WHAT IS REALLY POSSIBLE IN A MULTI-CLOUD WORLD?

ALEXANDER SOMMER
DIRECTOR, PRACTICE LEADER PRIVATE CLOUDS

Agenda

- Rackspace Introduction
- What is Cloud?
- Cloud Strategy
- A Multi-Cloud Setup
- Wrap-Up

rackspace

RACKSPACE INTRODUCTION?

A little bit about ourselves here…

DATA CENTERS

12 Worldwide

GLOBAL FOOTPRINT

Customers in 150 Countries

PORTFOLIO

Dedicated • Hybrid • Cloud

rackspace | WHO WE ARE

EXPERTS

6,000 Rackers
3,000+ Cloud Experts

REVENUE

Over $2B in
Annual Revenue

FORTUNE 100

We serve over ½
of the Fortune 100

Our evolution over time

Microsoft Partner

VMware Partner And Managed VMware Offerings

Next Generation OpenStack Public Cloud Launched

Fanatical Support For AWS Launched

1998

2002

2012

Oct 2015

Provide Fanatical Support on the World's Leading Clouds

1999

2003

2010

July 2015

H2 2017

Fanatical Support Is Born

Red Hat Partner

OpenStack Founded With NASA

Fanatical Support For Azure Launched

Fanatical Support For GCP Launching

rackspace.

What we do for our customers?

PLAN

DESIGN

MANAGE

DEDICATED

amazon
web services™

Microsoft

openstack®

vmware®

Google Cloud Platform

CURRENT
DATA CENTER

ASSESS

MIGRATE

OPTIMIZE

RACKSPACE RESPONSIBILITY

CUSTOMER RESPONSIBILITY

rackspace®
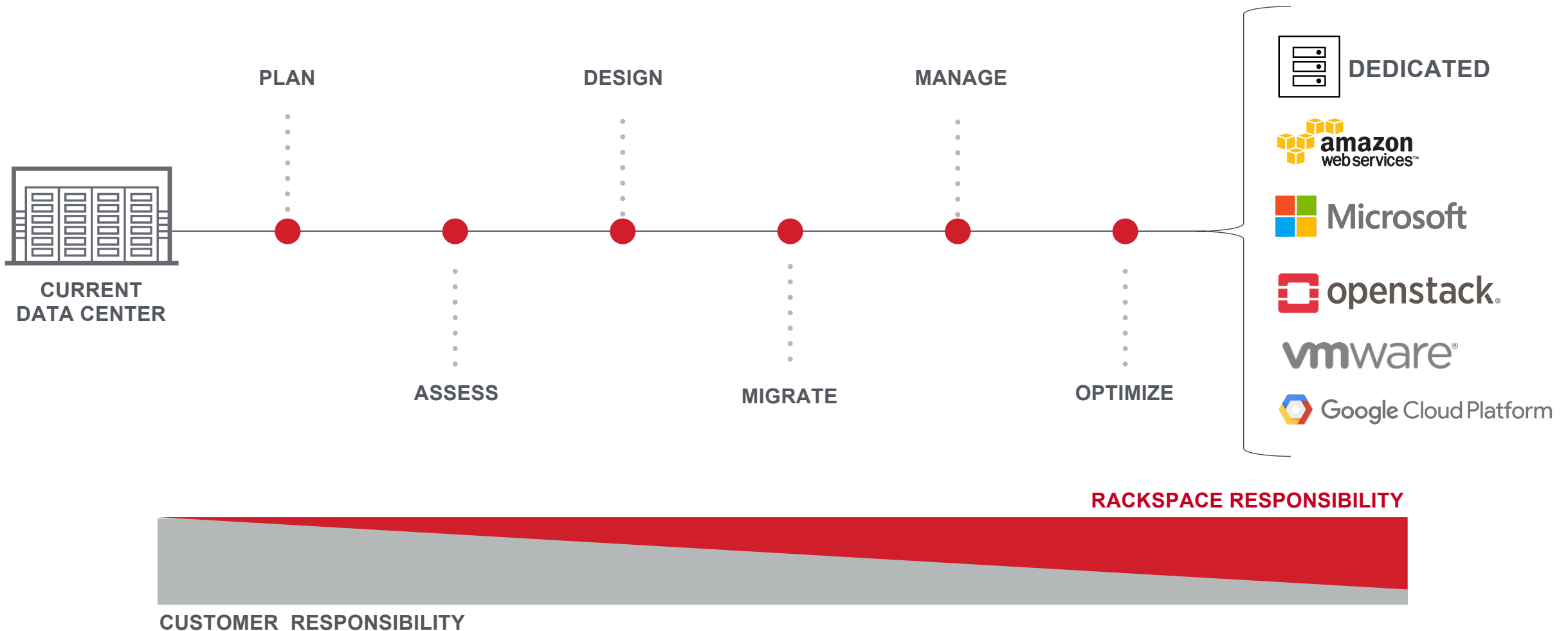
WHAT IS CLOUD?

Getting on the same page

Is this cloud?

NIST definition

Cloud computing is a model for enabling ubiquitous, convenient, on-demand network access to a shared pool of configurable computing resources (e.g., networks, servers, storage, applications, and services) that can be rapidly provisioned and released with minimal management effort or service provider interaction.

5 Essential Characteristics	3 Service Models	4 Deployment Models
• On-demand self-service • Broad network access • Resource pooling • Rapid elasticity • Measured service	• Software as a Service • Platform as a Service • Infrastructure as a Service	• Private Cloud • Community Cloud • Public Cloud • Hybrid Cloud

