A Reference Architecture for Hybrid Integration

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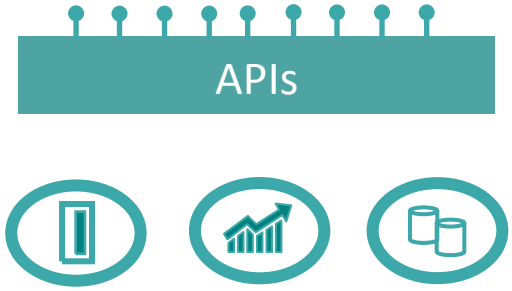
Offering Management

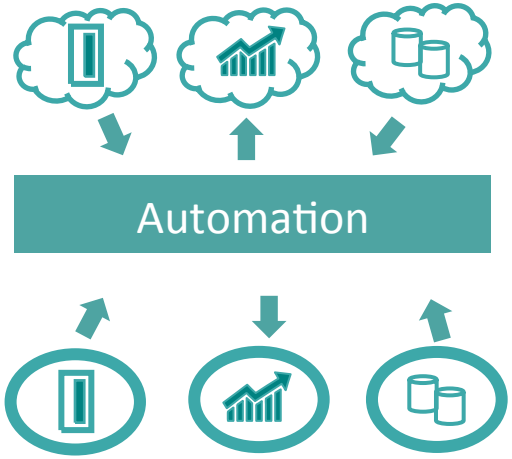
Common use cases for hybrid integration within digital transformation

A. Join the API Economy



Enable new channels for revenue by monetizing existing data via the API economy

B. Productivity



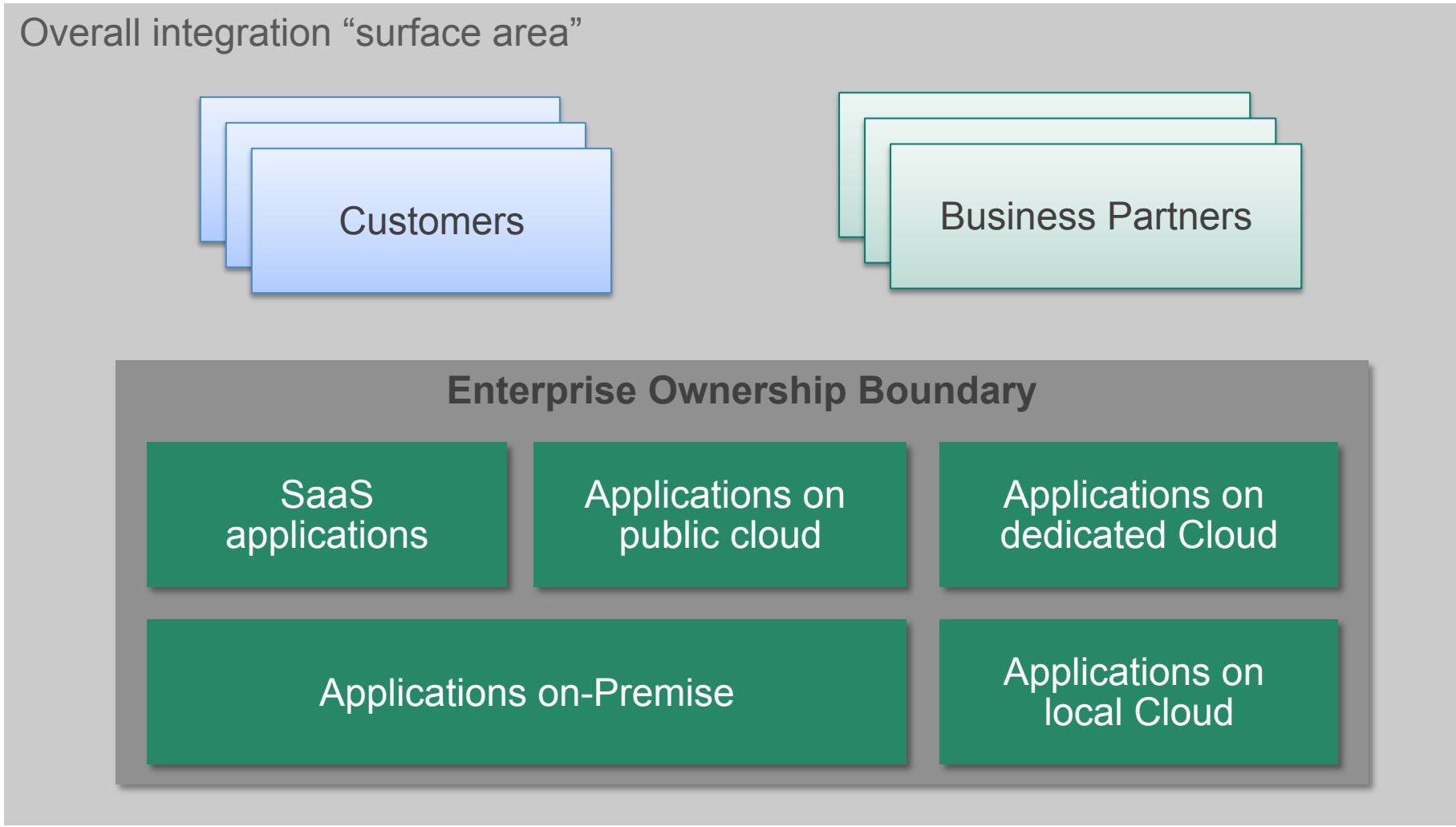
Enable line of business to automate their own work across SaaS and existing systems of record

