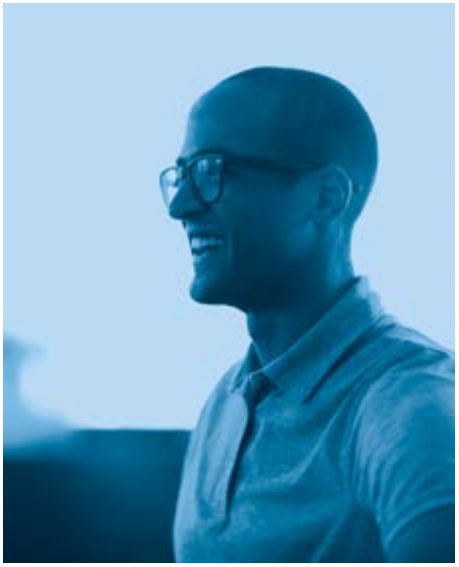
CLOUD CONFIDENCE

Everything you need to know about moving your business to the cloud



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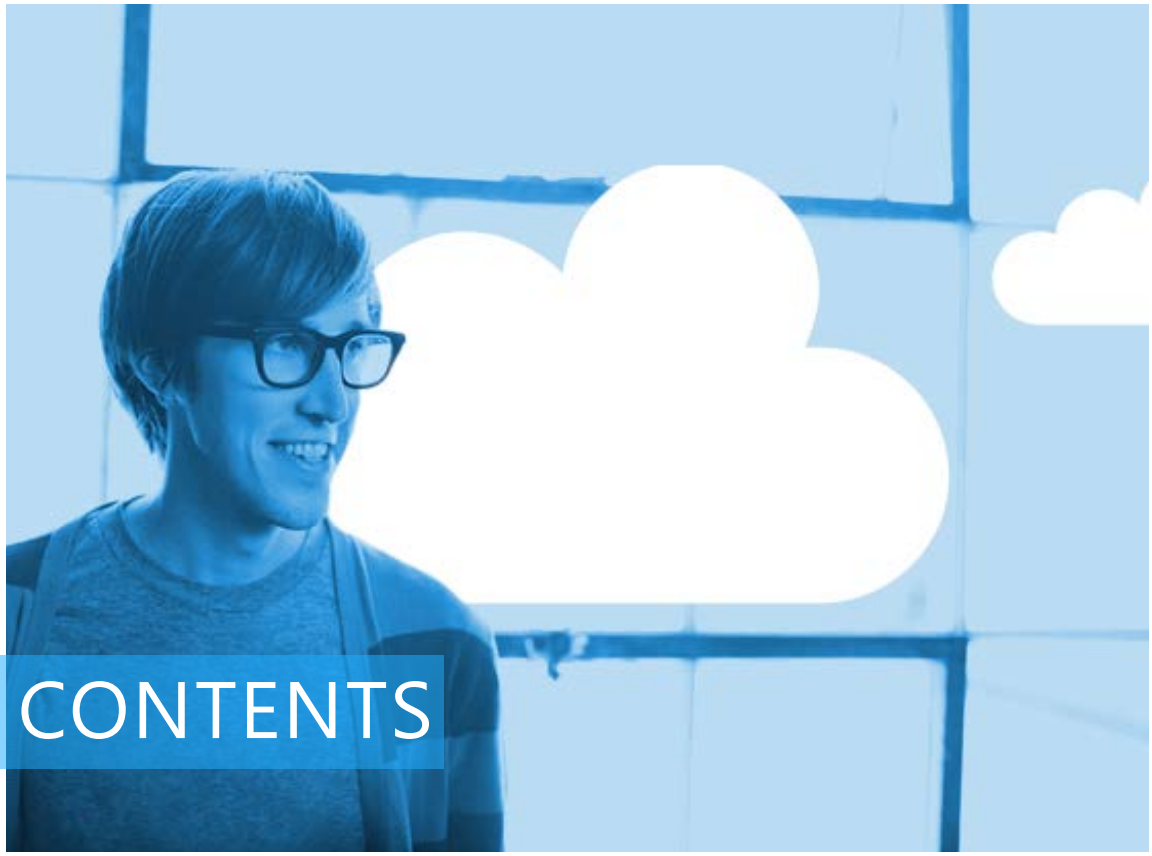

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WHY THE CLOUD MATTERS

"The cloud means business leaders can concentrate on being more strategic and reap the benefits of the cloud beyond IT."

Microsoft

DEMYSTIFYING **THE CLOUD**

'Paperclip', 'lightbulb', 'safety pin'... The best ideas are often the simplest, with names that describe exactly what they deliver. And although it will soon become apparent that the 'cloud' shares their simple effectiveness, the name certainly doesn't say what it does. It sounds so, er, cloudy. Which is why it's sensible to start by blowing away the mists of confusion and make everything crystal clear. Because with clarity comes confidence.

A not-so-misty history

The term 'cloud computing' was first used in 1996 by Compaq engineers. And by 1997, Steve Jobs was putting an 'i' in front of it (and it in front of consumers).

But the underlying concept of the cloud in the business space is much older than that. In fact, the idea of optimising computing performance by using a network of computers – rather than a single machine – to store, process, and share information, was hit upon in the 1950s.

In those days, 'mainframe' computers – the hubs of the operation - were elephantine, taking up whole rooms. Users in the rest of the building would log on to 'dumb terminals' that exploited the mainframe processing power.

These days the terminals, whether static or mobile, aren't so dumb, and instead of one massive mainframe in the basement, we rely on a global network of servers – computers and programmes that manage our resources and data – in what we now call 'the cloud'.

Except those servers aren't really in the cloud, they're on the ground. So, while the principle is basically the same today as it was back in the 1950s, it's on a much bigger scale, made possible and more effective by the 21st century introduction of high speed internet connections.

