



EMPOWERING Energy industry

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Agenda



Industry trends



Digital transformation:
The opportunity



Microsoft capabilities

Digital feedback loop



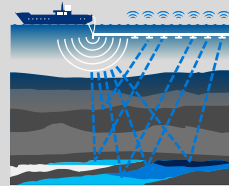
Across upstream digital hotspots

1

Upstream

Intelligent reservoirs

- Energy and petroleum data lake
- Predictive lease management
- Downhole intelligence
- Virtual geophysics
- Realtime reservoir models

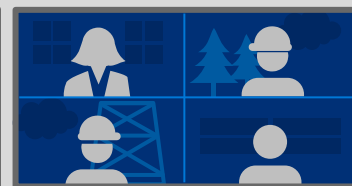
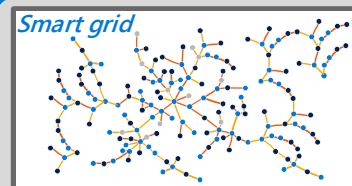
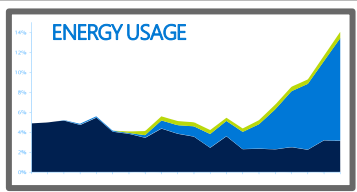
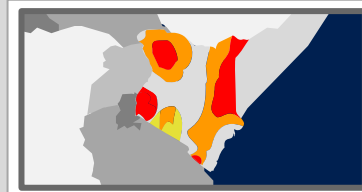
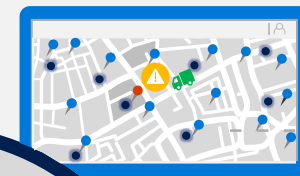


2

Midstream

Well planning

- Digitization platform
- Deep learning for seismic
- Cognitive search
- Collaborative decision making



Adaptive
Control Center

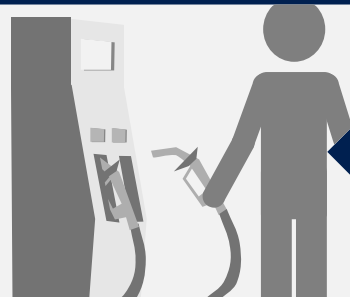


4

Retail

Digital asset integrity

- Real-time hydrocarbon production management
- Integrated production operations
- Automated field tickets
- Asset performance



3

Downstream

Drilling optimization

- Drilling optimization
- AI driven geo-steering
- Real-time drilling optimization
- Predictive drill rig maintenance



Vision & Strategy

Culture

Unique Potential

Capabilities



An aerial photograph of a wind farm situated on a mountain ridge. The landscape is covered in green grass and dotted with rocks. A dirt road winds through the terrain, connecting several white wind turbines. A thick layer of white fog or mist hangs in the valleys and around the turbines, creating a dramatic and atmospheric scene. In the background, more mountain peaks are visible under a clear blue sky.

1

A **vision and strategy**
that helps to reimagine how energy
is delivered to the world

Statoil to change name to Equinor

“ *Equinor is a name that is forward-looking, and creates a strong platform for engagement and dialogue with a broad set of stakeholders. We believe it will create internal alignment and pride, and help attract capital, partners and talents* ”

- Senior Vice President for Corporate Communication, Equinor



2

A **culture** that keeps teams
connected, elastic, and invites change



Shell to enroll thousands in online artificial-intelligence training

“ *Technology is moving so quickly that if you're not continually training your people, you're going to get out of date* ”

— General Manager of Data Science
Shell



3

Unique potential that unlocks and amplifies the value it creates



DNV GL launches industry data platform to unlock potential of big data

“ *Companies have always turned to us for independent, expert assessments and best practices ... Now we are exercising this same role in the digital domain with our Veracity industry data platform, designed to help companies leverage the ever-increasing amount of data from multiple sources.* ”

