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Why cloud investments may not (yet) live up to the hype

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Why cloud investments may not (yet) live up to the hype

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The full potential of the cloud often remains just out of reach

Cloud is seen as a prerequisite for many current **business transformation** efforts. Yet most organisations feel like the expected **benefits don't always materialise as planned.**

So we will talk about...

Ambitions vs. reality

Cloud Foundations

Maximise cloud value

The gap between ambition and reality

Where can cloud drive value?

9 key strategic priorities should be considered when evaluating cloud potential

Building new products or services

Expanding into new markets

Expanding existing products

Reducing and optimizing cost

Increasing efficiency and agility

Providing better sustainability in support of environmental issues

Creating new operational processes or workflows
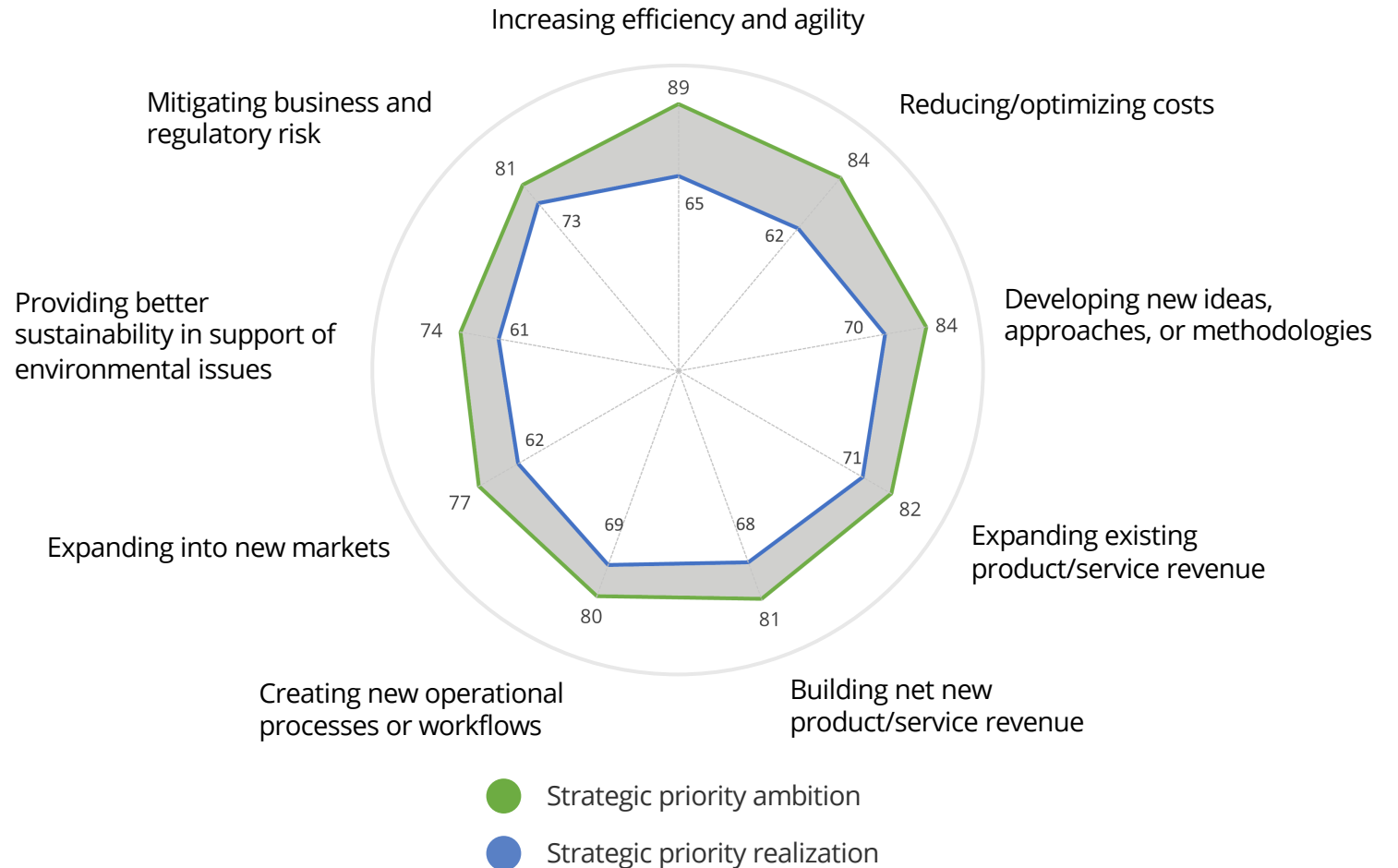
Developing new ideas, approaches or methodologies