Source: http://csrc.nist.gov/publications/PubsSPs.html#800-145

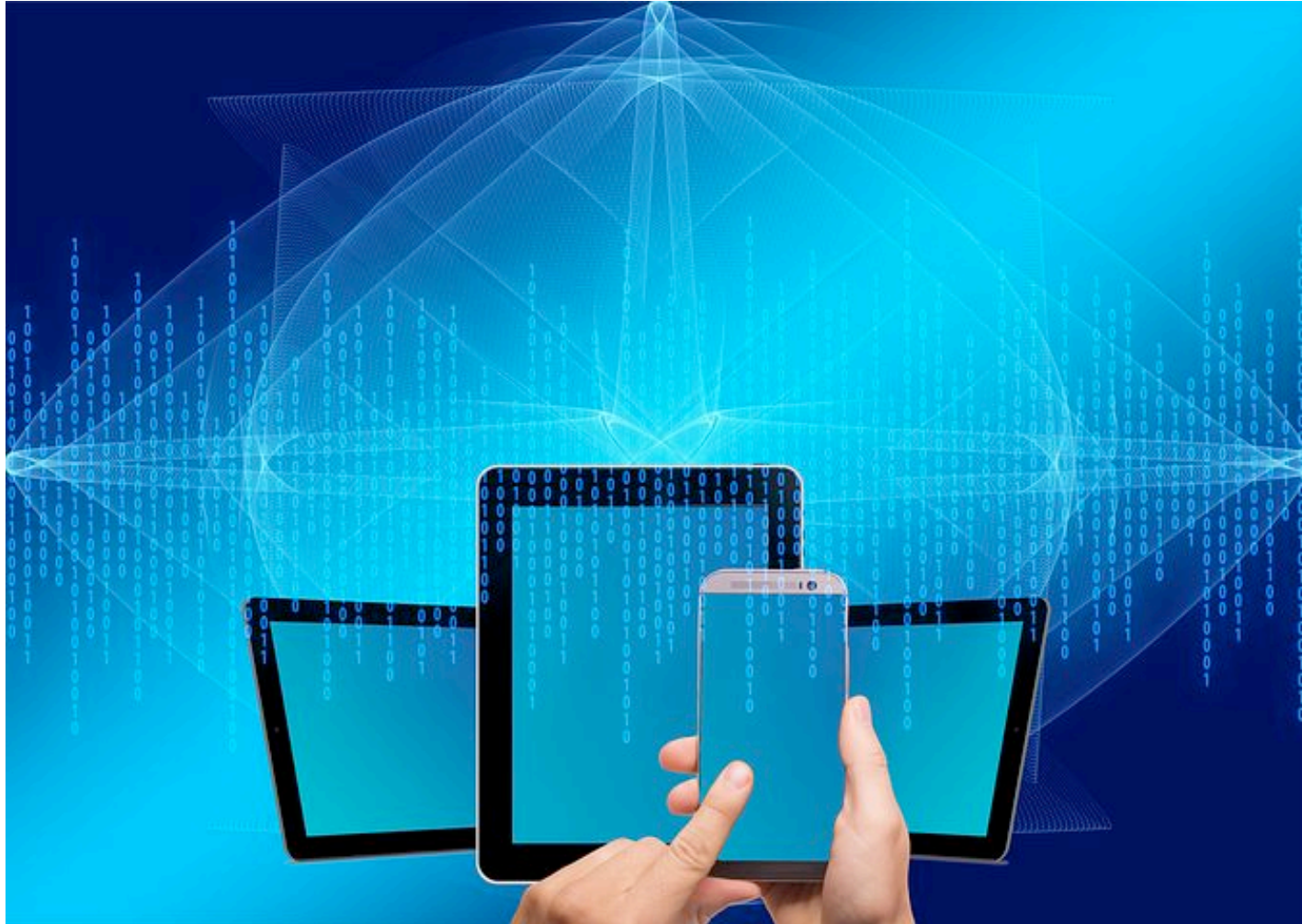rackspace

Think cloud – think agile

rackspace

CLOUD STRATEGY

And the considerations every organization needs to make

Why are we here today?

Digitalization – the next industrial revolution

The simple equation behind cloud

Costs + Output = Economic Value
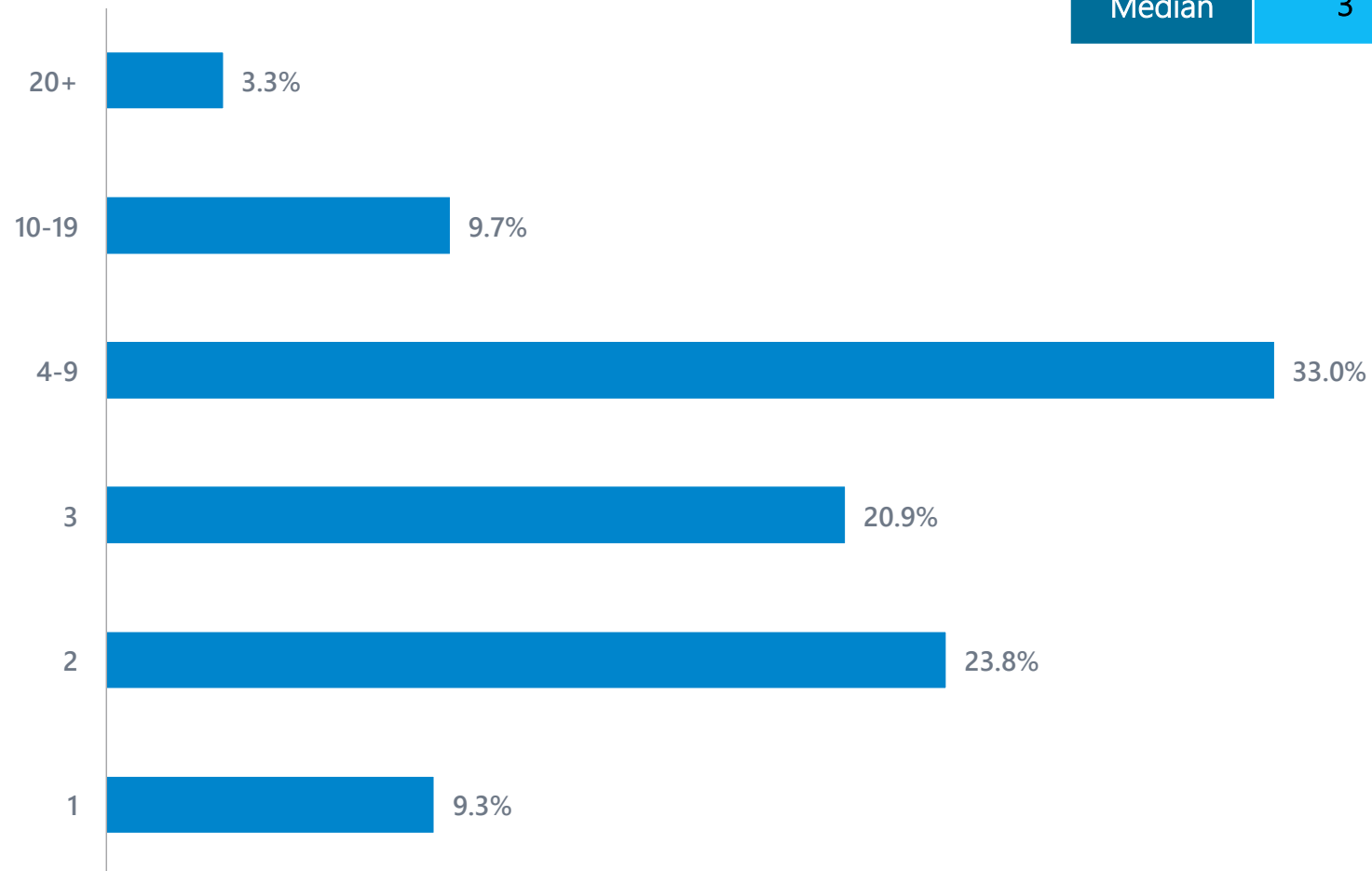
rackspace.

So how many clouds should I use?
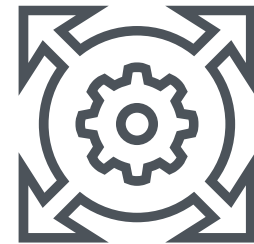
What impacts my cloud strategy?