C. Refactor for innovation

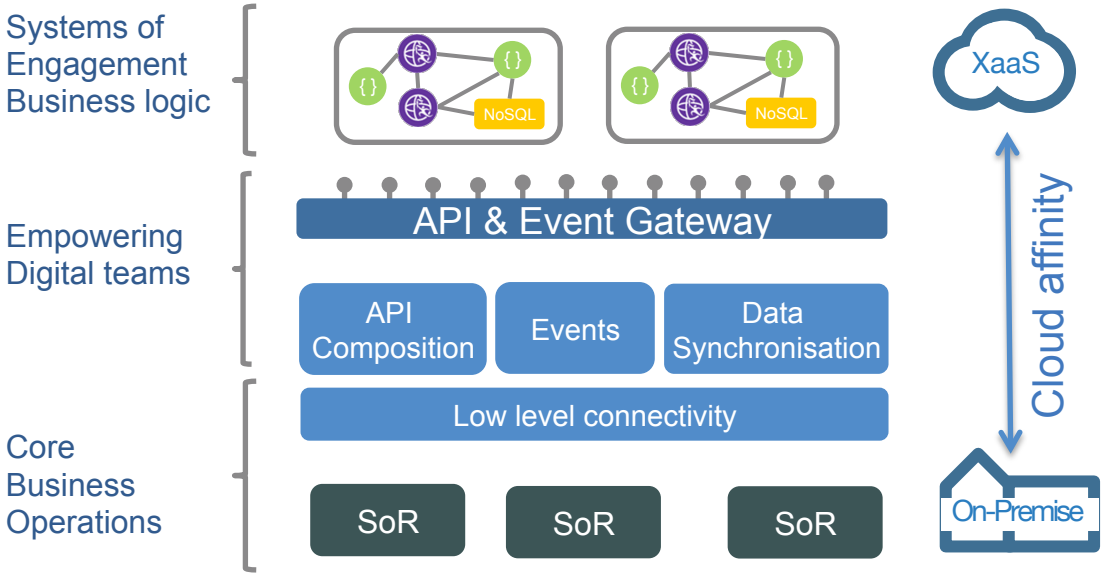
Make a fundamental shift to a composable application architecture, and cloud-based partners, to enable innovation.

Business projects are driving the “hybrid” agenda

- Hybrid **User Communities**
  Used by both IT as well as LOB who are adopting integration tooling to automate application interactions.
- Hybrid **Integration Styles**
  Combining **app** integration, **api** integration and **data** integration
- Hybrid **Connectivity**
  Reach across secure connections to get to data where it is from wherever you need
- Hybrid **Deployment**
  Software can be flexibly deployed on cloud and on-premises to optimize solution architecture


Overall integration “surface area”
Customers
Business Partners
Enterprise Ownership Boundary
SaaS applications
Applications on public cloud
Applications on dedicated Cloud
Applications on-Premise
Applications on local Cloud