— President & CEO, DNV GL



4

Capabilities that enable organizational transformation



Igniting a low code revolution at Schlumberger

“ *Microsoft Power Platform provides a low code environment to drive innovation at the edge of our business, enabling us to drive digital transformation at an enterprise level.* ”

— Digital Transformation Leader, Schlumberger

Schlumberger



Tech intensity = (Tech adoption X Tech capability)^{Trust}



Microsoft in Energy

Industry Priority
Scenarios



Strategic
Alliances



Partner
Ecosystem



Differentiated
Technology



Microsoft Strategic Alliances



Microsoft helps BP unlock the power of its data to deliver actionable insights in support of their business

The agreement will see BP move advanced workloads to Azure out of existing corporate data centers as part of the company's modernization and transformation agenda.

Repsol signs an agreement with MS as part of its digitalization strategy

Repsol will implement cloud computing-based technology developed by Microsoft, such as the hybrid cloud platform Azure, which will allow for scalability and ubiquity in both data storage and in processes.

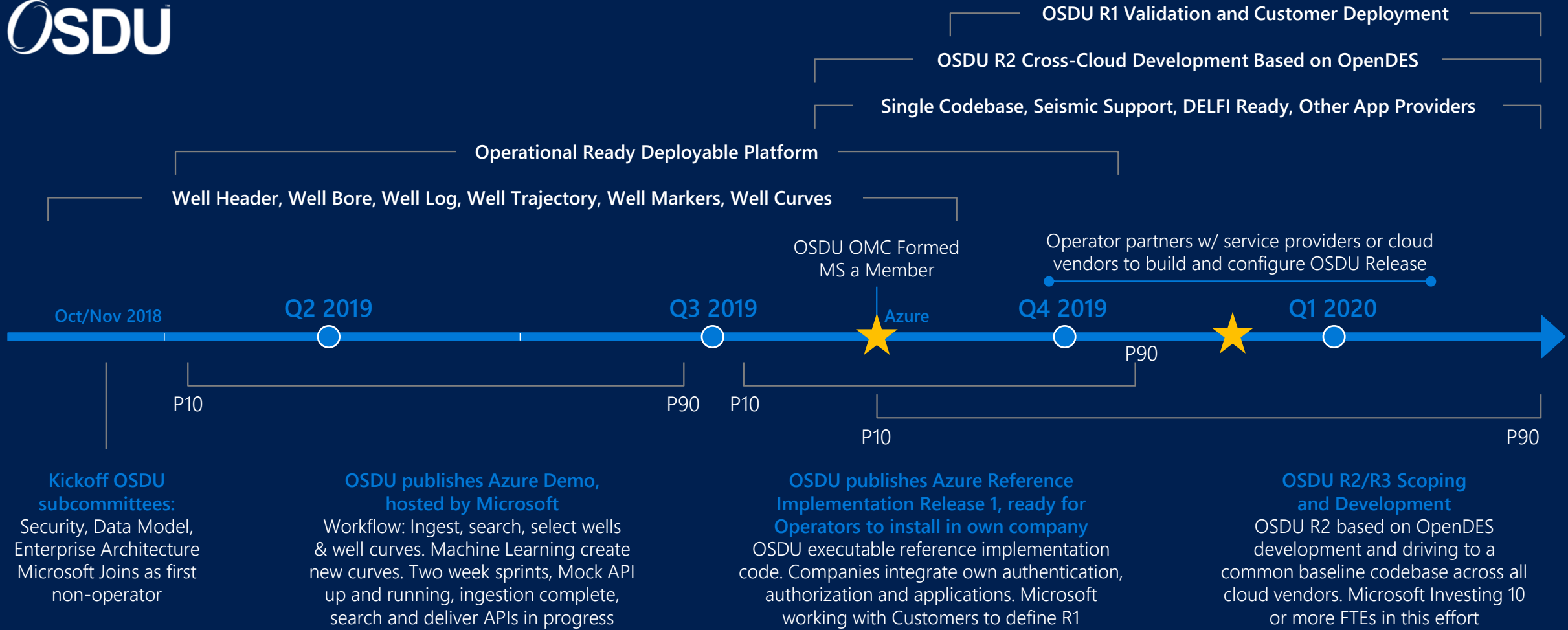
Chevron fuels digital transformation with new Microsoft partnership

Multi-year partnership establishes Microsoft Azure as Chevron's primary cloud and is part of Chevron's efforts to digitize its oil fields and accelerate deployment of new technologies that can increase revenues, reduce costs and improve the safety and reliability of operations.

