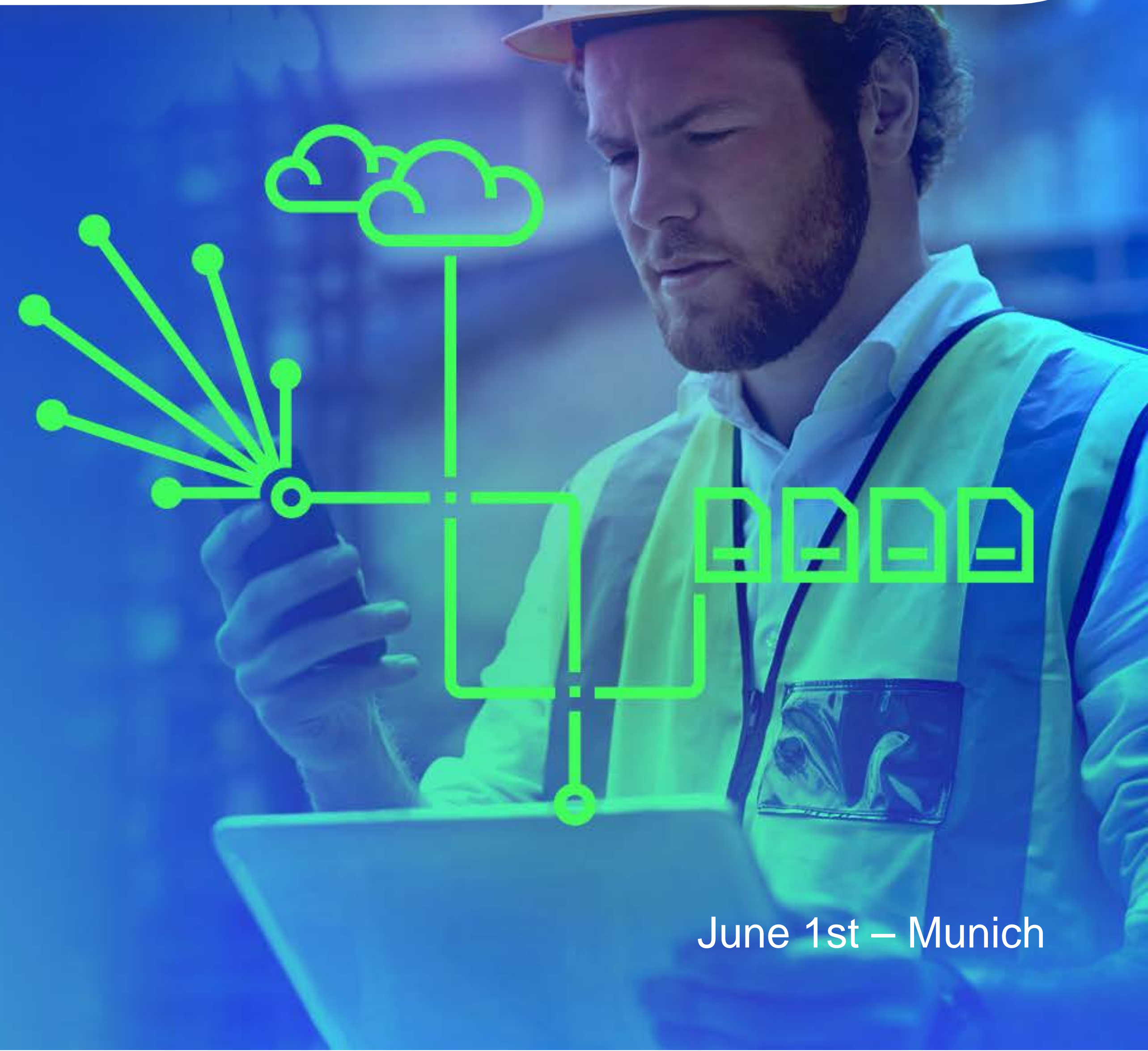# Franck Greverie

Group Cloud & CyberSecurity leader

Cloud services

2016 | Capital Market Day
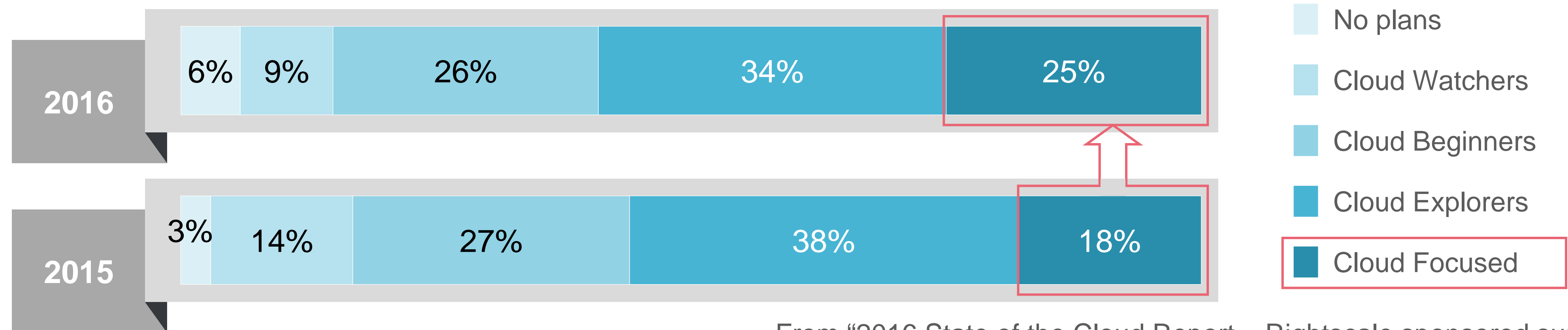
June 1st – Munich

Cloud: An ubiquitous delivery option for all kinds of IT

On average, businesses today are **allocating 40% of their IT budgets to cloud and cloud-related services** through 2017, 22% of which is allocated to public cloud services. 80% of organizations will increase their cloud spending through 2017.

– Gartner, Forecast Overview: Public Cloud Services, Worldwide, 2016 Update

Big jump with enterprises going cloud first!

Enterprise Cloud Maturity 2016 vs. 2015

2016

| 6% | 9% | 26% | 34% | 25% |

2015

| 3% | 14% | 27% | 38% | 18% |

Legend:
- No plans
- Cloud Watchers
- Cloud Beginners
- Cloud Explorers
- Cloud Focused
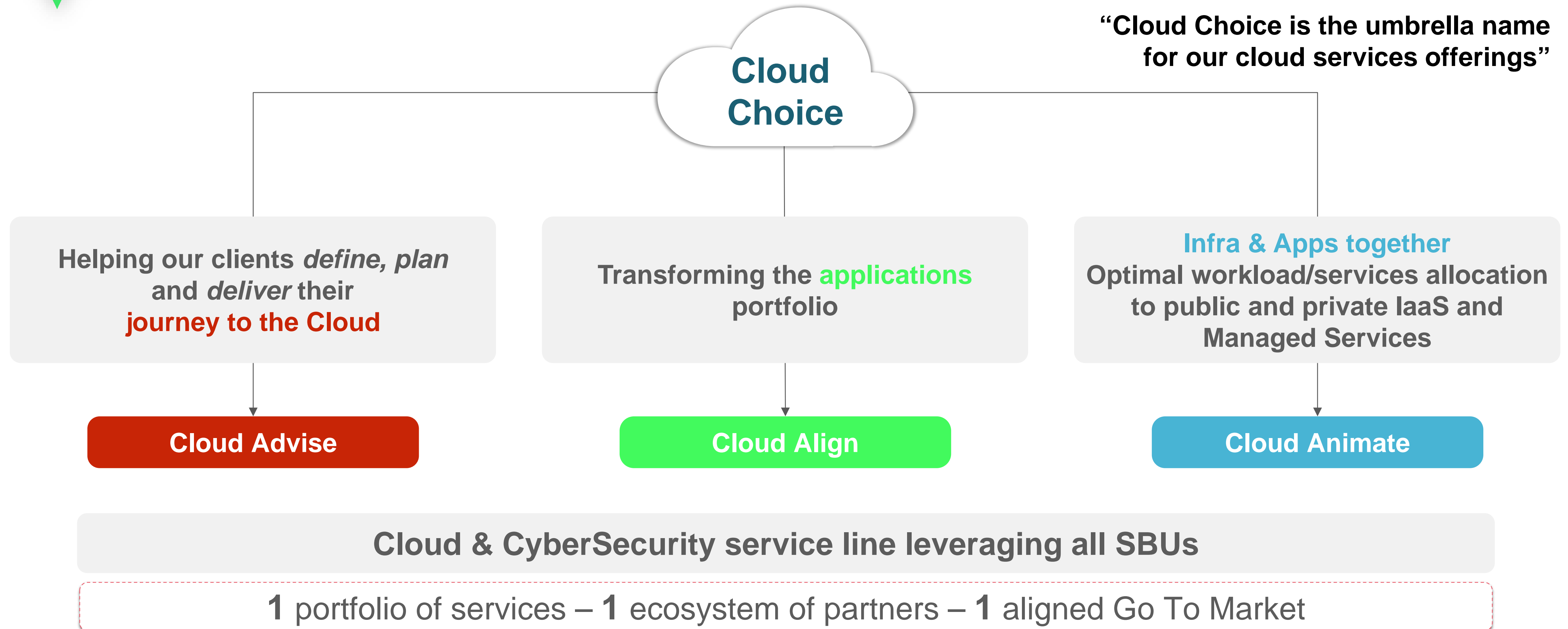
From "2016 State of the Cloud Report – Rightscale sponsored survey"

