INSIGHT

# Top 5 Factors To Consider When Evaluating Cloud Technologies

**GADELLNET**
TECHNOLOGY THAT POWERS MISSIONS

# What top factors should you evaluate when it comes to hosting servers and applications in the cloud, versus keeping them on-premise?

In this whitepaper, we are analyzing some key factors to evaluate on-premise and cloud infrastructure designs. Knowing the differences between these two options in the areas of security, cost and scalability will ensure you make the right decision for your organization.

"In most situations, the decision to move to cloud services is a complex one. There are **multiple variables** in the equation and the impact of the choice varies from organization to organization."

**Brad Hettenhausen**
**Vice President, Strategic Services**
**GadellNet**

According to the Flexera 2020 State of the Cloud Report*, 87% of enterprises have a hybrid cloud strategy and 59% of respondents expect cloud use to exceed plans due to COVID-19.

*So, what are among the biggest drivers?*

The biggest driver among these companies is to optimize cost savings, but responders also noted the importance of better financial reporting, automated policies for governance and those companies that are implementing a cloud-first strategy.

**87%**
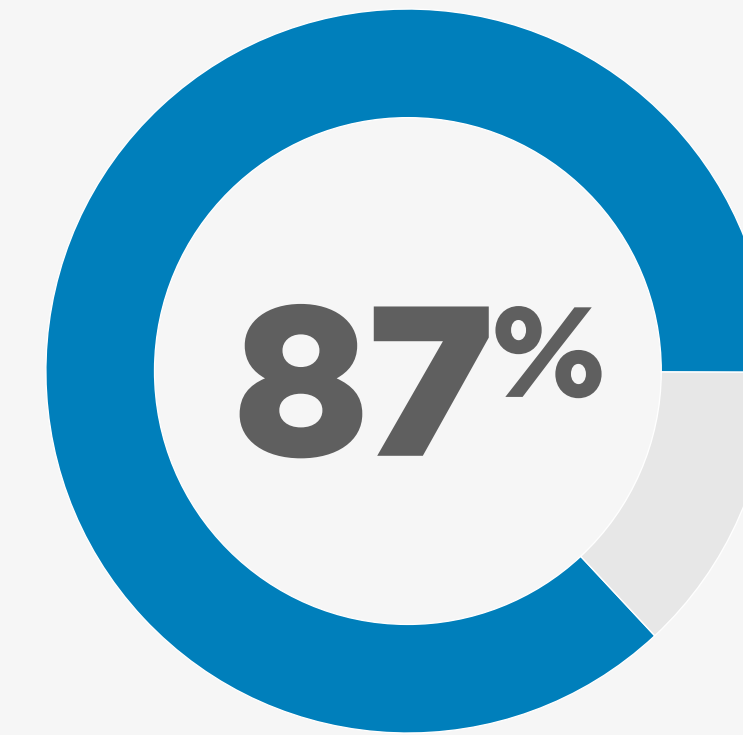
Enterprises with a
hybrid cloud strategy*

**59%**
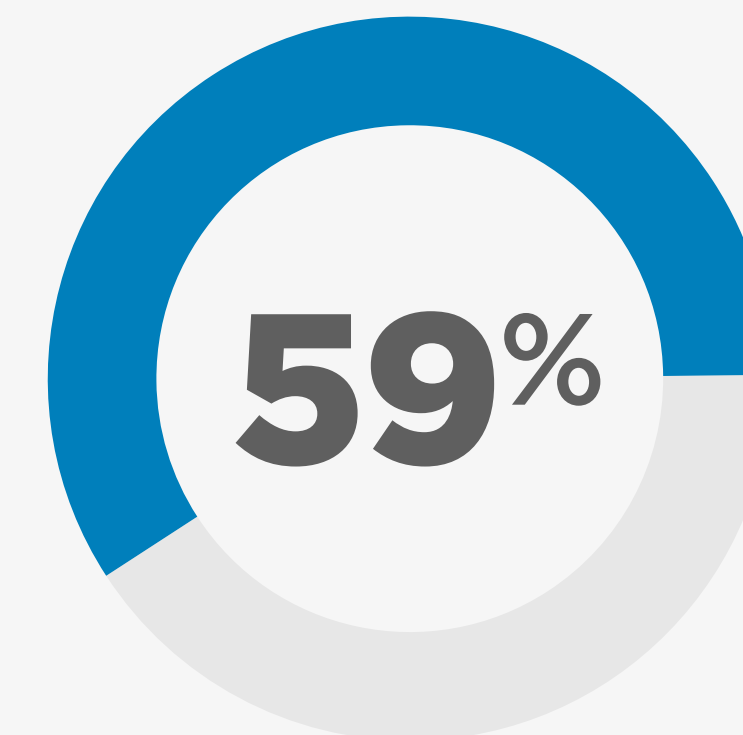
Enterprises who expect
cloud use to exceed
plans due to COVID-19*

# Understanding The Industry

The top three public cloud providers are Amazon Web Services (AWS), Microsoft Azure and Google Cloud Services.