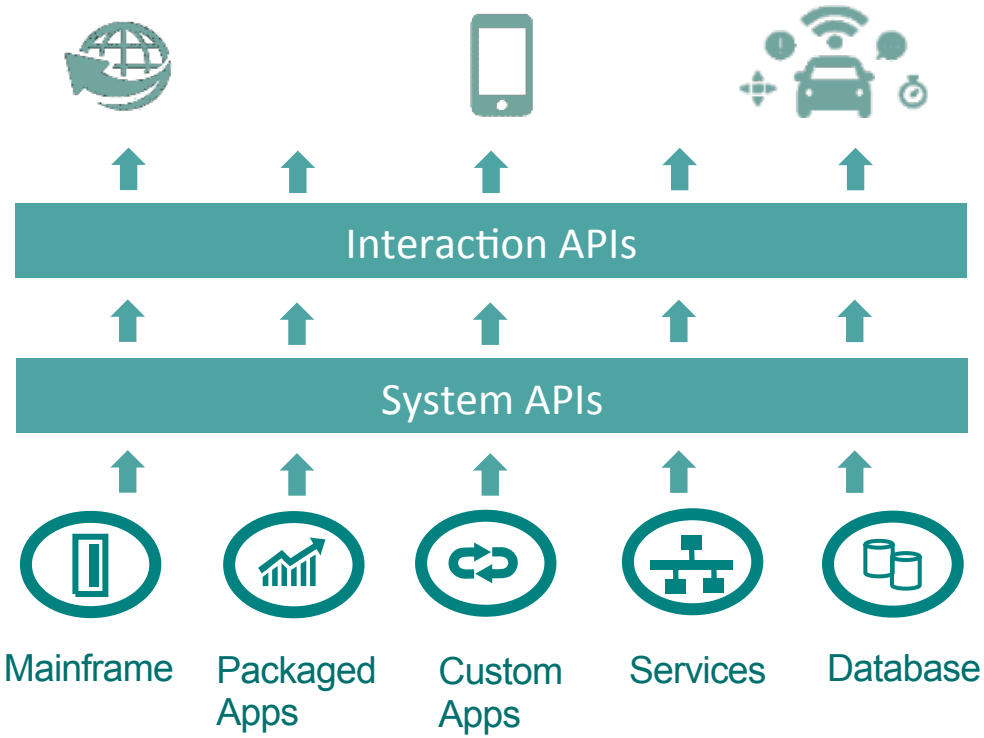
Hybrid Integration Reference Architecture – Basic single gateway



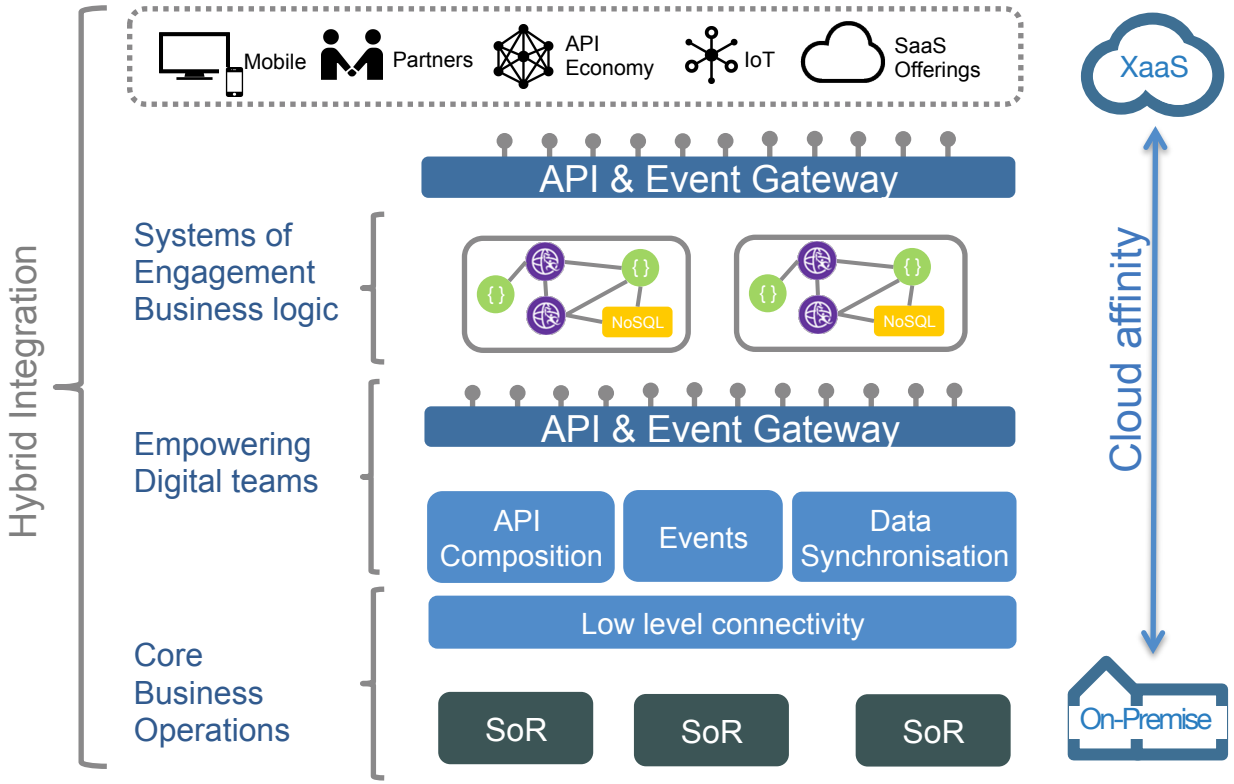
API Consumption Landscape

Interaction APIs
Invoke one or more System API's or data sources, and manipulate the returned data

