



Transitioning to the cloud for SMEs

What you need to know and
how to make it simple
and successful

Taking the right route to the Cloud

The Cloud offers huge benefits for SMEs. However, we have found that the lack of knowledge about the implications and uncertainty of the right approach to transitioning means that many SMEs don't feel confident enough to make the move.

So we've produced this guide to fill the gaps and give you the confidence you need to transition to the cloud. It's designed to help you understand the areas that you should be considering, and to show you the way forward.



See inside to discover:

- Why the Cloud has an important role to play in helping you stay competitive in the digital age
- How to assess the opportunities the Cloud offers your business
- How to plan and manage your transition
- How to choose an expert partner who meets your needs for transitioning



How cloud computing adds significant value

The digital revolution is impacting the behaviours of customers, competitors, employees, suppliers and partners. Harnessing these changes to compete in today's markets means fully embracing digital technology.

Making better use of technology can deliver competitive advantage by:

- Improving your speed to market
- Increasing your efficiency
- Enabling greater innovation across your business
- Equipping you to be more responsive and more connected to your customers

The digital economy can also level the playing field, enabling you to compete on equal terms with much larger organisations. Size is now less important than having good ideas and an agile approach.

Transitioning to a stronger future

The good news is that cloud computing now provides an attractive and achievable alternative to running your own infrastructure. By transitioning to the cloud, you can:

- Instill greater flexibility across your business
- Improve your speed and time to market
- Take advantage of economies of scale
- Strengthen your IT resilience
- Eliminate your IT capital expenditure
- Lower your IT total cost of ownership

Why traditional IT has changed from an enabler to a disabler

So what's holding you back? For many small and medium sized businesses, it's the limitations of their traditional IT systems.

If you're operating with outdated and inflexible IT systems, you could find yourself sidelined by the digital revolution.

Expensive to run, unable to scale and prone to failing, legacy infrastructures can cripple your ability to compete. They seriously hamper your capability for developing and releasing new applications and services to market in time to capitalise on opportunities. They make it difficult to collaborate effectively with partners, customers and suppliers. In addition, they impede your ability to take advantage of new tools that improve employee productivity and effectiveness.



Key considerations for a successful transition

Although the Cloud offers tremendous benefits, it's not right for every business operation. For the many scenarios where it is the best option, realising the benefits depends on a properly planned transition.

If you're not a pure start-up, you won't be starting with a blank sheet of paper. Most companies already have a mix of applications and data running on internal systems. Some of these apps and databases will be easy to migrate to the cloud, others will be more challenging.

Many businesses will end up with a hybrid infrastructure – for an initial period at least – featuring a combination of in-house systems and public cloud platforms.

Working out what should be migrated to the Cloud, when to do it and how to successfully manage the transition are all critical steps in the journey to realising the benefits on offer.

Whether you're looking to deliver a comprehensive migration strategy or an individual project, the following key areas should all be addressed:

- Assessing your opportunities
- Planning your transition
- Security and compliance implications
- Managing your migration
- Choosing your supplier

Assessing your opportunities

In assessing the opportunities that the Cloud can offer, it's vital to ensure that your current and future needs will be met. This involves the following considerations.

Auditing your existing IT infrastructure

You can't evaluate what you should migrate to the cloud until you fully understand what you already have. Key questions you need to answer are:

- What physical/virtual servers do you have today? Where are they? How are they managed?
- What's the actual usage of your current infrastructure (such as CPU, memory and storage)?
- What applications do you have running? Which of these could be migrated to a cloud environment?
- Are your existing systems all covered under maintenance contracts? Are any approaching end-of-life?
- Are your existing systems being backed up? Are the processes involved sufficiently robust?

If you haven't got the skills in-house to confidently answer these questions, you should work with a partner who can help you audit your current estate.



Evaluating your business requirements

You should also review what your business' IT requirements actually are. In particular, you need to identify areas where the performance of your business is being negatively impacted by the limitations of your current systems.

- Do your current IT systems prevent you from developing new services and deploying new applications?
- Is your employees' productivity damaged by IT issues (such as slow running systems, network related failures or difficulties accessing important data)?
- Could the experience you deliver to your customers be improved (for example, with better access to online services or a faster loading website)?