What's in the minds of best CIOs/CTOs?

Cloud services levers

Security privacy

Business line Leaders

Chief Digital Officers

Cost reduction speed

Agility

SHADOW IT
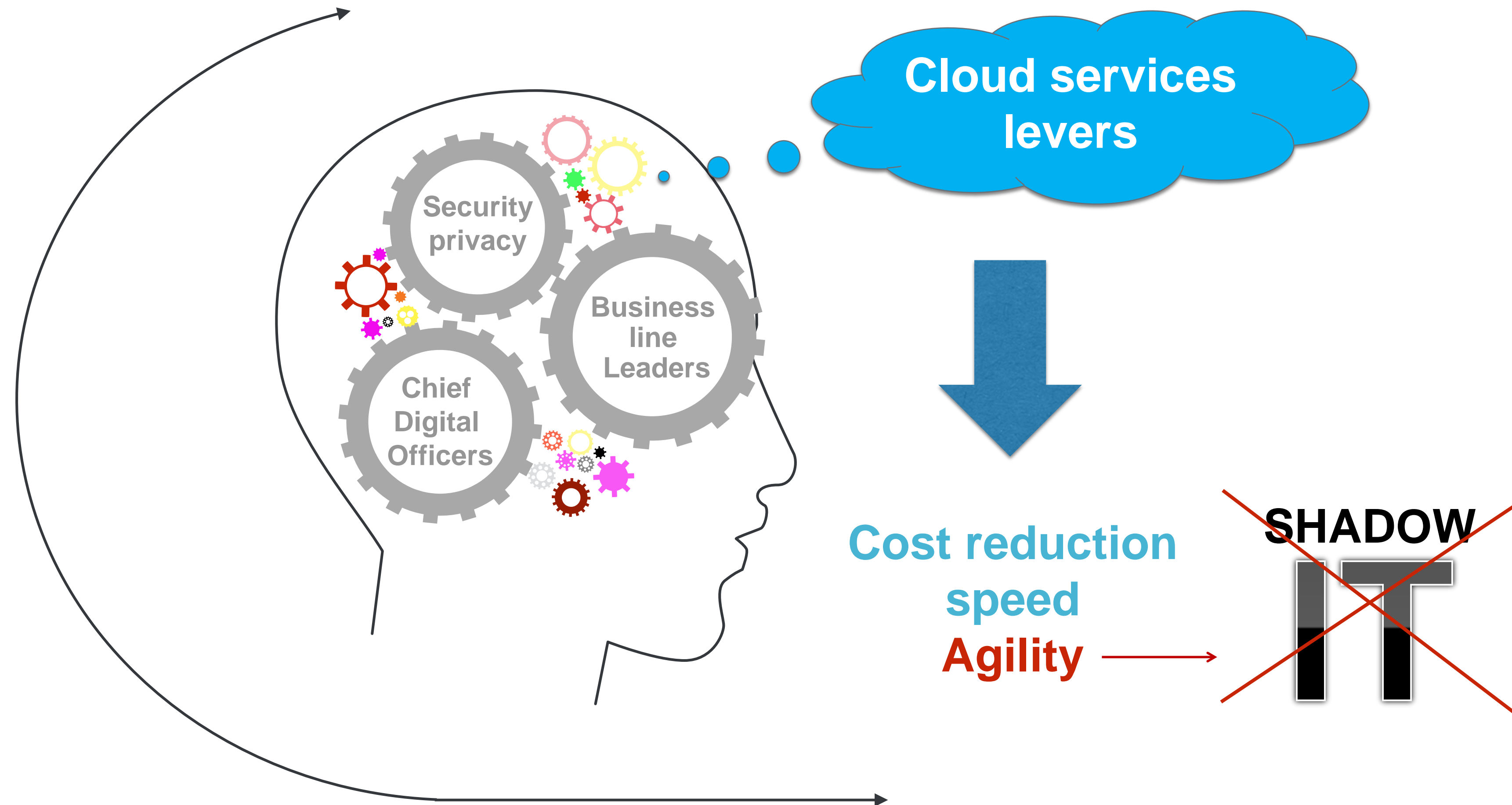
A leader in Cloud services

An end-to-end Cloud services portfolio – AAA

Cloud Choice

"Cloud Choice is the umbrella name for our cloud services offerings"

Helping our clients *define, plan* and *deliver* their
journey to the Cloud

Transforming the **applications** portfolio

Infra & Apps together
Optimal workload/services allocation to public and private IaaS and Managed Services

Cloud Advise

Cloud Align

Cloud Animate

Cloud & CyberSecurity service line leveraging all SBUs

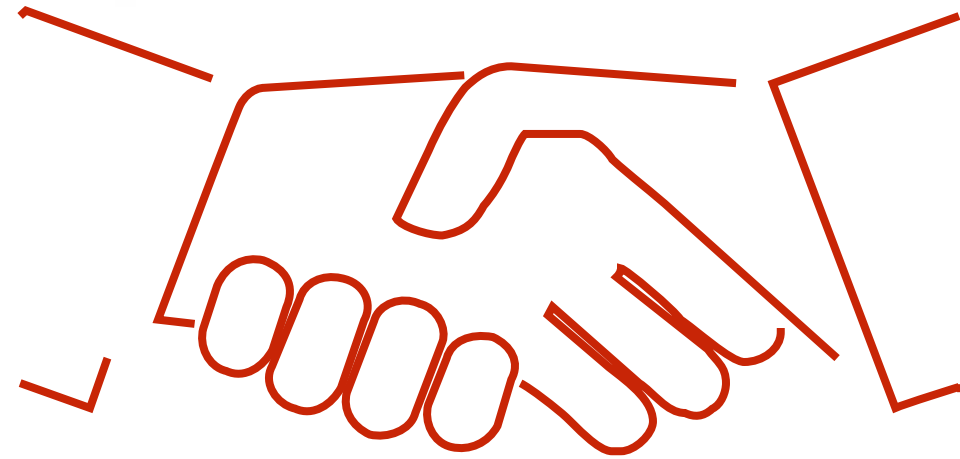**1** portfolio of services – **1** ecosystem of partners – **1** aligned Go To Market

Cloud services portfolio
## Cloud Strategy – Roadmap

We help our customers to adopt a "cloud-first strategy".
We design a business intent driven cloud roadmap (top-down approach) to enable your
digital transformation, not an Infra led cloud view (bottom-up approach)