Company
- Industry regulations
- Compliance & security
- Procurement policies
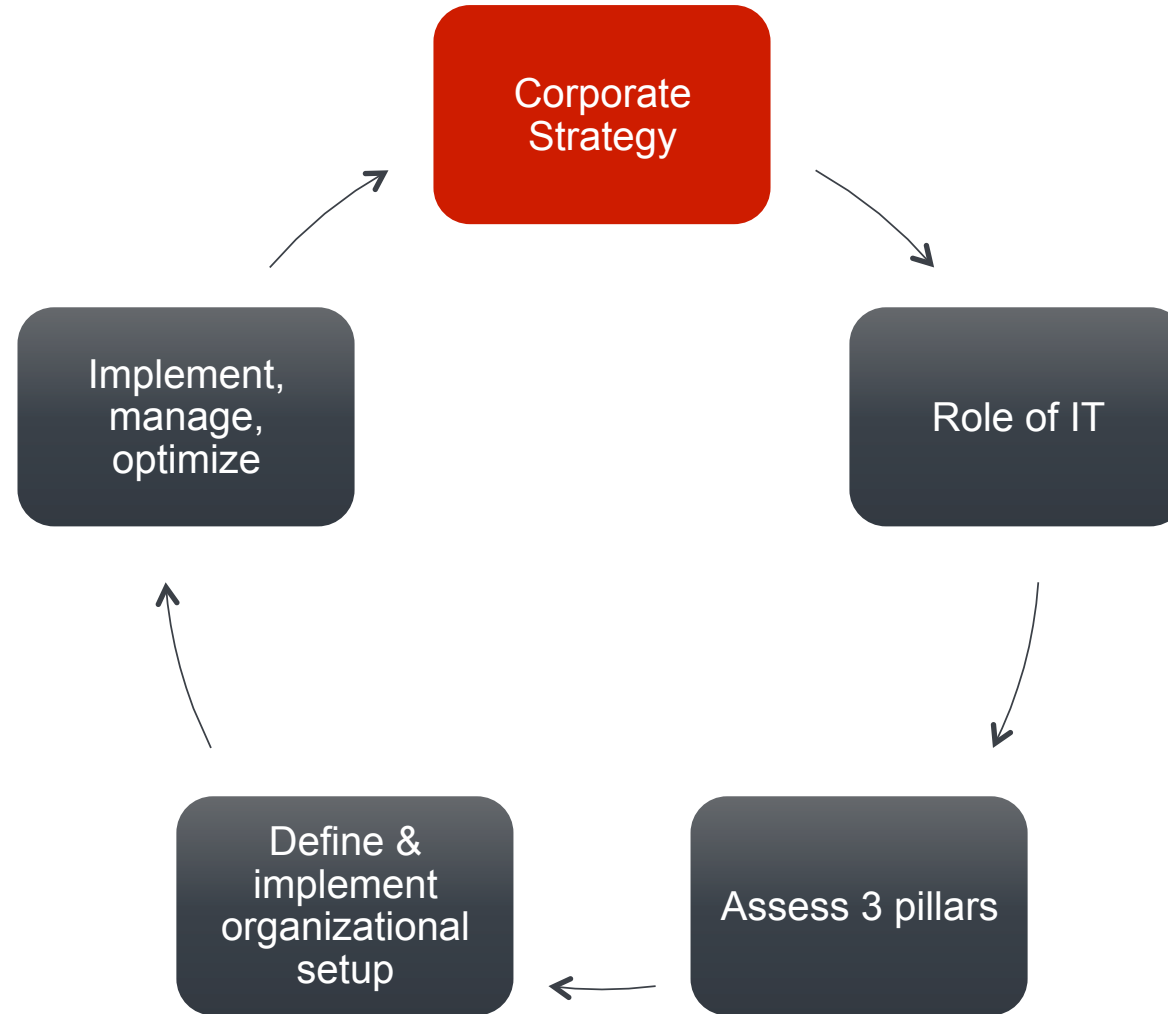- Strategic considerations

People
- Employees
- Organizational design
- Right skills
- Resources

Technology
- Applications
- Tools
- Platforms

rackspace

Developing your Cloud Strategy

A MULTI-CLOUD SETUP

And the considerations you will have to make…

SaaS

When and where this model makes sense…

A basic guide to SaaS...

Use Case Assessment

- Business Function
- Operational Importance
- Strategic Differentiation
- Compliance / Legal

General Use Cases

- HRMS
- CRM Systems
- Collaboration Tools

Why a SaaS Solution

- Limited customization is required and possible; front end / user focused
- Access is important, but unavailability will not be business critical
- Strategically it will not differentiate the company from the competition
- Compliance and legal concerns are generally manageable

rackspace®

APP & CLOUD HARMONY

Sitecore - A case for a single matching IaaS platform

What is Sitecore?

Key Features

- A web content management platform from Denmark
- It is web content management, commerce and digital marketing combined in one platform
- It is based on the .net framework
- Microsoft is their premier technology partner when it comes to platform technology

Gartner Magic Quadrant for Web Content Management

A basic architecture example
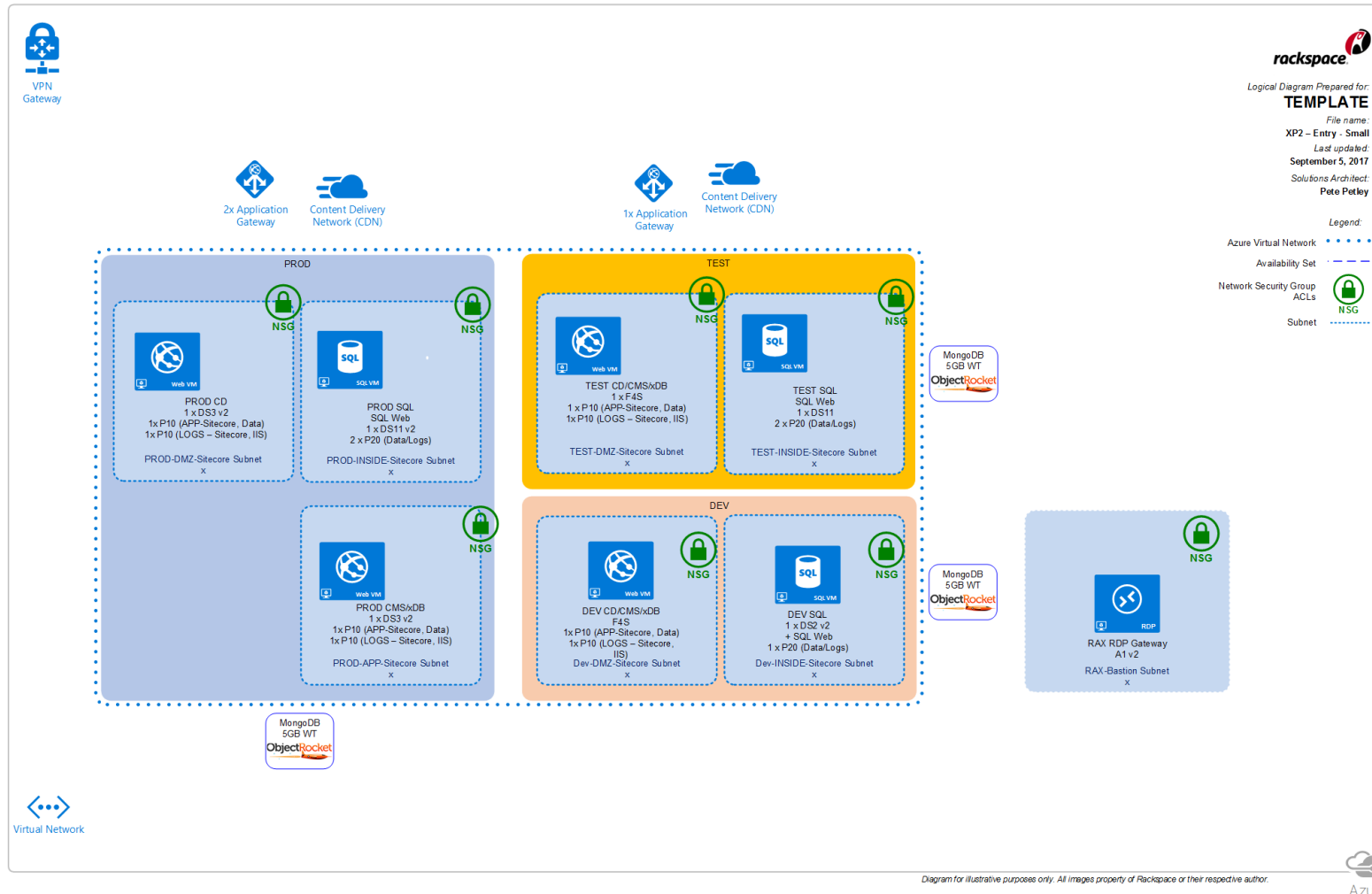
- Use of Azure components
- Use of MS products that works best on Azure
- Ability to compliment with external cloud technology (OR)
- Take advantage of new applications features based on native Azure features