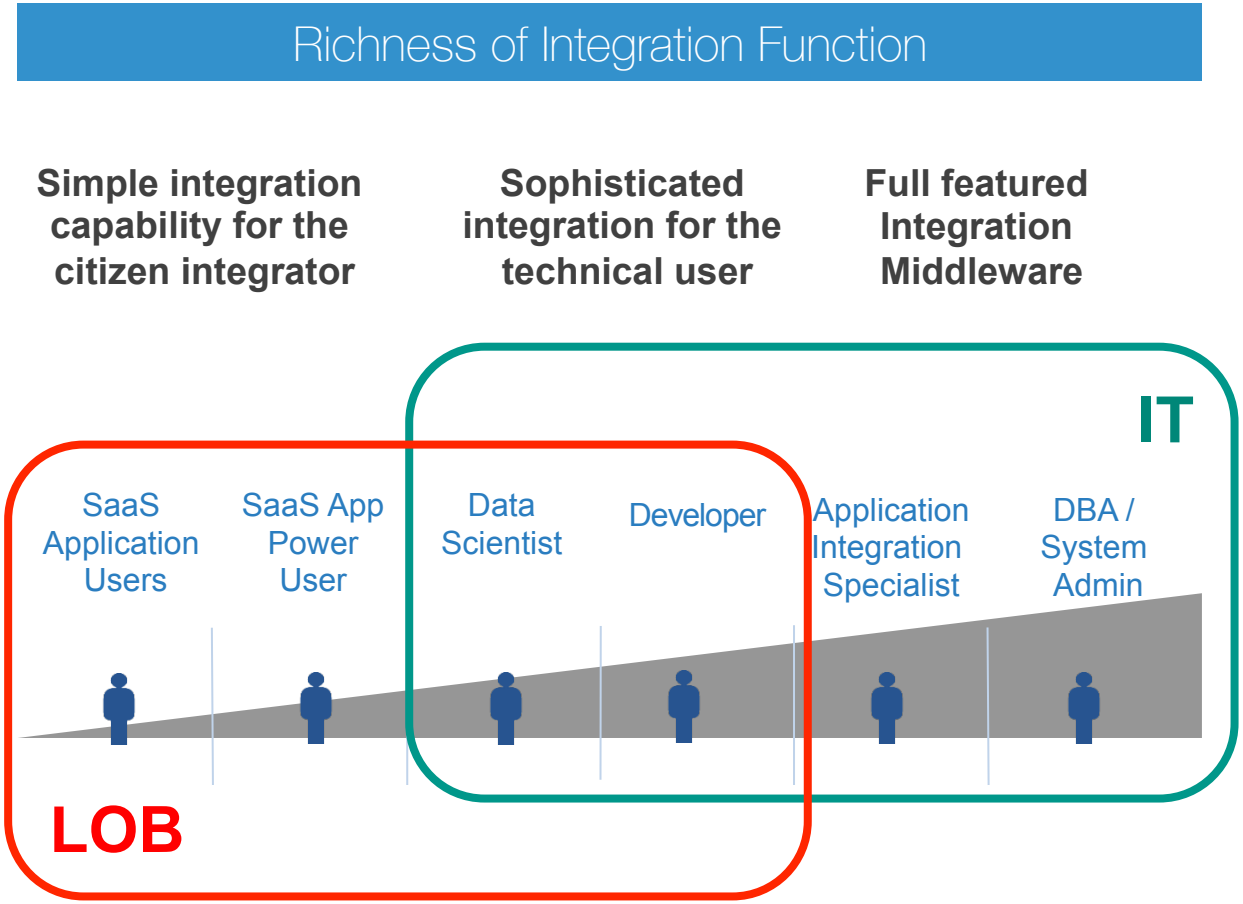
System APIs
APIs that access the core systems and assemble data in a standardized form for general consumption