Mitigating business and regulatory risk

The gap between ambition and reality

Organisations don't manage to fully meet their strategic ambitions across key domains

"On average, there's a **14.5 percentage point** *gap between organisation's stated* **cloud priorities** *and how well they say they are* **achieving them**"

Radar chart with the following values:

- Increasing efficiency and agility: 89 / 65
- Reducing/optimizing costs: 84 / 62
- Developing new ideas, approaches, or methodologies: 84 / 70
- Expanding existing product/service revenue: 82 / 71
- Building net new product/service revenue: 81 / 68
- Creating new operational processes or workflows: 80 / 69
- Expanding into new markets: 77 / 62
- Providing better sustainability in support of environmental issues: 74 / 61
- Mitigating business and regulatory risk: 81 / 73

● Strategic priority ambition
● Strategic priority realization

Why the gap?

Many organisations have to deal with the same challenges when it comes to the cloud

"Many organisations made mistakes during the pandemic with **overly complex infrastructure** *and without proper consideration of the operational impact. "*

- David Linthicum, chief cloud strategy officer, Deloitte Consulting LLP

Reliance on legacy systems

Unexpectedly accelerated adoption

IT drives without business input

The gap limits the cloud's impact

While cloud migrations typically result in positive outcomes, but the extent often does not live up to the hype

*In all nine of the considered domains, not even half of organisations see a **large positive impact** from their cloud investment*

45% for increasing efficiency and agility

34% for mitigating business and regulatory risk

31% to provide better sustainability in support of environmental issues

39% for reducing / optimising costs

Cloud Foundations can help close the gap

Leveraging cloud foundations can help close the gap

In order to fully benefit from the cloud, a balance between autonomy and control enabled by cloud foundations is required

MORE TEAM AUTONOMY BRINGS MANY BENEFITS...

Treat developers as your **customers** and adopt **platform engineering** principles

Build a self-service cloud service catalog to **increase agility and foster innovation**

Adopt a **product mindset** in which one team is responsible for the full life-cycle

Promote **community building** to create a culture of continuous learning and innovation

...BUT SHOULDN'T CAUSE A DECREASE IN CONTROL

Centralize where needed instead of controlling every piece of infrastructure

Manage your cloud platform through **automation**, **standardization** and **patterns**

Leverage **policies and guardrails** to ensure compliance throughout the landscape

Enables **SRE** teams to empower your product teams in building highly resilient products

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Key aspects of cloud foundations

The cloud offers a great opportunity to optimise costs, but this requires patience and a targeted, organisation-wide approach

Cloud Landing Zones

Cloud Service Catalog

Cloud Operating Model

Policy driven governance

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Cloud Landing Zones

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Cloud Operating Model
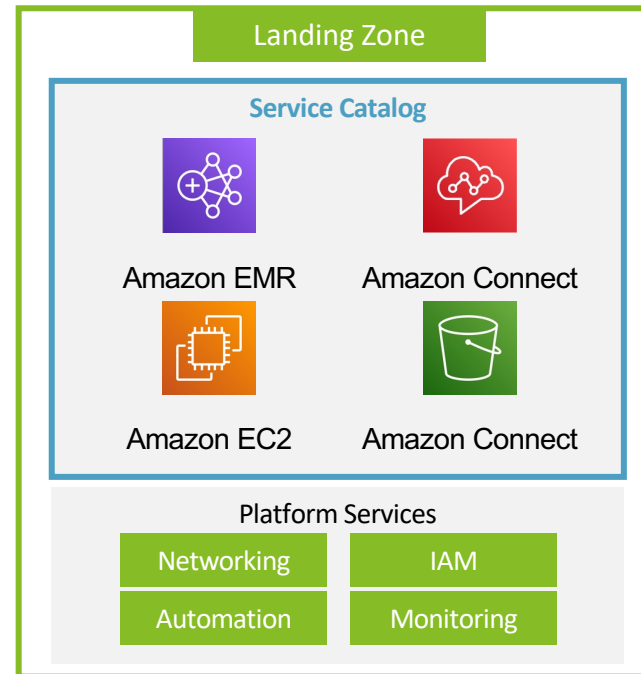
Policy driven governance

