RDW TECHDAYS 2017

Microsoft Azure Modern Application and DevOps

The cloud platform built for business

March 2017

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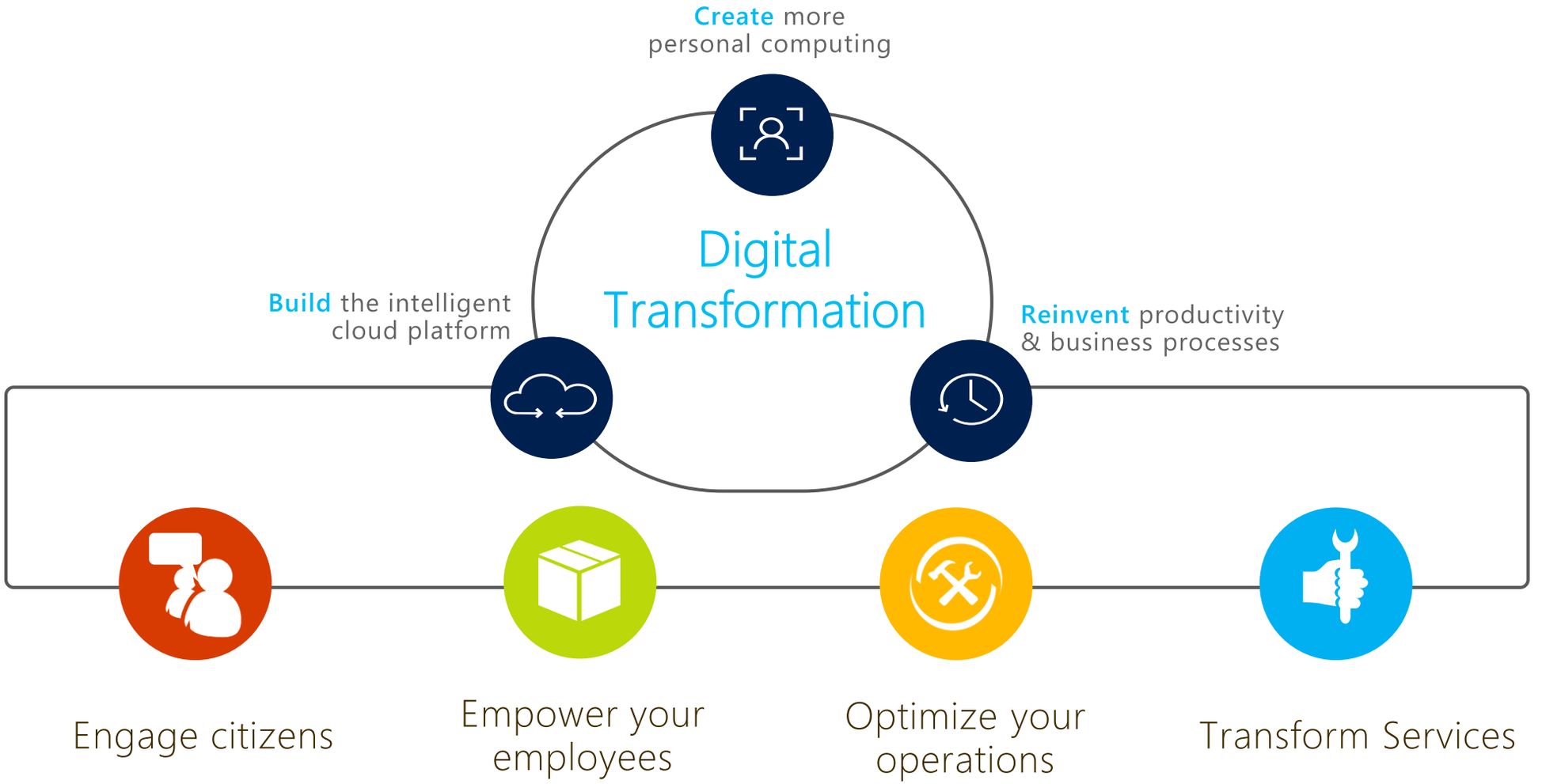
Government Digital Transformation



"At Microsoft, we're proud to partner with and empower all our customers around the world with the leading technology to seize the vast opportunities ahead." – *Satya Nadella*

Journey to the cloud

Journey to the cloud

38

Azure regions

2X the number of
AWS regions

RECENTLY LAUNCHED:

US Regions: West US 2 and West Central
Germany – Launched in Sep 2016
United Kingdom – Launched in Sep 2016

NEWLY ANNOUNCED:

France: France Central and France South
Korea: Korea Central and Korea South
DoD East and Central

