



GlobalDots

Your **2022** Guide to a Successful Cloud Strategy

#1: How to Choose Your Cloud Provider(s)

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#1 How to Choose Your Cloud Provider(s)

#2 Cloud Security Tooling

#3 Cloud Governance Best Practices

#4 Budget Allocations & Procurement

#5 Building Your Company's Cloud Centre of Excellence(CCE)

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Executive Summary

This whitepaper is part of a 5-whitepaper series suggesting guiding principles for moving towards a successful cloud environment. It applies to both newly migrated and already cloud-based organisations.

A successful cloud environment is one that provides maximum benefit to business processes, with minimal spend and complexity, and with the utmost security.



GlobalDots has been helping organisations successfully migrate to the cloud for years, and in that time we have seen businesses fall foul of the same mistakes over and over.

It's much easier, cheaper, and more efficient for your business to plan how you will use a cloud estate before you migrate there. In other words, spend more time planning your cloud estate before you let everyone loose in it, thereby turning it into what I like to call a 'double W' estate, or a Wild West estate!

If you have already migrated to a cloud provider, don't worry – the principles laid out here still apply. However, tidying up is a slightly more laborious task than starting from scratch.

Why is a cloud strategy necessary?

Shift problems left:

By spending time now to determine a set of rules (that are enforced by software tools), problems later can be severely reduced. By setting up rules and governance policies you can ensure your cloud journey runs smoothly right from the start.

The most common mistake we see is rushing into the cloud. It's easier to set up a safe landing zone for your cloud resources than it is to try and clean it up once production workloads are already running. Spend the time setting up in advance and make sure your cloud estate is clearly organised from the outset. That way, clean-up operations won't be necessary.

Spend money to save money:

Most organisations are reluctant to spend large sums of money on governance software before they build out their cloud infrastructure. This is actually a harmful mindset and will cost more in the long run.

SREs, DevOps and senior sys admins are some of the most expensive human resources on the planet, and it is exactly these people that you'll be asking to monitor and investigate goings on in your platform. They'll end up writing a complex set of admin scripts in order to ensure IAM roles are used correctly, API access keys are rotated, resources are spun down when they are not needed, and so on.

As your cloud estate grows your IT engineers will be swamped with requests. It's not realistic to expect them to be able to keep eyes on the whole estate. That's why it's so valuable to spend money on governance and security tools at the outset. Adding tools too late in a cloud journey will lead to a bumpy integration and security dashboards will be flooded with unremediated alerts.

Long-term thinking is a must:

Simple cloud platforms quickly become complicated, single VPCs become many and the connections between platforms can become vast and complex. When deciding on a cloud strategy the long-term effects of early decisions must be thought through, as these decisions will determine all the legacy systems, not just the new ones.

A well-governed cloud environment takes careful planning, budgeting and execution. Be prepared to fight the budget holders for money which won't reap benefits for 12 - 24 months. Be brave with proposals and use examples of horrific cloud sprawl (a quick google search will turn up results) to scare money from the company coffers.

How to Choose Your Cloud Provider(s)

The big warning!

The BIG message you should heed is that for every cloud you add, you increase complexity. It's no secret that there is a **global shortage of good engineers**. So it's crucial that the management team understand that increasing workloads in multiple clouds will create employment difficulties. Multi-cloud strategies can be attractive for a number of reasons, but we recommend you get it right in one cloud before extending into others.

Why use multiple clouds?

For the most part, features across clouds are similar; Kubernetes, databases, storage buckets, etc. Even the more legacy systems (such as AS400) can be converted to run in any of the 3 main clouds. However, there are certain applications that do benefit from a particular cloud, discussed below.

1

AWS - best all round

Amazon is the best all-rounder and has far and away the most features and integrations. It's the easy choice for most enterprises. The footprint is already large, and most engineers have expertise in using it already. Nearly all of the services currently running on-premise data centres can be made to run here.

2

Azure - best for MS services

Azure is now the 2nd largest cloud provider and offers many of the same features as AWS. However, it is really the best fit for enterprise IT applications. It makes perfect sense to migrate your existing Microsoft services to Azure; these include things like:

- Active Directory
- ADFS
- O365
- Sharepoint

Azure is best suited to hosting Microsoft services, and organisations can **convert existing licences** to access cloud services at a discount. It's also unlikely that there's a requirement for high latency connections from Microsoft services (such as Active Directory and file shares) to production, customer facing services. So you can afford to have your production workload in one location (not Azure) and have your enterprise IT services (AD and file shares) in Azure.

