



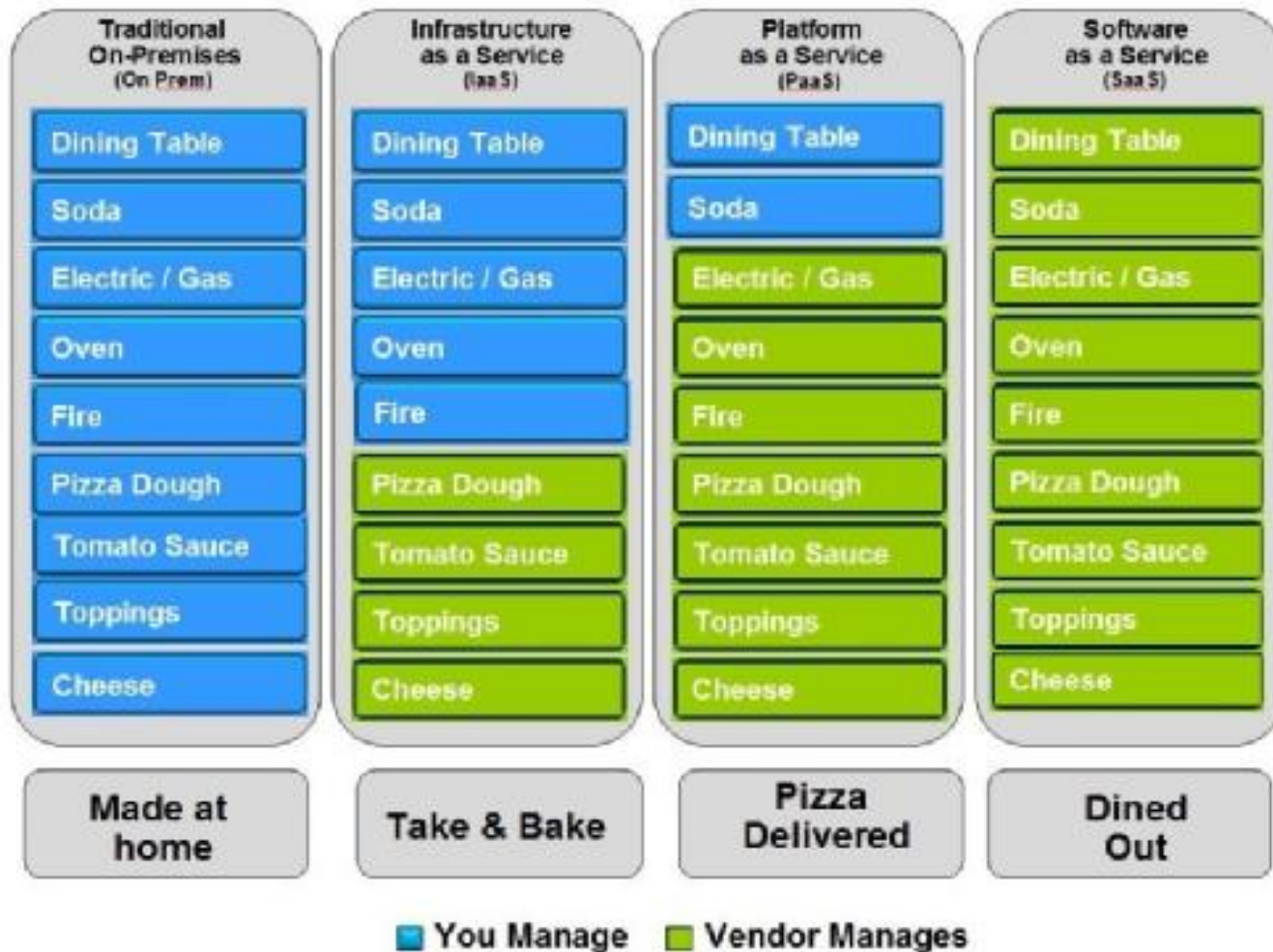
What is cloud computing?