Considering your future

It's also important to get your crystal ball out and consider how your business needs might change in the future. Points to ponder include:

- Are there any new initiatives planned that will require an uplift in IT capability (such as entering a new market or launching a new service)?
- If you needed to scale your business quickly to meet increased customer demand, could your existing systems cope?
- Are you likely to be making any acquisitions or opening new offices?

Planning your transition

Once you've given the green light to moving some or all of your IT systems to the cloud, you need to get planning. Clearly, you'll be aiming to ensure minimal business disruption. Here's a blueprint.

What

Following the audit of your existing infrastructure, your first consideration is what to put into the cloud. You should:

- Identify which applications and data to migrate, and detail what computing, network and storage resources will be required to support them
- Decide which of your cloud platform provider's additional services you'll want to take advantage of (such as backup services)
- Consider if you have any new development requirements that can be met by a cloud platform, rather than by purchasing new hardware

How

You then need to establish how the transition will take place, particularly for existing applications and data that you plan to migrate. Ask yourself:

- What tools will be utilised to support the migration?
- What in-house resources will manage the migration? Do you need support from an external IT provider?

There are a number of different approaches that can be taken to how you migrate your data, depending on the volumes involved. You should talk through the options with your chosen cloud provider.

Also, look at how your key systems and processes will be managed during the migration. For example, will you need a period of parallel running until the cloud systems are fully operational?

When

For most businesses, a phased migration plan works best. Many start with the least-sensitive applications – testing the migration processes and building confidence – before moving on to the more mission-critical elements.

Phasing the migration also ensures your IT people are not overloaded by trying to do too much at once.

You need to think about timing:

- Will migrating at a weekend or overnight minimise business impact?
- Are there critical points in the business year to be avoided – times when you can least afford any disruption?

Creating a comprehensive project plan – covering all aspects of your migration and identifying any key dependencies – is an important part of the transition.

Why

It's important to ensure the relevant people within your business know why you're transitioning to a cloud platform. Ensure your stakeholders understand what the benefits are. If any of your users will be temporarily affected, they need to be prepared and on board.

Security and compliance implications

In many ways, public cloud platforms offer a higher level of security and easier regulatory compliance than you can achieve when running your own on-premise infrastructure. But you need to be aware of the security implications of moving applications and data to the cloud and ensure that effective safety measures are in place.

Understanding your obligations

Some regulations impact companies regardless of industry, such as the new European Union Directive for General Data Protection Regulation (GDPR), due to come into force in May 2018. Others are specific to certain types of business, such as PCI-DSS (covering anyone who processes card payments). One of the advantages of migration is that most of the leading cloud platforms are already designed to be compliant with regulatory standards.

You should also review any contractual requirements relating to your existing customers. These may impose obligations on you, particularly regarding how you manage your customers' data.

Managing roles and identities

It's essential that you have effective controls in place governing who can access your cloud-based applications and data. Preferably, you'll have common solutions in place to manage access controls and identities across both on-premise and cloud applications.

You need clear policies and effective controls covering user identification, authentication and role-based access to resources – possibly using federated identity management (allowing identity information to be shared amongst several entities and across domains) and single sign-on.

Cloud provider credentials

Make sure that your cloud platform provider adheres to the highest standards and follows accepted best practice for security. Check that:

- They have relevant industry accreditations, such as ISO27001 (a widely accepted security management standard that specifies best practices for comprehensive security controls)
- They have effective controls in place for ensuring your data is totally secure and cannot be accessed by other users of the cloud platforms
- Their data centres offer the highest levels of physical security

Network security

While the security of the cloud platform is the responsibility of your cloud provider, ensuring the security of your data in the cloud is down to you.

An effective network security architecture should be provided by your cloud provider, but configuring the network security controls will typically remain in your – or your trusted IT provider's – control. So you need to ensure your configuration meets your specific needs. Key areas to consider include firewall rules and whether you require a secure VPN connection between your network and the cloud platform.

You also need to think about whether you want additional layers of security deployed, such as an Intrusion Detection System (IDS) or Prevention System (IPS).