3

GCP - best for big data

As with Amazon and Microsoft, the standard computing components are catered for. But what makes Google special is their big data abilities. It's for this reason that it can make sense to put data warehouses and business intelligence (BI) tools into GCP. GCP is also particularly friendly on price when it comes to managing and querying these large data sets. They also invented Kubernetes, so you can expect these (managed) workloads to be supported by the top engineers worldwide.

4

General rules for all clouds

Whichever cloud provider you choose, there are certain rules that apply to them all:

- A Cloud Centre of Excellence is required to make important decisions
- Good governance is required to keep infrastructure manageable
- Cloud security requires new tooling
- Cost optimisation should be considered at every step

These subjects are covered in detail later.



Migration tooling

No matter which cloud(s) you decide to expand into, there will be a large amount of infrastructure that needs to be migrated at the VM level. This 'lift and shift' of virtual machines can be done manually (by DevOps teams), but it's highly recommended that tooling is used for this.

GlobalDots regularly explores new & leading vendors in the cost reduction sphere. Some of the latest tools even include automated cloud migration offered for free. While established category leaders are higher-priced, emerging competitors might perform identical tasks equally well.

It can be tempting to migrate the VMs manually, but when the number of VMs to be migrated is higher than 10 or 20 it makes more sense to use a tool.



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Summary

The cloud can enable businesses to grow rapidly but without a good strategy you'll end up in a mess.

Technical staff are required to build a competence centre or a 'Cloud Centre of Excellence' (CCE). With this team in place better engineering and technical decisions can be made on behalf of the whole business. The CCE should oversee enterprise-wide technology decisions and responsible for introducing good governance of those tools.

By bridging the gap between business units, technical teams, and management, a CCE would make sure the right decisions are made, reducing technical debt and standardising the tools and technologies used in cloud environments.

Only through good governance, good tooling and good teamwork will an organisation achieve an optimised cloud environment. Time, money and effort needs to be expended up front in order that the future cloud environment is flexible, tidy and well governed.

Additionally, most tech stacks remain unprotected at some level. Therefore, there is a specific importance to cloud workload protection and open source vulnerability detection. We highly recommend organisations look at tooling to address these common blind spots.

There is an ever-growing variety of cloud solutions for performance and security. The right ones for each business are a needle in a haystack. Therefore, consulting an impartial cloud technology partner can save much of the investment in research, evaluation, and proper implementation.

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Appendix: Example toolset

Below is a summary of example technologies needed to ensure good governance and effective security in cloud environments.

To learn more about them, make sure to read all 5 parts in this [Cloud Strategy series! Download Full Guide](#)

A

API Security

Application monitoring

C

Cloud cost reduction

Cloud Governance (SDO)

Cloud migration

Cloud Workload Protection

I

Identity Management

K

Kubernetes Security

L

Log management

O

Open Source Security

P

Passwordless Authentication

S

SD-WAN & SASE

Z

Zero Trust Access

GlobalDots Your Tech Innovation Partner

GlobalDots is a world leader in discovering and implementing cloud & web innovation. Over the last **17** years, GlobalDots enabled streamlining and smart growth in over **500** business customers, providing enterprise-grade web performance & CDN; Web Security & anti-fraud solutions; DevOps & Cloud services; Cloud Security; Corporate IT; Cloud-native networking and infrastructure.

Our vendors range from world leaders to innovative, cutting-edge startups.

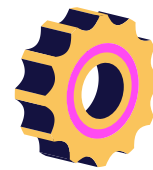
Our seasoned engineers test & master each solution's capabilities, pros, cons, and best practices. This allows them to quickly spot your perfect fit of technology and enable fast, smooth adoption.

The GlobalDots Innovation Edge



Innovation Hunters

Constantly tracking the industry to provide spot-on solutions for your ecosystem.



Vendor-Agnostic

Our ever-evolving portfolio and customizable solutions cater for each unique use case.



Streamlining Technology Adoption

Breezing you through from selection to deployment, exhausting every feature to your business benefit.



Holistic, Business-Oriented Approach

We align your IT architecture with your business profile, use case and goals focusing on what matters in terms of complexity and financial impact.

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