So, if all of these devices are always online – and with good connections to the internet – should we run our software and data online too? The cloud answered that question with a big fat 'yes' – and brought with it brand new opportunities for your business.

OPPORTUNITIES **ON A NEW SCALE**

Nowadays, businesses needn't fret so much about their computers' processing power or hard drive space, because a cloud-based network of powerful servers does most of the heavy lifting. It means business leaders can concentrate on being more strategic and reap the benefits of the cloud beyond IT.

Talk about connectivity

So, the cloud is about so much more than just remote data storage. For example, it enables businesses to make the very most of conversations between employees and customers, creating new, mutually beneficial dialogues across a number of devices. Dialogues that were previously impossible.

Social tools like Yammer and Skype for Business make it easy for employees to connect, share ideas, and build teams, wherever they are. And cloud-based workhorses like Office 365 break down barriers between departments, enabling collaboration from virtually anywhere.

In short, the cloud is plain common sense for any modern business. But are UK businesses aware of all its advantages?

Video 1: What is cloud?

Cloud computing means storing and using data and programmes over the internet instead of your computer's hard drive.

12 WAYS YOU ALREADY USE THE CLOUD WITHOUT THINKING ABOUT IT

As long as it's easy to watch box sets on a laptop, read emails on a smartphone, or share files from a tablet, people don't pause to wonder where the data actually goes, how it gets there, and what happens to it on the way. But these days the cloud is usually involved somewhere.

Think of it as the unsung hero of daily data...

01 Check your email on your smartphone this morning? Chances are it was stored in the cloud.

02 If you checked the news or weather or the whereabouts of your next train to the office, all of that useful app data is also managed in the cloud.

03 If you made a quick change to a spreadsheet or Word doc on your smartphone, that probably happened over the cloud too.

04 Messaged someone on LinkedIn? Social networking, whether professional or personal, is managed in the cloud.

05 Did you receive a large file from a colleague today? That was probably sent to you over the cloud.

06 If you collaborated with a virtual team on a document or using communication software like Yammer or Skype, that happened over the cloud too.

07 Did you see the YouTube clip that got sent around the office or listen to Spotify while you worked? That was all thanks to the cloud.

08 If you logged your hours or booked your annual leave, the chances are that happened over the cloud.

09 Pull up a contact on your smartphone? Most address books are stored in the cloud nowadays.

10 Take a photo of your dinner? Photo sharing apps, like Instagram, are made possible because of the cloud.

11 Did you wind down in front of Netflix or your games console? Internet video and game data is stored in the cloud.

12 If you checked your diary for the next day, can you guess where your appointments are stored?

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CREATING THE NECESSARY CONFIDENCE

The majority of business leaders are, according to our research, already using the cloud in some form or other at work. However, they don't feel totally confident in their knowledge of what it can achieve and sometimes are not even sure when they are using it. Hence they rate their own confidence levels at only 50%.

That probably explains why, when we asked 250 senior managers at medium and large businesses, 70% of respondents said they do not use the cloud in their organisation*.

Raising Knowledge and lowering cost – pronto

From the managing director to heads of technology, marketing, HR and finance, all parts of the business have a stake in the effective implementation of cloud solutions. So what would boost confidence and awareness across the business?

An understanding of how it all works is a must. So knowledge is crucial. Once that is achieved, research shows that 'trustworthiness' and 'cost' are the two most important factors for cloud service provider selection*.

In addition, the 2014 IDG Enterprise Cloud Computing Study found that 39% of respondents concurred that the ability to get up and running quickly and reduce running costs, are the two most popular reasons for making a conscious move to the cloud.

*Microsoft Cloud Confidence Survey 2015

Business leaders rate their 'cloud confidence' at only 50%

YOUR CLOUD SPOTTING GUIDE

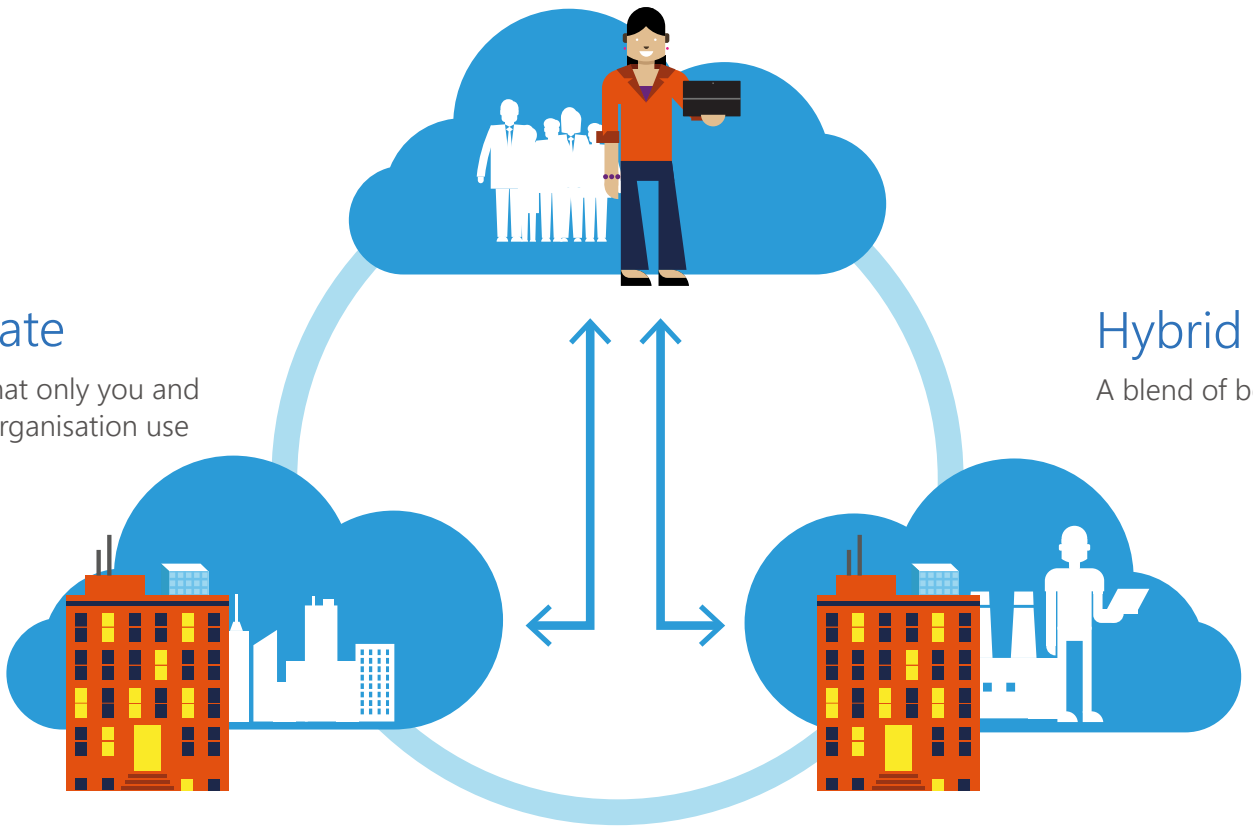
There are 3 types of cloud: one that only you and your organisation use, one that's shared with everyone and a blend of both. You'll hear them referred to as 'private', 'public' and 'hybrid'...