Concept of cloud foundations

Organisations with well established cloud foundations typically see better returns on their cloud investments
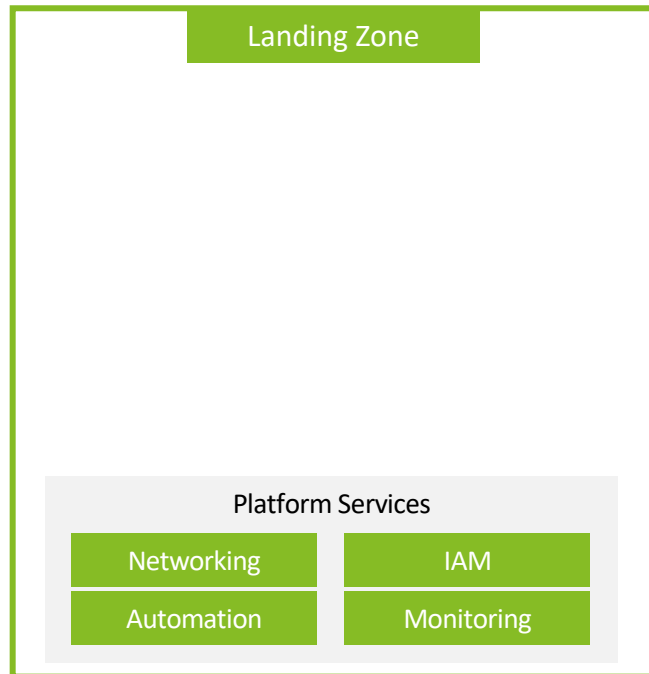
Platform services provide **basic functionalities** to landing zones as well as **integration** with the existing IT landscape
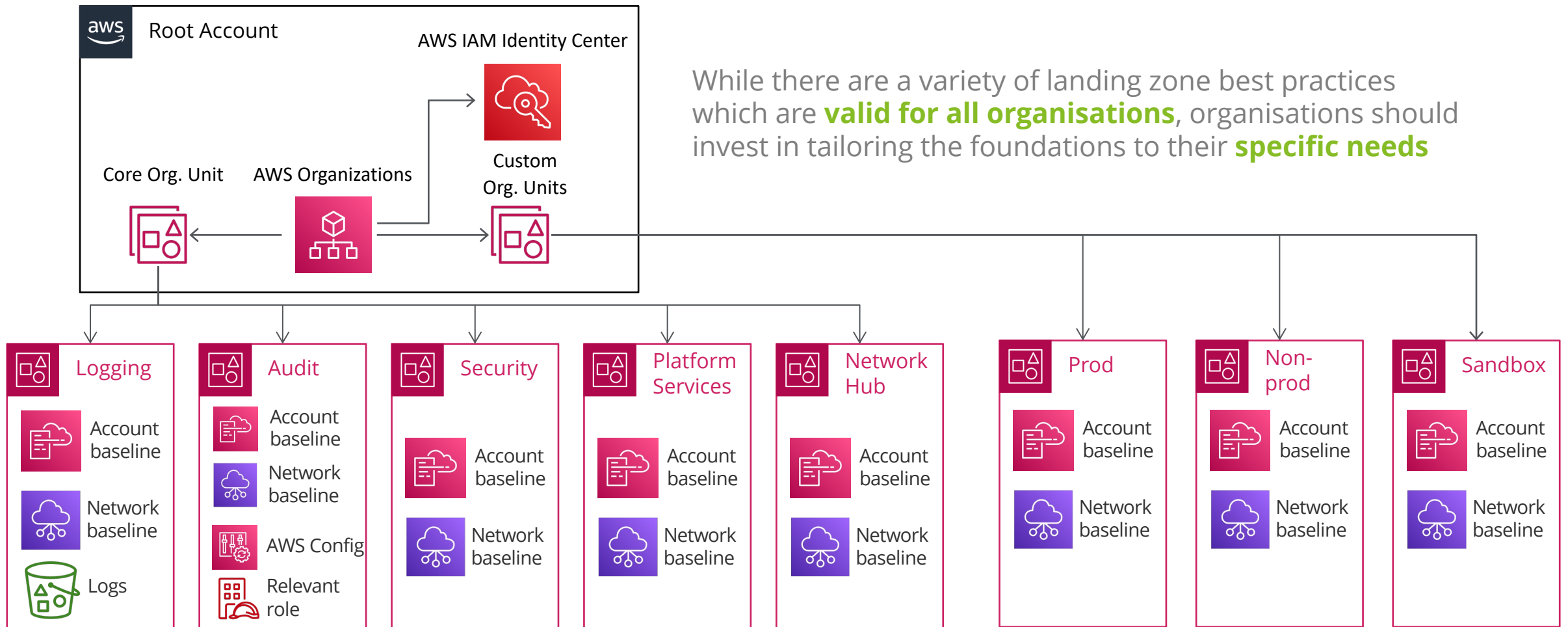