Microsoft Azure

Application innovation
Accelerate innovation with the cloud

Openness and flexibility
Build freely, deploy anywhere

Data and intelligence
Power decisions & apps with insights

Trust and security
Protect your business

Build apps faster and easier

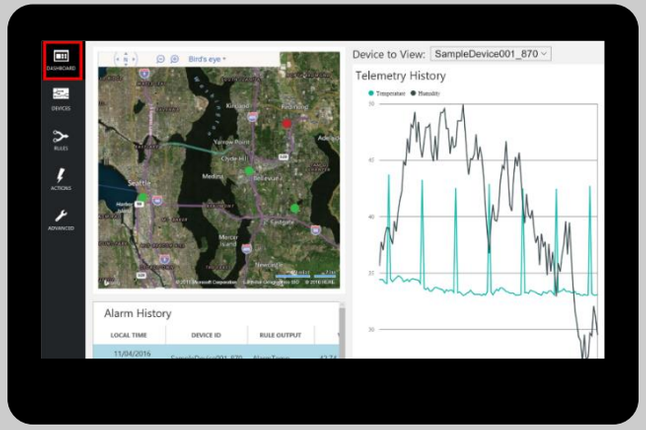
Build on PaaS

- Existing frameworks
- Web and mobile
- Microservices
- Serverless Compute

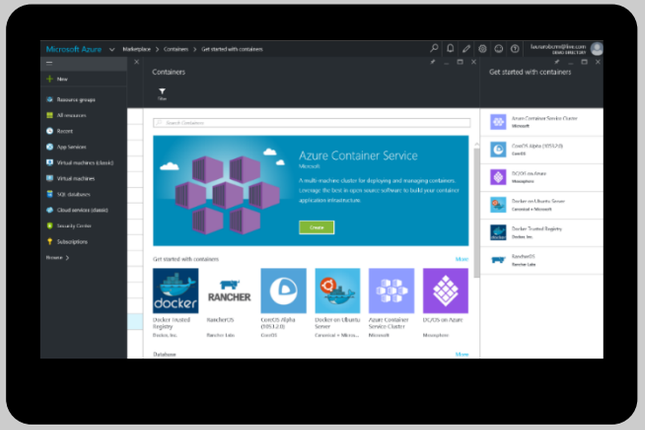
Build on IaaS

- Storage
- Virtual machines
- Networking

Azure Internet of Things



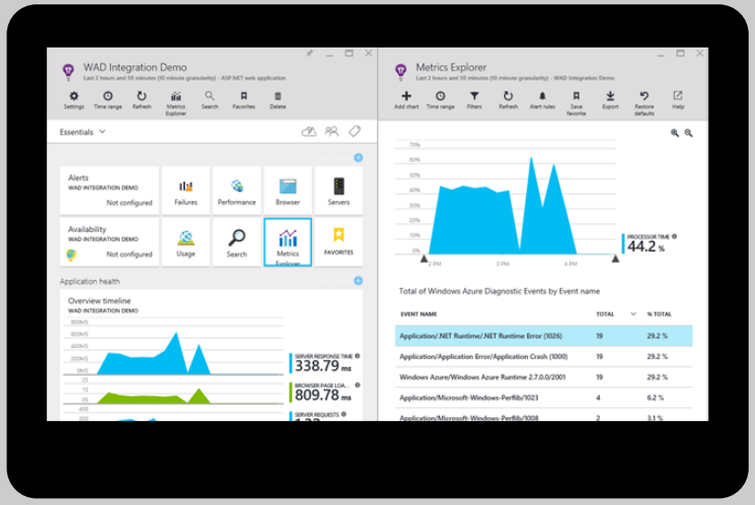
Azure Marketplace



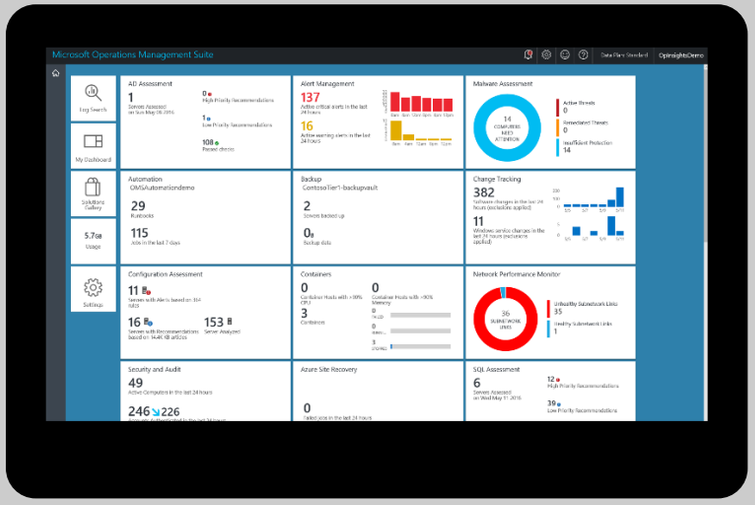
Manage applications proactively

Azure Portal

Application Insights

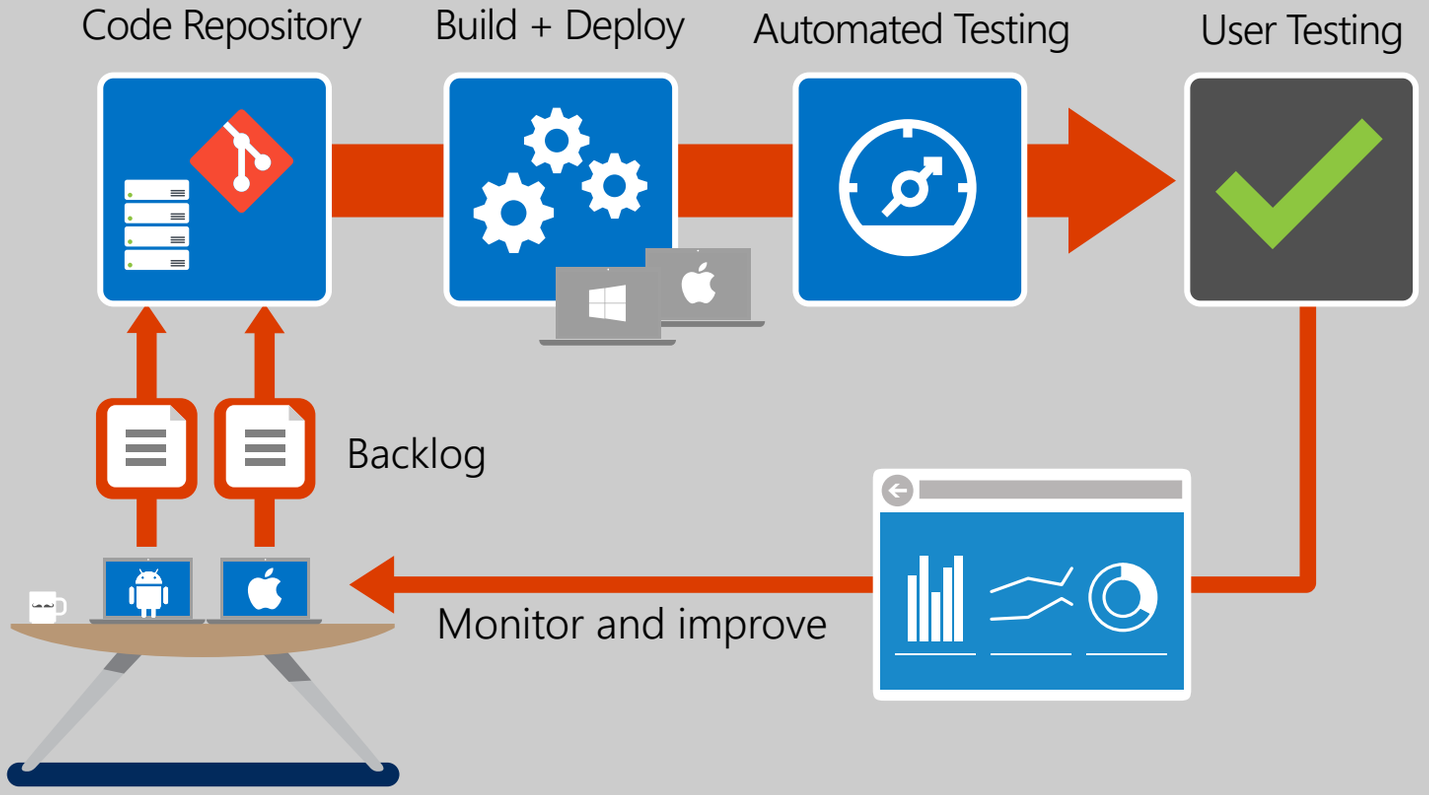


Operations Management Suite



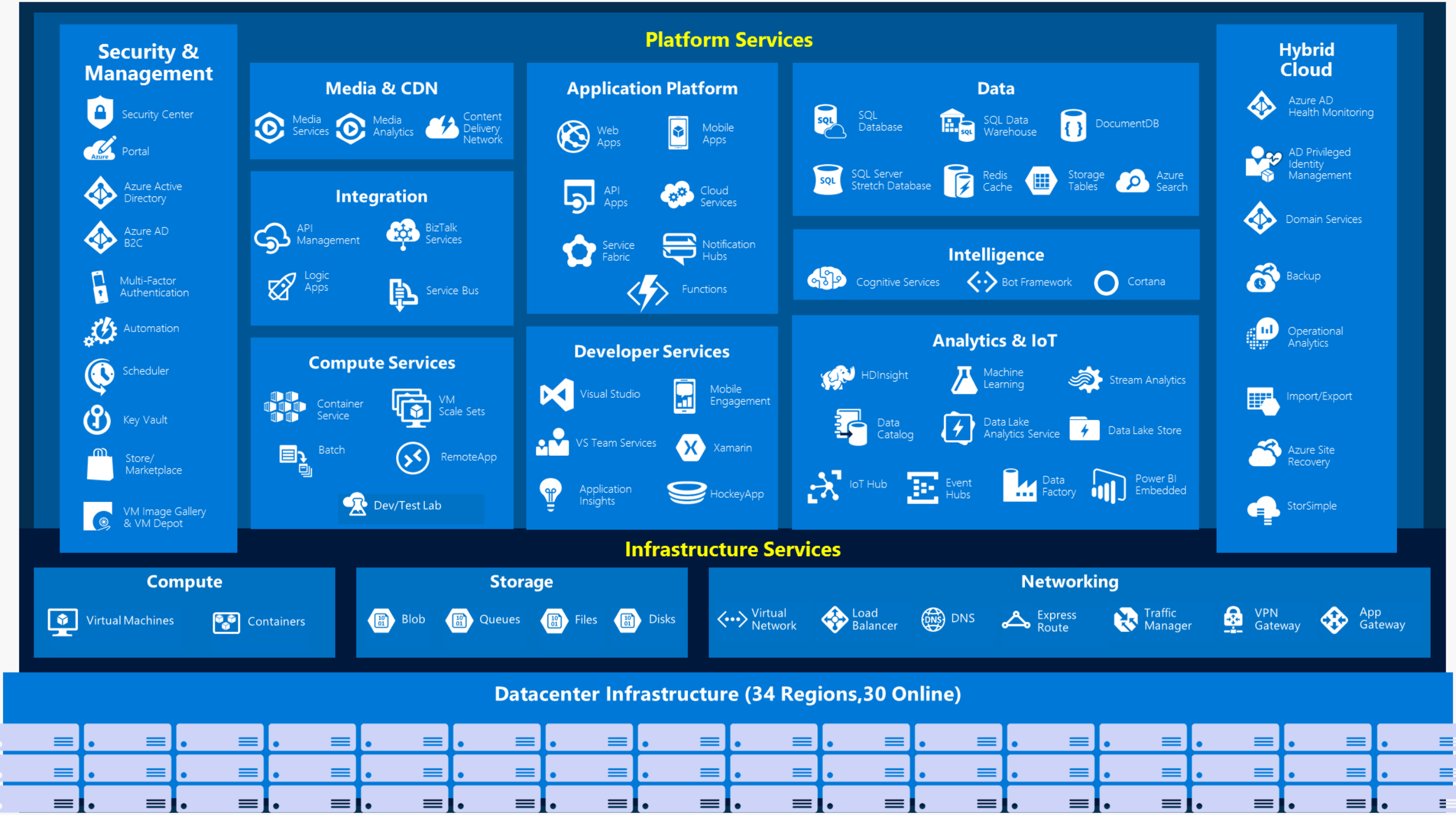
Deliver apps seamlessly

DevOps



Mobile Back-end Services

- Cloud and Offline Data
- User Authentication
- Push Notifications


Platform Services
Security & Management
Security Center
Portal
Azure Active Directory
Azure AD B2C
