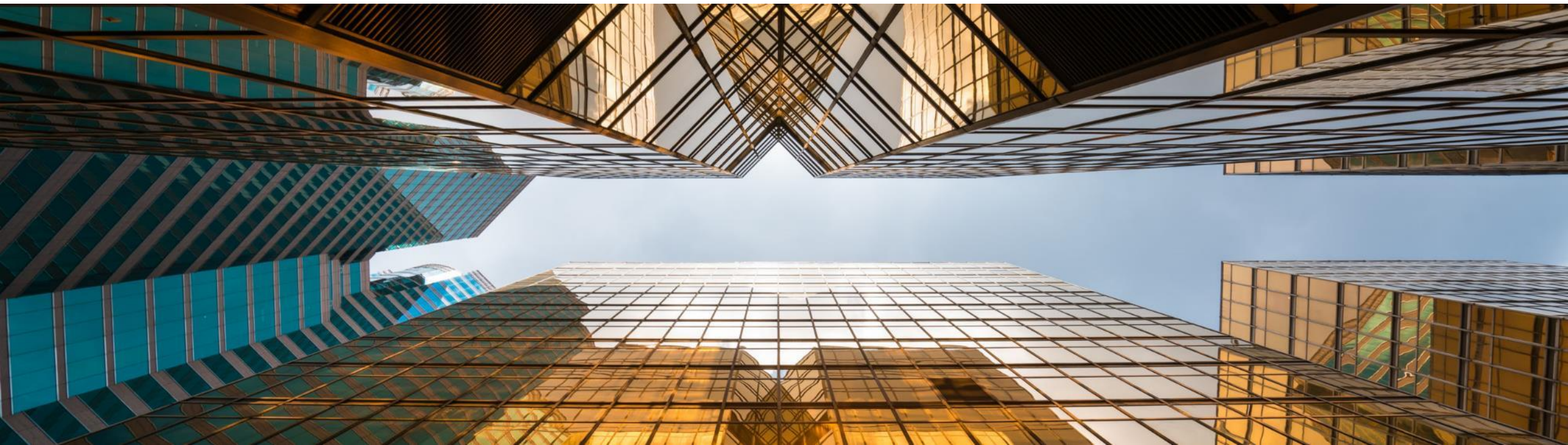


# SAP Cloud Platform

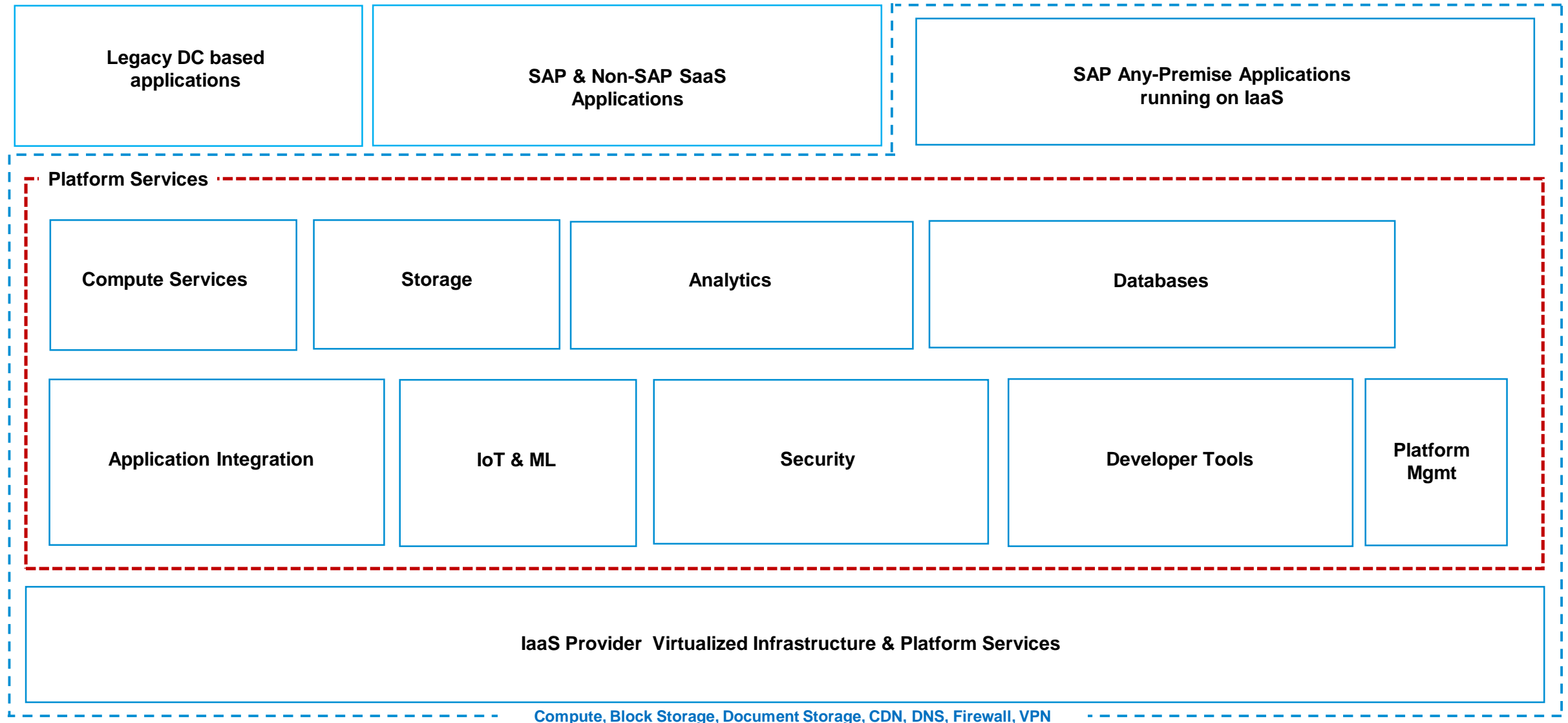
Accelerating the Intelligent Enterprise by Focusing on Rapid Business Results