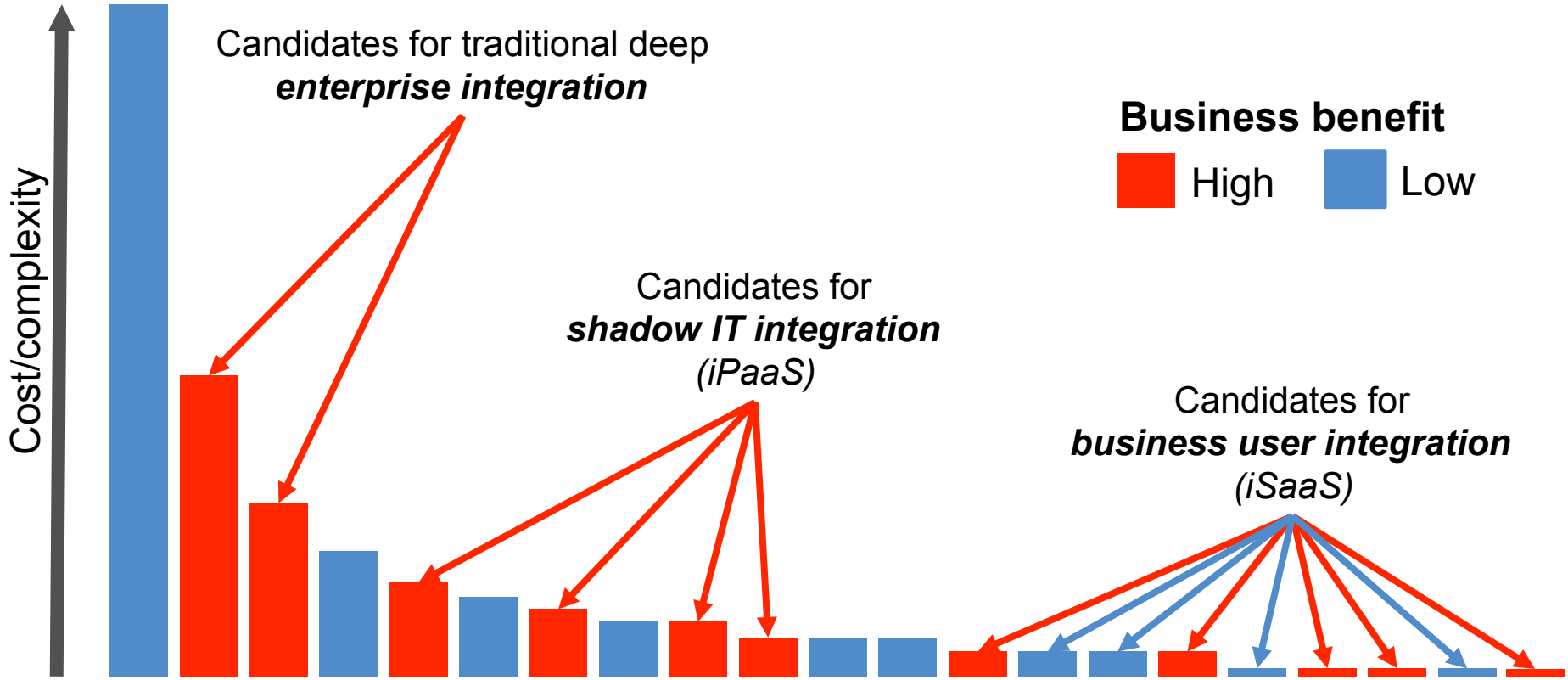
Hybrid Integration Reference Architecture – Basic two gateways



