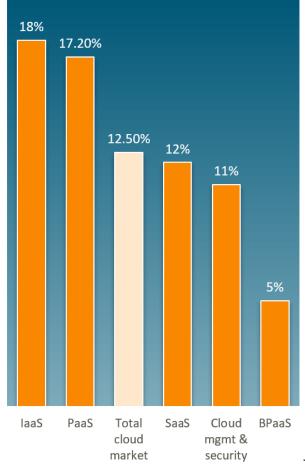
# THE MULTI-CLOUD & HOW TO CREATE A MULTI-CLOUD STRATEGY



To say that <u>cloud adoption has been accelerating</u> might be an understatement. Enterprises are after what the cloud provides: speed, agility, simplicity, and lower costs. Gone are the days of managing an <u>expensive data center</u>.

#### bmc

5 Year Cloud Growth, 2018-2022: Compound Annual Growth Rate



Though <u>IT managers</u> love cloud benefits, various studies

show that that fear of <u>vendor lock-in</u>—being stuck with a vendor who no longer suits your needs—is real for a lot of companies. And this fear is growing with each passing year, which may hinder the agility and speed you need to thrive.

The best way to alleviate these concerns? Implementing a multi-cloud strategy.

Before the cloud even existed, companies used multiple database vendors. This strategy isn't new, we're just moving it onto the cloud. Let's take a look at:

- The multi-cloud
- <u>Multi-cloud strategy</u>
- Why you'd use this approach
- Benefits of the multi-cloud
- <u>Challenges</u>
- Data safety
- How to choose
- <u>Additional resources</u>

## What is the multi-cloud?

Multi-cloud is the practice of using more than one cloud platform in your cloud approach. It isn't a kind of technology, just an approach. If you are using <u>more than one</u> cloud or cloud provider, it's multi-cloud.

Easy. (Understand and compare <u>public, private & hybrid clouds</u>.)

# What is a multi-cloud strategy?

A multi-cloud strategy is the intention and implementation of multi-cloud. It's choosing to be in the multi-cloud on purpose—not by default.

For instance, many companies first move into the cloud tepidly, one small service or application at a time. Soon, this becomes unwieldy and you have to clean up your cloud sprawl. You need a strategy.

Strategizing for the multi-cloud, as we'll show, means reflecting on what your needs are and what vendor aligns with them best. For instance, the difference might be between <u>homogenous and</u> <u>heterogenous clouds</u>:

- A homogenous cloud may include several different clouds, but all from the same vendor.
- A heterogenous cloud, on the other hand, could mean three public clouds from three vendors.

They're all multi-cloud strategies, but one will work better for you than others.

# Why would I use a multi-cloud approach?

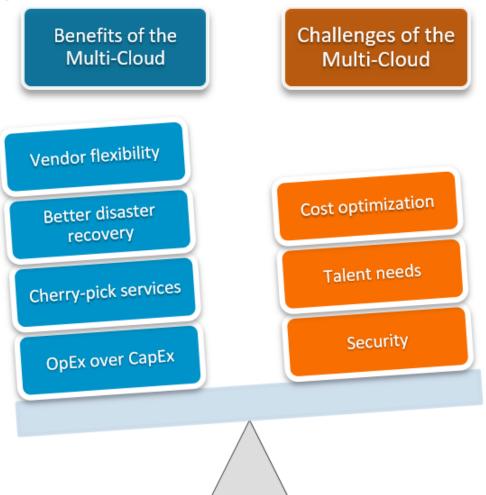
Every day, every company uses <u>various types of data</u> and various applications. Most cloud vendors specialize in one area, so being able to use multiple clouds allows companies the agility they need. For example, with a multi-cloud approach, you can have:

- Highly available apps existing in one ideal cloud solution.
- Highly sensitive data that you don't need to access often in a different cloud solution. This one might be slower but more secure—and that's OK!

A jack-of-all-trades is a master of none, maybe? That's actually key to why multi-cloud strategies are growing in popularity. Just like you are an expert in your area, you want an expert in cloud services supporting you. There is no reason to be locked into a service that cannot evolve with the data it handles.

Being locked-in can be a real challenge for any company. Not only do multi-cloud approaches escape lock-ins, but you can also get a lot of specific benefits.

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#### **Benefits of a multi-cloud environment**

Moving to a new system can be daunting. Businesses worry about handing data over to what are essentially unknown entities.

However, there are many advantages to this type of strategy.

#### Vendor flexibility = no lock-in

Never put all your *cloud eggs* in one basket. If your vendor changes its strategy, <u>service level</u> <u>agreements (SLAs)</u>, or pricing model, it is best to be able to move quickly. Moving in and out of the cloud is expensive, time-consuming, and risky—something to avoid.

Instead, by using a mix of vendors, you maintain your negotiating power, leanness, and agility. This risk management strategy will ensure that you have control of your data through needed flexibility.

#### Improved disaster recovery

<u>Multi-cloud backups allow for better backups and better backup access</u>. Even if one cloud service goes down, you can rely on other providers to still have your important data safe.

(Explore <u>cloud disaster recovery</u> best practices.)

#### Cherry-pick services you need

No single cloud provider has the best services for everything, so it is smart to tailor the best service for your situation. You might even have one process in your workflow that requires a dedicated cloud service.