IaaS & PaaS

Private, Public, and Hybrid

Now let's talk about IaaS and its key factors

- Infrastructure operated through an API
  - ‣ GUI, Command Line or Web Services
- Broad range of features depending on service provider
  - ‣ Ultimately: Storage, Network and Compute
- API is specific to the service provider
  - ‣ E.g. AWS, GCP, OpenStack
- Provides most flexibility for consuming cloud services
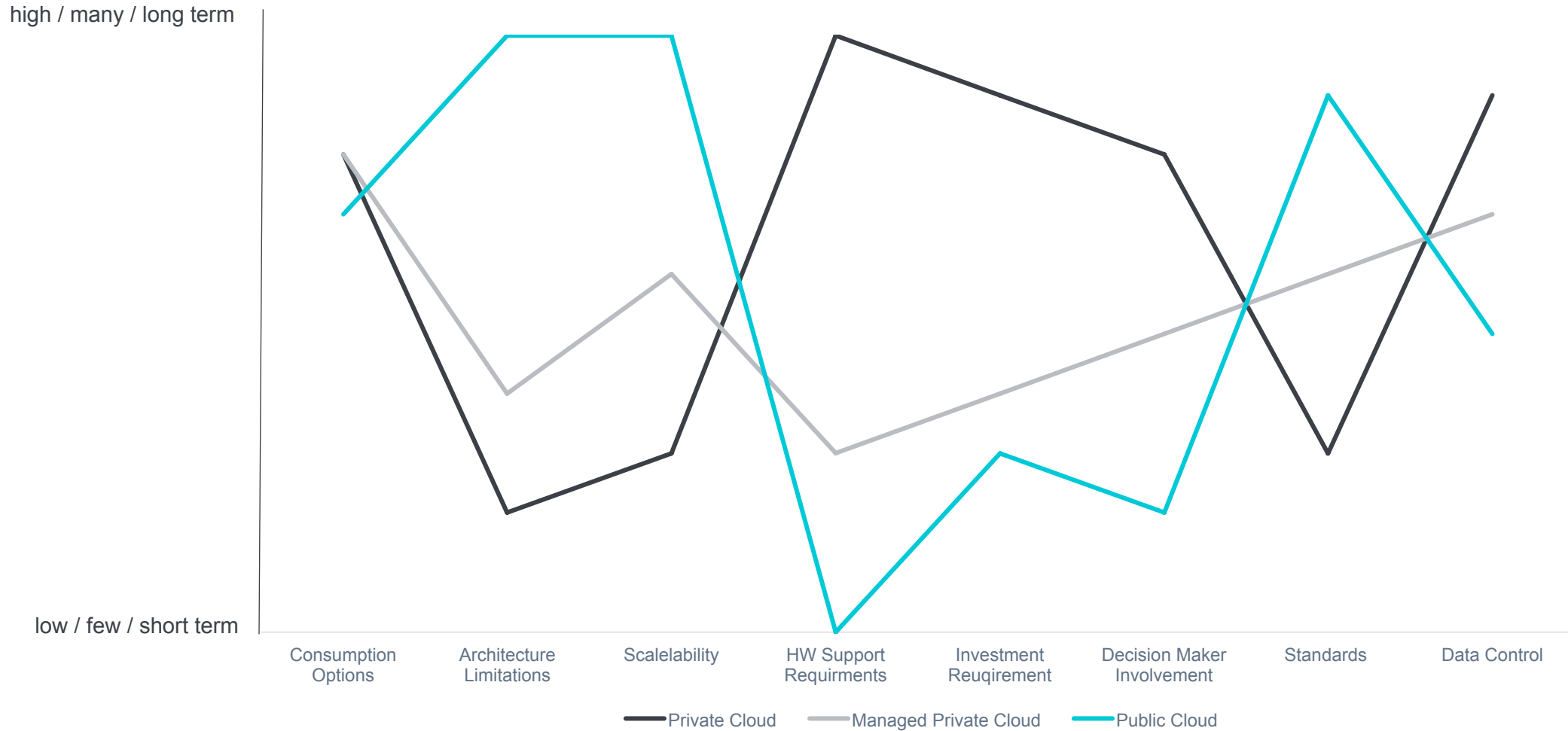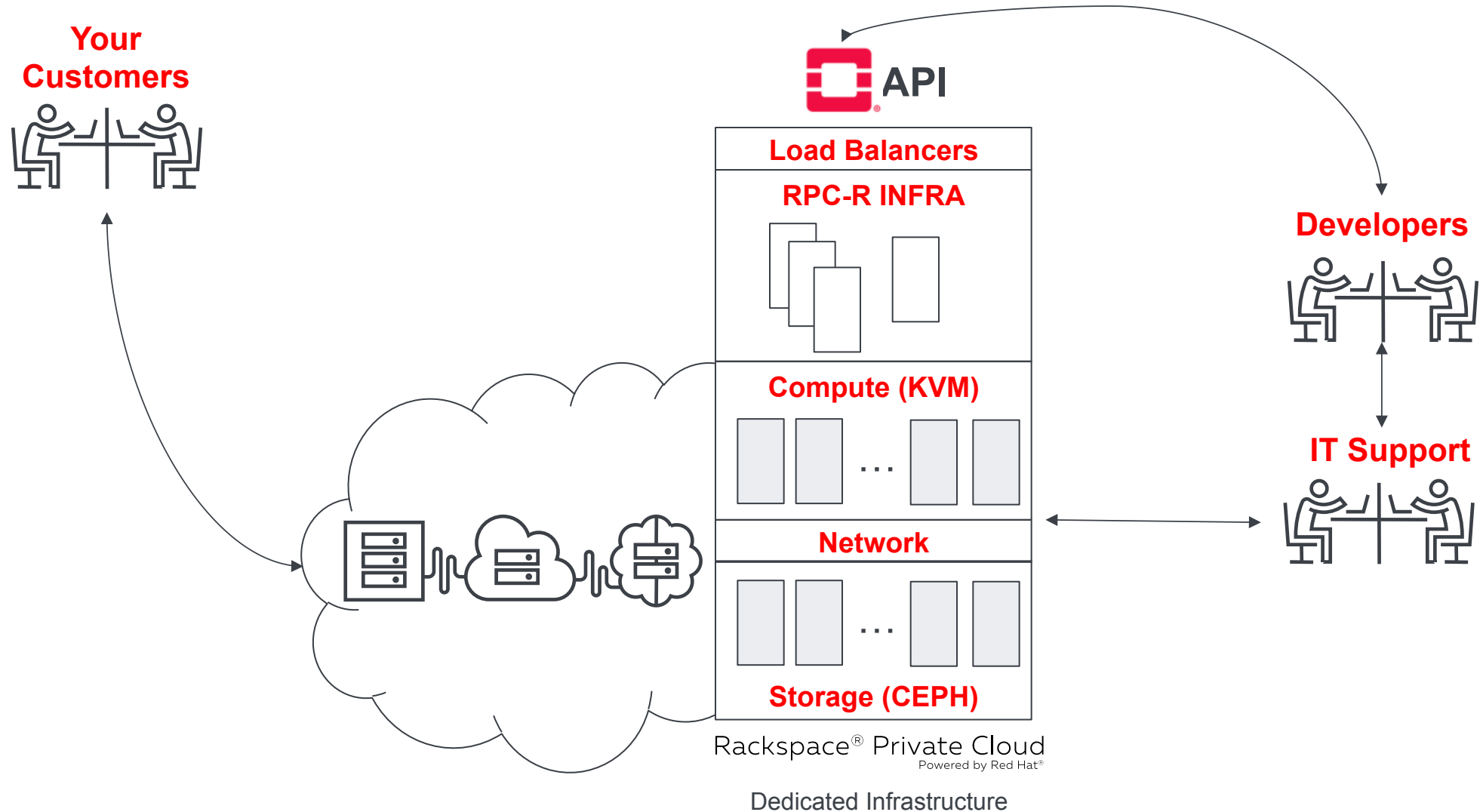 - ‣ Greater reliance on tools and your own standards and procedures