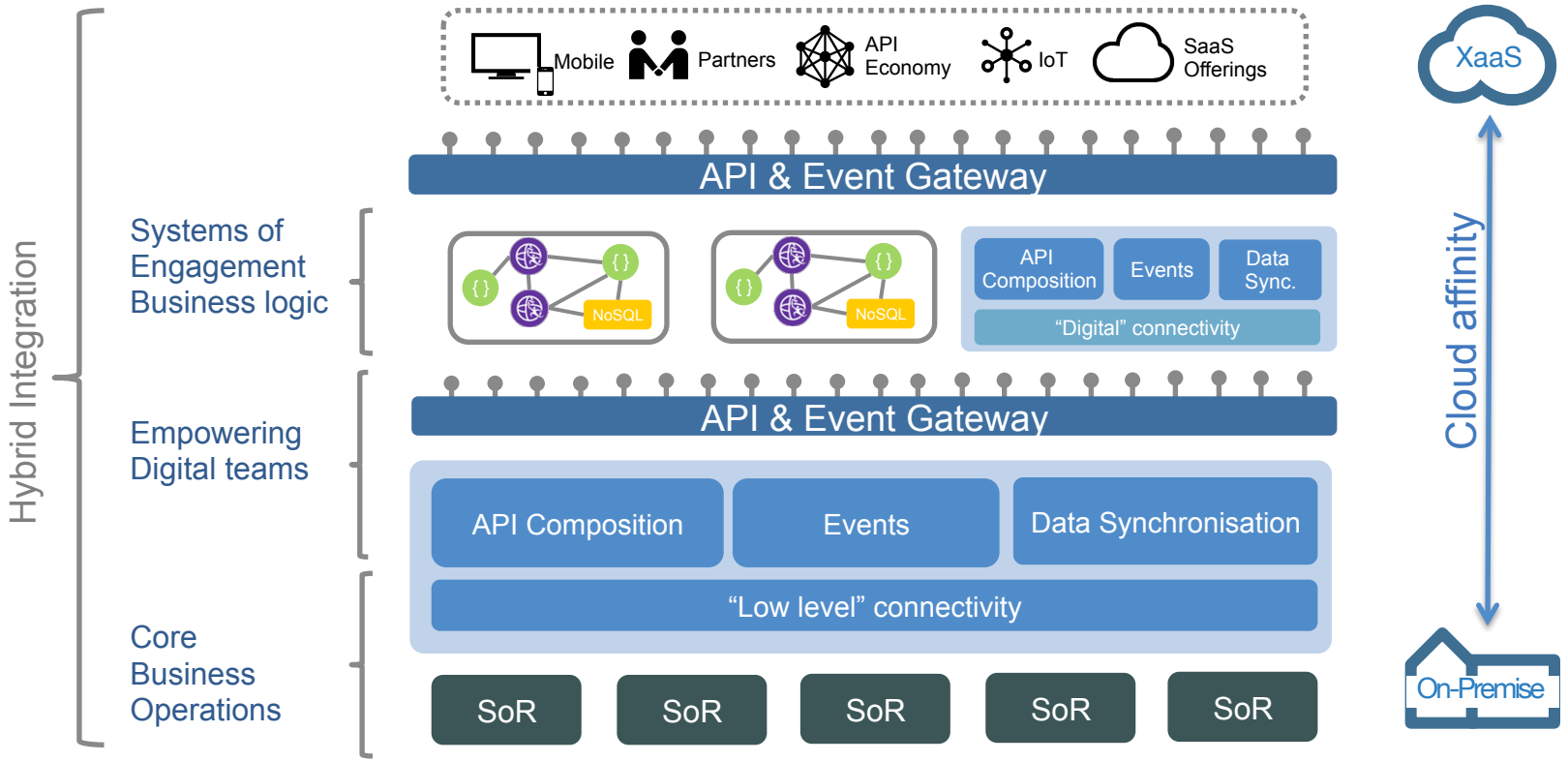
IBM is investing to enhance and extend it's offerings for the full continuum of users