Whichever type a business chooses, they all share the following properties:

- Computer resources that you share with others in your office or with the rest of the world to reduce cost.
- 'Elastic' and scalable features, so you can dial up or down resources in busy or quiet times.
- Off-the-shelf solutions that can be deployed without much IT knowledge.

Public

One that's shared with everyone



Private

One that only you and your organisation use

Hybrid

A blend of both

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YOUR CLOUD SPOTTING GUIDE

Let's take a look at them...

Private

A private cloud is a distinct and secure environment for just one business. Your data and programmes are kept on a separate computer - or 'server' - either on your premises or on a service provider's premises. Because the private cloud is only accessible by a single business, it is thought to offer higher levels of security and privacy (though we'll come on to explain how the public cloud can offer this for most businesses too).

The private cloud can also offer more agility for businesses to quickly develop, test and deploy the programmes they need. That's why companies like **Aston Martin** chose Windows Server 2012 to build four of their own private clouds. For smaller businesses, however, the costs can be prohibitive, as there are upfront costs as well as running costs too.

Public

The public cloud is hosted in multiple locations by a service provider away from your business premises. Your data and programmes are on the same servers as other clients, but that doesn't mean that one client can gain access to another. Your data is separate and secure.

Because your investment in the public cloud is matched by lots of other businesses, the public cloud provider can spend more money on the latest hardware, software and security technology. That's why, if you use Microsoft Office 365 or Dynamics CRM Online, your software is always up-to-date.

Hybrid

A lot of businesses go down the hybrid cloud route. It's a customised combination of both private cloud and public cloud according to your business needs. If you host your data in your own private cloud, but extend that to meet external resources in the public cloud, then you're working in a hybrid cloud model.

Mobile services provider **Telenor** uses Microsoft Azure to maintain a hybrid cloud solution. Its marketing department uses the public cloud for promotions. When a customer signs up to the promotion, it triggers a process to access the customer's account information in its private cloud.

Video 2: What's the difference between public, private and hybrid clouds?

Microsoft

UNDERSTANDING WHAT'S **BEST FOR BUSINESS**

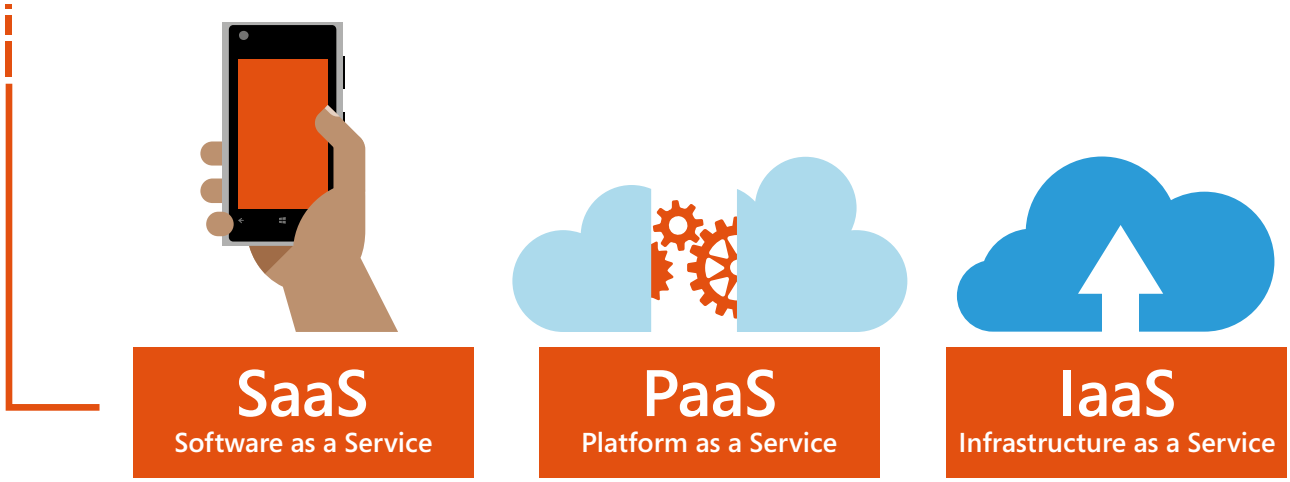
It's remarkable how quickly things can change. Not long ago the cloud was an object of IT department distrust. Now it's fast becoming an object of desire. We found that

69% of enterprises have either apps or infrastructure running in the cloud.