A service catalog makes **pre-approved** cloud services (and relevant documentation and guidance) available to developers with the **click of a button.**
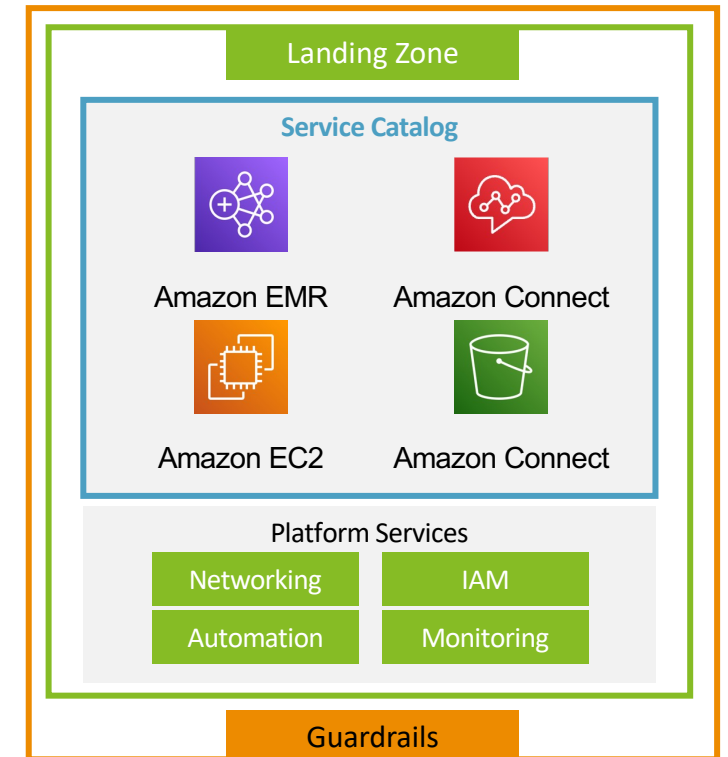
Guardrails are a combination of policies, permission boundaries, etc that ensure environments are **automatically compliant.**
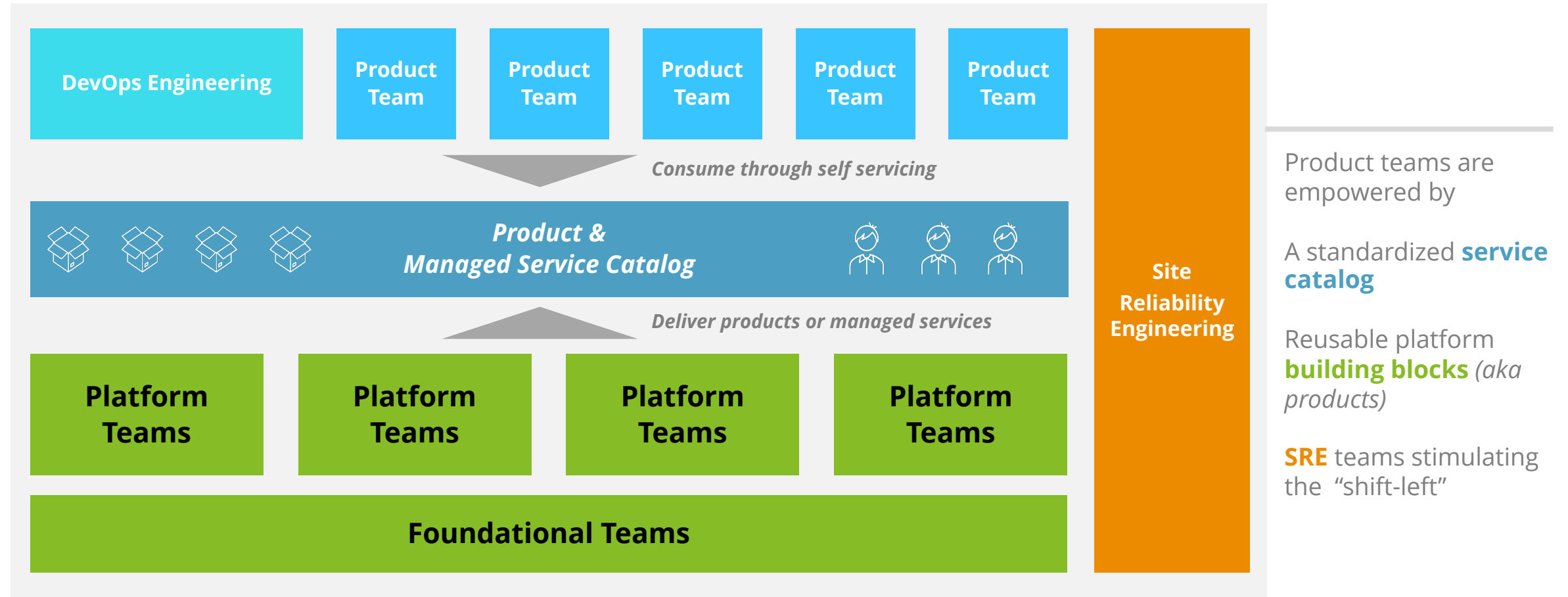
Example architecture

