# Choosing the Right Strategy

## Cloud and Virtualization Workshop

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# We've Talked About…

- Cloud services like:
  - Compute, Software as a Service (SaaS), Infrastructure as a Service (SaaS)
  - Object storage, storage, containers, Infrastructure as code, more
- Virtualization
- Proxmox as a management framework over hypervisors
- Migration of VMs
- File storage, file systems, LVMs, networked storage, Ceph, Linstor
- Cloud-Init
- Terraform and Ansible
- Docker and Kubernetes
- Cloud security and networking
- Proxmox networking
- Physical storage
- Cloud management and cost
- Monitoring and metrics
- … and, more…

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# What to Use?

With any virtualisation strategy (local or cloud):

- Answer the question, "Our goal moving to the cloud is…"
- What is your goal?
  - ✓ Will moving to the public cloud assist your organization? Will you:
    - ○ Save money
    - ○ Improve security
    - ○ Improve reliability and stability
    - ○ Simplify your work loads
    - ○ What else?
  - ✓ Will creating a local cloud solution (Proxmox and Linstor for example)
    - ○ See above ☺

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# Considerations
## (Cloud)

**All of these are driven by:**

- Location of service
- Governmental restrictions
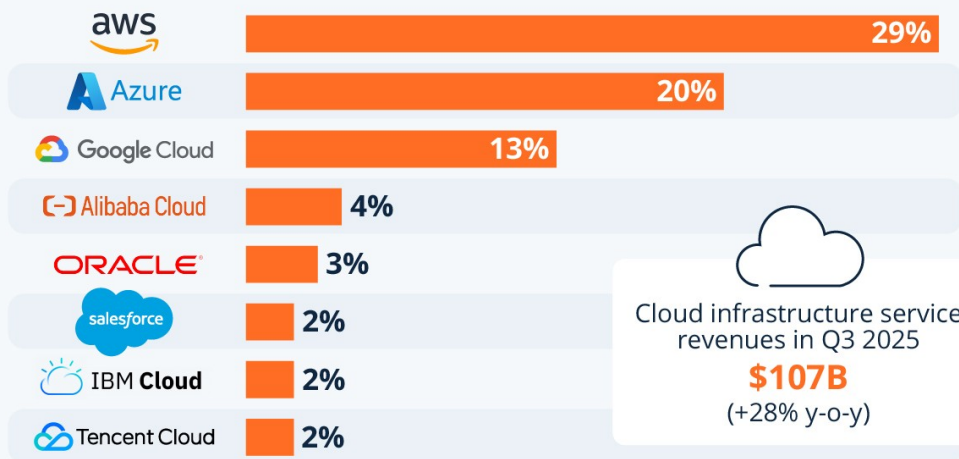- Your organization type

**And, of course:**

- Services provided and your need

**There are others…**

- Linode
- Digital Ocean
- VULTR
- OVH

## AWS Stays Ahead as Cloud Market Accelerates

Worldwide market share of leading cloud infrastructure service providers in Q3 2025*

| Provider | Share |
|----------|-------|
| aws | 29% |
| Azure | 20% |
| Google Cloud | 13% |
| Alibaba Cloud | 4% |
| ORACLE | 3% |
| salesforce | 2% |
| IBM Cloud | 2% |
| Tencent Cloud | 2% |

Cloud infrastructure service revenues in Q3 2025
**$107B**
(+28% y-o-y)

* Includes platform as a service (PaaS) and infrastructure as a service (IaaS) as well as hosted private cloud services
Source: Synergy Research Group

statista

# Considerations Local Cloud

What is your goal?

- − We may have reviewed compute options, like Docker (Kubernetes is another)
    - • Can you do this locally or in the public cloud?
- − We have reviewed Proxmox as a virtualization environment
    - • Showed how to select and create software-defined storage (SDS) platform that offers object, block, and file storage – Ceph and Linstor.
- − Are you working on compute solutions that run reliably? Services to customers that are more reliable, easier to maintain, or something else than what you currently provide?
- − Is public cloud not an option or not wanted for some reason?
- − Would a local cloud improve your organization's overall stability, reliability, cost, other?

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# What About Doing Nothing?

Organization win vs. cost

- Perhaps a public cloud or practical hybrid method is expensive
- Is the cost worth it for your organization
- What if you do nothing? What if you have failure:
  - Downtime
  - Lost data
  - Unreliable equipment needing replacement

One item that can be missed, what about your work life experience?

# In Conclusion

No perfect answer for all. Goals of this workshop include:

- Present possible solutions in the public cloud or built locally options
- Present what might be benefits of using some of these
  - Better security
  - Better data manipulation and use
  - Less overall cost?
  - Improvement of worklife
  - Improvement of stability, reliability, continued cost, supporting your organization's purpose
- Help present what is involved to implement this to help you decide if it makes sense and/or has needed value to your organization.

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# Questions?
# Suggestions?
# Comments?