But instead of buying those apps and servers, renting is seen as the way forward. You simply rent the cloud tech and dial up or down your subscription when you need to.

There are three different routes. And don't let the acronyms put you off. The jargon is easy to translate:

1. **Software-as-a-Service** – or SaaS – is about paying a subscription fee for programmes that are hosted in the cloud. The benefit is that programmes are always kept up-to-date and new features roll out regularly. Examples of SaaS include online accounting software like Sage or CRM software like Dynamics CRM Online.
2. **Platform-as-a-Service** – or PaaS – is about paying a subscription fee for an environment that allows businesses to develop their own programmes in the cloud. The ingredients to do so, like database software and storage, work together and are rented rather than owned.
3. **Infrastructure-as-a-Service** – or IaaS – is about renting the actual hardware, such as servers and the tools to maintain them, to essentially allow businesses to run their own cloud.



In 2015, 24% of IT budgets will be allocated to cloud solutions, with the highest percentage being allocated to SaaS models.

IDG Enterprise Cloud Computing Study 2014

Microsoft

ARE YOU **CLOUD READY?**

"It's essential to react to the demand for the cloud that's coming from inside and outside corporate walls."

EXCITING OPPORTUNITIES AHEAD

Some pundits talk about how digital transformation is 'disrupting' the entire organisation. But disruption it isn't. How can anything that expands business capabilities and streamlines its operations be called disruptive? That's not disruptive. That's exciting. That's opportunity.

The only disruption that will occur is if a business fails to move with the times: the disruption of inertia (AKA stagnation). Which is why it's essential to react positively to the wholesale demand for cloud-based change that's coming from both inside and outside corporate walls. From colleagues as well as customers.

There is one statistic from our research that says it all. That indicates why there's no time to be wasted before constructively applying cloud solutions, and shows that the cloud is not just for the IT department, but for the business as a whole.

It is simply this...

'90% of CIOs say that requests from other departments have influenced the decision to implement the cloud.'

The clamour for digital transformation has never been so democratically spread across business roles in head offices UK-wide.

But there is also one practical – and tactical – problem. What is the most effective way to embrace this exciting new opportunity?

That's where we can help. Let's start with 5 straightforward steps...

5 STEPS TO DOING BETTER **BUSINESS IN THE CLOUD**

1. Get in the know

…across all businesses functions, not just IT. Check out cloud suppliers: can they deliver enterprise class IT with the highest levels of security? What are their Service Level Agreements (SLAs) and price points? What happens if the service goes down? Can I access my data without an internet connection?

2. Develop a practical strategy

Review, refine and agree your strategic objectives in light of what the cloud can offer your business in particular. Rather than a one-size-fits-all approach, investigate how the cloud can address specific inefficiencies in your organisation, such as costs, productivity or collaboration – or exploit and identify opportunities in your market. Support your business case with examples of how businesses have made savings or discoveries thanks to the cloud (you'll find plenty in this eBook).

3. Suck it and see

A good way to get a feel for the possibilities of cloud computing is to sign up for a free trial and just start playing. All of Microsoft's cloud services, including Azure, Office 365, CRM Online and Intune offer free trials – and you usually don't need to install any additional software on your computer; you can experience cloud software through your existing web browser.

"You don't have to put everything into the cloud. There's no need to force round pegs into square holes. A hybrid model is very plausible. Stick with processes or systems suitable for the cloud. So if you've got a legacy system that doesn't make sense to move into the cloud, just keep it on-premise and integrate the two, at least in the short term."

Michael Wignall, Microsoft's UK National Technology Officer

5 STEPS TO DOING BETTER **BUSINESS IN THE CLOUD**

4. Implement, configure, iterate and feed back

The Government Digital Service Design Manual offers some helpful advice on the stages you should go through when planning and implementing digital services, based on the acronym 'DABL'...

- **Discovery:** research the needs of your users and explore any technological or policy-related constraints.
- **Alpha:** create prototype solutions to meet your users' needs, test them on a small group of users and gather feedback.
- **Beta:** Develop a fully working version to meet demand and release a test version.
- **Live:** Launch the 'final version', but remember to continue improving the service in response to new needs and demands.

5. Find a cloud you can trust

If your organisation is in the public sector, you'll need to consider the Government's **14 Cloud Security Principles**. All organisations, whether in the public or private sector, should look for an experienced and trustworthy cloud service provider - one that understands that it's your data, is obsessive about compliance and relentless about privacy and security.

"Initially you need to forego a certain amount of custom tailoring and bespoke design. Yes, you can build a completely tailored, customised CRM system using Dynamics CRM Online, but we strongly advise that customers keep it simple and make use of the service as it's provided. This is one of the key principles of a successful cloud adoption strategy."

Paul Tarttelin, Principle Engagement Manager, Microsoft

ALL CHANGE FOR **MAJOR PLAYERS**

The Microsoft Enterprise Audience Insights (2014) show that business leaders are becoming more influential in technology purchasing. Furthermore, over 50% of enterprises adopting digital business principles expect to complete the transition within two years.

So it's hardly surprising that old work models are changing dramatically. Words like 'share' and 'collaborate' have become the new kings of the business lexicon. Roles are adapting accordingly and lines of responsibility blurring in response to these new demands. For example, in the same way that technology is no longer the sole remit of IT, strategy is a domain that marketers and planners have to share with other departments.

Who's who in the cloud coup?