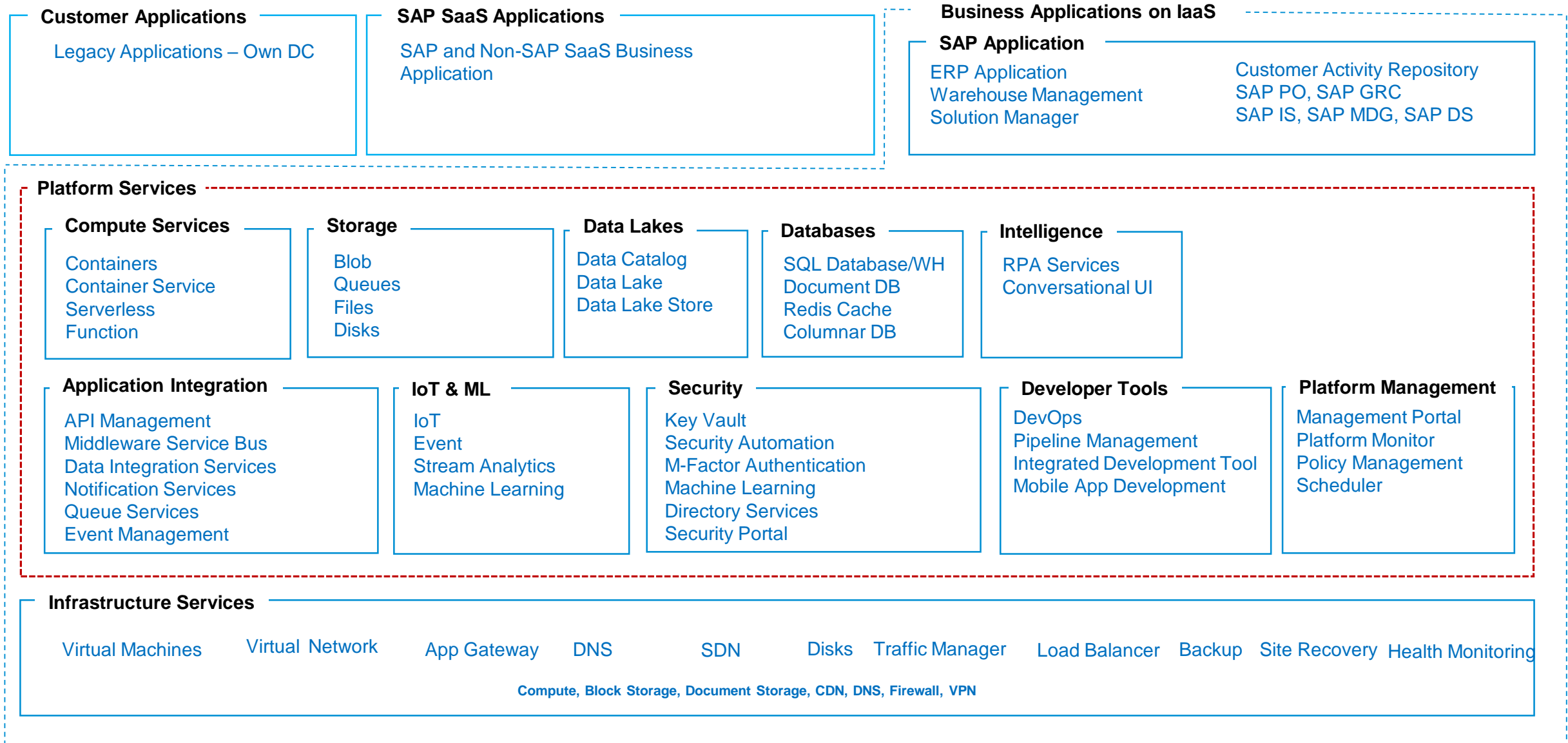
# Making it All Work Together



# SAP Cloud Based Architecture