#### **Decrease capital expenditures**

Data centers require lots of infrastructure, hardware, and even power supplies. These items are expensive to purchase outright. The more of these you have, the less free-flowing capital you have to run day-to-day business operations. The cloud is a vital way to <u>free up CapEx spending</u> in favor of more nimble OpEx spend.

## **Challenges of a multi-cloud approach**

A multi-cloud strategy can be more complex to run compared to the traditional single-cloud approach. The entire process is highly dependent on good planning.

Businesses should familiarize themselves with the advantages and disadvantages when making optimal choices.

#### Talent needs

Having the right people for the job is crucial. A multi-cloud environment is more involved and you need to have people who understand the structures. Most cloud interfaces vary, so one person knowing every system is rare.

As more companies fully embrace cloud infrastructure, having the right cloud talent is vital. You might consider cloud-specific specialists—AWS, Azure, and speciality clouds—or roles that focus on one part of cloud infrastructure, such as:

- Cloud architect
- Cloud network engineer
- Cloud automation engineer
- Cloud security engineer/manager
- Cloud developer

Another option is to hire a consultant to set up your cloud, which:

- Can be very cost-efficient in the long run
- Ensures minimal issues, disruption, and risk

(Get started with these popular cloud certifications.)

#### **Adequate security**

Another big challenge is security. Organizations should have a thorough discussion regarding security before committing to any providers. Every person on the project should know how to respond in case of a <u>data breach</u> or <u>data loss</u>.

Security and privacy are cited as some of the biggest reasons why companies are not in the cloud.

Ironically, it is usually the company—not the provider—who leaks data unintentionally. It is up to us to protect our own data. The cloud vendor may have some nice tools, but it is up to the organization to implement them to the greatest benefit of the data.

As this is the biggest drawback for many people wanting to enter the world of multi-cloud strategies, there are many considerations about:

- Data safety
- <u>Cloud governance</u>
- Data ethics

(Lear more about data loss prevention and solutions.)

# Data safety in the multi-cloud

Each enterprise will adopt a different mix of traditional and cloud services to achieve its goals. That means you must match the platform to your service requirements.

So, what are the right questions to ask about multi-cloud environments? Here are some starters:

- What types of applications are best for traditional environments? Cloud environments?
- What are the risks? How could they affect my business?
- What is the cost of the cloud versus what can be saved in the future?
- What compliance or government regulation is required?
- What level of <u>automation</u> is needed?
- What is the security strategy? What does the vendor protect? What do we secure?
- Are the right people in place to manage this strategy?

All clouds are not created equal. So, in order to choose your most appropriate cloud vendors, you must first know what you <u>want your data to do</u>. By having a great planning stage, implementing your multi-cloud strategy will be much easier!

For example: an application that is only going to run a few hours per day will not be a good fit for a cloud that is always running. You can cut costs dramatically by using vendors that provide the exact service you need.

# **Choosing the right cloud & provider**

The first step in choosing a cloud provider is to match each application's requirements to what the cloud offers in terms of:

- Features
- Services
- Technical requirements

Most enterprises with a multi-cloud strategy are running each application in a single cloud.

#### What's best for your data?

Choosing the right cloud for each workload is not as difficult as it may seem. When you understand your technical requirements, you can make better, educated judgments.

In fact, a public cloud meets the goals of many enterprises.

#### What are your particular needs?

The answers to these questions will play a significant factor in what vendors you consider.

Look at the granular level. Involve the app developers, the data engineers, the security team. Ask questions like:

- What apps and data require high availability?
- Which require the most stringent protections?
- Which areas do you anticipate significant scaling up or down?

#### Are the costs justifiable?

The variable cost model of cloud computing makes comparing prices complicated—but it still offers significant opportunities for savings. Prices are constantly changing, so it can be difficult to make evergreen comparisons. On average, compute resources will account for 75-80% of your cloud costs.

When evaluating cloud providers, it is important to know if they offer support. If so, what's the cost? Some support models are priced as a percentage of your cloud spend. If your cloud spend is significant, your support costs will be greater as well.

# **Multi-cloud strategies work**

Despite the number of challenges of adopting a multi-cloud strategy, the advantages outweigh the disadvantages. Since most organizations are in business to make money, we can safely say the top reason is that a multi-cloud strategy contributes to cash flow by saving money.

Usually, issues and solutions become more complex when people make them sound more complex. A good multi-cloud strategy must be well thought out, planned, and mapped to your needs. The planning phase of a strategy should take longer than the implementation.

The best planning phase is when two parties—security and data experts—tear apart your proposed plans numerous times, identifying weaknesses, risks, and unneeded complexity. Only after your plan is bulletproof that you should move onto the implementation phase.

Having the best plan and the best people will ensure that your strategy lives for a very long time.

## **Related reading**

- <u>BMC Multi-Cloud Blog</u>
- The Role of Cloud in DevOps
- <u>GCP Cloud Architect Certification: An Introduction</u>
- What Is a Software-Defined Data Center? SDDCs Explained
- Hybrid IT vs Hybrid Cloud: What's The Difference?
- Data Management vs Data Governance: An Introduction