Multi-Factor Authentication
Automation
Scheduler
Key Vault
Store/ Marketplace
VM Image Gallery & VM Depot
Media & CDN
Media Services
Media Analytics
Content Delivery Network
Integration
API Management
BizTalk Services
Logic Apps
Service Bus
Compute Services
Container Service
VM Scale Sets
Batch
RemoteApp
Dev/Test Lab
Application Platform
Web Apps
Mobile Apps
API Apps
Cloud Services
Service Fabric
Notification Hubs
Functions
Developer Services
Visual Studio
Mobile Engagement
VS Team Services
Xamarin
Application Insights
HockeyApp
Data
SQL Database
SQL Data Warehouse
DocumentDB
SQL Server Stretch Database
Redis Cache
Storage Tables
Azure Search
Intelligence
Cognitive Services
Bot Framework
Cortana
Analytics & IoT
HDInsight
Machine Learning
Stream Analytics
Data Catalog
Data Lake Analytics Service
Data Lake Store
IoT Hub
Event Hubs
Data Factory
Power BI Embedded
Hybrid Cloud
Azure AD Health Monitoring
AD Privileged Identity Management
Domain Services
Backup
Operational Analytics
Import/Export
Azure Site Recovery
StorSimple
Infrastructure Services
Compute
Virtual Machines
Containers
Storage
Blob
Queues
Files
Disks
Networking
Virtual Network
Load Balancer
DNS
Express Route
Traffic Manager
VPN Gateway
App Gateway
Datacenter Infrastructure (34 Regions,30 Online)

Consistent Management Layer

Tools

Microsoft Azure + Command Line + Visual Studio

AZURE RESOURCE MANAGER API

RESOURCE MANAGER

Cloud + On-Premises

ADFS

AAD

RESOURCE PROVIDER CONTRACT

Provider Rest Points

Build and run open source solutions

DevOps

Nagios · VAGRANT · GRUNT · Gradle

Clients

Xamarin · APACHE CORDOVA™

Management

CHEF · puppet labs · ANSIBLE · SALTSTACK · mist.io · libcloud · SCALR CLOUD MANAGEMENT

Applications

Joomla! · Drupal

PaaS & DevOps

apprenda · Jelastic · CLOUD FOUNDRY

App Frameworks & Tools

php · nodeJS · Java · Ruby · IntelliJ IDEA · eclipse

Databases & Middleware

hadoop · redis · cleardb · cloudera · MySQL · mongoDB · Couchbase

Infrastructure

redhat · suse · bitnami · ORACLE LINUX · FreeBSD · docker

Azure Stack

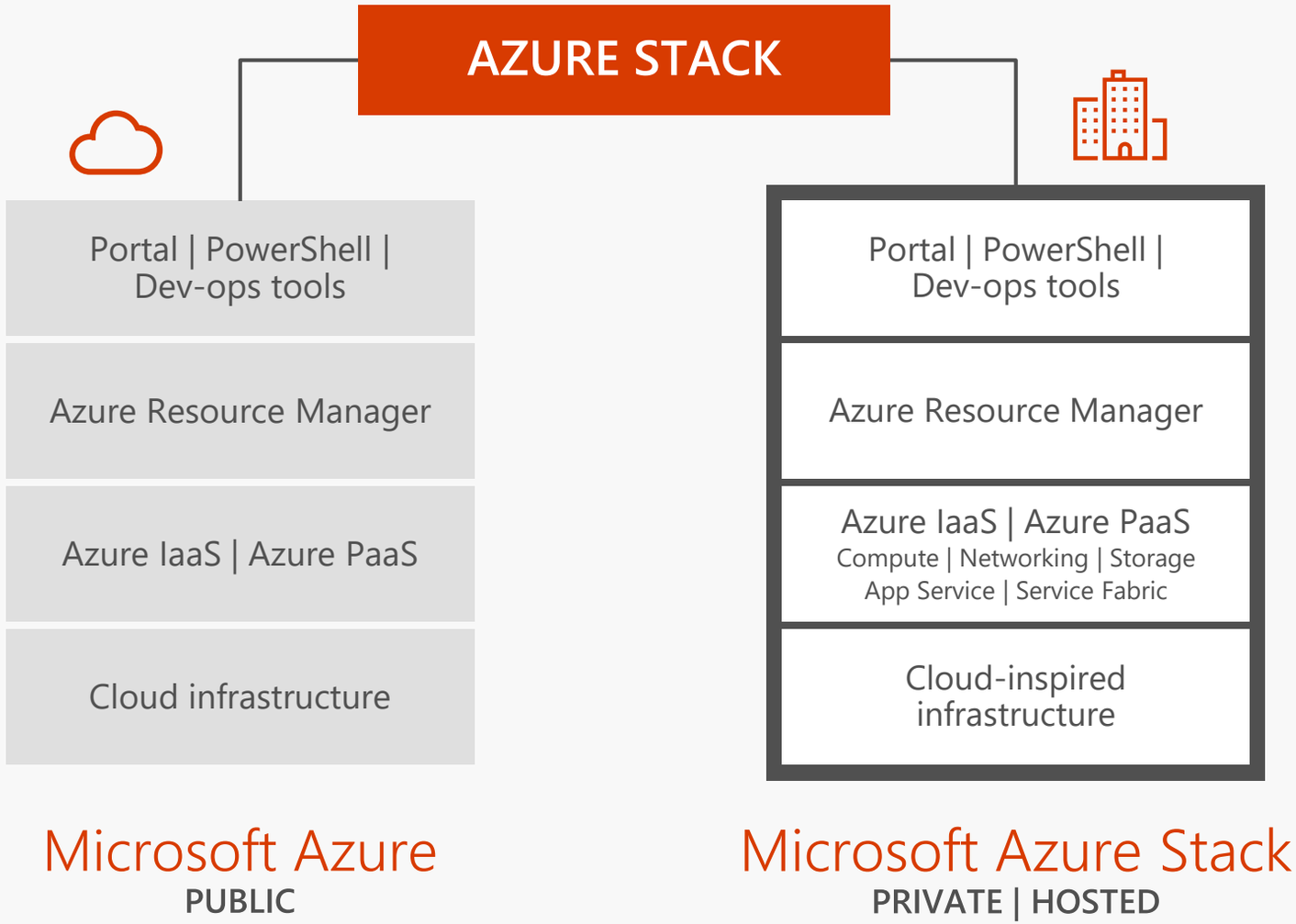
Deploy the cloud on-premises.