The CIO is moving from being a builder of technology to a creator and protector of business, with a role that goes way beyond the day-to-day oversight of operations. Some argue that the 'I' in CIO now stands for 'Innovator'.

Market-leading, UK-based door and glazing manufacturer Everest has over 1,100 employees and an annual turnover of £120m. But its IT systems were stifling the business with frequent outages of key services, such as email, printing and file storage. By moving those key services into the cloud, Everest has seen a cultural change in its business.

"We have been able to speedily implement a wide range of initiatives that have revolutionised the way we perceive IT in our organisation," said Everest CEO Roy Saunders. "Moving rapidly from being seen as a blocker to a catalyst for change."

Almost half of CIOs believe their organisations lack the right skills and capabilities for the future – and that includes their own departments.

ALL CHANGE FOR **MAJOR PLAYERS**

Likewise, **the CMO** cannot ignore the growing consumerisation of technology and the need to work closely with internal IT leaders in order to construct effective campaigns, using the latest media to create the best possible customer experience.

Almost half of CIOs believe their organisations lack the right skills and capabilities for the future – and that includes their own departments.

Likewise, **the CMO and sales management** cannot ignore the growing consumerisation of technology and the need to work closely with internal IT leaders in order to construct effective communications, using the latest information to create the best possible customer experience.

After experiencing 50 per cent growth in one year, presentation consultancy Eyeful Presentations looked to the cloud to power its sales expansion with Microsoft Dynamics CRM solution. "The ability to run things in the cloud has had such a huge impact on the business," said Simon Morton, founder of Eyeful Presentations. "I frankly don't think we could be where we are today without that ability."

A cloud-based CRM solution gave the business an integrated view of its customers. "The quality of the information that's going into the system has dramatically improved, which means we are able to do things with much more confidence than ever before."

Only 14% of marketers who want to reinvent themselves for the new digital world actually know how to, and 30% of companies are struggling to adapt at all to the new technology. (Adobe 2014)

Meanwhile, **the CFO** is understandably concerned that Data Governance should be a top priority: information security, data privacy, reputational threat and financial risk cannot be taken lightly – not to mention saving costs wherever possible.

ALL CHANGE FOR **MAJOR PLAYERS**

By using Skype for Business to improve online collaboration, Equiniti has made significant savings when training remote teams. "We've saved tens of thousands of pounds in travel expenses to remote offices," explained Equiniti CTO Mike Jolliffe.

Employee satisfaction can't be taken lightly either. These days, employers are expected to provide the latest tools, and it's the job of **the HR Director** to champion their digital corner.

Animal welfare charity Cats Protection relies on around 10,000 volunteers to improve the lives of cats in the UK. It made the decision to move to the cloud to better support those volunteers. "We took a long hard look at our IT strategy and decided the first thing we should do is migrate the extranet for the volunteers to a cloud platform," explained Tony Gamble, head of IT at Cats Protection. "The primary objective was to ensure staff and volunteers have easy and quick access to any information they need, when they need it from wherever they are."

Together senior management must drive digital transformation forward, overcoming the barriers to reap the rewards.

Control of the new digital industry platform wins the game. But merely inserting digital technologies into the existing process is insufficient to realise the full value of digitalisation. The process itself must change.

HOW NIKE **BECAME NIKE+**

Nike uses cloud-based technologies to enhance customer experiences, develop new sales strategies, connect athletes worldwide, and implement new manufacturing innovations. But it didn't begin with a 'big bang' all-encompassing change. Instead, Nike asked the simple question: how can we add – and deliver – more value to our connected customers?

By weaving technology and information together into a new business model that works in the cloud, the Nike+ concept took off. Nike+ uses connected elements – a running app, Fuelband wrist sensor, and an internet platform that acts as a personal trainer – to help customers make the most of Nike products while giving the company invaluable information about how customers use its products. The result? Nike improves its range while growing an engaged community of users. Everyone's happy.

NO CLOUD, **NO NETFLIX**

What began as a DVD rental service in 1997 has evolved into video on-demand via the internet, with an annual turnover of $3.7 billion.

By 2010, Netflix had shifted from the fastest-growing customer of the United States Postal Service first-class mail, to the main source of internet traffic in North America. Now Netflix is hosted almost entirely in the public cloud with over 60 million subscribers in more than 50 countries, serving 100s of thousands of requests per second and over one billion hours of content a month.

There's only one way that a business like this could give such a massive, fast-growing customer base what they want without delay: the cloud. It offers everything Netflix needs – scalability, elasticity, velocity and global availability.

The success of its streaming model combined with the growth of YouTube precipitated Netflix's shift to becoming a tech company, with two in three employees working in tech roles. And with the move to the cloud, the engineering team became more dev-ops orientated, giving them the freedom to test and innovate without lengthy recourse to IT.

BUSINESS GETS DIGITALLY RE-MASTERED

In a study of more than 400 mainstream organisations in every industry around the world, Leading Digital described 'digital masters' as companies that use digital technologies to drive greater profits, productivity and performance. Specifically, the research shows that companies who successfully digitally transform themselves are, on average, 26% more profitable than their industry peers.

Expect the unexpected

The Tata Communications 2015 survey of 1,000 executives revealed that 83% are experiencing unexpected benefits from cloud computing, of which...

- 25% say they experienced improved communications within their organisations.
- 22% report increased revenues they did not anticipate.
- 22% say they experienced greater customer satisfaction.
- 21% claim the cloud has improved security.

Nearly 65% of respondents confirm that using the cloud has increased speed of access to technology. And in terms of streamlining business processes, over 67% have experienced reduced delivery times to clients and partners.

Speed, agility and reliability trump cost as key drivers of cloud service growth

Cloud worth the money for FinTech company

For Caxton FX, a UK-based currency company, replacing on-premise legacy technology proved to do more than improve how the organisation was run – it presented new opportunities for the business.