**Right Scale, State of the Cloud report

Azure is narrowing the gap with AWS in both the percentage of enterprises using it and the number of virtual machines (VMs) enterprises are running in it**

Microsoft invests over $1 billion in cloud security each year.

# The Top 5 Evaluation Factors

**COST**

**SECURITY**

**AGILITY & SCALABILITY**

**LINE OF BUSINESS APPLICATIONS**

**UPTIME**

For some static and stable situations, on-premise infrastructure may represent a lower cost in the long run. However, cloud platforms offer more scalability and resiliency options for companies that have dynamic and changing needs.

*In certain cases, a hybrid approach utilizing both environments together can be the most effective approach.*

# Evaluation Factor: Cost

## On-Premise

**ADVANTAGE**

Can be less expensive during the life of the servers (5+ years)

**DISADVANTAGE**

Significant upfront hardware and software costs means deployment can be costly

## Cloud

**ADVANTAGE**

Predictable subscription pricing. No upfront hardware/software costs

**DISADVANTAGE**

More complex long-term planning may be necessary to justify

## Key Questions

Is it more important to **control upfront costs** or **long-term costs**?

Would you rather see IT as an **operating expense** or a **capital expense**?

Do you see **big changes to your business operations** in the next 18 months?

# Evaluation Factor: Security

## On-Premise

**ADVANTAGE**

Data remains local, giving organization full control of the physical hardware

**DISADVANTAGE**

Requires dedicated and knowledgeable resources (either full-time employees or outsourced)

Adds risks if organization lacks appropriate expertise

## Cloud

**ADVANTAGE**

Delivers superior data security

**DISADVANTAGE**

Requires capable expertise to support

## Key Questions

Do you have a quality, secure data closet on-premise?

Do you have a qualified staff with the rights tools and processes to secure your environment?

Do you have any **specific compliance regulations** (NIST, HIPPA, SEC, SOC II) to consider?

# Evaluation Factor: Agility & Scalability

## On-Premise

**ADVANTAGE**

Physical control over the hardware means upgrades can be tightly controlled

**DISADVANTAGE**

Must plan far in advance. Small mistakes in hardware can cause significant outages

Scalability is difficult and costly. You could be stuck with excess infrastructure.

## Cloud

**ADVANTAGE**

Cloud resources can be rapidly adjusted to accommodate specific demands

**DISADVANTAGE**

Monthly recurring subscription or management costs can escalate if cloud infrastructure is not properly managed

## Key Questions

How much change is predicted and planned for the future?

Will the organization be scaling up or scaling down in the next 3 years?

# Evaluation Factor:
# Line of Business Applications

## On-Premise

**ADVANTAGE**

Some line of business applications are still better suited to stay on-premise

**DISADVANTAGE**

Redundancy and scalability for applications may be limited or costly

## Cloud

**ADVANTAGE**

Many line of business applications have moved to cloud-native platforms and no longer require server infrastructure

**DISADVANTAGE**

Where bandwidth constraints are a concern, some line of business applications are not well suited for cloud-server hosting

## Key Questions

How many line of business applications are running in your environment?

Do your software vendors support cloud-infrastructure?

How much bandwidth does each application require?

# Evaluation Factor: Resiliency

## On-Premise

**ADVANTAGE**

Can be cost-effective when 99% uptime is not a concern

**DISADVANTAGE**

Costly to build out if 99% or greater uptime is required

## Cloud

**ADVANTAGE**

Much easier and more cost-effective to build redundancy for increased uptime

**DISADVANTAGE**

Ultimately, the provider (Azure, AWS, Google) is responsible for uptime

## Key Questions

Does your on-premise infrastructure include redundancy onsite and offsite?

Does your cloud infrastructure include redundancy onsite and offsite?

Have you developed and tested disaster recovery procedures?

# Still have questions? GadellNet's team of Strategic Consultants can help you decide which option makes the most sense for your organization.

We can craft the right cloud migration, on-premise or hybrid solution for you. Our team is focused on synthesizing all of this information and guiding you in the right direction.

As a Microsoft Gold Partner with Cloud Platform Competency, we understand what it takes.

Contact us today at sales@gadellnet.com.

"We can help you lay out the potential paths, with justification for the recommendations. **We help clients understand the path** forward. Our team has executed a wide range of cloud migration efforts and are always on top of the latest capabilities."

**Joe Gadell**
**Chief Technology Officer**
**GadellNet**