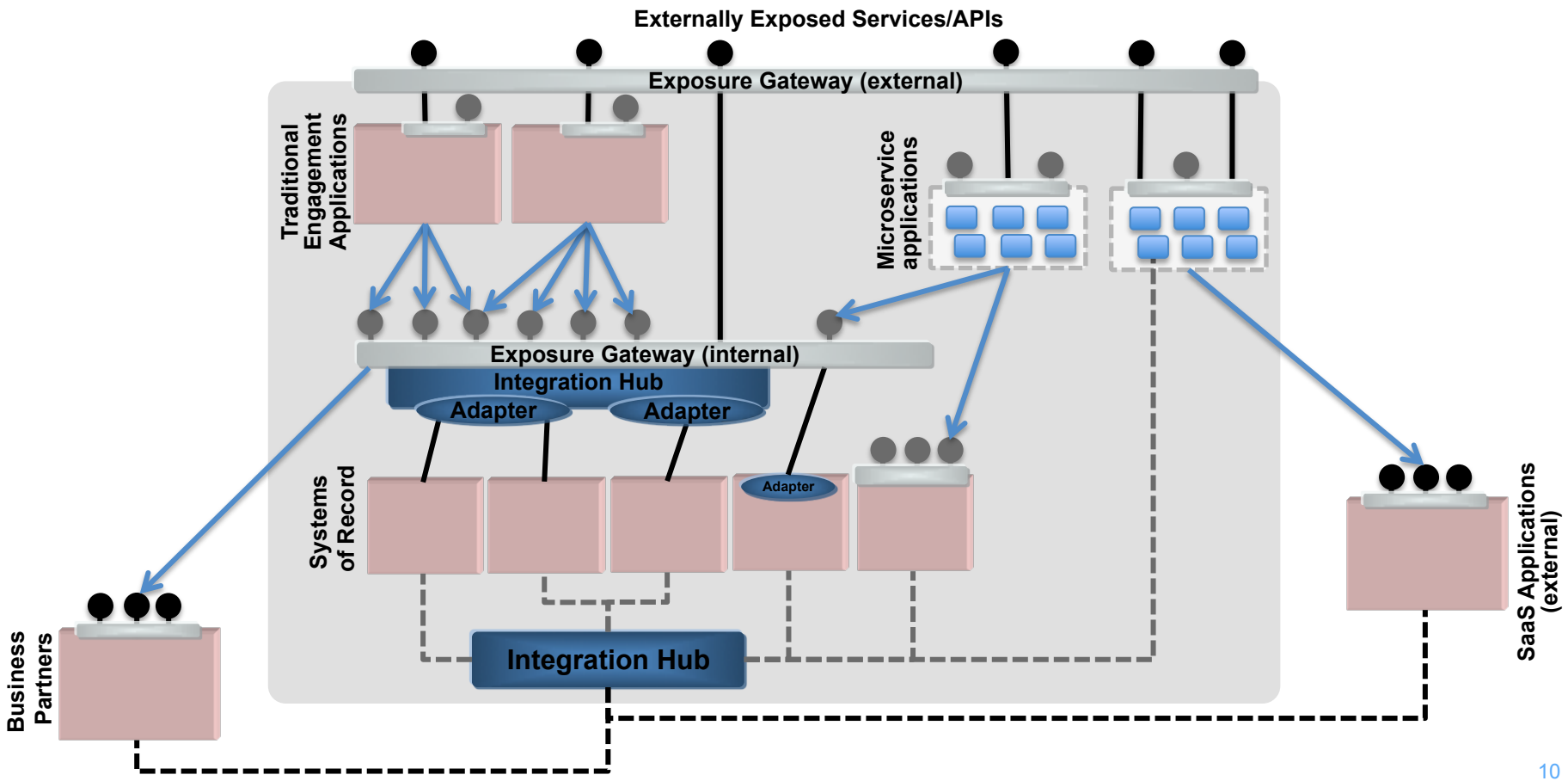
The long tail of integrations



Hybrid Integration Reference Architecture – Bi-modal Integration



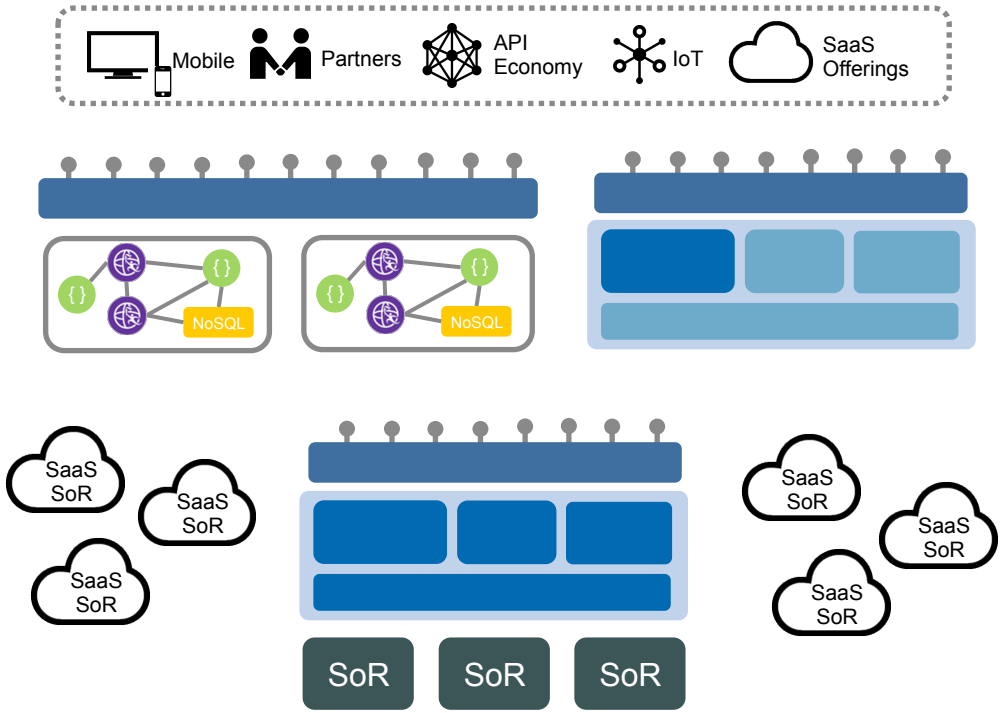
A glimpse into the complexities of a real integration architecture



Hybrid Integration Reference Architecture – Decentralised

In a perfect world…

- Application teams self-administer exposure of their own APIs
- Access to external APIs is governed using the same mechanisms used to govern access to internal APIs.
- Application teams handle their own integration needs using a productive subset of the tools available
- Application logic is firmly seated with the application teams
- API monitoring/diagnostics are gathered consistently across the organisation
- Security models are implemented more consistently