"We were running systems on servers in the building that kept falling over," said Rupert Lee-Browne, Chief Executive at Caxton FX.
"By moving to Microsoft Azure, we've now got a solution that is managed by someone else – with guaranteed up-time. It was a no brainer."

BUSINESS GETS **DIGITALLY RE-MASTERED**

So, the decision to move to the cloud wasn't a difficult one for Caxton FX. But the benefits reached farther than the IT department.

"From July last year to January, we built a completely new trading platform, a core banking platform, a customer-facing website and a brand new marketing website, using all of the latest things on the Azure platform," said Russell Stather, Director of IT & Innovation at Caxton FX. "If we had to build that ourselves it would have taken us maybe 5 times a long."

For Chief Executive Lee-Browne, the technology has been an enabler of business.

"It propels the business forward at a much greater speed. It means that we can grow globally in a way that we couldn't do before, without necessarily increasing our costs dramatically."

For IT Director Stather it removes prohibitive costs – and headaches: "If regulation in, say, Singapore says you've got to keep customers' personal data within our territory, I can do that. I can pull up a new database in a suitable data centre that Microsoft Azure supplies and it's fully integrated in our environment straightaway. Previously, I would have had to send people out to Singapore, find a data centre, and establish a relationship with a new provider. It would have been a complete nightmare."

BUSINESS GETS DIGITALLY RE-MASTERED

What are the biggest benefits of all?

According to IDG Enterprise, while cost savings and financial flexibility are often highlighted as major cloud benefits, it's the instant availability and scalability of cloud services that captures the business hearts of cloud adopters. In particular, **speed, agility and reliability** trump cost as key drivers of cloud service growth.

For those making the decision to move to the cloud, the ability to get up-and-running quickly with cloud-based applications (39%) and the lower cost of ownership they provide (39%) are the two key factors.

Replacing on-premise legacy technology (35%) is the third most common reason. This is especially true in manufacturing industries, where legacy ERP systems that can't scale to current or future business models are gradually being substituted.

UNDERSTANDING THE **BARRIERS TO BUSINESS**

Nothing is ever as straightforward as it seems. Although the benefits of the cloud are many, there are obstacles to overcome. Some real. Some perceived. So what's creating pause for thought at senior management level?

CIOs who have yet to fully convert to the cloud, cite three main issues:

1. **Security concerns (61%),**
2. **Integration challenges (46%)**
3. **Information governance (35%)** (IDG Enterprise Cloud Computing Study 2014).

There is a natural, if arguably subjective, reluctance to cede total control of the IT infrastructure to a service provider, especially as some are unsure how to measure return on investment when reporting to the CFO.

In addition, there's the practical problem of shortcomings in legacy applications with, according to the RightScale 2015 State of the Cloud report 2015, nearly half of CIOs believing that less than 20% of their business applications are cloud-ready, and 26% saying their teams simply aren't up to the job. 'And will cloud computing solutions meet our particular industry standards?' Asks the Board with its brow collectively furrowed…

Hence the temptation is for senior management to put the words 'reliability' and 'stability' into sentences about 'working with what you know' in order to justify maintaining the status quo.

'Will cloud computing solutions meet our particular industry standards?' Asks the Board with its brow collectively furrowed…

What's more, if all these objections are overcome, the next question is 'who do we trust?' Apparently the CMO and HR Director are most likely to be confused about which service provider to choose.

Real or perceived, these barriers matter. But they can be surmounted.

WHAT TO LOOK FOR IN A **CLOUD VENDOR**

"Transformative technology - and peace of mind that comes with knowing your data is safe and secure."

CHOOSING THE **RIGHT SERVICE PROVIDER**

The Microsoft Cloud Confidence Survey 2015 confirms it: Trust is one of the biggest barriers to businesses' cloud adoption.

On a scale of 1 to 5 (1 being 'most important' and 5 being 'least important'), respondents ranked trustworthiness (2.39) as the most important factor in choosing a cloud provider. The runners up were cost (2.78) and knowledge and expertise (2.83).

With so many cloud vendors out there, who can you trust to deliver a robust system that keeps your data secure and compliant, at a competitive price? Your move to the cloud can't begin until you've answered that question. So, where do you start?

The temptation is to go with the brand you already know. But choosing a reliable tech partner is about so much more than familiarity. It's important to have a set of yardsticks by which it's possible to objectively compare the specific offerings of competing providers, without being swayed by big-brand talk.

The temptation is to go with the brand you already know. But choosing a tech partner is about so much more than familiarity.

Asking the following questions can help you get under the skin of cloud service providers, and address the trust question head-on:

1. **Who owns the data stored on the service?**
2. **What security standards does the service comply with?**
3. **What are the service's security features?**
4. **How has the provider demonstrated their credibility?**

Ask these questions of every cloud vendor you consider to ensure the provider you eventually choose not only delivers transformative technology, but also offers the peace of mind that comes with knowing your data is safe and secure.

Video 3: What to look for in a cloud vendor

Microsoft

QUESTION 1: WHO OWNS THE DATA **STORED ON THE SERVICE?**

This might sound like a no-brainer. Your data should be your data to do with as you wish. Entering into a relationship with a service provider should neither change that fact, nor give the provider the right to use your data for their own ends or those of others. But not every service provider feels the same way. Make sure your chosen provider can tick all the following boxes:

- ☐ **They are transparent and can openly share with you info about where your data resides, who on their side can access it, who their subcontrators are, and what they do with it.**
- ☐ **Your data continues to belong to you alone and you can remove it whenever you choose.**
- ☐ **Your data is kept separate from other businesses' data.**
- ☐ **For the sake of safety, reliability and availability, your data is held in at least two separately located centres at any given time.**
- ☐ **Your data is only used to maintain and provide the cloud services you pay for.**
- ☐ **There are built-in controls to help you maintain access to your data and address data security.**
- ☐ **Your data will not be used for advertising purposes.**
- ☐ **Administrative access to your data is clearly defined.**

Never underestimate the value of data. "Facebook is worth about $200 billion dollars. United Airlines, a company that actually owns things, like airplanes…is worth $34 billion. Just sayin'…"

Howard Baldwin, Forbes, 23.3.15

QUESTION 1: WHO OWNS THE DATA **STORED ON THE SERVICE?**

Why Microsoft?

