# GUIDE TO **THE CLOUD**

**yellow**spring
Business IT Solutions
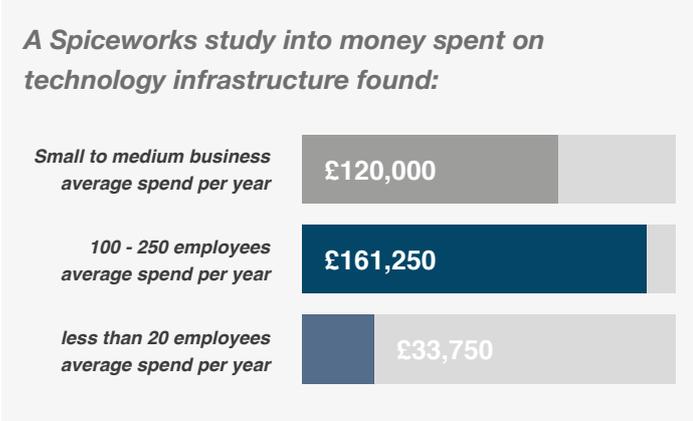
# OUR WORLD HAS **CHANGED**

**Every now and again it is worth taking a step back to consider just how much has changed in the world in which we operate.**

Email has now become the primary method by which we communicate with others, the internet has become the primary tool by which potential customers find us and learn more about what we have to offer. Everything of importance is now managed and stored within our IT systems; from our personal diary to our customer relationships and financial data.

We have become highly dependent on the information technology that we use. In terms of importance, these systems have become as critical to the success of the business as the products and services that we sell. We simply cannot live without them.

This is reflected by the amount of money we spend on putting in place technology infrastructure, systems and applications to support our businesses. In a recent global study by Spiceworks, it was found that small to medium sized business now spend on average £120,000 per year, with companies of less than 20 employees spending on average £33,750 and companies with between 100 and 250 employees spending £161,250.

*As IT has become a critical part of the business, it has also become a major cost to the business; with small companies spending on average the equivalent of 6.9% of revenue on IT related costs.*

*A Spiceworks study into money spent on technology infrastructure found:*

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|---|---|
| Small to medium business average spend per year | £120,000 |
| 100 - 250 employees average spend per year | £161,250 |
| less than 20 employees average spend per year | £33,750 |

The rate of change of technology, and our adoption of such technologies to push our business forward, shows no signs of slowing; if anything, new capabilities and the accessibility of advanced technology is presenting a wealth of opportunity. Smartphones and Tablets are changing the way we access systems and making us far more mobile; advances in networking and connectivity are transforming the possibilities of how we collaborate and the evolution of the Cloud is changing the way we think about, deploy and use technology.

# THE CHALLENGE OF **INTERNAL IT**

**Traditionally we have had no choice, if we wanted to leverage IT in our business we needed to locally put in place the infrastructure, systems and applications that we needed and then either nominate an existing employee, or recruit someone to look after them.**

You have to purchase the network, servers and storage you need at a cost. You build in future capacity at a cost. You build in reliability at a cost. You maintain and upgrade it at a cost. You buy the applications you need at a cost. You have to upgrade servers to accommodate the new applications at a cost. You need more storage at a cost. You need to support and manage it at a cost.

The recurring theme is 'at a cost' and a heavy financial burden often comes with compromise - falling behind in upgrades, reliability and capacity.

We see the main challenges for small to medium sized businesses in deploying and managing local IT as being:

## Capital Expenditure
IT can be a major drain on capital, taking cash out of the business for what should be an operating expense.

## Fit For Purpose
Technology quickly becomes outdated and as organisations fall behind on the investment cycle, systems and applications quickly become misaligned to needs in terms of their performance / capacity, or the capabilities that they provide.

## Flexibility
Businesses need to be agile and IT needs to enable this, not restrict it. Businesses are often restricted in what they do by the systems they use; whether that be capability, capacity or connectivity.