Concepts



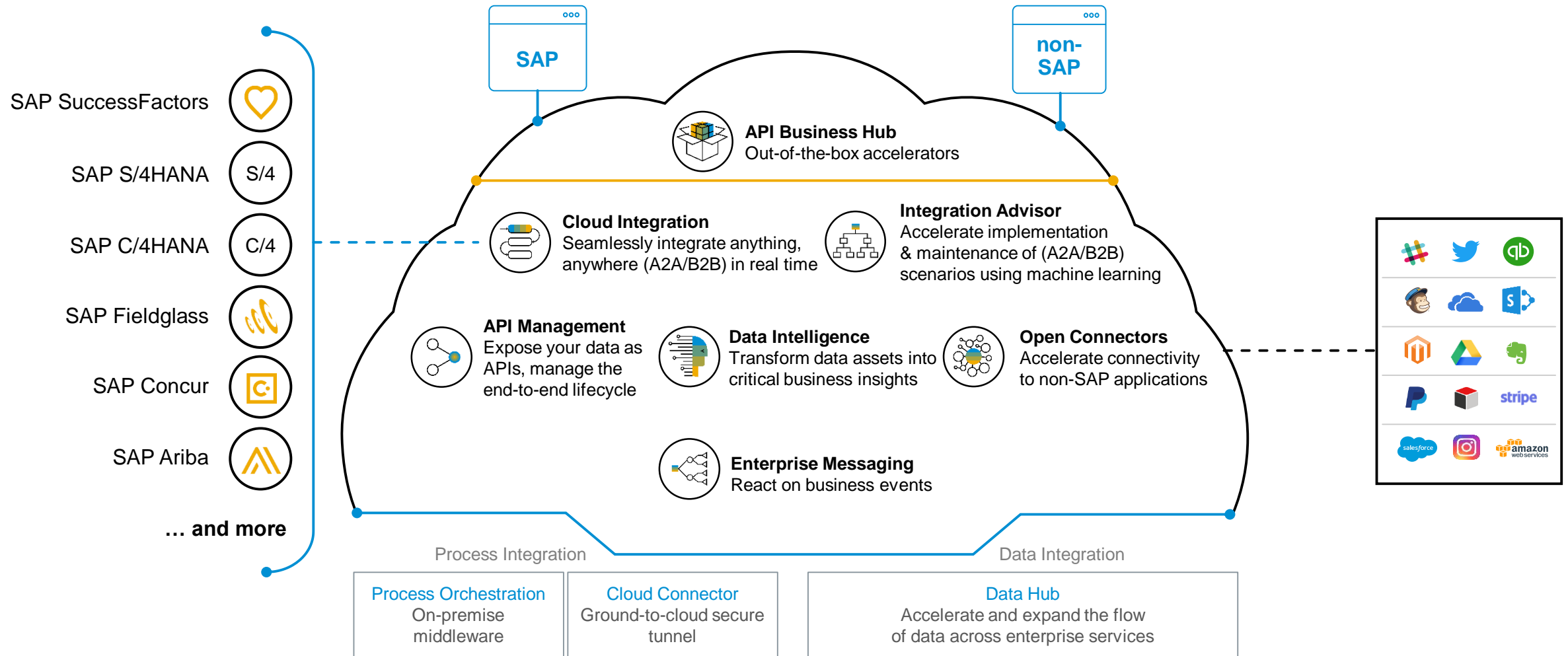
# SAP Architecture – Sample Capability View