Capgemini
CONSULTING.TECHNOLOGY.OUTSOURCING
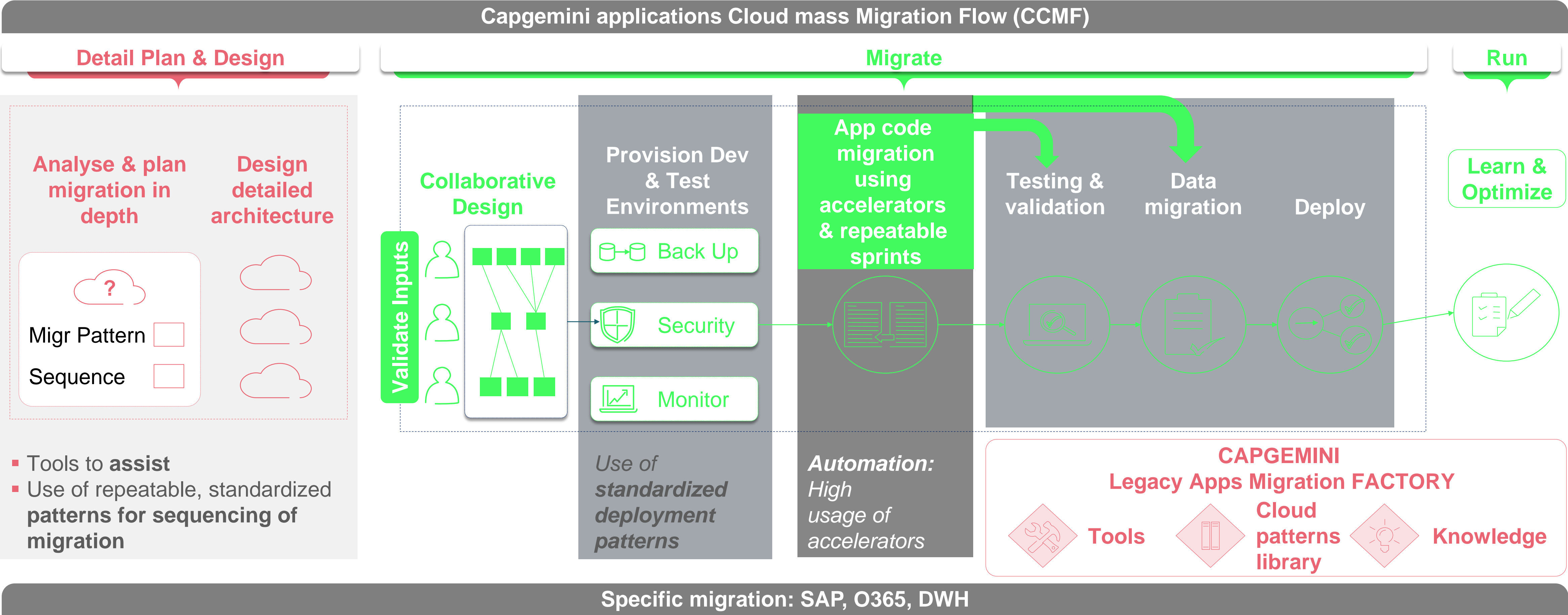
CLOUD STRATEGY – ROADMAP – 4 areas

BUSINESS CASES
"Looking at Cloud Strategy through the lens Of Value"
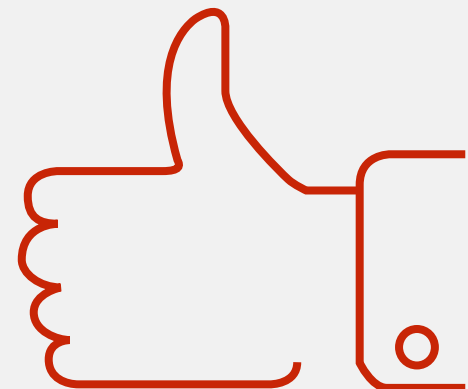
A — **Digital business services/applications** that need to be able to scale and to be transformed regularly

B — **Big data solutions** that are used today or that will be needed in the future (Hadoop,…)

C — The **migration of existing on-premises apps** apps to the cloud.

D — The **acceleration in the adoption of SaaS** from ERP and core systems to HR and Office
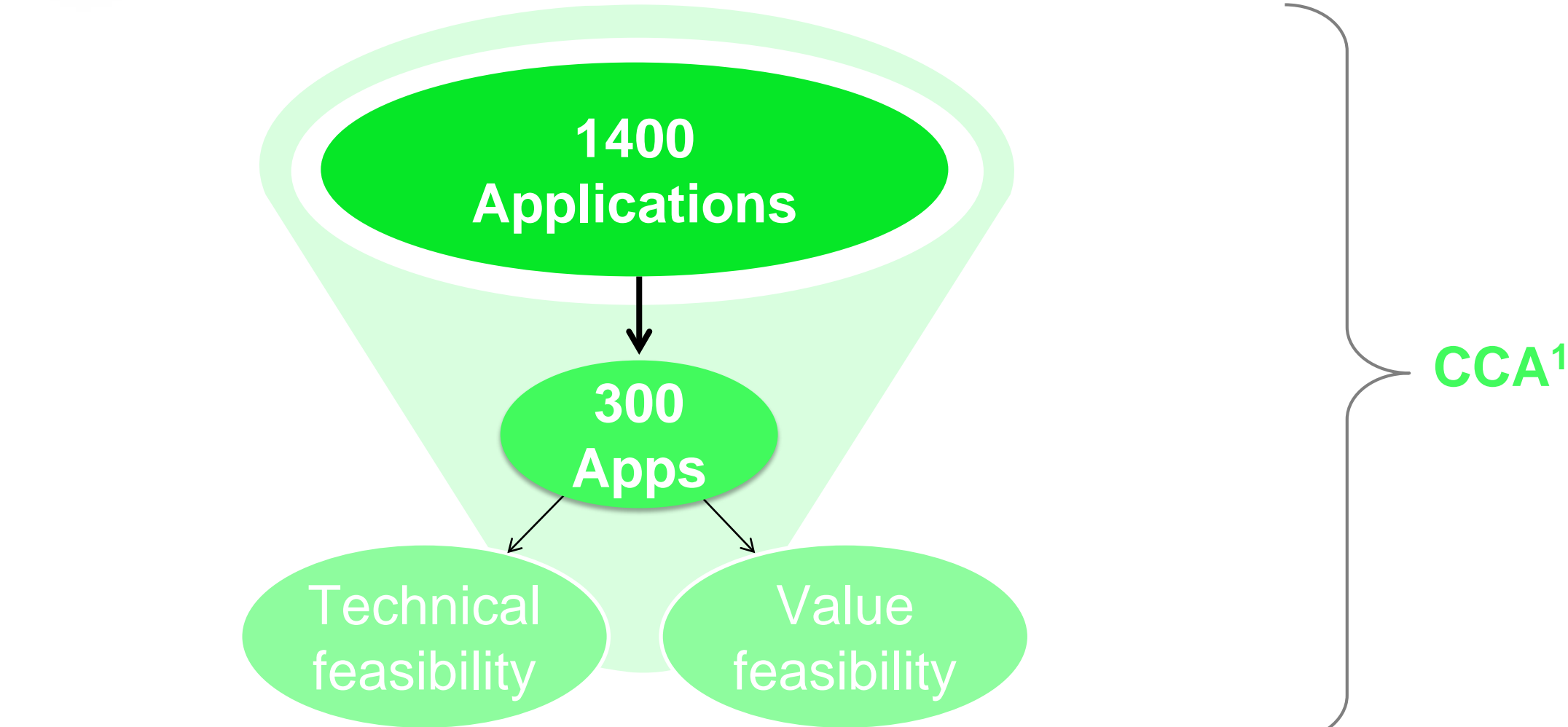
Cloud services portfolio
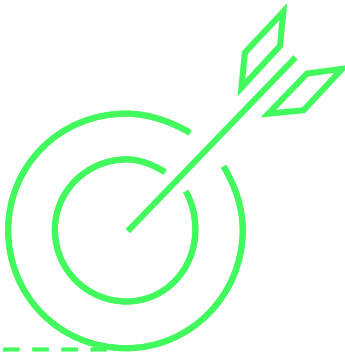## Legacy Apps migration to the cloud – CCMF

Cloud Align

Capgemini applications Cloud mass Migration Flow (CCMF)

Detail Plan & Design

Migrate

Run

Analyse & plan migration in depth

Design detailed architecture

?