Cloud foundation best practices are well-defined

While there are a variety of landing zone best practices which are **valid for all organisations**, organisations should invest in tailoring the foundations to their **specific needs**

An evolved IT organisation

Next to architectural changes, the operating model will have to evolve as well to leverage cloud foundations

| DevOps Engineering | Product Team | Product Team | Product Team | Product Team | Product Team |

Consume through self servicing

Product & Managed Service Catalog

Deliver products or managed services

| Platform Teams | Platform Teams | Platform Teams | Platform Teams |

Foundational Teams

Site Reliability Engineering

Product teams are empowered by

A standardized **service catalog**

Reusable platform **building blocks** *(aka products)*

SRE teams stimulating the "shift-left"

Balance between risk and value

Organisations will have to find a balance between their risk exposure and the ease of creating cloud value when implementing cloud foundations

There are many potential cloud risks...

... which must be carefully balanced against potential cloud value

Sovereignty

Strategic Risk

Regulatory Risk

Cloud Risk Themes

Cyber & Operational Risks

Vendor Selection and Contracting risk

Risk of Control Environment

Maximizing cloud benefits
(speed, on demand resources)

Minimizing cloud risks

The question of sovereignty

Cloud sovereignty is a key risk theme which will heavily affect the design choices of the cloud foundations
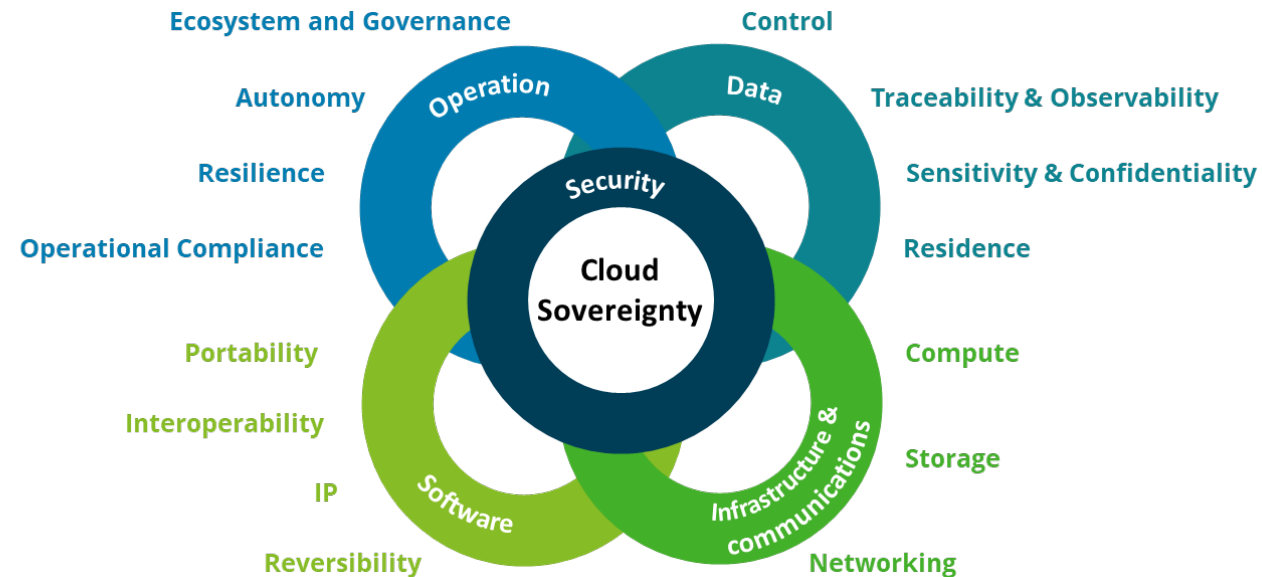
Typical strategies for **safeguarding sovereignty** (e.g. portable stack, sovereign landing zones, multicloud etc.) **introduce added complexity**

More **innovate capabilities** (e.g. serverless, managed services) **vs. higher control**

Open-source infrastructure might require **more security capabilities** for critical workloads

Compliance as code

Adopt cloud-native, **automated** solutions to build resilience in scaling and managing risk and compliance.

WHAT

Implement preventative, detective and remediation controls into code

HOW

Integrating expected evidence and controls into code.

BENEFITS

Securing platform services (IAM, resource creation, etc.) and lessen evidencing by engineers.

Top-down – what controls do we need to be in control?

Bottom-up – What do engineers want to do?

Change Management and people

Even with a well thought out approach, change management remains a challenge for a lot of organisations transitioning to the cloud

Adopting your way of working to the cloud will require your existing IT teams to take **new roles and responsibilities** and **recruit new people** in the case of a skill gap:

Redistribution of the Infrastructure team

Product teams   SRE
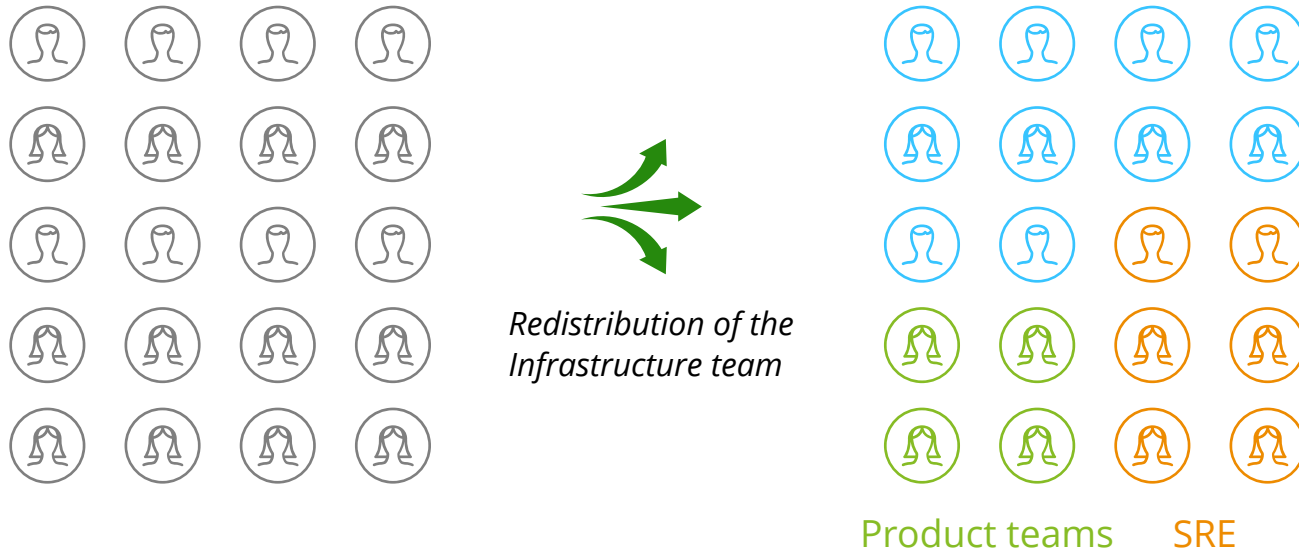
Siloes between existing teams will have to be broken down