110v   220v   240v
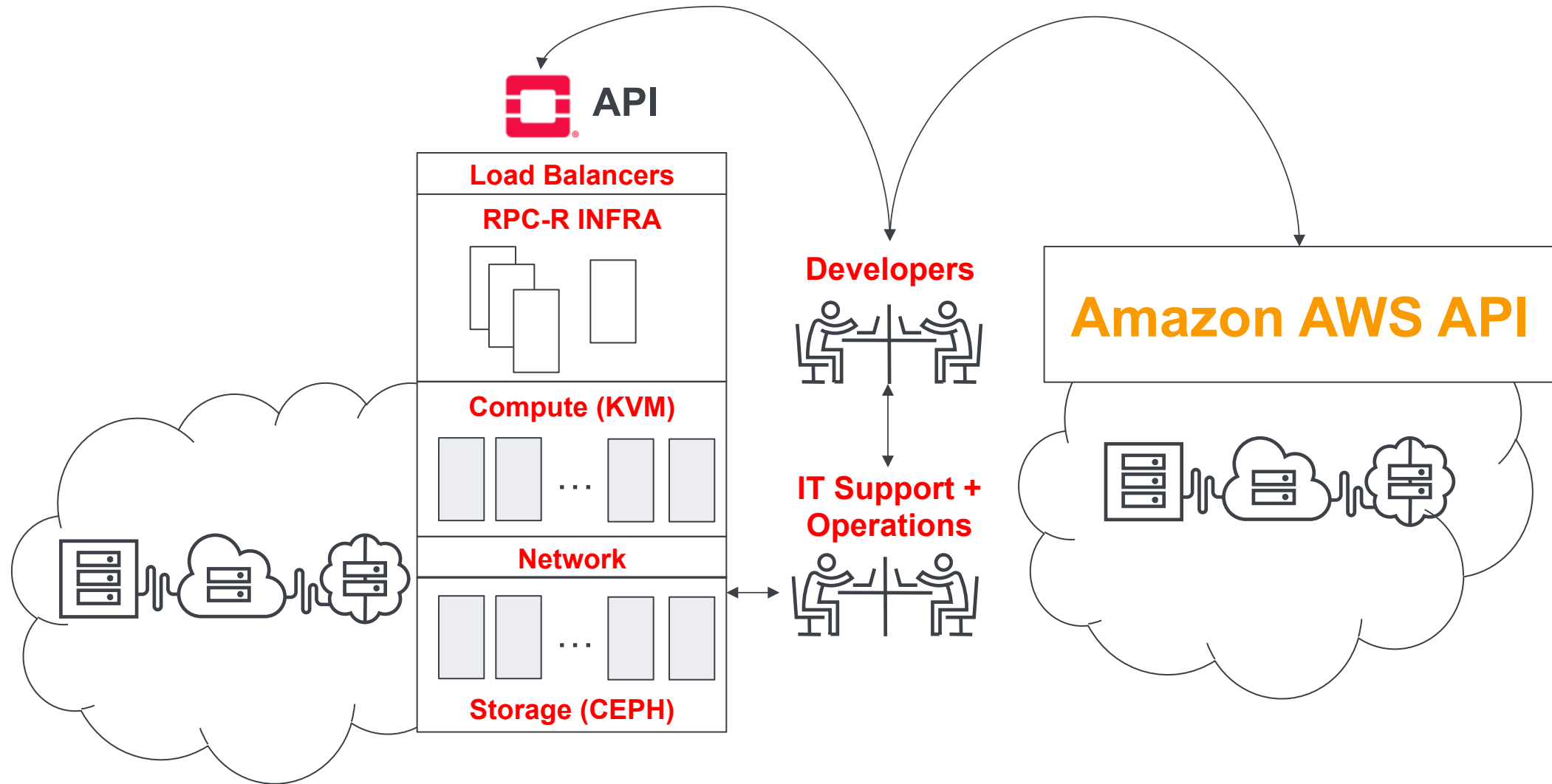
rackspace.

Consumption Options – Private vs. Public

The Private Cloud

Your Customers

API

Load Balancers

RPC-R INFRA

Compute (KVM)

...

Network

Storage (CEPH)

...

Rackspace® Private Cloud
Powered by Red Hat®

Dedicated Infrastructure

Developers

IT Support

rackspace.

The Public Cloud

Your Customers

Amazon AWS API

Developers

Operations Support

The Hybrid Cloud: Multiple APIs

API

Load Balancers

RPC-R INFRA

Compute (KVM)

Network

Storage (CEPH)

Developers

IT Support + Operations

Amazon AWS API

rackspace.