Migr Pattern ☐

Sequence ☐

- Tools to **assist**
- Use of repeatable, standardized **patterns for sequencing of migration**

Validate Inputs

Collaborative Design

Provision Dev & Test Environments

🗄→🗄 Back Up

🛡 Security

📈 Monitor

Use of standardized deployment patterns

App code migration using accelerators & repeatable sprints

Automation: High usage of accelerators

Testing & validation

Data migration

Deploy

Learn & Optimize

CAPGEMINI Legacy Apps Migration FACTORY

🔧 **Tools**

📚 **Cloud patterns library**

💡 **Knowledge**

Specific migration: SAP, O365, DWH

6

Customer use case
One of the world's largest beverage company

1400
Applications

300
Apps

Technical feasibility

Value feasibility

CCA[1]

End-to-End Capgemini Cloud Migration Flow (CCMF)

Detail Plan & Design | Migrate | Run

Analyse & plan migration in depth | Design detailed architecture

Migr Pattern
Sequence

- Tools to **assist**
- Use of repeatable, standardized **patterns for sequencing of migration**

Collaborative Design

Provision Dev & Test Environments
- Back Up
- Security
- Monitor

Validate Inputs

App code migration using accelerators & repeatable sprints

Testing & validation

Data migration

Deploy

Learn & Optimize

Use of **standardized deployment patterns**

Automation: High usage of accelerators

CAPGEMINI Legacy Apps Migration FACTORY
Tools | Cloud patterns library | Knowledge

CCMF[2]

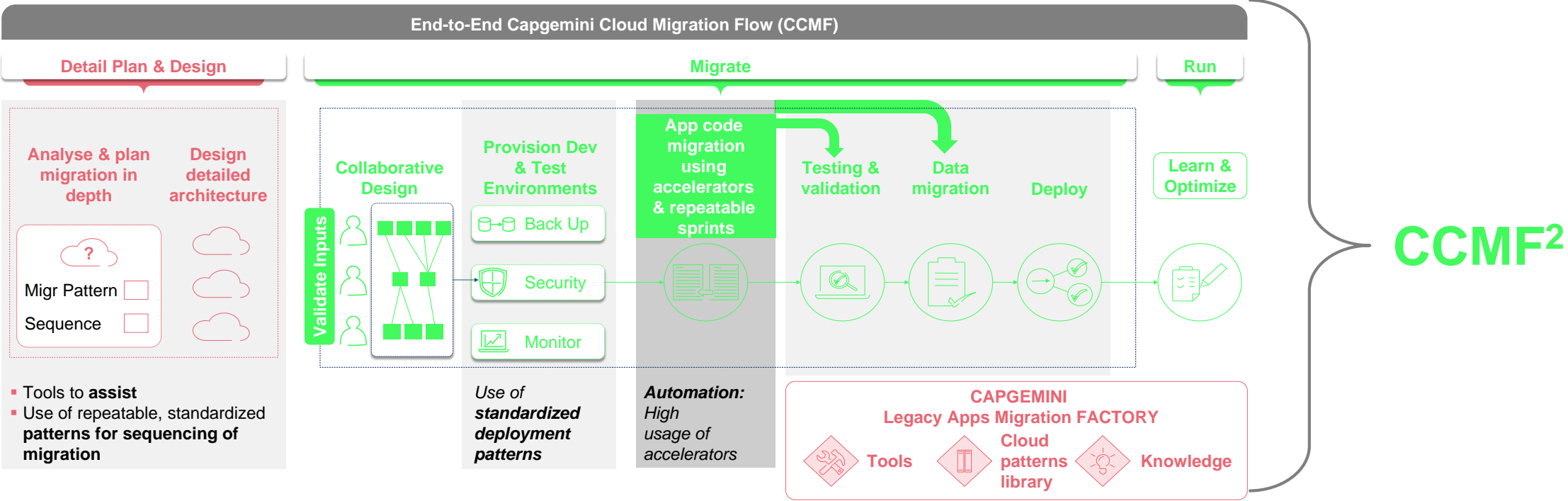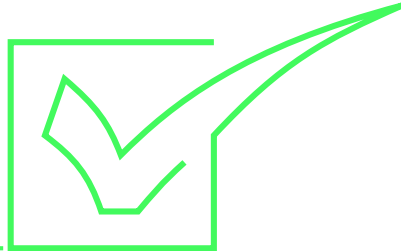[1] Capgemini Cloud Assessment [2] Capgemini Cloud Migration Factory

Objectives

- Strong drive to reduce datacenter footprint & IT costs
- Move as many applications to the cloud

Approach/Solution

- Conduct exhaustive application apps & data discovery
- Perform assessment, based upon agreed decision matrix
- Make destination recommendation, in line with organization's cloud strategy & IT strategy
- Get buy-in from business and IT stakeholders
- **Design application architecture (in the cloud), create the business case and plan the migration**
- **Provision cloud environments**
- Participate in security and performance testing

Cloud services portfolio
Cloud native applications: The new IT revolution

Apps/services development & operations is changing

Develop your Services in the cloud

Agile

Focus on delivering business value

DevOps

Continuous integration & deployment. Automated builds, deployment & provisioning.

Full function PaaS

Public PaaS

PaaS

Developer self-service platform with integrated tools
Highly dynamic, elastic. Environment consistency.
Always up.

Micro-services

Loosely coupled and fine-grained software facilitates quicker, more frequent deployments
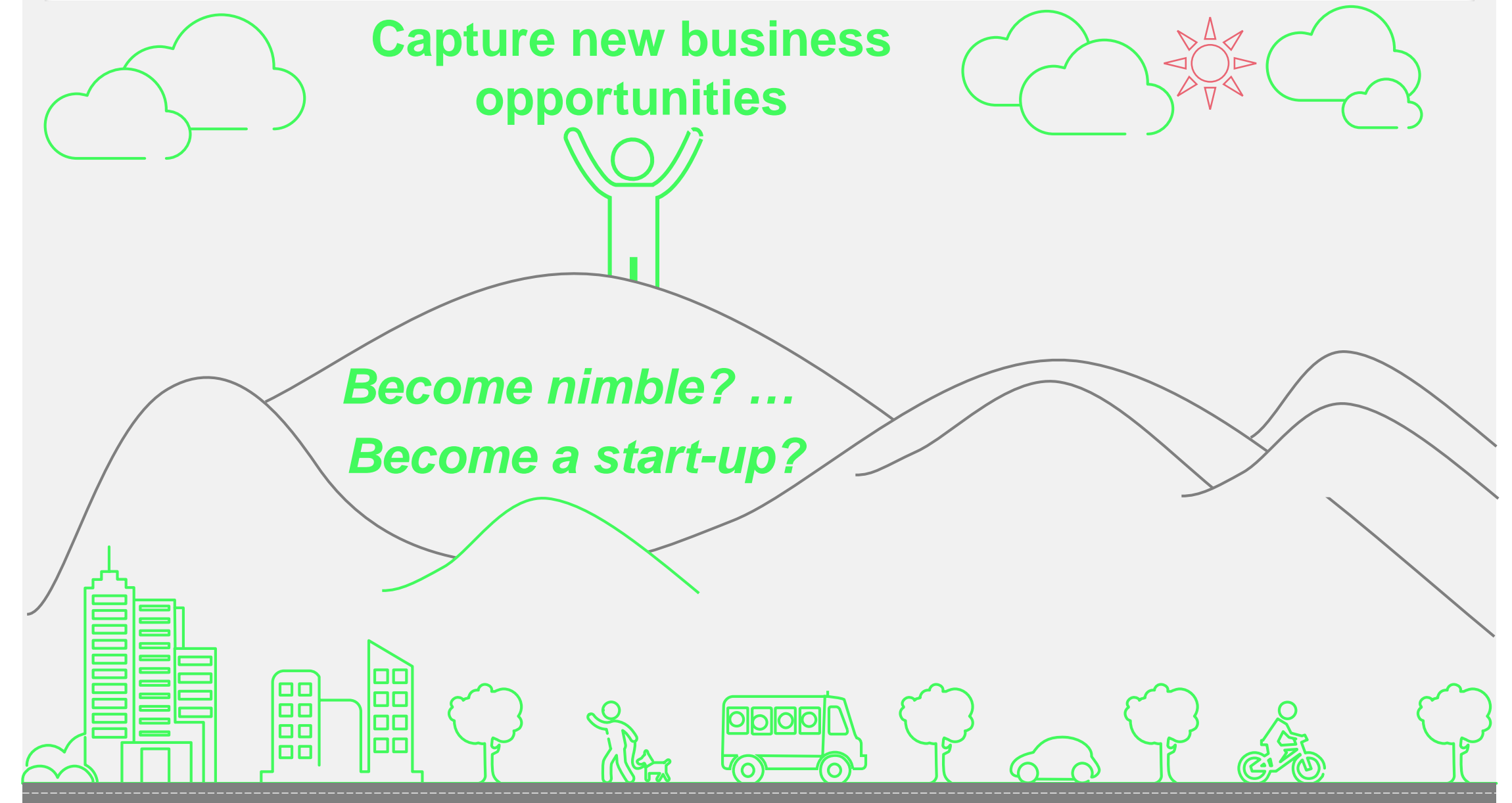
Containers