Cloud will gradually become **the new norm** everywhere

Cloud profiles are **in high demand**
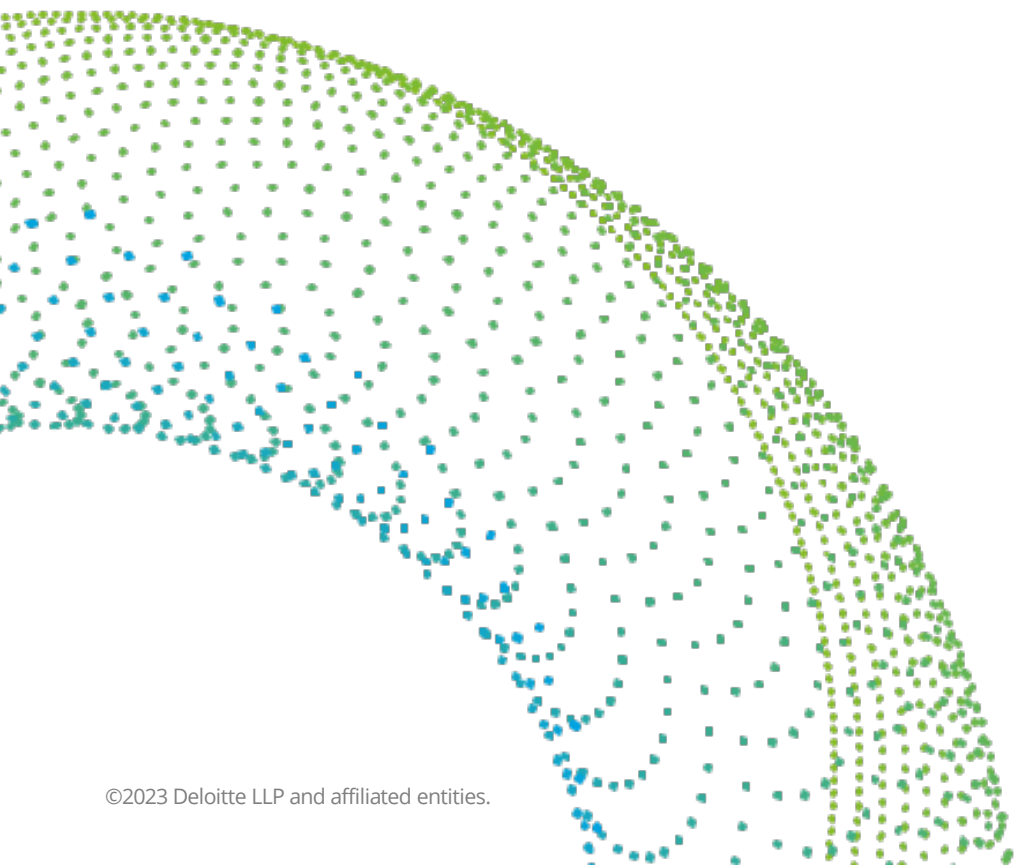
Maximise your cloud value

Automate and monitor your environment to prevent and remedy inefficiencies

Provide developers with efficient and compliant **building blocks**

Balance risks and advantages in a way which best suits your organisation

Get in touch with our cloud engineering practice

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Thank you!

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