# SAP Cloud Platform: Integration Suite

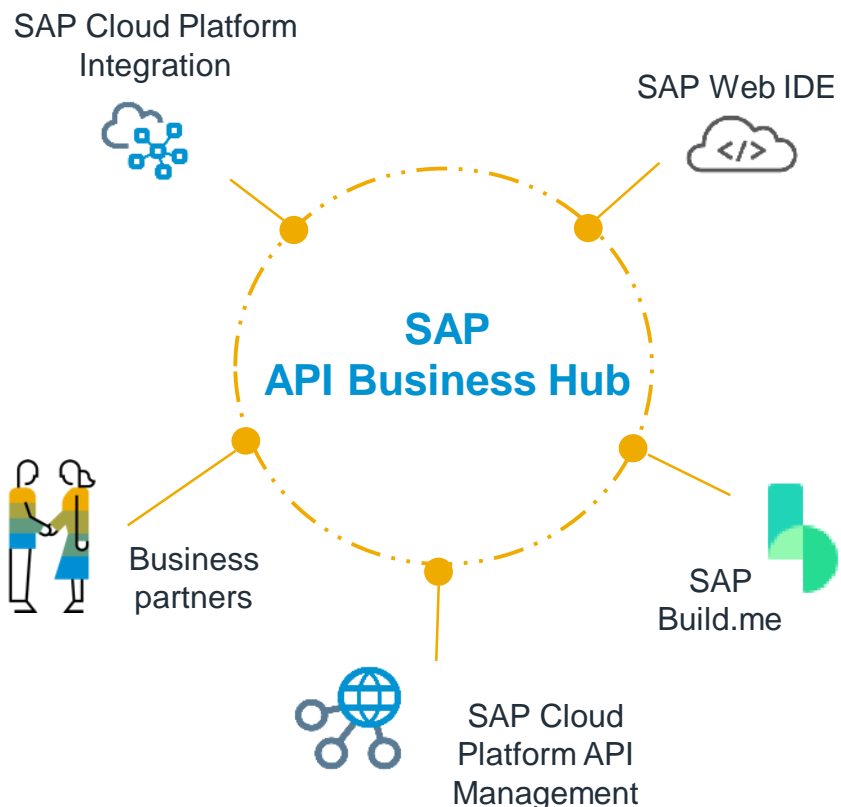
For hybrid and heterogenous environments