Equinor partners with Microsoft for cloud services delivered from new cloud data centers in Norway

The partnership with Microsoft enables Equinor to shape and accelerate the development of fit for purpose IT services for the energy industry and secure a faster transition to the cloud.

Microsoft OSDU Program



Schlumberger, Chevron and Microsoft announce collaboration to accelerate digital transformation

“ *We believe this industry-first advancement will dramatically accelerate the speed with which we can analyze data to generate new exploration opportunities and bring prospects to development more quickly and with more certainty.* ”

— EVP Technology, Projects and Services
Chevron



Schlumberger **OSDU**



Microsoft Energy partners

HALLIBURTON

SIEMENS

Rockwell
Automation



accenture

ABB

Bentley®

avanade



CGG

Honeywell

SAP

Schneider
Electric

ELEMENT
ANALYTICS™

Baker Hughes

C3.ai

Schlumberger

MAANA

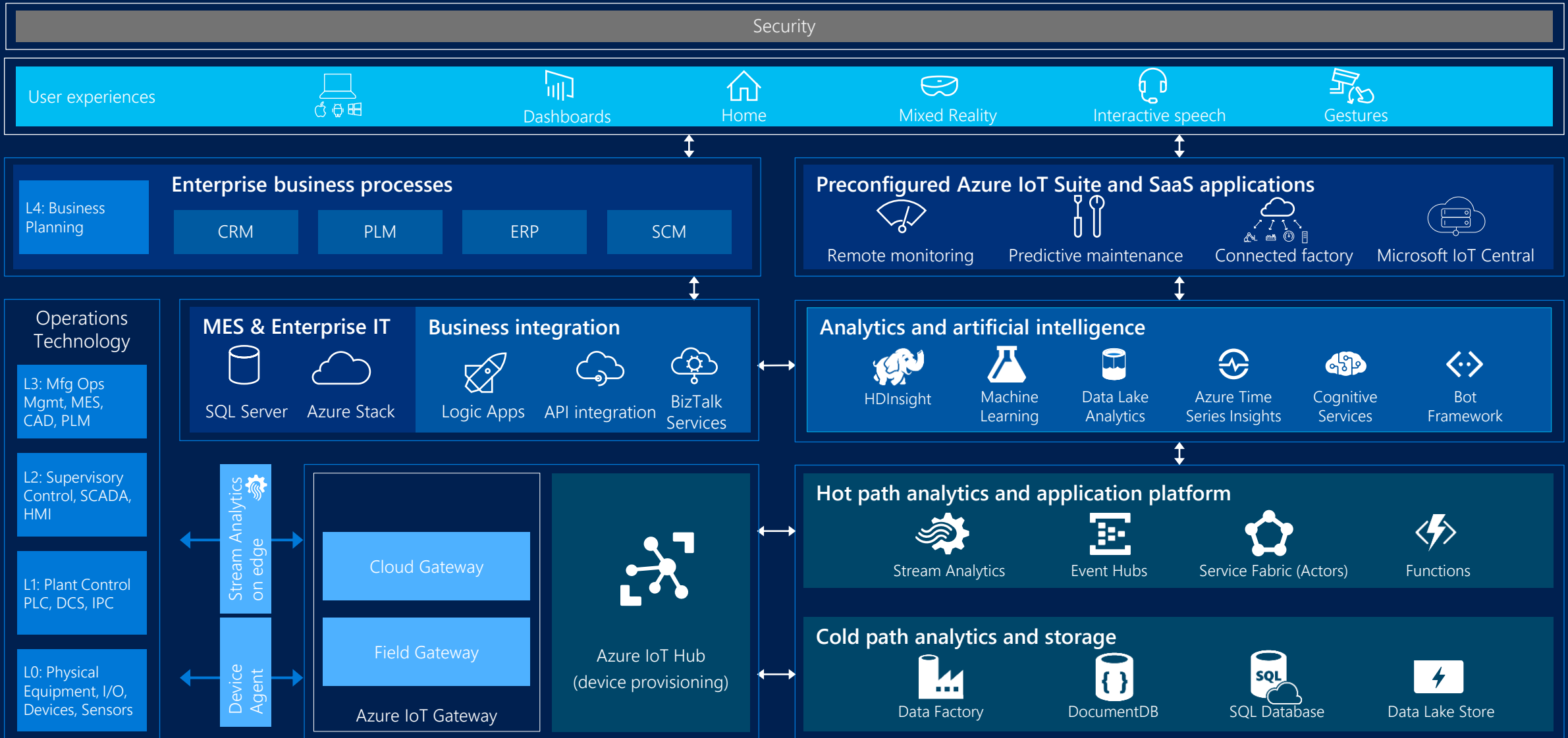
ptc

OSIsoft®

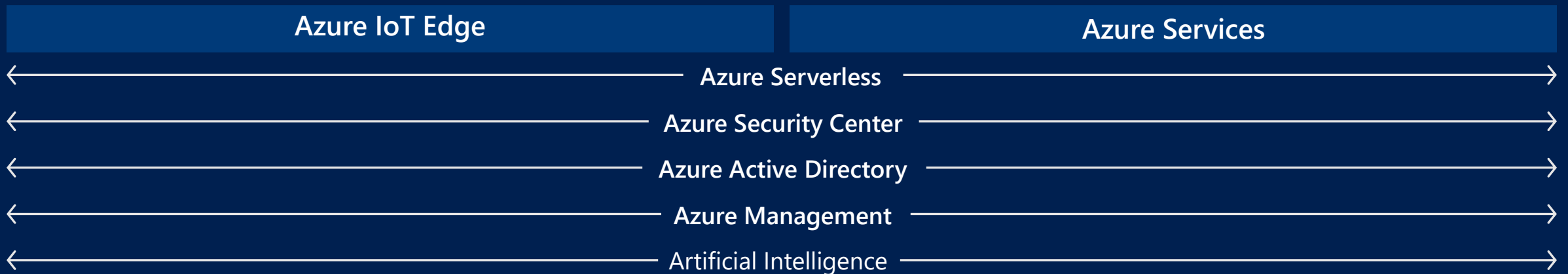
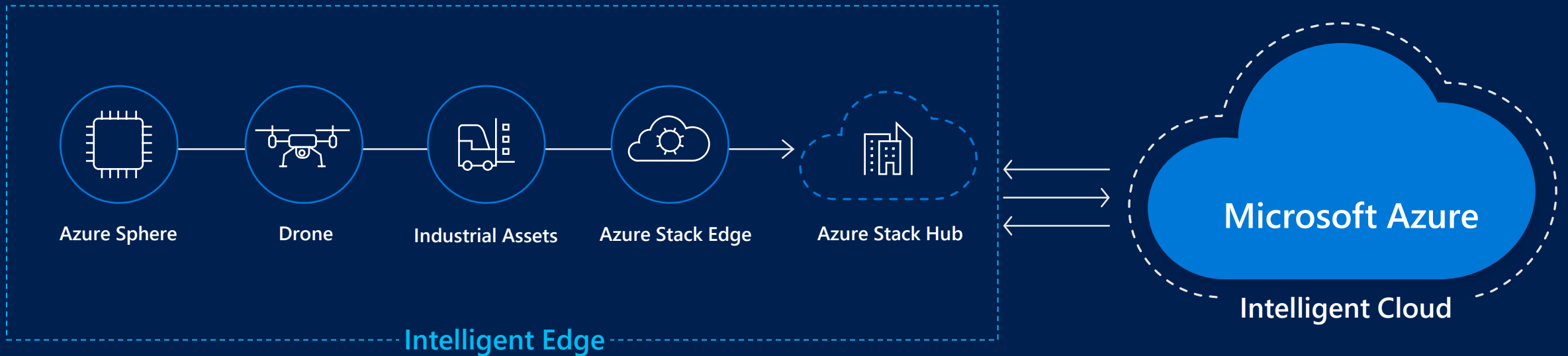
EY
Building a better
working world