The Hybrid Cloud: CloudForms
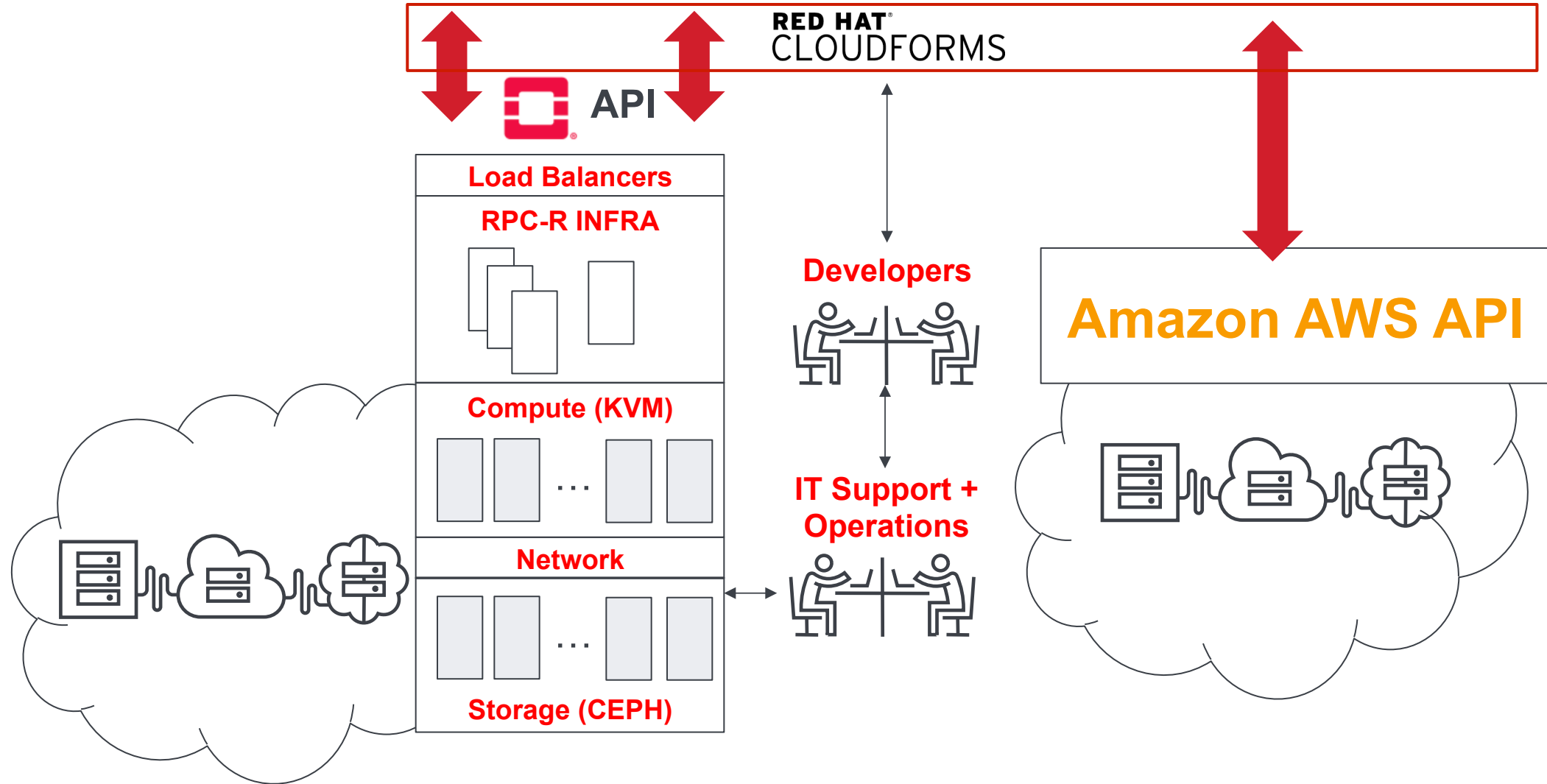
The Hybrid Cloud: PaaS - OpenShift

The Hybrid Cloud: Data Strategies

RED HAT® CLOUDFORMS

API

Load Balancers
RPC-R INFRA
Compute (KVM)
Network
Storage (CEPH)

Developers

IT Support + Operations

Amazon AWS API

Data Replication

rackspace®

The Hybrid Cloud: Data Strategies

RED HAT® CLOUDFORMS

API

Load Balancers

RPC-R INFRA

Compute (KVM)

Network

Storage (CEPH)