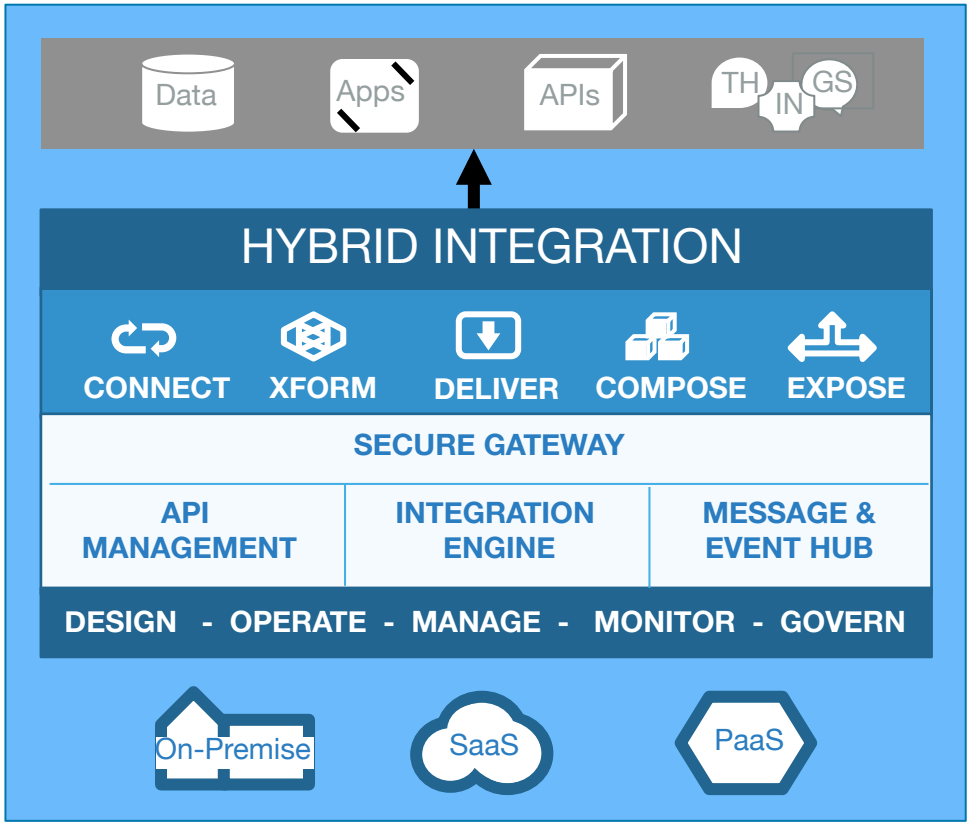
IBM – Hybrid integration vision

One cohesive offering serving all integration needs

Connect Seamlessly
Hundreds of end points to apps and data in the cloud and on premise

Develop Rapidly
Intuitive and robust tooling to transform data to meet business needs

Scale Efficiently
Performance and scalability to meet the SLAs of your business applications



IBM Application Integration Suite

a composable architecture for hybrid integration

API Management

- ✓ Policy based traffic management
- ✓ Integrated developer portal
- ✓ Lifecycle management

Cloud Connectivity

- ✓ Broad native cloud connectors
- ✓ Non-specialist composition
- ✓ Pre-defined templates

Enterprise Integration

- ✓ Deep mature connectivity
- ✓ Rich flow language support
- ✓ Advanced mediation capabilities

Hybrid **User Communities**

Used by both IT as well as LOB who are adopting integration tooling to automate application interactions.

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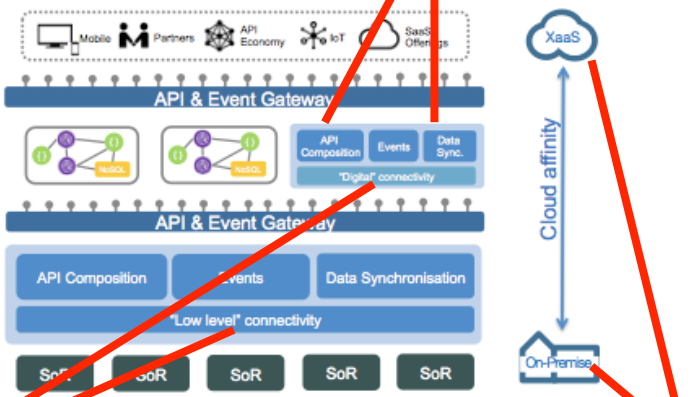

Hybrid **Connectivity**

Reach across secure connections to get to data where it is from wherever you need

Hybrid **Deployment**

Software can be flexibly deployed on cloud and on-premises to optimize solution architecture

Looking for more information?

These slides come from the following article:

“The evolving hybrid integration reference architecture”
https://ibm.biz/HybridIntRefArch

And are described in this video for Integration Developer News
http://ibm.biz/HybridIntRefArchYouTube

“Microservices, SOA, and APIs: Friends or enemies?”
https://ibm.biz/MicroservicesVsSoa

More information on IBM’s hybrid integration products
http://www.ibm.com/middleware/us-en/solutions/hybrid-integration