One Azure ecosystem.

Unified app development.

Azure services in your datacenter.

TP3 Technical Preview



https://azure.microsoft.com/en-us/overview/azure-stack/

Benefit from relentless business commitment

Global

ISO 27001

ISO 27018

ISO 27017

ISO 22301

SOC 1
Type 2

SOC 2
Type 2

SOC 3

CSA STAR
Self-Assessment

CSA STAR
Certification

CSA STAR
Attestation

US Gov

Moderate
JAB P-ATO

High
JAB P-ATO

DoD DISA
SRG Level 2

DoD DISA
SRG Level 4

SP 800-171

FIPS 140-2

Section
508 VPAT

ITAR

CJIS

IRS 1075

Industry

PCI DSS
Level 1

CDSA

MPAA

FACT
UK

Shared
Assessments

FISC
Japan

HIPAA /
HITECH Act

GxP
21 CFR Part 11

MARS-E

FERPA

GLBA

FFIEC

Regional

Argentina
PDPA

EU
Model Clauses

UK
G-Cloud

China
MLPS

China
GB 18030

China
TRUCS

Singapore
MTCS

Australia
IRAP/CCSL

New
Zealand
GCIO

Japan My
Number Act

ENISA
IAF

Japan CS
Mark Gold

Spain
ENS

Spain
DPA

India
MeitY

Canada
Privacy
Laws

Privacy
Shield

Germany IT
Grundschutz
workbook

Zoom into Web Apps

=

Web apps

Web apps that scale with your business

Mobile apps

Build mobile apps for any device

Functions

Serverless event based development accelerator

API apps

Easily build and consume APIs in the cloud

Azure App Service

Build and scale great web and mobile apps

Auto-patching and auto-scale

.NET, Java, Node.js, PHP, Python

Integrate with SaaS and on-premises

Continuous integration with VSTS, Github, BitBucket, and more

Azure App Service

Enterprise-grade apps

VNET Integration
Not Configured

Securely access resources available in or through your Azure VNET
Learn More

Setup

Hybrid Connections
Not Configured

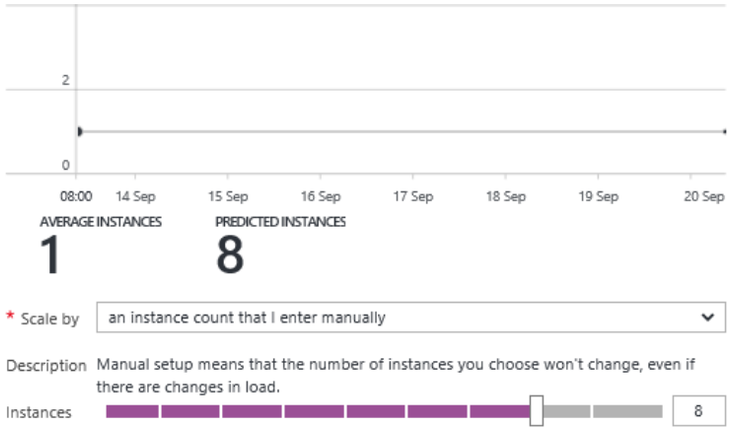
Securely access applications in private networks
Learn More