Developers

IT Support + Operations

Amazon AWS API

Direct Access

rackspace®
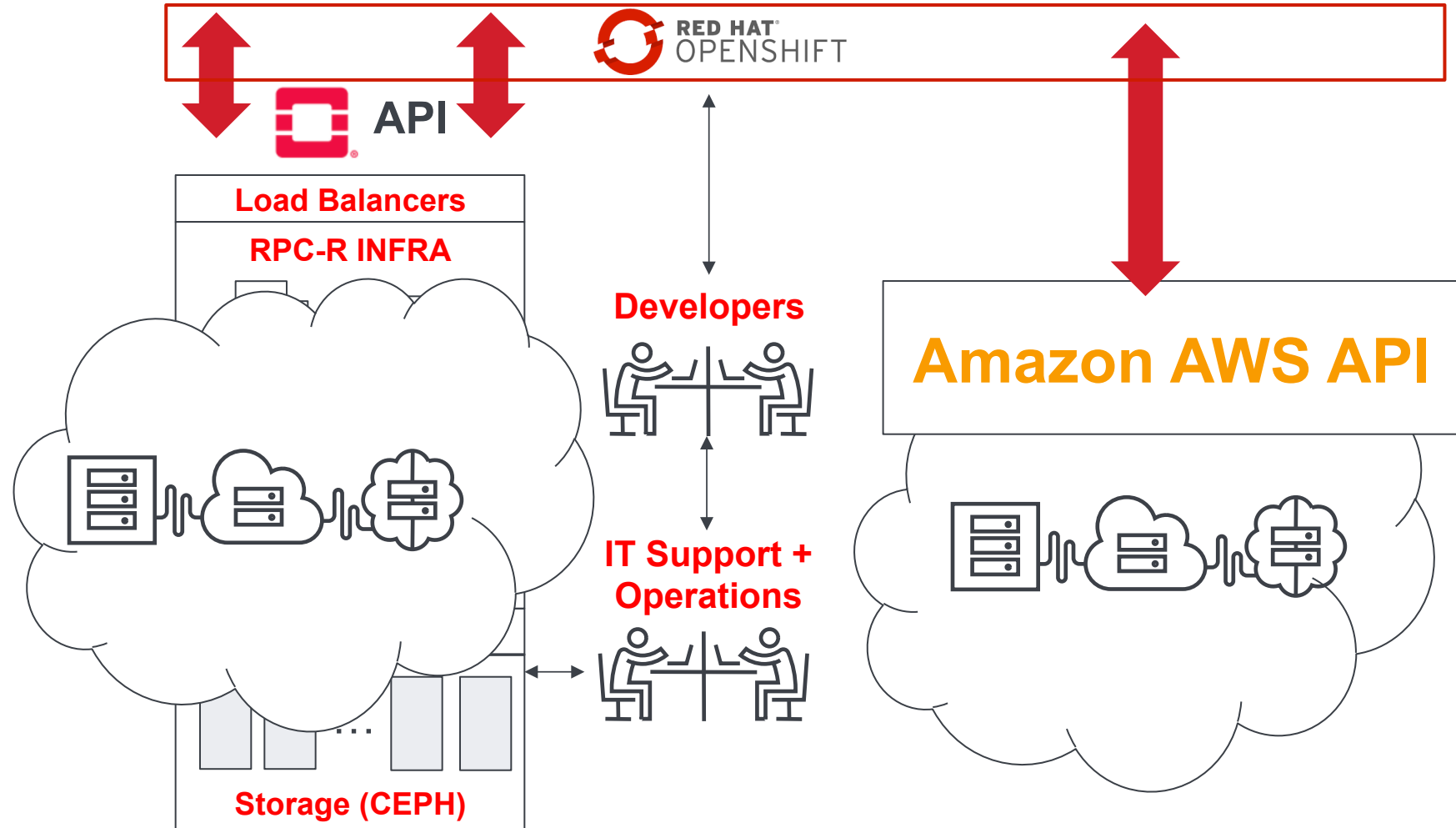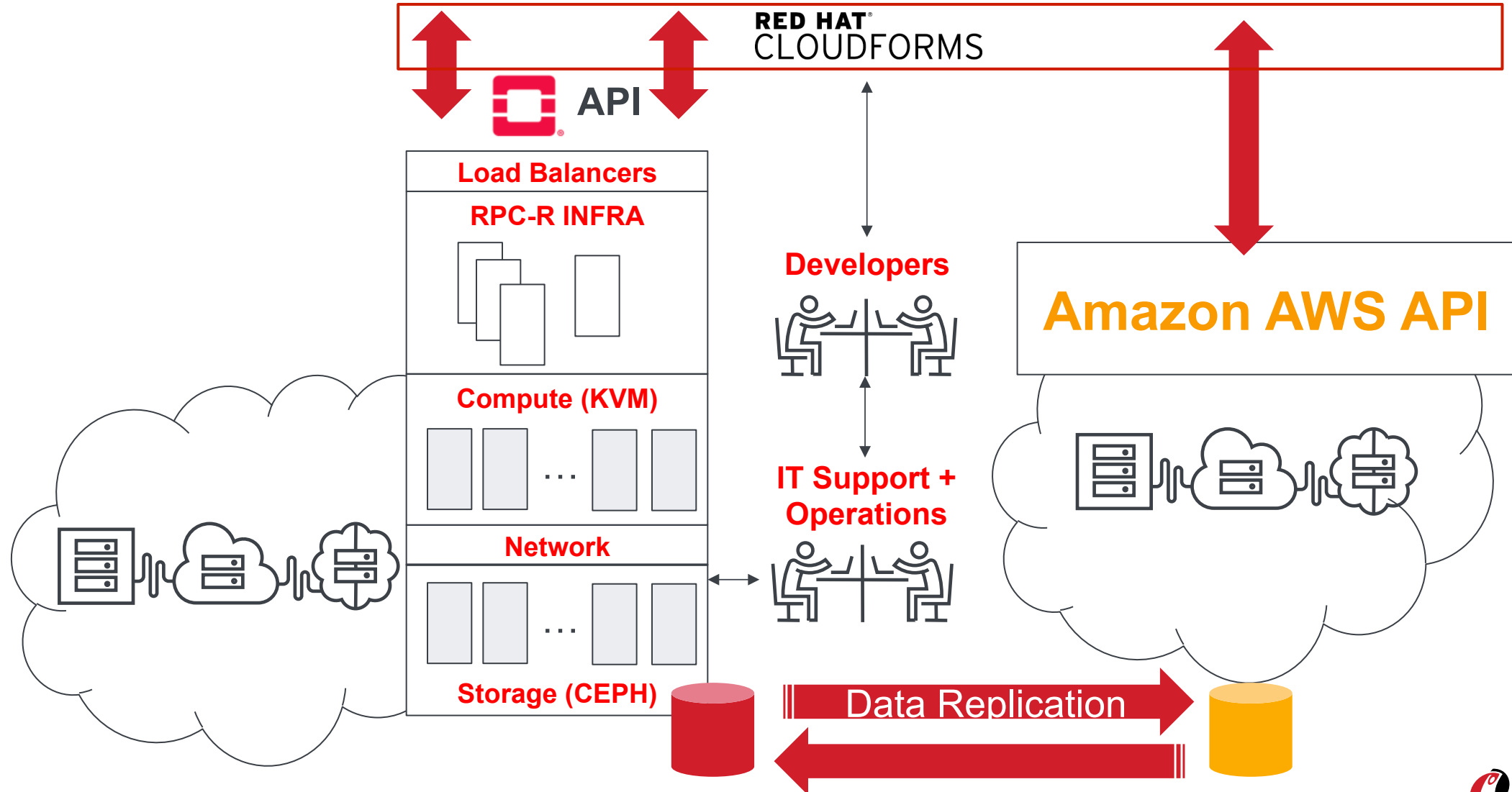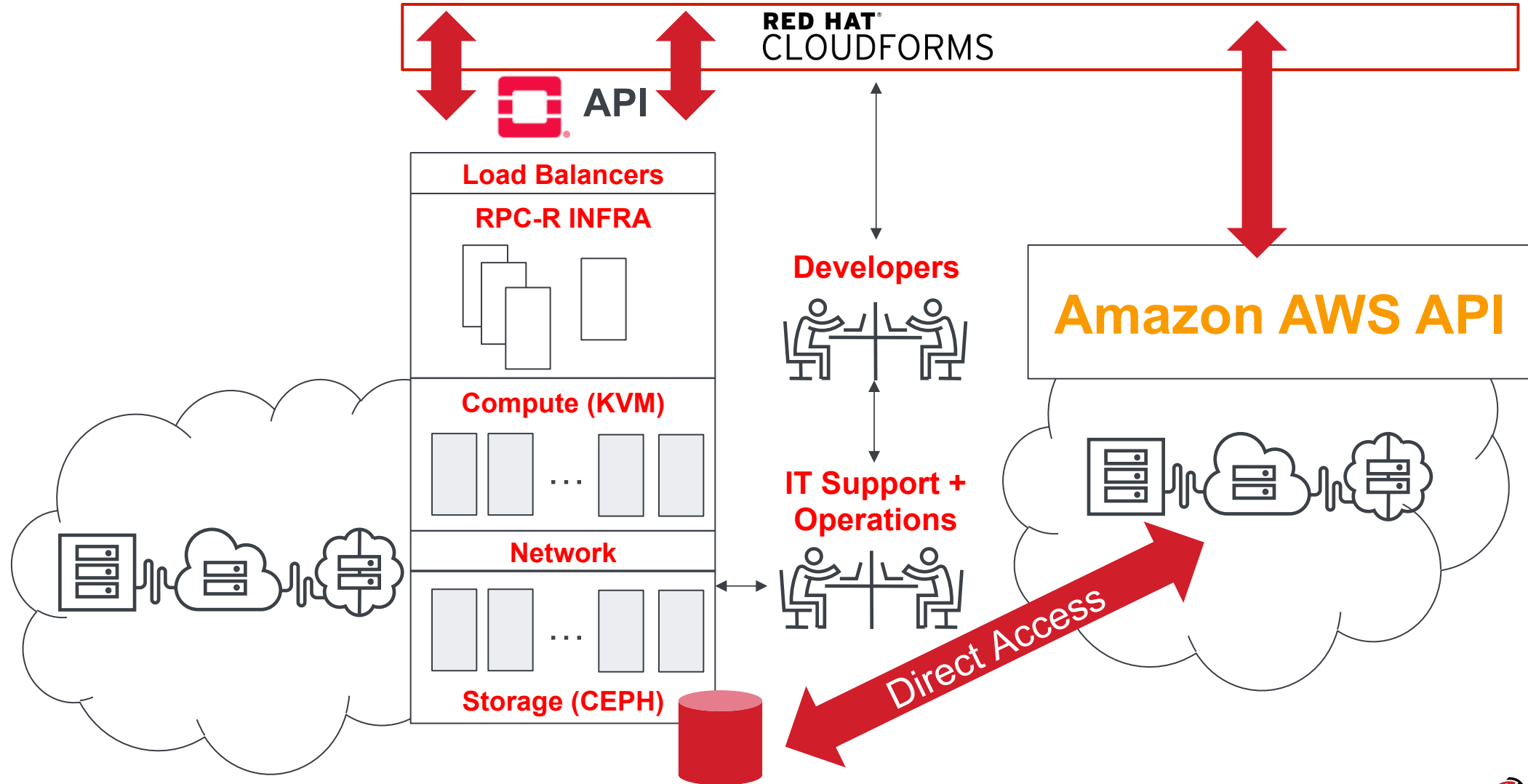
My multi-cloud landscape
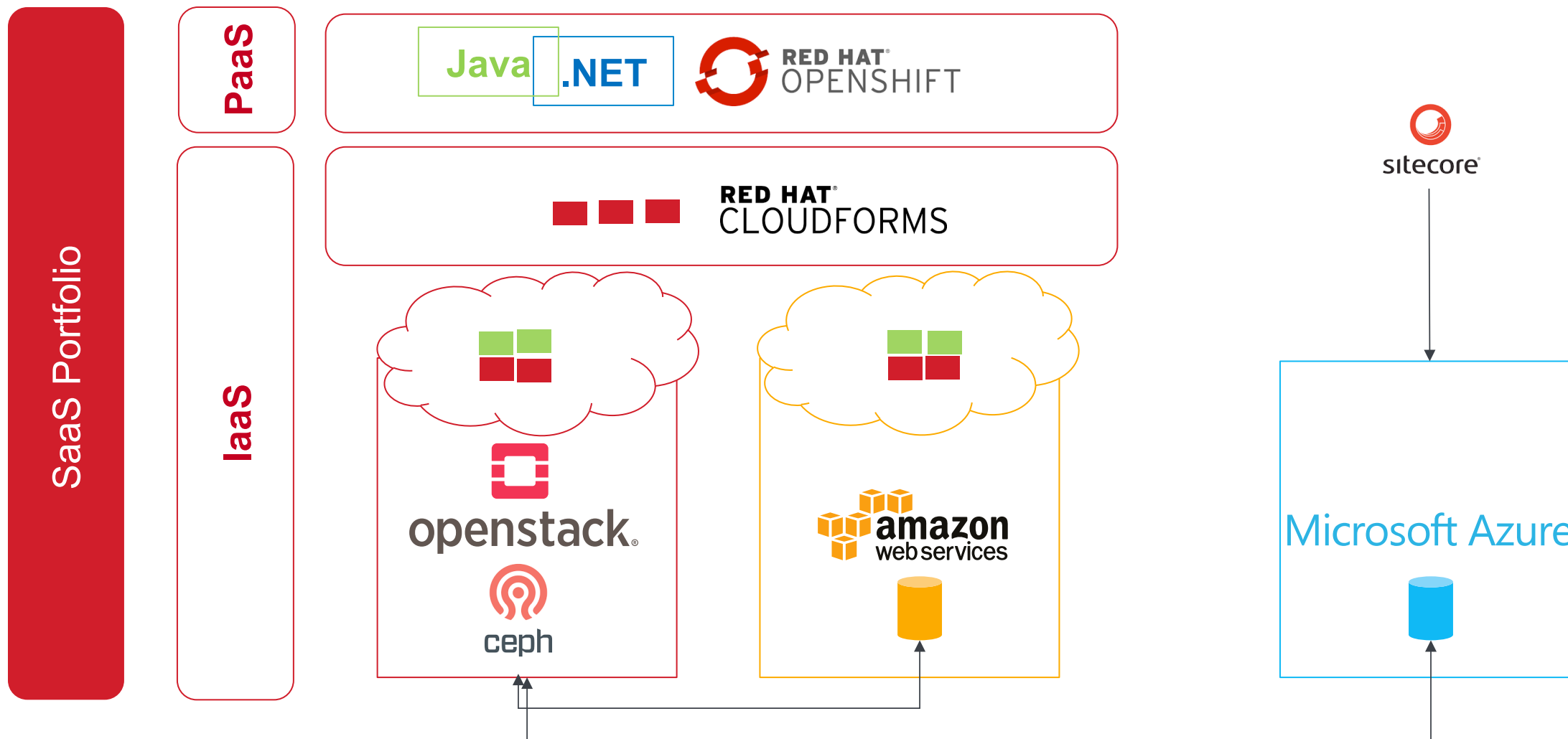
There is no such things as free lunch...