Speed + higher degree of portability and re-use

Rapid iteration, test & deploy to production faster – accelerating Time to Market, test new concepts

Capture new business opportunities

Become nimble? …

Become a start-up?

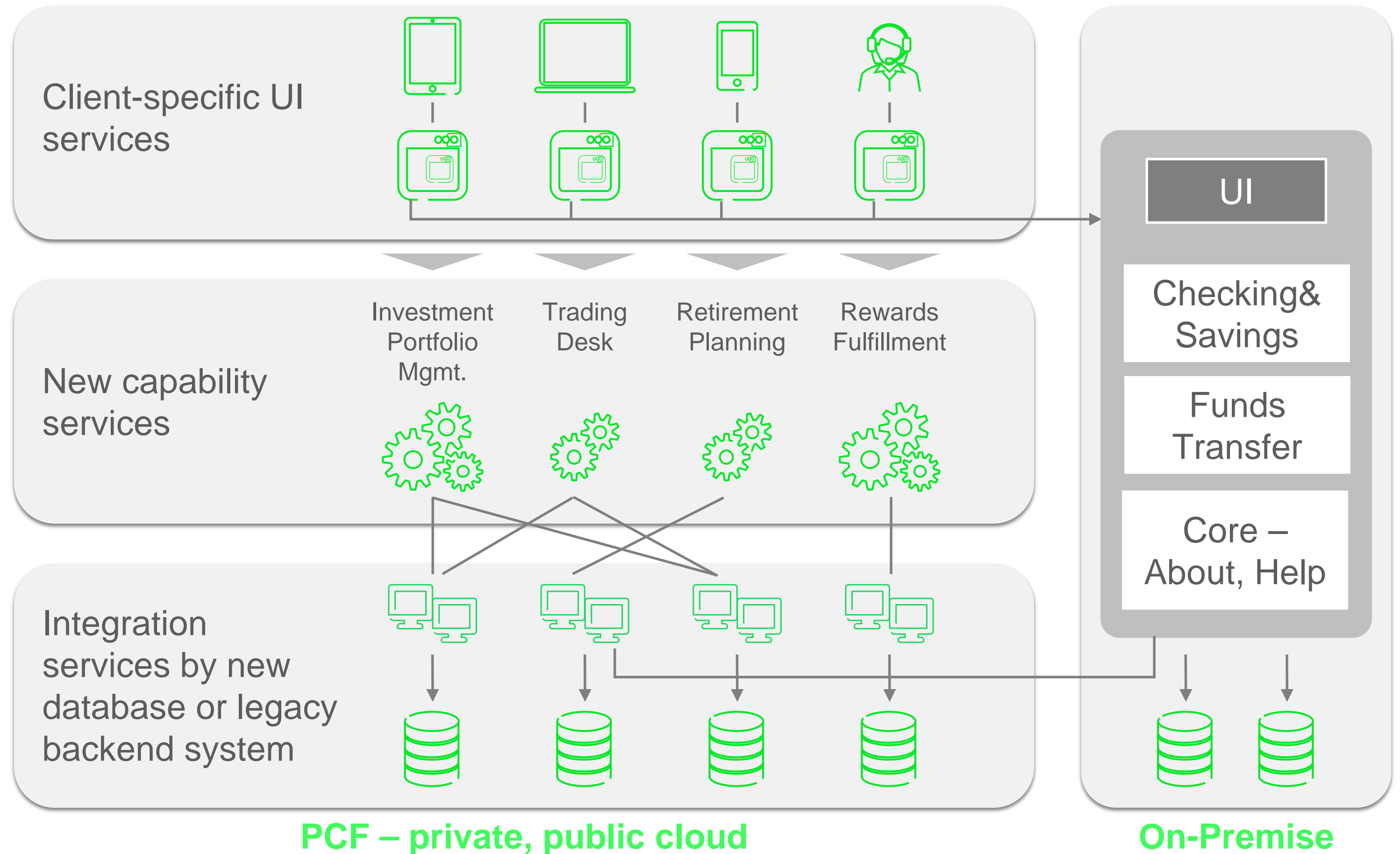# Customer use case
One of the world's largest bank

Objectives

- Enhance deployment capabilities to 50+ countries (different configurations)
- Enable quicker and more adaptable software release