Configure your hybrid connection endpoints

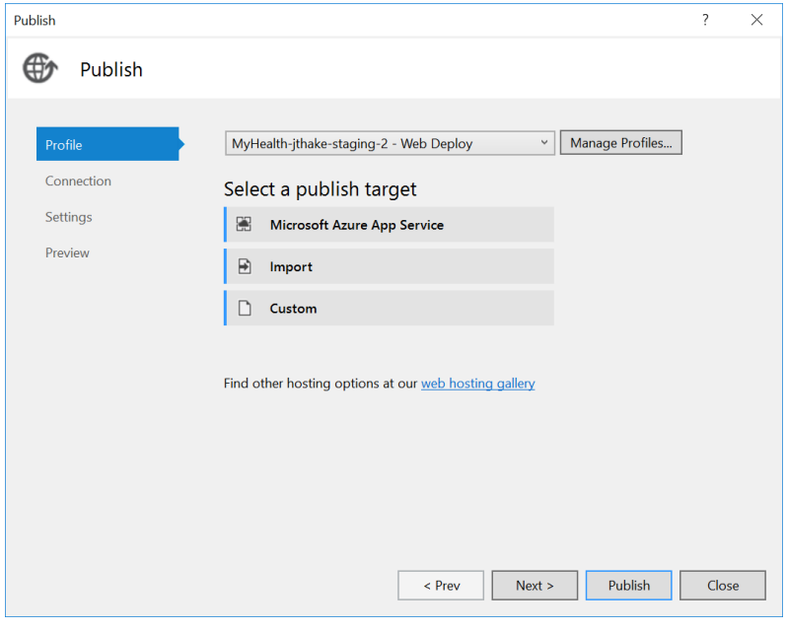
App Service Environment
Not in an ASE

Host your web apps in your own Azure Virtual Network
Learn More

Fully managed platform



High productivity development



Azure functions

Asynchronous, event-driven, serverless experience

Respond to events occurring in other Azure services, SaaS products (e.g., Office365, Salesforce), on-premises systems

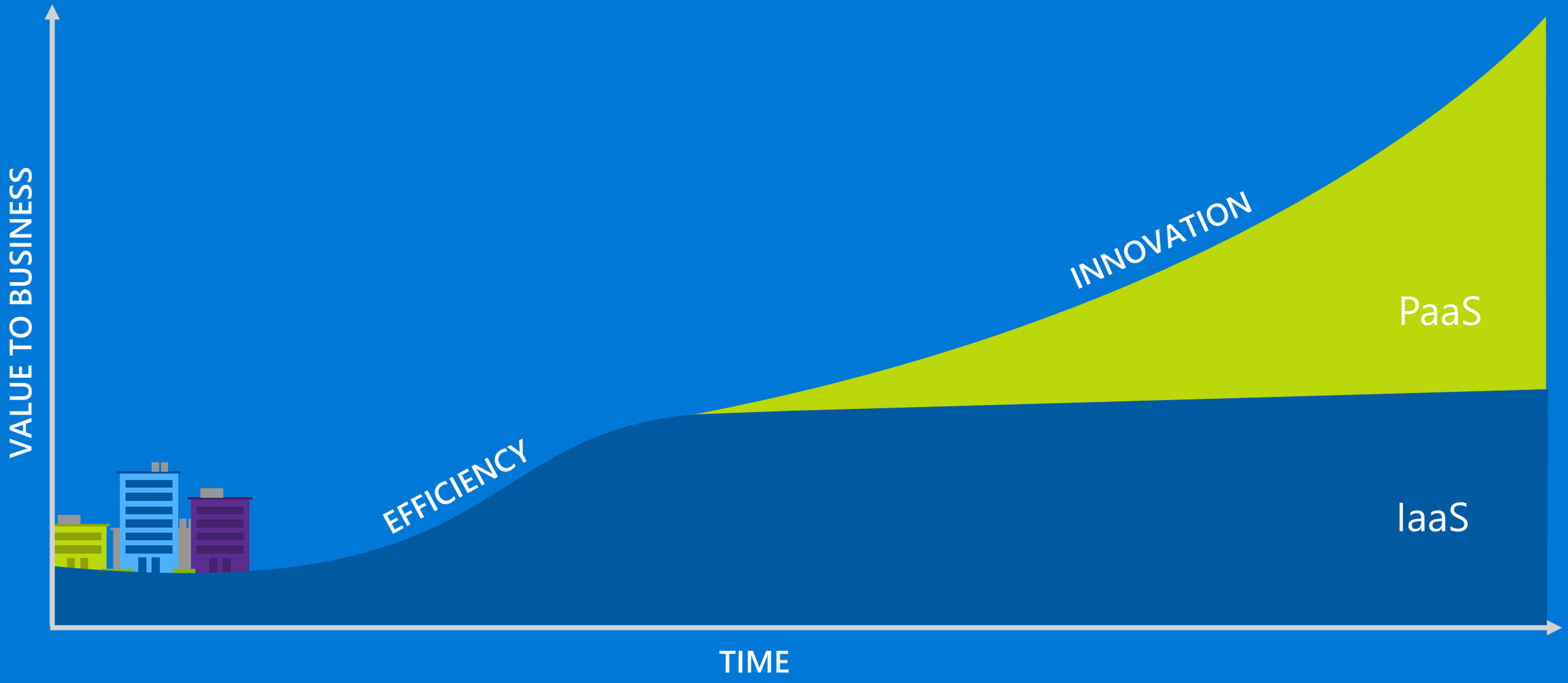
Only pay while function is executing

Fully open source

AZURE FUNCTIONS

serverless experience

From infrastructure to innovation



Microsoft Application Platform

Build the next generation of intelligent apps with an open, comprehensive solution for any developer and any platform

Target any platform, use any technology

- ✓ Custom or template based solutions
- ✓ Multiple languages, frameworks, tools, and databases
- ✓ iOS, Android, Windows, and Linux

Flexible & open

Develop apps with speed and agility

- ✓ Integrated cloud platform, DevOps, and tools
- ✓ Build, deploy, manage apps faster
- ✓ Work across teams and disciplines