EMERSON™

Technology Stack



Microsoft Azure approach



Unmatched security



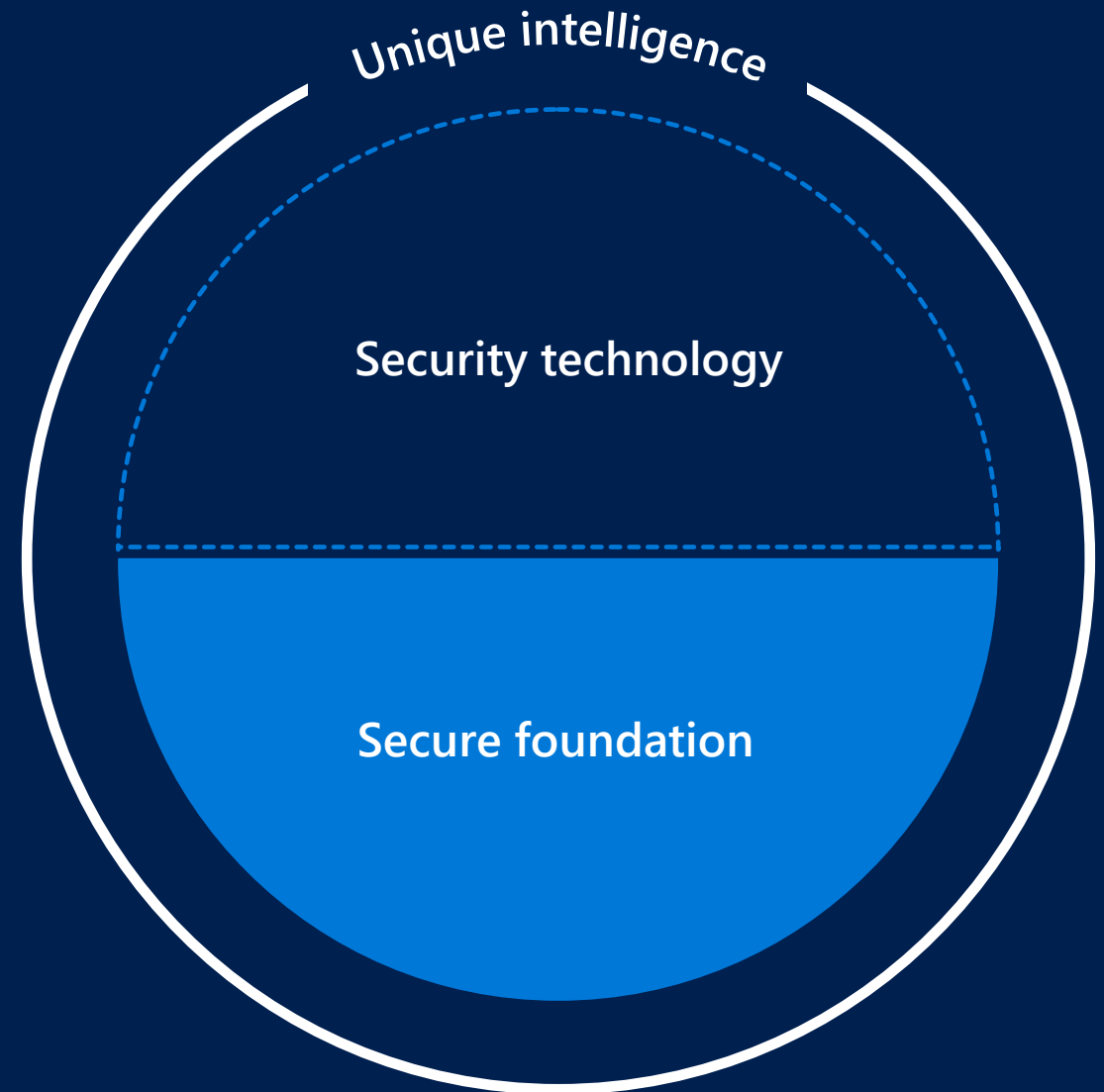
\$1B+ annual investments



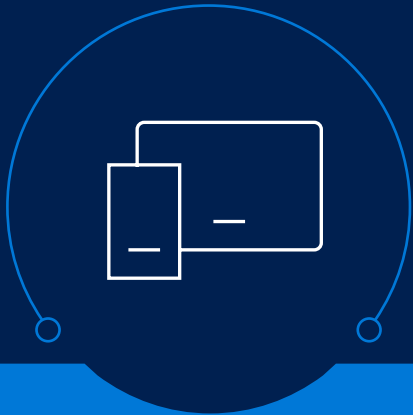
Over 3,500 security experts



Trillions of diverse signals



Azure AI



AI apps & agents

Azure Bot Service
Azure Cognitive Services



Machine learning

Azure Databricks
Azure Machine Learning
Azure AI infrastructure

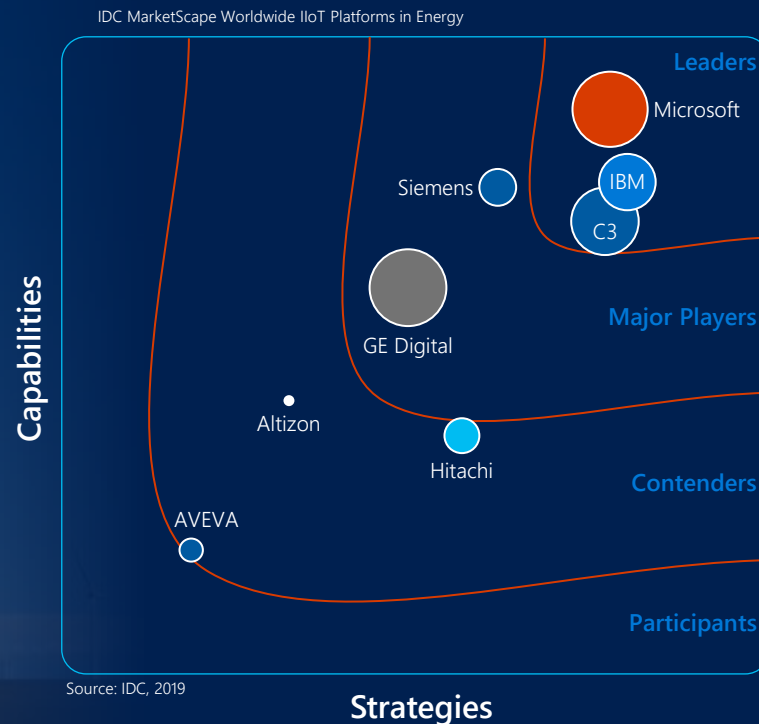


Knowledge mining

Azure Cognitive Search

Microsoft recognized as leading Energy IoT Platform

Energy MarketScape



Strengths Identified

Strong momentum within the Industrial IoT sector

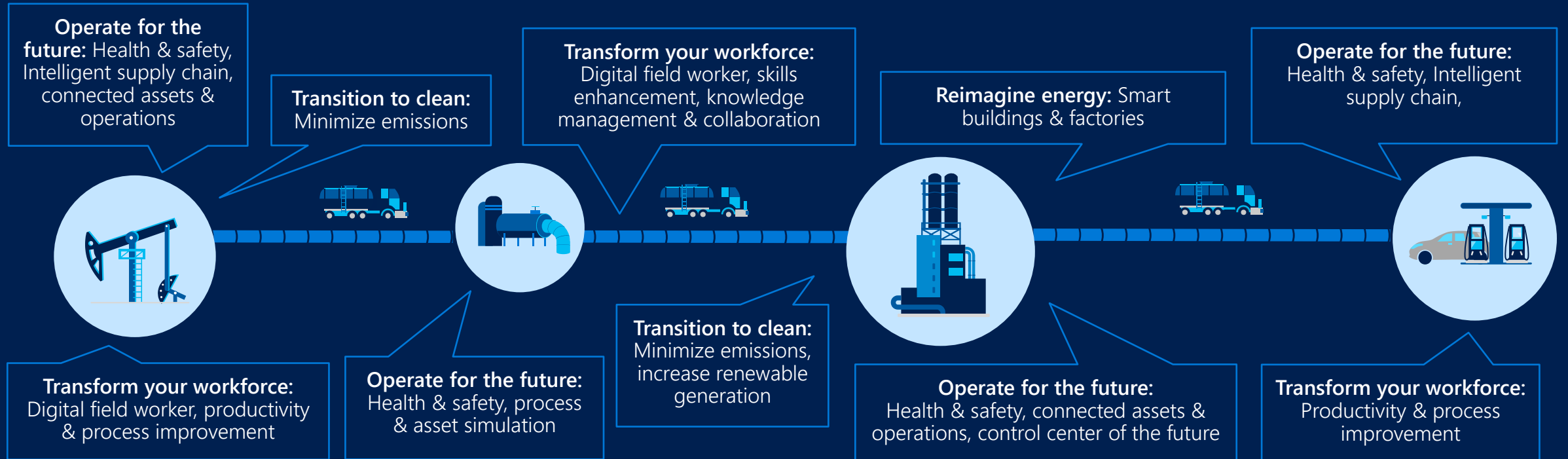
Extensive partnerships with IT and OT companies

Broad strategy to support edge computing that spans hardware and software