Approach/Solution

- Adopt micro-services and Pivotal Cloud Foundry PaaS
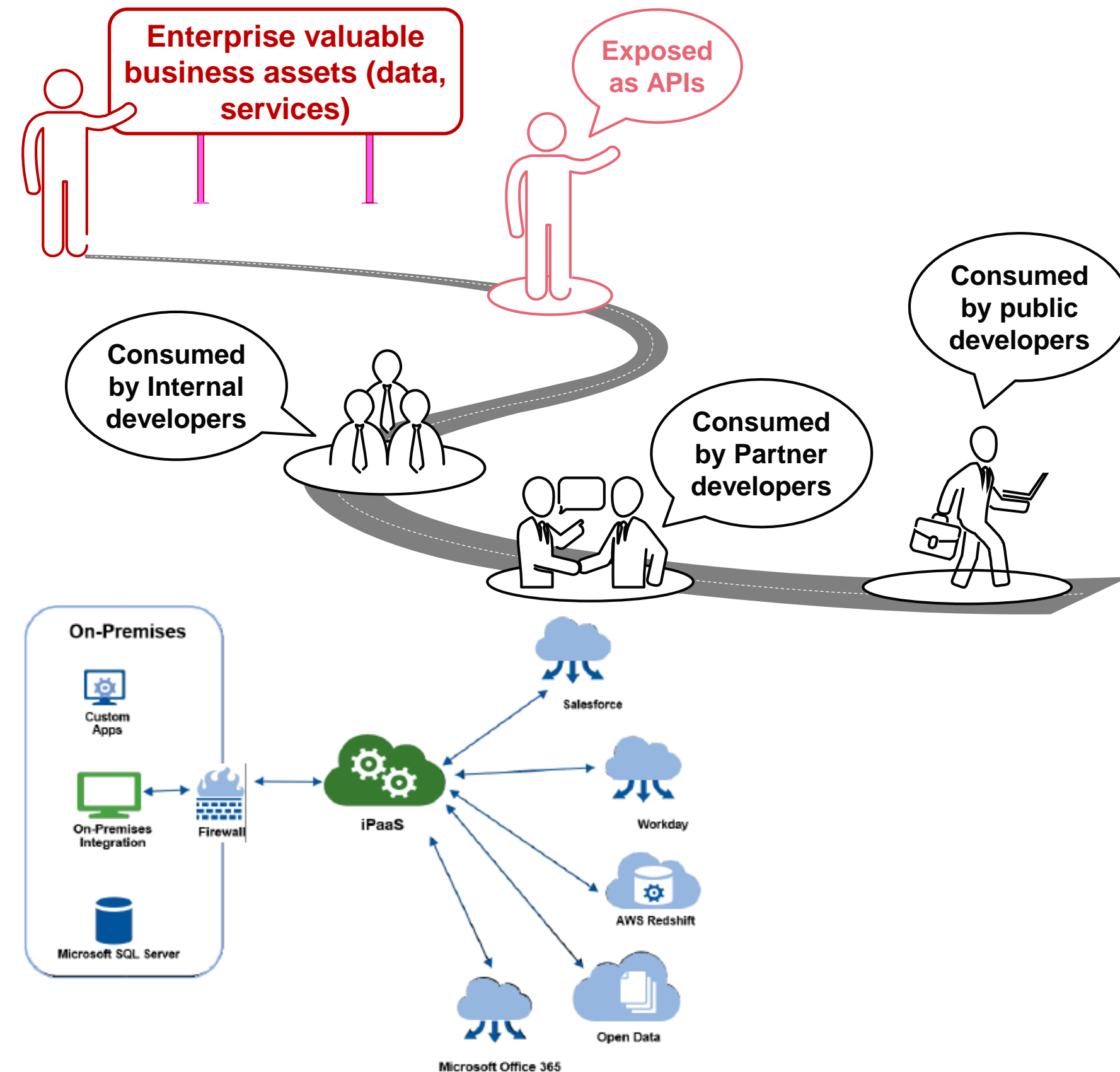- Adopt more Dev**Ops** practices for speed and ease of multi-country deployments

Client-specific UI services

New capability services

Investment Portfolio Mgmt.

Trading Desk

Retirement Planning

Rewards Fulfillment

Integration services by new database or legacy backend system

UI

Checking& Savings

Funds Transfer

Core – About, Help

PCF – private, public cloud

On-Premise

Cloud services portfolio
Integrate your cloud Apps and generate new revenues developing an APIs business

Cloud Align

Enterprise valuable business assets (data, services)

Exposed as APIs

Consumed by Internal developers

Consumed by Partner developers

Consumed by public developers

On-Premises

Custom Apps

On-Premises Integration

Firewall

iPaaS

Microsoft SQL Server

Salesforce

Workday

AWS Redshift

Open Data

Microsoft Office 365

Capgemini **iPaaS** is a secure open source plateform on which **"Applications" can be integrated** quickly, consistently and cost effectively, in private or public cloud

Identity & Access Management

Service Management

APP   APP   ● ● ●   APP

API Management (external)

Integration

API Management (internal)

Operational Business Services

Common Data Services

Business Support Services

Automated Provisioning

Application Lifecycle Management
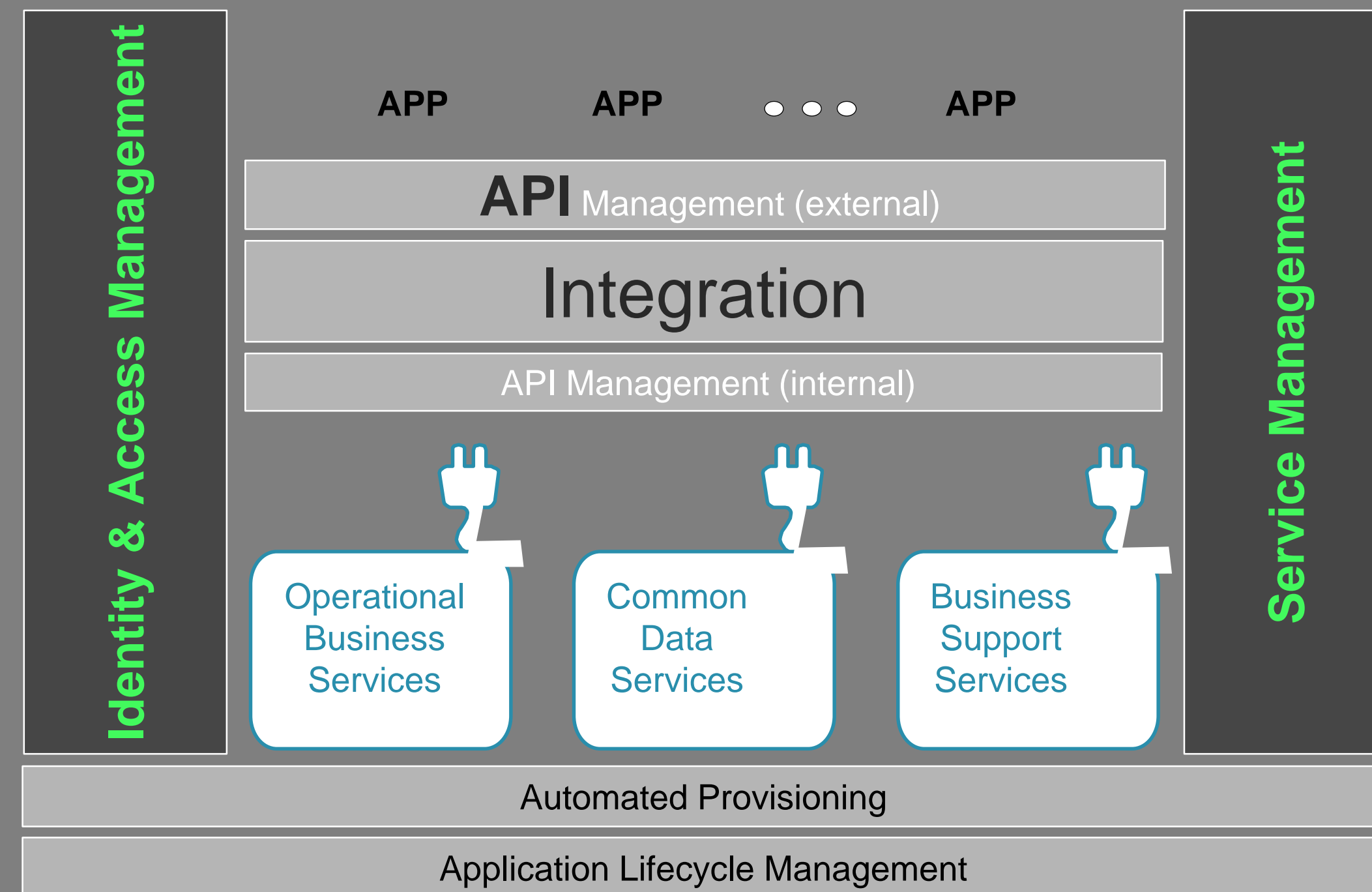
Using APIs to enable new revenue streams and compete with FinTechs

Customer use case
One of the largest bank in NA

Cloud Align

We help them build out Banking as a service to generate revenue through APIs

BUSINESS ISSUE

- One of the largest banks in NA has decided to launch a separate channel for API interactions
- Focus is on monetization of these revenue streams by offering API based banking services
- Business wants a Try– Test– Adapt framework with a premium on Agility

CAPGEMINI SOLUTION

- Leveraged Capgemini's iPaaS cloud integration services platform
- Helped set up Agile and Behavioral driven Development practices for product teams to work effectively and build out automation from the start

BENEFITS

- Integrated fully functional API management framework that is the backbone of the Banking as a service initiative
- Automated Provisioning and Analytical usage of API features used drive Release backlog and feature prioritization