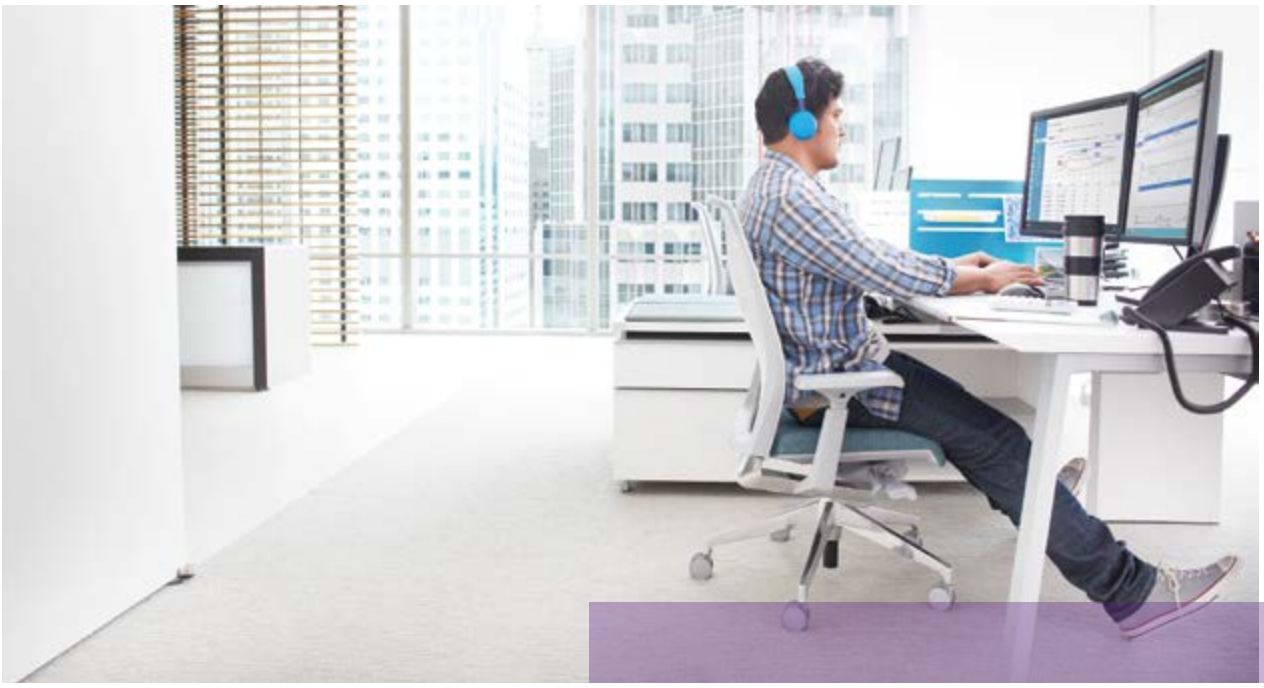
Microsoft only uses your data to provide the state-of-the-art cloud services that you purchase from us for your organisation. For enterprise cloud services, we don't scan the contents of your data for commercial purposes or any other non-authorised activity, like advertising.

As Michael Wignall, National Technology Officer at Microsoft UK says, "We absolutely know it's your data. We don't use it for any other purpose other than delivering our service to you."

We provide transparency about what we do with your data - and you can visit our Trust Centres online to see where your data sits in the world and to better understand the key privacy and security commitments we make to you when you use our cloud services. (Links in the resources section at the end of this chapter.)

For our key cloud services, we have specific resources that allow you to see which accreditations Microsoft currently adheres to. Click here to see accreditations specific to Microsoft Azure, Office 365 and CRM Online.

Microsoft understands that it's your data - and we're committed to protecting it. We build in controls to help you maintain access to your data and address your own data security requirements. For example, the rights management feature in Office 365 allows users to encrypt – or scramble – information, and also apply policies that give explicit permissions on what can and cannot be done with the information. That means that you control the accounts in your own organisation that can and cannot access the service and its data. Total control.



QUESTION 2: WHAT SECURITY STANDARDS DOES **THE SERVICE COMPLY WITH?**

Comply or die. It sounds drastic but that's the choice businesses face when dealing with data. That's why it's imperative to find a cloud vendor who is as obsessive about compliance as you are – preferably MUCH more so.

Can your provider answer "yes" to all these questions?

- ☐ Do they proactively engage with the leading data regulators?
- ☐ Does the provider offer in-depth and regularly updated information on their own security and privacy commitments?
- ☐ Is it clear where your data resides, who has access to it, and what the provider does with it?
- ☐ Is the provider audited to the highest international standards by trusted third parties, including the British Standards Institution?
- ☐ Do they deliver compliant, independently verified cloud services that will make it easier for your business to achieve compliance for all the infrastructure and applications you run?

'Find a cloud vendor who is as obsessive about compliance as you are – preferably MUCH more so'

QUESTION 2: WHAT SECURITY STANDARDS DOES **THE SERVICE COMPLY WITH?**

Why Microsoft?