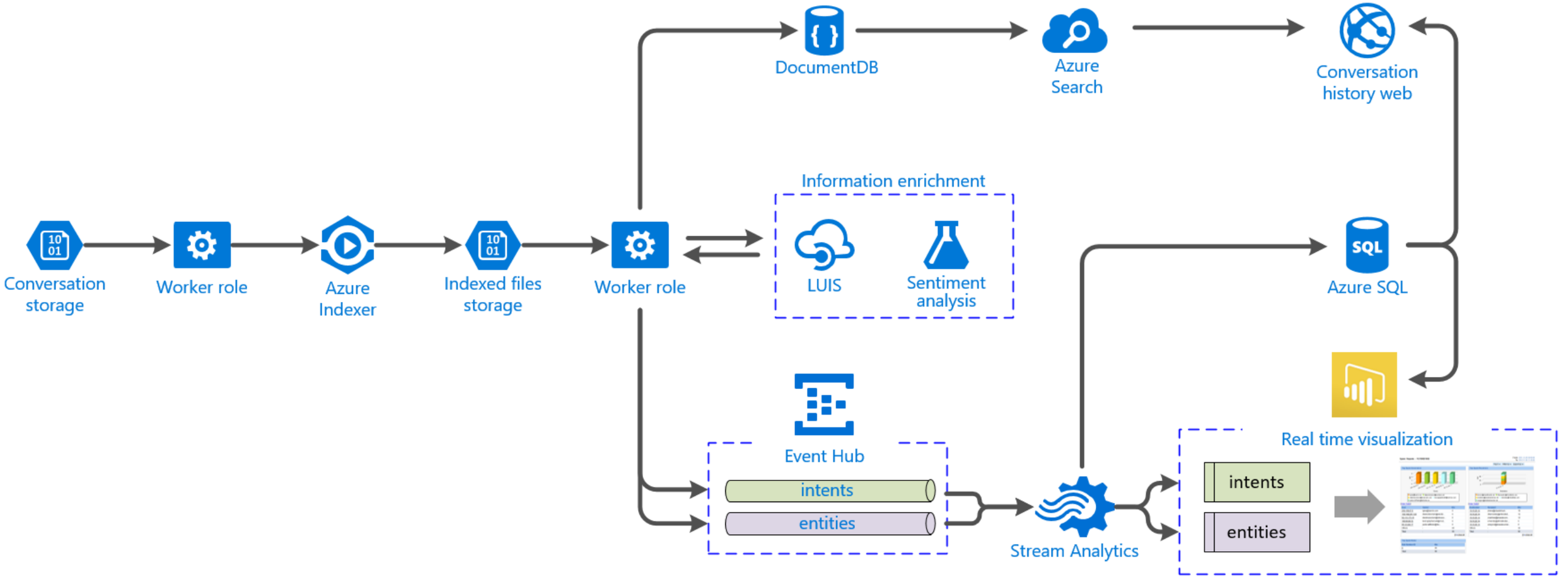
Productive

Gain the broadest reach for every line of code

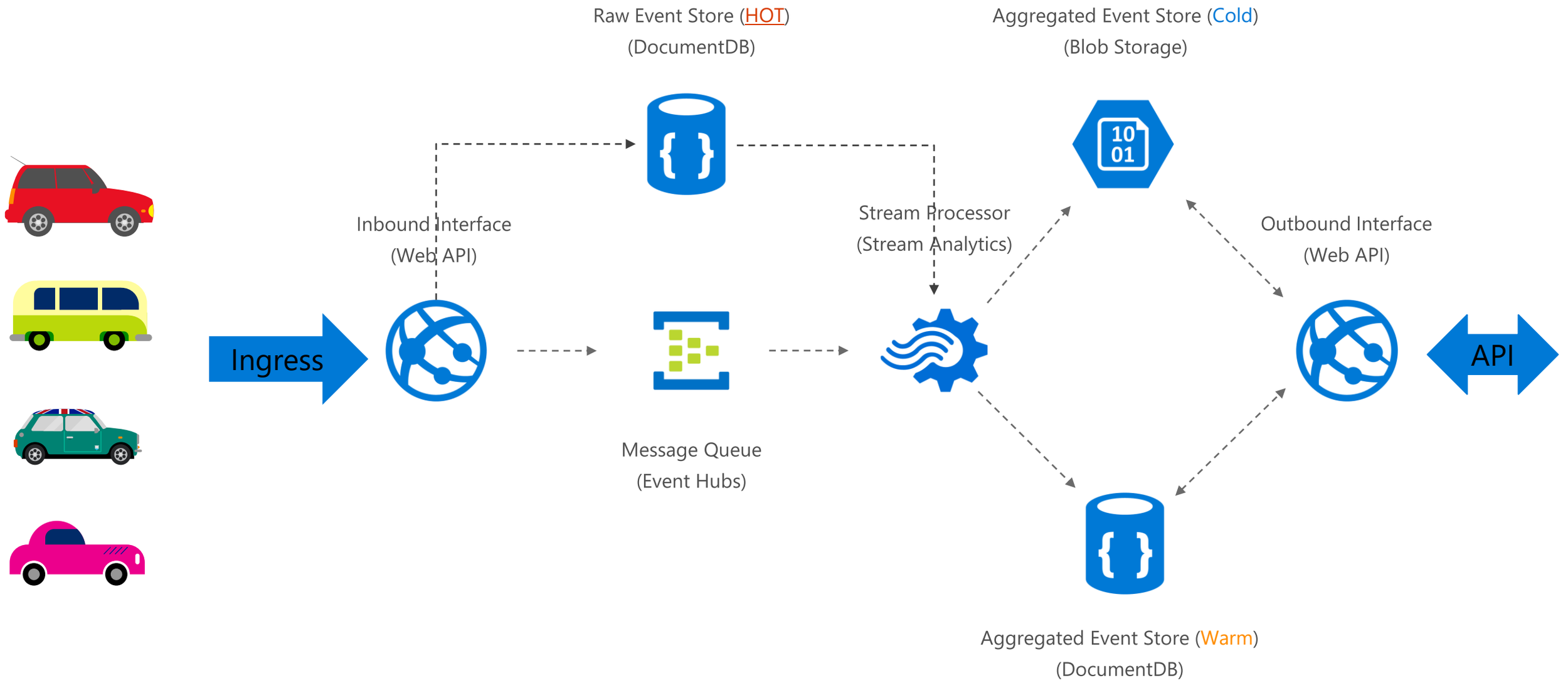
- ✓ Target on-premises, hybrid, cloud, and multi-cloud
- ✓ Write once, run anywhere
- ✓ Leverage 60+ enterprise grade services