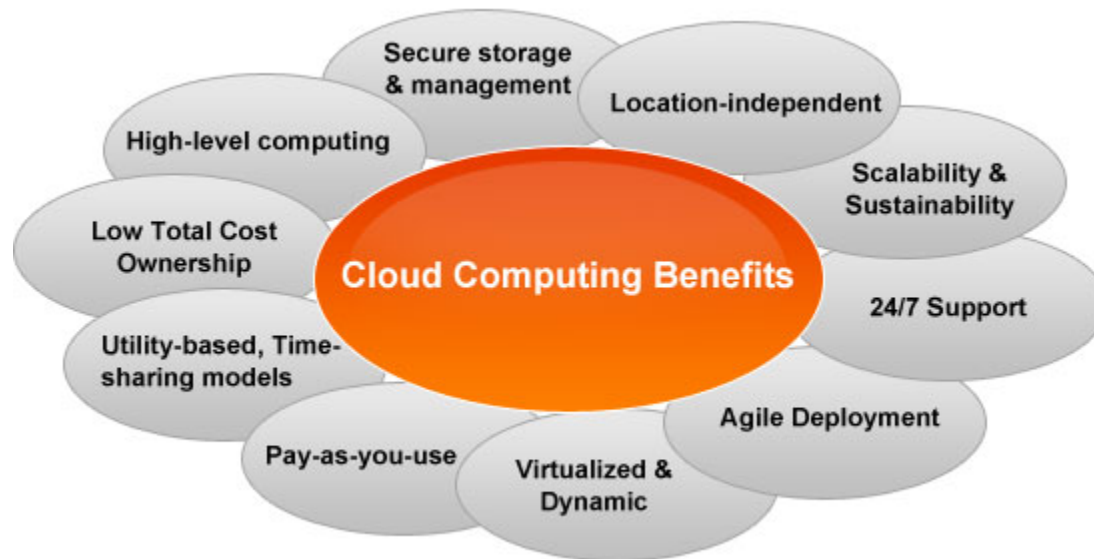
- “Cloud computing is the on-demand delivery of compute power, database, storage, applications, and other IT resources via the internet with pay-as-you-go pricing.”

Cloud Computing Models

- IaaS (Infrastructure as a Service)
- PaaS (Platform as a Service)
- SaaS (Software as a Service)

Pizza as a Service





Benefits of Cloud Computing

- Cost saving
- Elasticity and stop guessing capacity
- Availability
- Increase speed and agility
- Institutions can concentrate on their core business
- Go global in minutes

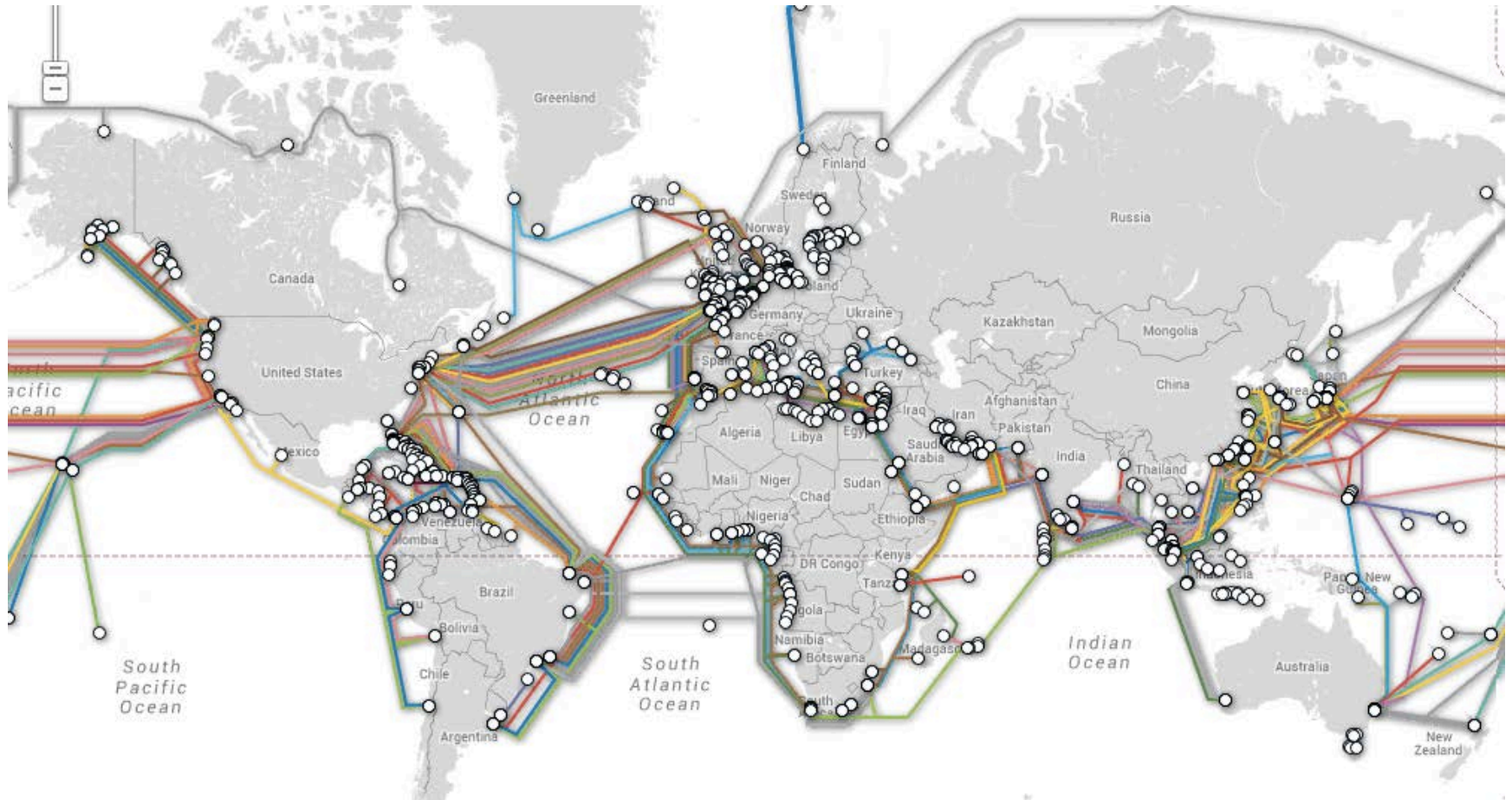
What are the risks?