IDC MarketScape vendor analysis model is designed to provide an overview of the competitive fitness of ICT suppliers in a given market. The research methodology utilizes a rigorous scoring methodology based on both qualitative and quantitative criteria that results in a single graphical illustration of each vendor's position within a given market. The Capabilities score measures vendor product, go-to-market and business execution in the short-term. The Strategy score measures alignment of vendor strategies with customer requirements in a 3-5-year timeframe. Vendor market share is represented by the size of the circles. Vendor year-over-year growth rate relative to the given market is indicated by a plus, neutral or minus next to the vendor name

SOURCE: "IDC MarketScape: Worldwide Industrial IoT Platforms in Manufacturing 2019 Vendor Assessment" by Stacy Crook and Reid Paquin, June 2019, IDC #US45116819 and IDC #US45116919

Oil & Gas Value Chain



Exploration & Production

- Sensors & IIoT monitoring
- Satellite & drone detect and prevent fugitive emissions
- Seismic imaging to improve exploration
- Equipment optimization
- Carbon use for EOR

Midstream & Pipelines

- Drones for monitoring & inspection
- Computer vision sensors
- Low emission freight
- Equipment optimization
- Sensors and leakage detection

Downstream Refineries

- Sensors & IIoT monitoring
- Carbon Capture and storage
- Facility energy management
- Equipment optimization
- Connected worker technologies
- Facility management

Retail & Demand

- Energy usage analytics
- Sensors & IT
- Fleet management
- Facility management
- Vehicle efficiency

Microsoft
runs on
trust.



Thank you