- Skills
  ‣ Skills to use three different clouds, operate two different infrastructures and use two additional tooling would be required
  ‣ Developers need to understand different APIs and behaviors of instances

- Policies
  ‣ Restrictions may be in place, or need to be put in place depending on application or data requirements
  ‣ Spending policies and quotas should be introduced for public cloud usage
  ‣ Security policies need to be clearly articulated

- Data
  ‣ How fast can your data replicate?
  ‣ How tolerant of data lag is your application
  ‣ Is data replication part of your cloud DR strategy?

- Dependencies
  ‣ Appropriate network bandwidth
  ‣ Familiarity of hybrid workloads
  ‣ License implications

rackspace.

WRAP-UP

What I would like you to take away from today's talk…

Key Take-Aways

- Not everything outside your DC is Cloud – think cloud, think agile
- Digitalization is here to stay – every organization needs a corporate and cloud strategy to address it
- Cloud is more than technology – it is a state of mind and a journey that is unique to every company
- Multi-cloud is reality, but it is more than the concept of cloud brokerage
- Open Source software provides value across the stack and should play a role in any organizations strategy
- If you think about an integrated multi-cloud strategy – Rackspace is someone you should speak to!

rackspace®

RED HAT
FORUM
Europe, Middle East & Africa

rackspace.