## Reliability
You depend on your IT infrastructure; having no email for an hour is an inconvenience, losing it for a day can be catastrophic. The same can be said for your website, business applications and shared storage. However, building in sufficient business continuity is costly and can quickly double the budget required.

## Manageability
As a small company, every hire is important. Having dedicated IT staff is often a luxury. However, putting the management of your critical IT infrastructure in the hands of a non-dedicated, or specialist resource is fraught with danger.

# WHAT IS THE **CLOUD**

The term Cloud comes from the world of data networks, where IT people would refer to anything that wasn't their network's own hardware as 'being in the Cloud' or in effect, 'somewhere out there'.

Two key technology advances have come together to make what is known as 'The Cloud' possible. Firstly, virtualisation technologies have enabled computing power to be pooled with a single physical server providing, in effect, many 'virtual' servers with individual environments for users and applications.

Secondly, network bandwidth and in particular internet access speeds mean that you do not need a server by your desk to get the performance you require.

These two factors are enabling computing power, storage and applications to be taken out of the office and centralised in a datacentre, the location of which is mostly irrelevant.

## Public Cloud

Public Clouds cater to multiple groups from a single connected set of server resources. Public Clouds are best suited to micro, small and medium sized businesses. Pooled resources offer a unified level of service with segregated access, meaning you can access your own information in a Public Cloud, but cannot get the information from other users.

## Private Cloud

Private Clouds are designed for use by one company / entity, usually large enterprises. Employees or members can use it to access, edit and update files in real time and share projects. This facility is not available to individuals outside the company. Some Cloud benefits are availed of in this model, while complete control is retained.

## Hybrid Cloud

Hybrid Clouds combine elements of both a private and public Cloud setup, relying largely on the Private Cloud for regular access to secure or business critical data applications. Public Cloud is used to provide instant scalability and to support non-critical applications. Hybrid Clouds are more usually used by larger organisations.

> "Cloud computing is a model for enabling ubiquitous, convenient, on-demand network access to a shared pool of configurable computing resources (e.g., networks, servers, storage, applications, and services) that can be rapidly provisioned and released with minimal management effort or service provider interaction."

National Institute of Standards and Technology (USA)

Simply having the capability does not drive the scale of step-change that we are seeing with Cloud computing. What is driving the explosion is the way that such an environment can deliver against changing business trends.

## Businesses Are More Virtual

With multiple offices, multiple locations and homeworkers, businesses need an infrastructure that is not tied to one physical location.

## Employees Are More Mobile

It is no longer acceptable to be disconnected when out of the office; employees now demand to be able to communicate, access data and use applications from any device in any location.

## Business Needs Are More Dynamic

What you did last year is not necessarily what you will do next year; businesses are more agile and need an IT infrastructure that can scale both up and down and continually adapt to changing needs.

## IT Should Be A Utility

The common-place of Software-as-a-Service is now driving more and more IT components to be considered as a 'utility' with desire from businesses to consume such capability on a pay-as-you-use basis.

# TECHNOLOGY AS A SERVICE

**The capabilities of Cloud computing, combined with the changing needs and drivers of business are fundamentally altering the way we think about IT.**

No longer do we think of IT in terms of network, servers, storage and applications; but as a set of services. In essence, we should stop thinking in terms of what IT IS, but in terms of what it is that IT DELIVERS.

For example, as a business you need email - this is a service; you need your website hosted - that is a service; you need Microsoft office applications available to each user - this is another service. All of these services need to be available 24 hours a day, seven days a week - that is a service level.

If you combine the desire of businesses to consume IT as a service with the capabilities and economies of scale of the Cloud, you have a compelling model for delivering technology as a service.

In this model, small to medium sized businesses in particular can eliminate the burden of creating and managing their own infrastructure. Instead you leverage an infrastructure that already exists and external expertise that you could never justify internally, and you consume IT services on a pay-as-you-use OPEX model.