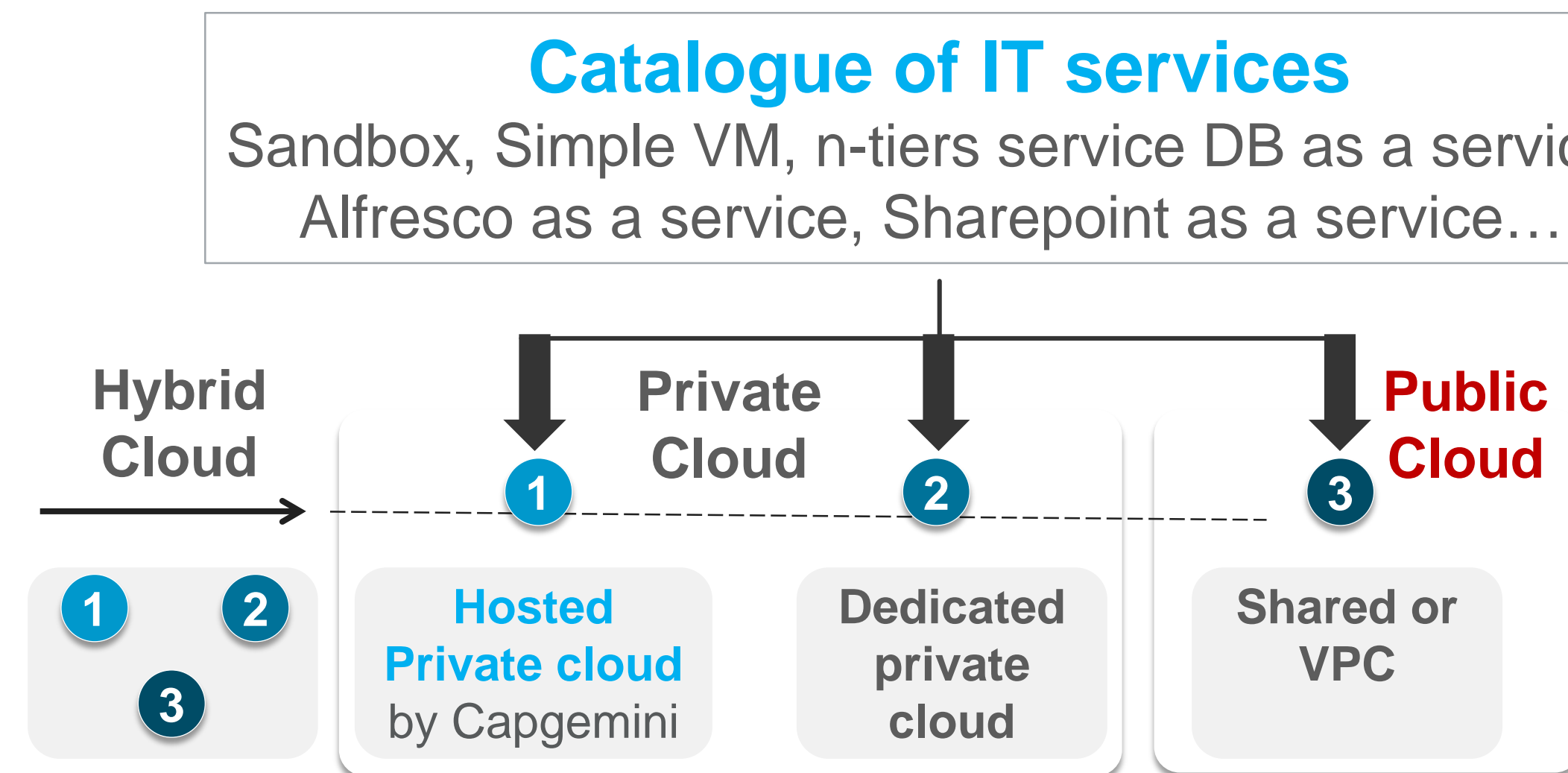**Using APIs to enable new revenue streams and compete with FinTechs**

Cloud services portfolio
Catalogue of IT services deployed on the different environments

Most of our customers implement an hybrid cloud strategy *we provide CLOUD INTEGRATION, AUTOMATION services & CLOUD MANAGEMENT services*

Catalogue of IT services
Sandbox, Simple VM, n-tiers service DB as a service, Alfresco as a service, Sharepoint as a service…

Hybrid Cloud

Private Cloud

Public Cloud

1 2 3

1 2

3

Hosted Private cloud
by Capgemini

Dedicated private cloud

Shared or VPC

Hybrid cloud managed services and AUTOMATION

Customer use case:
One of European's largest bank

Objectives

- Implementing a **private cloud** with a catalogue of services
- Leverage public cloud
- Migration of 55% of the Bank's applications onto its new target IaaS.
- Redesign its IT Operating Model (ITOM) to facilitate the new ways of working

Benefits

- Increased proportion of self service catalog requests from <15% to >25% in less than a year – reducing the number of calls received by the IT team
- Increased adoption of public cloud to 5% in one year and to 25% in three years.
- Operational cost savings of ~€500m over 5 years

Approach/Solution

- Software Defined Data Center architecture
- Catalogue of services
- Services orchestration, automatic provisioning
- Public cloud implementation
- Cloud managed services
- Mass Apps migration

Cybersecurity services portfolio

Cybersecurity
Securing the digital world against cyber attacks and malicious internal behaviour

ONE TEAM

Capgemini
CONSULTING.TECHNOLOGY.OUTSOURCING

Capgemini Consulting

SOGETI

www.capgemini.com/cybersecurity

Our missions:
Win standalone cybersecurity services projects and provide cybersecurity services as a key differentiator of:
- Infrastructure/Apps/**Cloud**-based projects
- **Digital projects**: DCX, Digital operations, Digital back office

Positioning:
100% services but with a deep know-how of security products (ELITE R&D team testing security products + an ITSEF)^*