Reach

Call center analysis/dashboard solution architecture



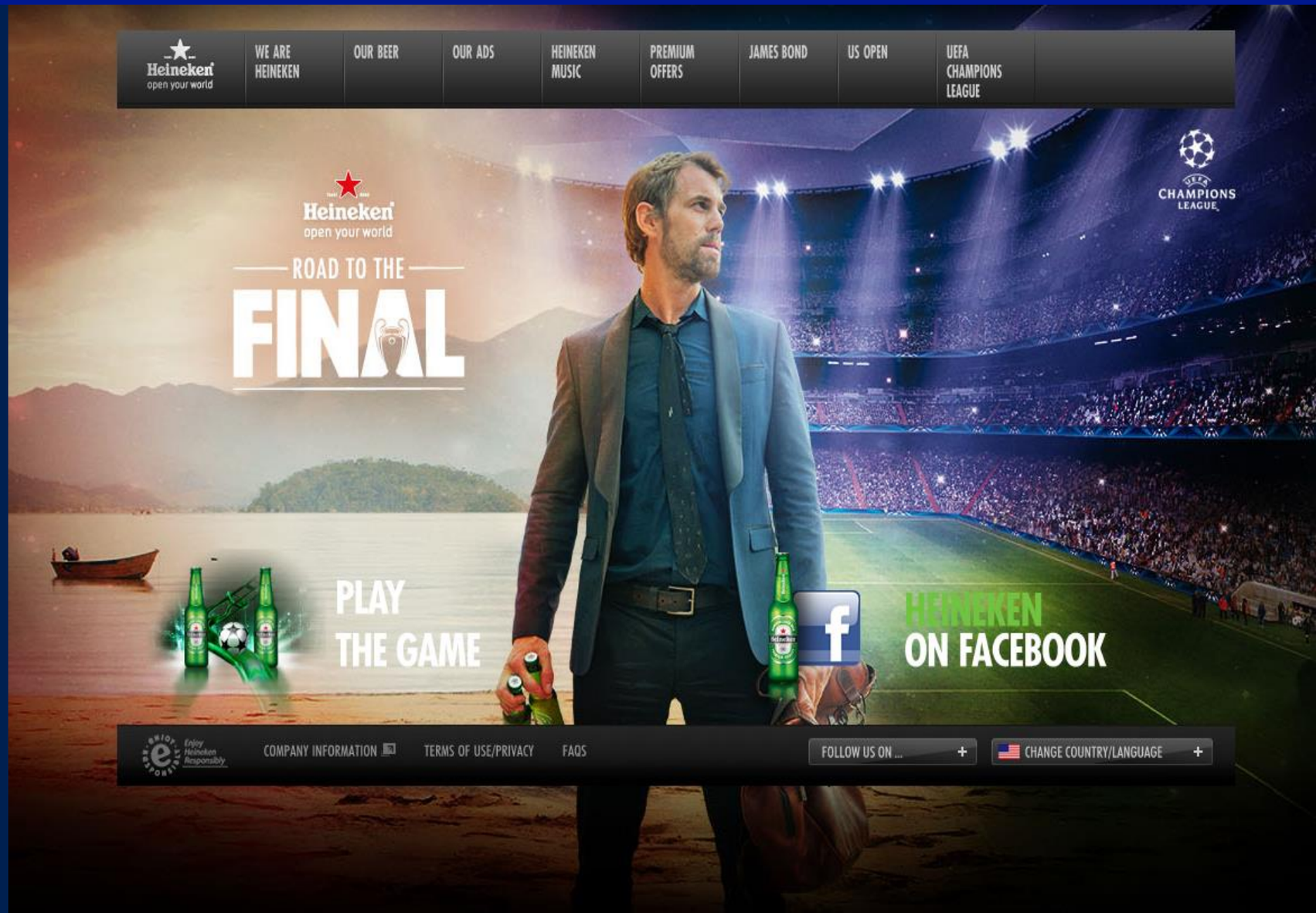
IoT : Vehicle Telematics



Heineken

Global Marketing Campaign in the Cloud

- 40+Mln bekijkers van online campagne video
- Champions League campagne schaalt tot 1Mln gameplays per uur
- Pas bij succes van de campagne wordt cloud veel gebruikt en zijn er kosten



Demo

General Web App demo

RDW EDS Next Continuous Integration Continuous Deploy

Three options for leveling up your skills

Free

Training

Access to our full online course catalog of new Azure technical training including Microsoft Azure Fundamentals and Microsoft Azure for AWS Experts

Certification

Digital Certificates of Completion for each course

Benefits

The skills to lift and shift technology to Azure

Start now >

$99

Training

Access to our full online course catalog of new Azure technical training, with new courses added monthly

Certification

One Azure certification exam of your choice (one free retake included, exam can be completed online or in person)

One practice test for the Azure exam of your choice

Digital Certificates of Completion for each course

Benefits

Valuable Microsoft Certified Professional status

Start now >

$279

Training

Access to our full online course catalog of new Azure technical training, with new courses added monthly

Certification

Three Azure certification exams of your choice (one free retake of each included, exams can be completed online or in person)

Three practice tests for the Azure exams of your choice

Digital Certificates of Completion for each course

Benefits

Evidence of your mastery of Azure cloud skills

Start now >

https://azure.microsoft.com/en-us/learn/skills/

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