- Lack of control over supplier's assets
- Supplier's incentive to overload their infrastructure
- Data privacy
- Legalities of storing data offshore
- Denial of service attacks
- Bugs in large systems, e.g., distributed networks

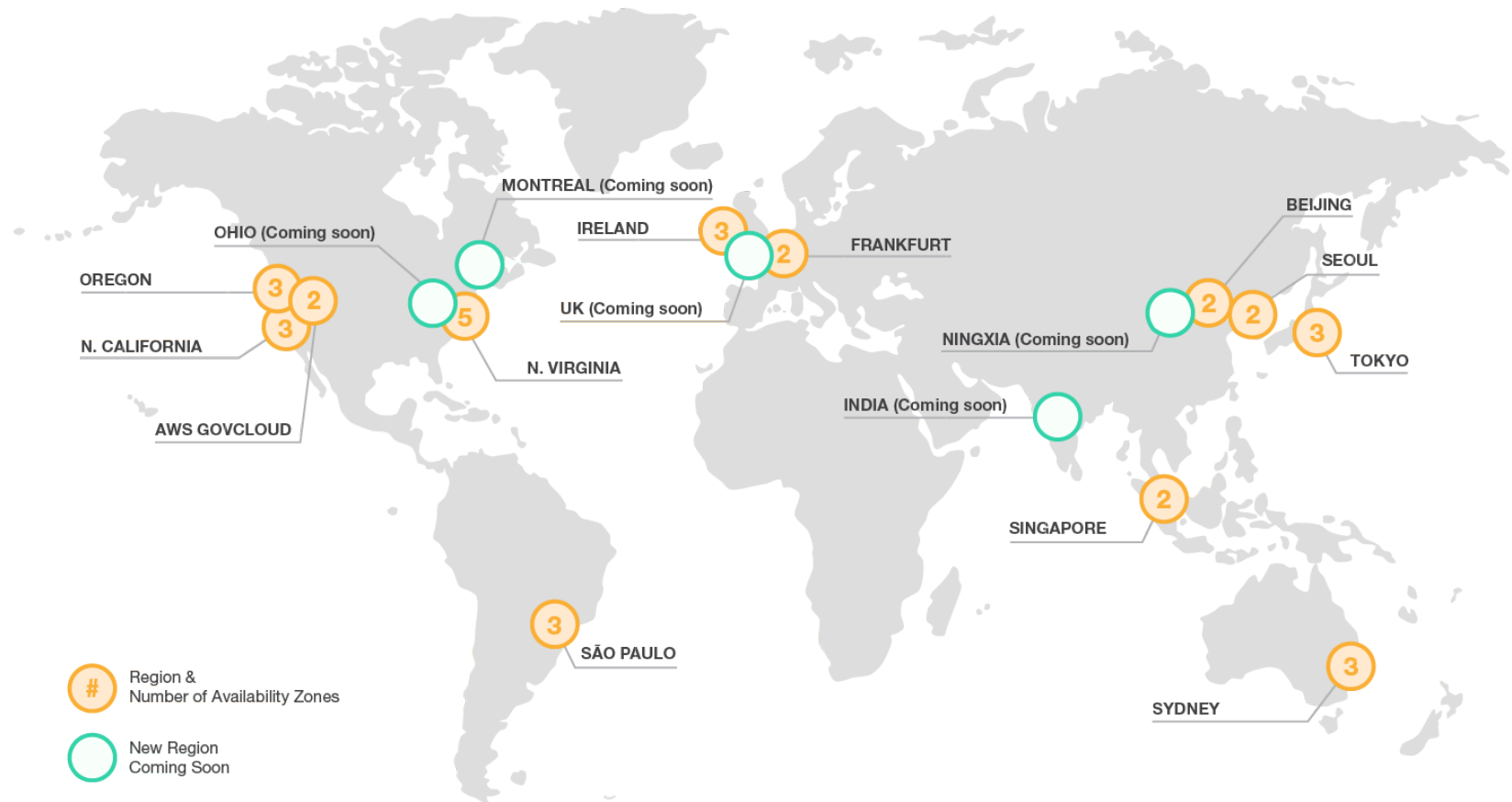
Amazon Web Services



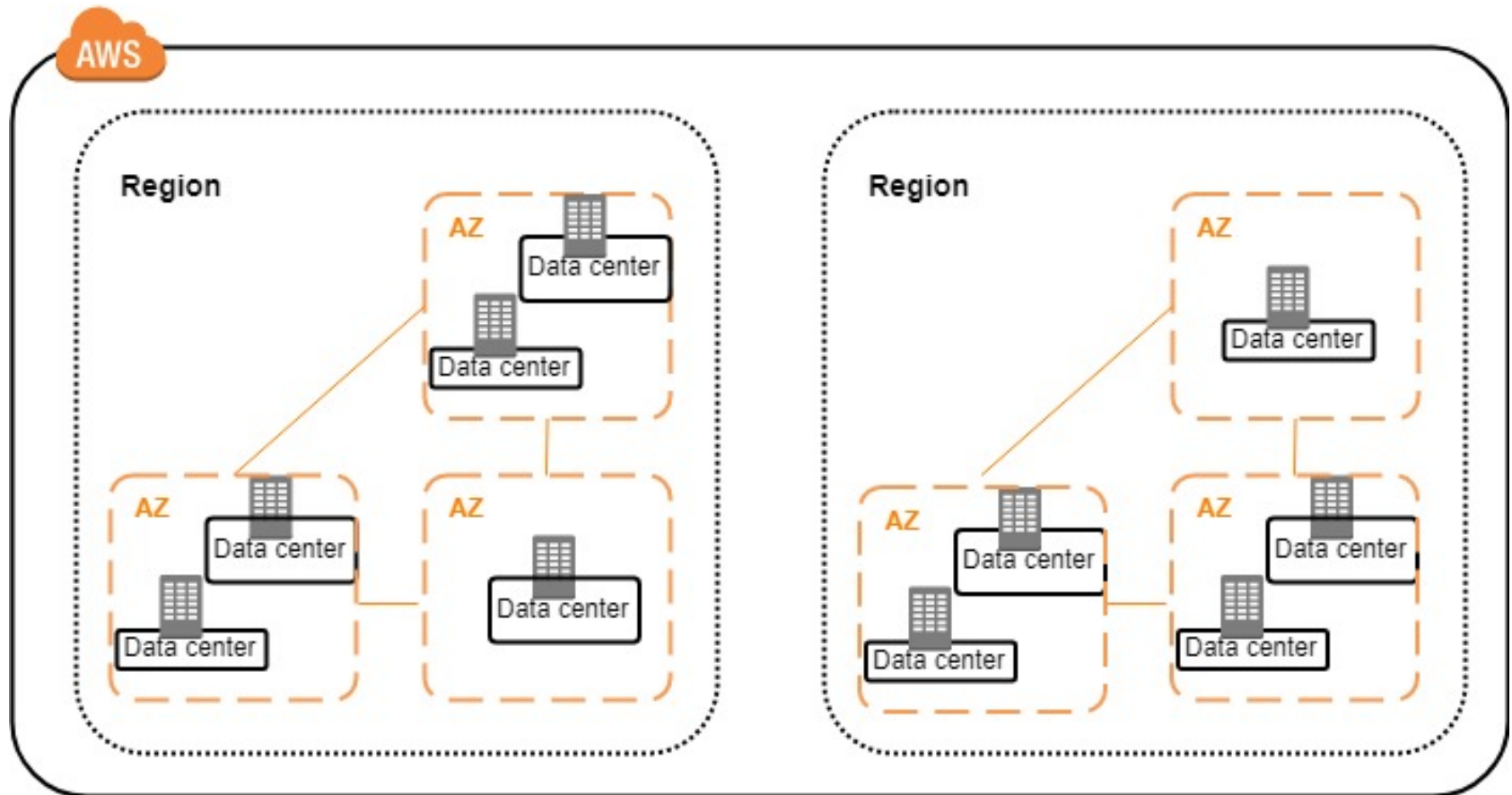
AWS Global Infrastructure



AWS - 12 Regions, 11 Availability Zones



Region and Availability Zone Concepts



Regions and Availability Zones(AZ)

- Regions:
 - isolated from the other Regions
 - Two or more Availability Zones
- Availability Zones:
 - One or more data centers
 - Interconnected with other Availability Zones through low-latency links