# SAP Cloud Platform API Management

Secure, manage & govern APIs in the cloud



## Fine grained Access Control of API Assets realized via Role based permissions

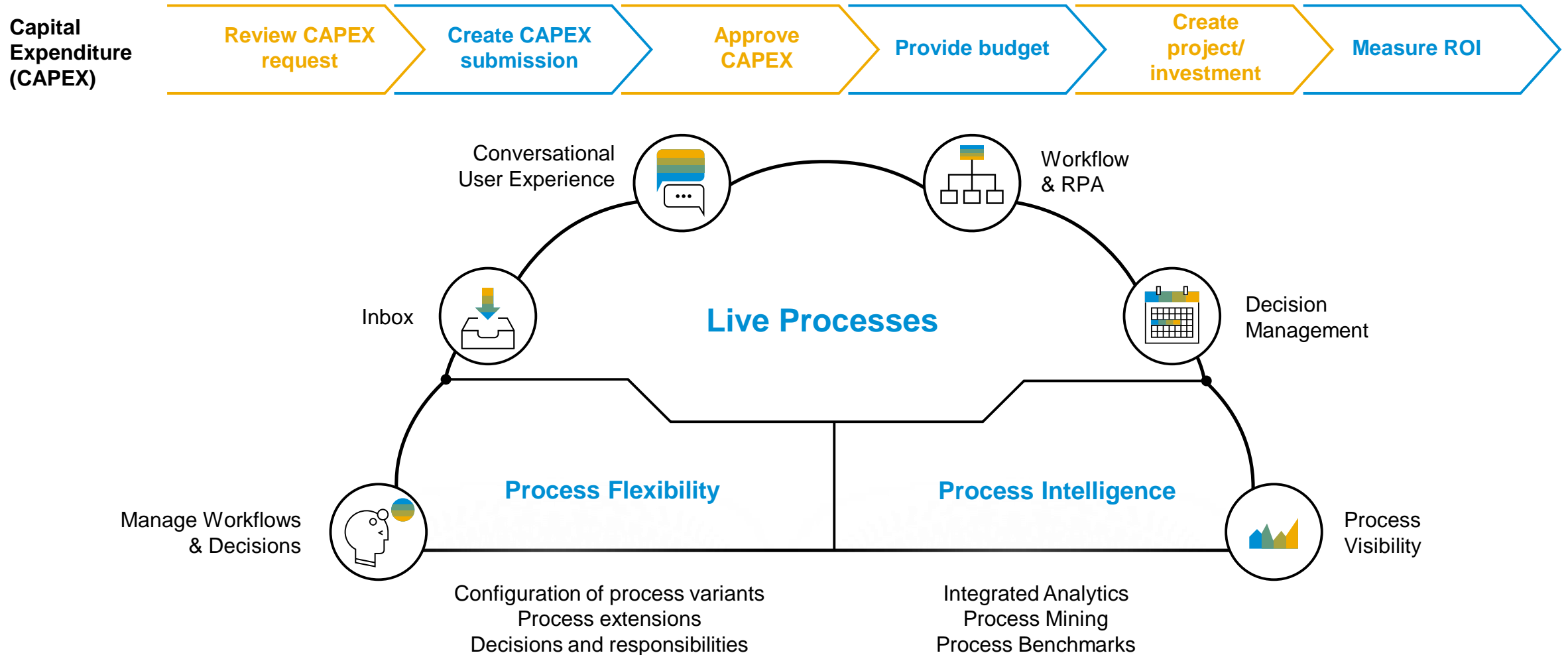
- Permissions based on Roles for Discovering Products and Consuming Applications in DEV Portal.
- System prompts the Admin of a Role is missing / deleted.
- Error proof method to create API Proxies by changing Properties from existing templated API Proxies, flexibility in managing multiple proxy virtual host endpoints, visually appealing interface.



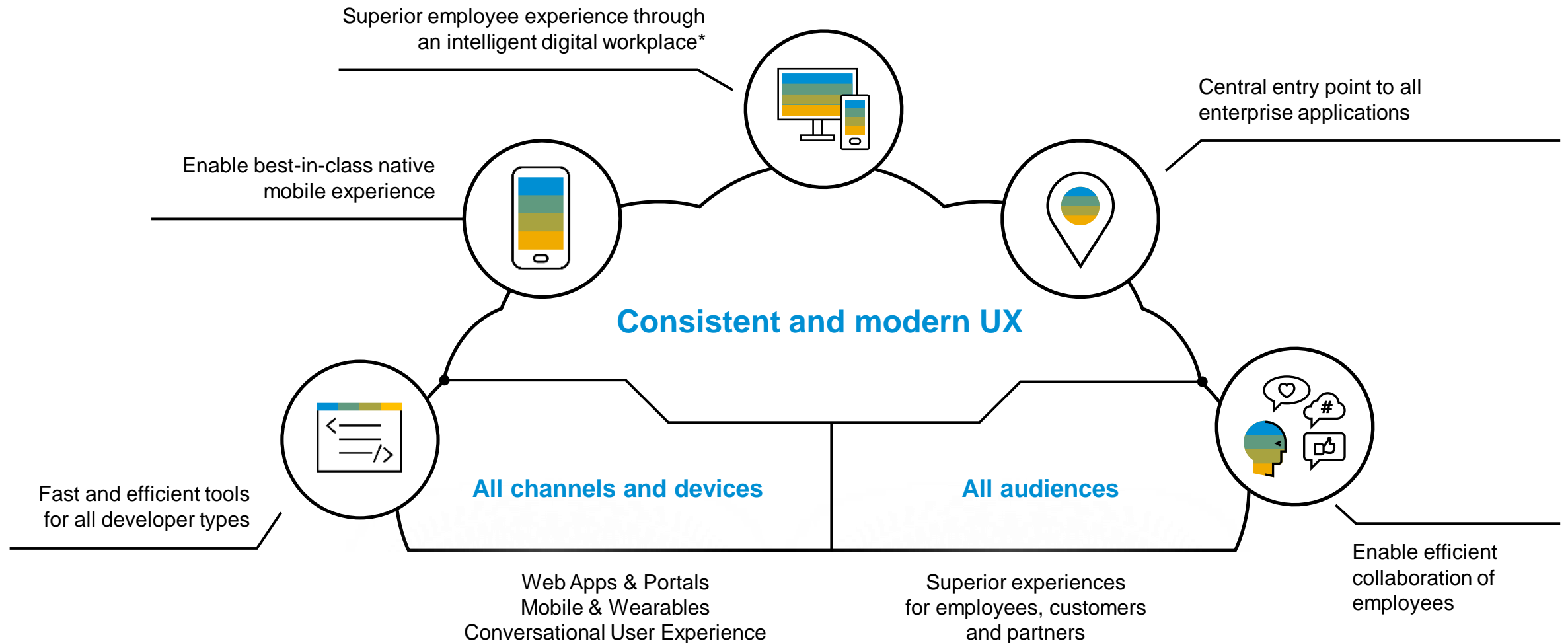
## Discover diverse catalog – SAP API Business Hub Themes, search, filters and featuring