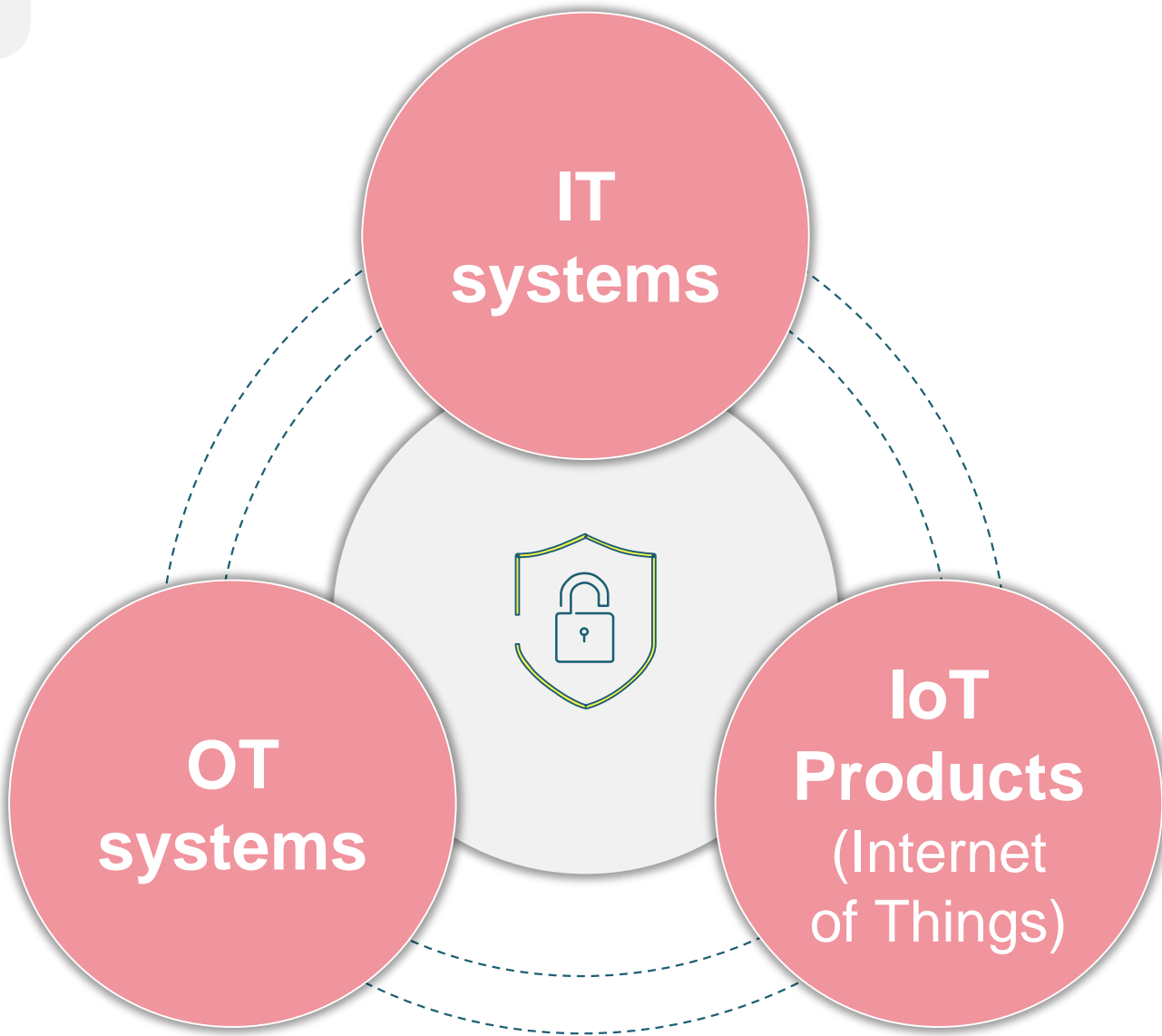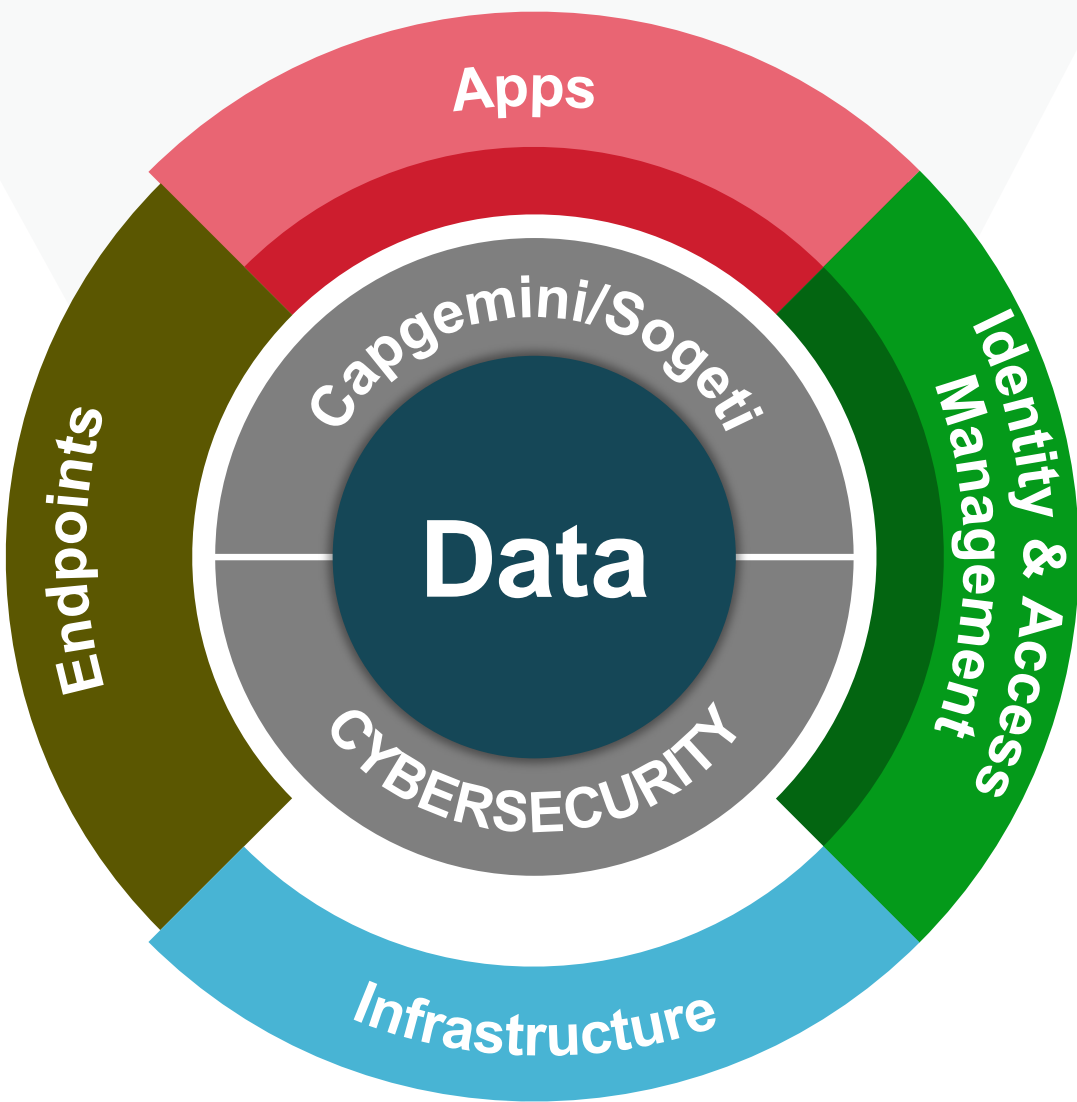ITSEF: Information Technology Security Evaluation Facility

Cybersecurity services portfolio

3 families of
Cybersecurity Services

- Consulting & Assessment Services
- Protection Services
- Monitoring Services

15 control-points

1 Cybersecurity framework

- Apps
- Identity & Access Management
- Capgemini/Sogeti **Data** CYBERSECURITY
- Infrastructure
- Endpoints

- IT systems
- OT systems
- IoT Products (Internet of Things)

Gartner >"Operational Technology (OT): industrial systems and manufacturing IT systems

50% standalone projects/50% security solutions integrated with larger Capgemini projects (growing faster)

IAM as-a-service >> Capgemini IDaaS
How to Balance Digital Transformation and User Security?

NEW OFFER: presented during RSA Exhibition in SF (March 16) addressing IAM challenges and new customers' needs

IAM and SOC are the foundations of security

Only 51% of traditional IAM projects are successful

New Customers' needs:

Access data & Apps from any devices through any IT deployments (traditional DC, private, public cloud)
For 85% of organizations; access to cloud services is critical

Better user experience (authentication)
84% ask for adaptative access *[21% are equipped in Europe]*

Manage different types of digital ID: employees (normal & IT admin), partners, consumers
62%: extension to consumers is important *[26% are equipped in Europe]*

Capgemini kuppingercole CXP Group RSA

IDENTITY CRISIS
How to Balance Digital Transformation and User Security

1st Advanced Data Analysis Security Operation Center

Dedicated SOCs or ManagedSOCs

Design & Build
Managed Security Services

7 multi-tenant operated from France, UK, Luxemburg *2, Spain, Belgium

Gain **complete visibility** of your IT and security system to **detect**, **analyze** and **react** to cyber attacks.

On-prem Data Centre/private cloud + public Cloud

Detect and **analyze** even the most advanced attacks before they can impact the business.

Response: Take targeted action on the most important incidents.

3rd Generation Security Operations Centre (SOC) capability

About Capgemini

With more than 180,000 people in over 40 countries, Capgemini is one of the world's foremost providers of consulting, technology and outsourcing services. The Group reported 2015 global revenues of EUR 11.9 billion. Together with its clients, Capgemini creates and delivers business, technology and digital solutions that fit their needs, enabling them to achieve innovation and competitiveness. A deeply multicultural organization, Capgemini has developed its own way of working, the Collaborative Business Experience™, and draws on Rightshore®, its worldwide delivery model.

www.capgemini.com