Managing your migration

This is the most critical part of the transition process. For your move to cloud-based infrastructure to be a success, it's best practice to follow these guidelines.

1. Joint working

From initiation to sign-off, your migration will inevitably be a joint exercise between you and your cloud provider. As part of the transition planning, you should have established the roles and responsibilities of the various parties involved – including your IT staff, your cloud provider, your external IT provider if appropriate and your business users. During the migration, it's important to keep the lines of communications open and to ensure that everybody is kept informed of any schedule changes.

2. Proof of concept

For key projects such as this, a proof of concept test is often recommended. It means that representative systems/data sets are agreed and dummy migrations carried out to check interoperability, latency and migration timings, as well as pinpointing as early as possible any potential functional and non-functional issues.

3. Dress rehearsals

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4. Business/operation engagement

Migrations sometimes get owned solely by technical teams. It's important to keep business and operations users involved in the process as part of your acceptance testing teams. These teams will have the ultimate sign off on whether the project has delivered its promised business value, so they need to be fully engaged.



Choosing your supplier

Your choice of supplier is paramount. Obviously price will be a consideration, but you should also:

- Agree a clear set of requirements criteria and stick to it
- Get recommendations from other companies
- Follow up on case studies
- Ensure your internal operational and technical users are part of the selection process
- Check your supplier can support change requests via an online portal, giving you the agility you need

Is your supplier focused on your type of business?

If you're a smaller business, you don't want a cloud provider whose primary focus is large enterprises. If you need support, you may struggle to get much attention.

Does your supplier have robust service level agreements?

Ensure your chosen cloud provider offers robust SLAs that cover areas such as availability and response times in the event of a problem.

What's the track record?

Running data centres at massive scale, and delivering high levels of availability and performance, requires experience and expertise. Look for a cloud platform provider who is well established and has a proven track record of delivery over a sustained period of time. Ask what their uptime stats over recent years are, and when they last had a major outage.



What systems and support are involved?

Look at what processes are in place for ordering and provisioning – does the supplier make you jump through hoops or decipher loads of technical jargon just to get an order placed?

What systems are in place to support ongoing management and monitoring of your service? Is there an online portal that enables you to easily see CPU and storage utilisation? Are proactive alerts provided for possible issues?

How much flexibility do you get?

- There's a full range of configuration options that allow you to consume just what you need – no more and no less
- You can easily scale up and down to reflect changing business needs – without any cost penalty
- The provider offers enough choice in areas such as supplementary services (including back-up) and where your data is actually located (which is vital if you want to have physical redundancy or need to locate data overseas in order to enter a new market)



What breadth of capability is on offer?

Do you want a supplier who only offers cloud computing services or would it be easier to work with someone who provides a broader level of support?

For example:

- Do you need someone who can provide end-to-end support through the process (including auditing your current environment, building your transition plan and implementing your data migration) or are you comfortable doing all of this by yourself?
- Will it be easier to work with someone who can provide a one-stop-shop to handle all your computing and communications needs (including access connectivity and voice services)?

Why choosing us makes better business sense

Delivering an easy, low risk, low hassle transition to the cloud, our services have been designed specifically to meet the needs of SMEs. The advantages you'll benefit from include:

Full needs assessment

Our upfront infrastructure audit and report help determine the size and utilisation of your current environment in order that we build what you need rather than what you've previously been 'sold'.

Simple provisioning processes

We provide easy quoting, ordering and provisioning with support available when needed.

Secure and resilient platform

Our solution is built on the world's largest and most reliable public cloud platform with certified 99.95% availability.

Flexible service options

We offer a wide choice of configuration options and a range of optional additional services, including dedicated Cloud Backup applications.

With Dalycom your business will soon be reaching for the sky.

Full ongoing management support

Our fully-managed service includes proactive monitoring of the platform 24x7x365. We also provide ongoing service updates to the platform, ensuring you're always up to date.

By removing the layers of complexity normally associated with designing and provisioning cloud services, we make your transition to cloud-based infrastructure services painless and straightforward. Working with us enables you to respond better to your customers' needs and drive business growth, enabling you to gain competitive advantage in today's digital economy.