- New user experience that draws user to the most popular of the 250+ packages
- Product themes, search and filters help users navigate 830+ integrations and ~750 APIs
- Favorites and Subscriptions to keep user up to date with the latest content

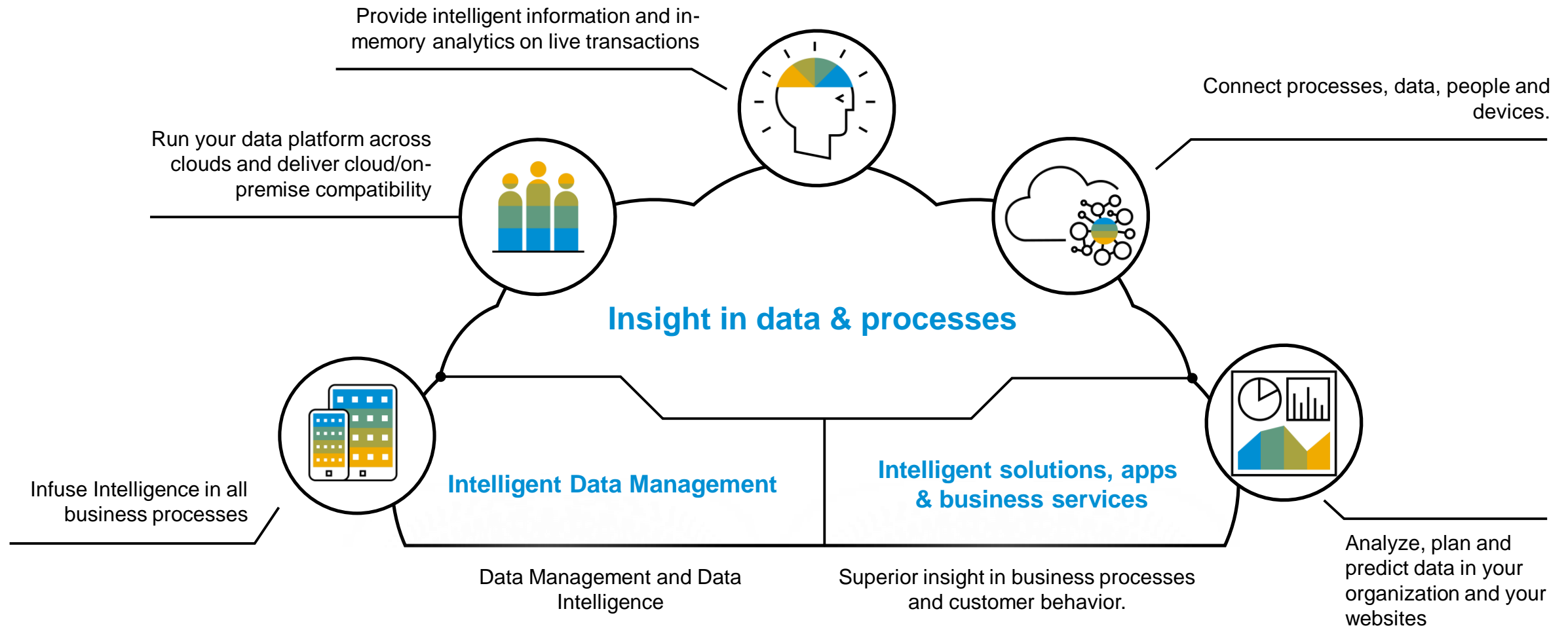
# SAP Cloud Platform as an intelligent BPM Platform