This is more than pure Hosted Services – whereby you place your equipment, applications and data into a datacentre and you are still responsible for managing, upgrading and maintaining the systems. This is more than just a Managed Service whereby you outsource the management of your hardware and your software to a third party to administer and maintain.

Consuming IT as a service allows business access to a robust environment, within which a particular service such as email or MS Office applications can be delivered to your workforce as a service from the Cloud. The applications and associated data are hosted in the Cloud and the service provider, such as Yellowspring, is responsible for providing this as a turn-key service; including sufficient computing power, storage, management, upgrades and maintenance. What's more, such a service is delivered as an all-inclusive, pay-as-you-use monthly fee.

# THE **VALUE** TO BUSINESS

**More and more businesses are turning to the Cloud and Infrastructure-as-a-Service to deliver technology, applications and information into the business and gaining significant benefits from this approach:**

## Capability

By switching to a Cloud, businesses remove the upfront cost barrier of putting in place new systems and applications; enabling you to provide the right tools to your employees when you need them, rather than when you have the capital to invest.

## Remaining Current

By procuring systems and applications as a service you remove the burden of upgrades; these are part of the service and as such, not only are there no surprises in terms of expense, your users will always be on the latest 'production tested' environment.

## Scalability

There is no need for future capacity planning, nor to pay for capacity you are not using; with a Cloud approach, you are only paying for what you are using, when you are using it; with the ability to scale up and scale down as your business needs change.

## Expertise

By taking the Cloud approach you remove the need to invest in internal expertise; the expertise comes with the service. You are effectively leveraging the experience of your service provider to align service to your business needs and deliver a professionally managed service.

## Service Level

By taking key applications and services out of the business and to a contracted Cloud provider, service delivery is transformed from best endeavours to contractual commitment; reflecting the true business-critical nature of your IT environment.

## Resilience

Through leveraging capabilities of the Cloud and the architecture of the IaaS platform, a higher level of resilience is provided as standard; such as redundant power, removing the dependency on your physical location, etc. This makes it easy for you to ensure business continuity far greater than what is feasible with an in-house solution.

## Cost Advantage

Removing the need for capital expenditure and leveraging the economies of scale of the Cloud to deliver improved IT services at lower costs.

# HOW DO YOU **EMBRACE THE CLOUD**

The options available to embrace the Cloud are endless. You can leverage the Cloud to consume additional applications and services to complement your existing IT environment. You can migrate some or all of your existing environment to the Cloud, or you can make the switch to consuming IT services through a pure Cloud model.

At Yellowspring, we believe that how you embrace the Cloud starts with you; your business needs, your current environment and your aspirations of what you hope to achieve. We then apply our collective experience, based on more years than we care to remember, to provide you with your options.

For anyone looking to embrace the Cloud we would strongly recommend:

- Make 'Experience' a key requirement in selecting your partner.

- Establish a 'Partnership', not just a 'Contract'.

- Don't think of Cloud in terms of outsourcing your current IT environment but in terms of what you 'Need' and the step change you can make.

- Stop thinking of IT as what it is, start thinking of IT in terms of the 'Service' it delivers.

- Rome does not have to be built in a day; you can start now and take an 'Incremental' approach.

# ABOUT **YELLOWSPRING**

Yellowspring is a specialist in providing Cloud, Datacentre and IT Infrastructure-As-A-Service to small to medium-sized businesses. What makes Yellowspring unique is our attention to detail and focus on exceptional service delivery.

We like to view ourselves as a new breed of IT Service Provider. We are not an IT Outsourcer; we are not a Datacentre; we are not a Hosting Company - we are all of these things, but most of all, we are a service company. We are judged on the

service we provide to our clients and the impact that the services we deliver has on their business.

Our aim is to be a seamless part of our client's organisation, fully understanding their business needs and then using our knowledge and experience to deliver exceptional IT. We focus on what we are good at, leaving you to focus on what you are good at - your business.

**Yellowspring Ltd** 01268 494 160 | www.yellowspring.co.uk