# SAP Cloud Platform as a Digital Experience Platform



# SAP Cloud Platform as a Platform for Data-Driven Insights





# Some things to Remember



# Finally, some things to keep in mind

Elastic ≠ Low cost

Data egress

Data Gravity

Latency and bandwidth and \$

Global backbones from cloud providers & POPs

Network peering and \$

Continuous chaos

Lifecycle and governance

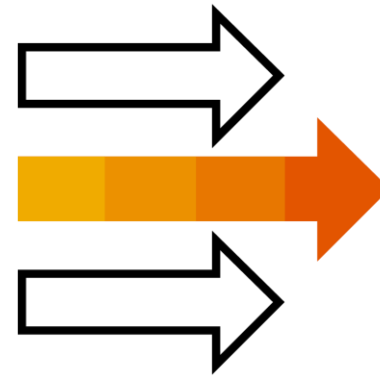
In house skills and cloud skills

Privacy & secrecy

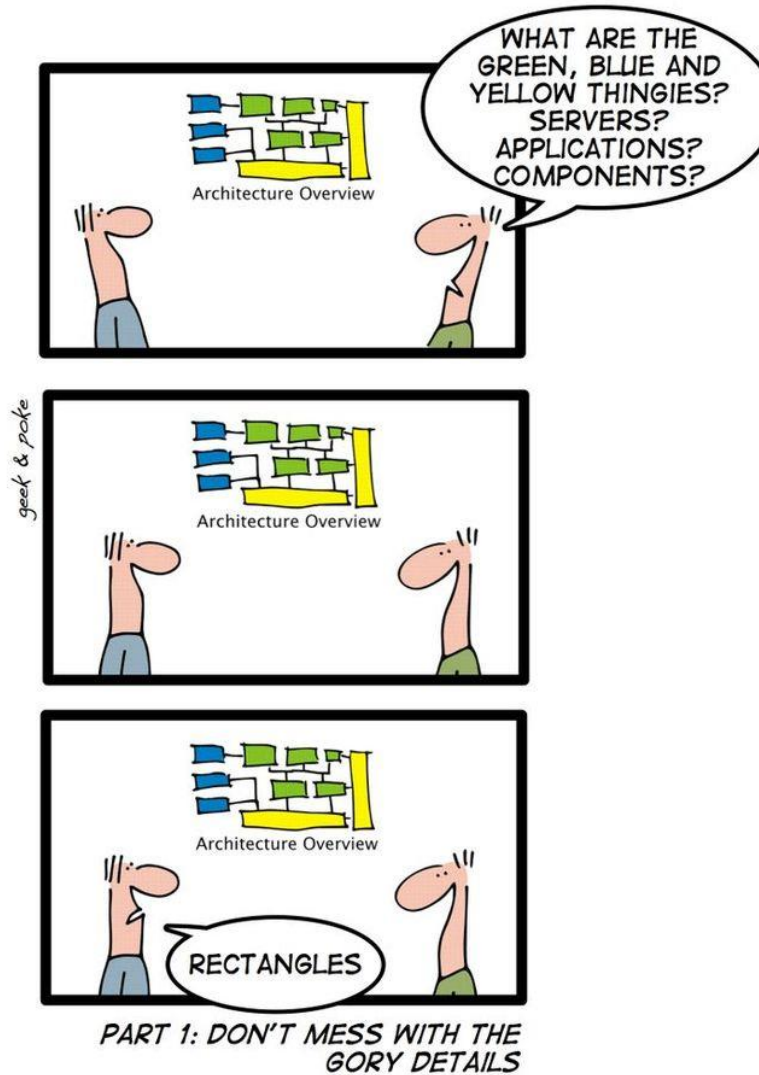
Process vs data integration

End-2-End process monitoring & management

SLA synchronization



## ENTERPRISE ARCHITECTURE MADE EASY



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# Thank you.

Contact information:

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