To quote UK Chief Security Advisor Stuart Aston, "Microsoft is absolutely bananas about compliance". We've over 30 years of experience working with businesses and making sure their workplaces comply with standards and regulations - and we've transferred that knowledge to cloud services and to address what compliance means today.

We proactively engage with leading regulators, including EU data protection authorities, and we're audited to the highest international standards by trusted third parties, like the British Standards Institute.

For example, Microsoft was the first cloud services vendor to implement 'Model Clauses'. Not only were we first, but we took our Model Clauses implementation to the Article 29 Working Party; we took their feedback on board, and became the first and currently the only cloud vendor endorsed by them. But we didn't stop there. We made this implementation available to all of our customers - not just those in the EU, to make it easier for everyone to meet their compliance regulations.

We're hot on compliance, when it comes to our customers handling personal data too. We adopt the latest standards, such as ISO 27018, and we're happy to say that Office 365 and Azure already adhere to this standard.

In the public sector, Microsoft was the first provider to be accredited by UK Government. These accreditations have enabled us to comply with the UK government's new **14 Cloud Security Principles**, which organisations should rate cloud services against. You can read more about these government principles and how Microsoft stacks up **here** – and assess other vendors against the same framework.

In short, we're obsessive about compliance. Our continuous commitment to compliance gives our private and public sector customers and consumers cloud confidence.

Modal Clauses is the contractual model that European data protection authorities agreed must be in place when data leaves the EU.

Article 29 Working Party consists of representatives from each of the 28 EU data protection authorities and the European Commission.

ISO is the International Organisation for Standardisation, an independent, non-governmental membership organisation. ISO 27018 is a standard that defines specific controls and measures for the protection of personal data in the cloud.

QUESTION 3: WHAT ARE THE SERVICE'S **SECURITY FEATURES?**

When it comes to data, is anything more important than ensuring security and privacy? No.

That's why any trustworthy cloud services provider should have a demonstrable 'we-never-stop-improving' attitude towards building security into its services. Paying lip-service to it doesn't cut the mustard. **Ask potential cloud service providers about these features:**

- ☐ **Will your data be protected by high-end encryption, authentication and data classification capabilities?**
- ☐ **Can they offer you security intelligence and expertise to help you protect, detect, and respond to current and future security challenges?**
- ☐ **Is their cloud infrastructure globally secure and capable of meeting client needs worldwide?**
- ☐ **Are the data centres physically secured and monitored 24 hours a day?**
- ☐ **Does the service proactively investigate and fight cybercrime – monitoring for irregular behaviour and possible threats?**
- ☐ **Is it an established business whose staff have many years' experience in providing security for online data?**
- ☐ **Do they restrict access to production servers to a small list of operations personnel?**

Will your enterprise and customer information be protected by high-end encryption, authentication, and data classification capabilities? It should be.

QUESTION 3: WHAT ARE THE SERVICE'S **SECURITY FEATURES?**

Why Microsoft?

In order to keep your data secure, Microsoft pursues a comprehensive engineering effort to strengthen encryption across our services. In addition to this, you may have heard of the free and built-in encryption tools we provide, such as BitLocker and Microsoft Windows Encrypting File System.

Encryption has long been a feature of Microsoft products and services to protect our customers from criminals and hackers. But we don't stop at building security features into our services. We created the Digital Crimes Unit to proactively investigate and stop cybercrime, such as the spreading of viruses or stealing of personal information. Microsoft partners globally with private and public sectors to take down cyber criminals and ensure a safer digital environment for our customers.

So, it's not just securities features that we're investing in, but crime-fighting too. We're the cape and the superhero!

QUESTION 4: HOW HAS THE PROVIDER DEMONSTRATED **THEIR CREDIBILITY?**

Credibility is key to confidence. Your data is invaluable and therefore it should only be entrusted to an industry leader with a verifiable track record in privacy and security. You need a company that meets the highest standards of EU data protection legislation. You need a champion whose voice is heard and respected in the corridors of power – challenging governments on the issues that matter to clients as well as corporate conscience.

So does your preferred provider:

- ☐ Advocate for, and implement extensive improvements in cybersecurity?
- ☐ Commit that they will not provide any Government with direct and unfettered access to your data?
- ☐ Challenge Governments and Authorities in order to protect these commitments?
- ☐ Have a track record of meeting the varied and complex security, privacy, and compliance needs of global clients?
- ☐ Commit to notify customers of legal requests from Governments or Authorities for their data and insist that correct legal processes are being followed?
- ☐ Work closely with security software vendors and collaborate with global IT, Governments, and multinational organisations to strengthen data policies?
- ☐ Passes proven industry-leading best practices in the design and management of online services?
- ☐ Have many years of experience in the delivery of both consumer and enterprise technology?

Remember that even if your business isn't multinational, you are likely to deal with those that are. Their data becomes your responsibility.

QUESTION 4: HOW HAS THE PROVIDER DEMONSTRATED **THEIR CREDIBILITY?**

Why Microsoft?

"By taking a holistic approach and pursuing proactive engagements with governments and regulators, engineering efforts to help keep your data secure, and by leading the charge against cybercrime, Microsoft consistently proves its credibility when it comes to cloud security and privacy."

Patricia Christias, Senior Attorney- UK Legal Lead

We're not against law enforcement accessing information if it helps them fight crime and manage national security, but we believe there's a long standing framework to do this following the rule of law. And we're not afraid to push back.

For example, in the US, we formally challenged the geographic reach of a US criminal search warrant, arguing that email should receive the same treatment as printed documents or other property, whereby the US Government can't obtain a search warrant to seize property outside of the United States.

The email in question is actually hosted in one of our datacenters in Dublin, Ireland. In our view, just as the US government can't search a home in another country, it shouldn't have the power to search the contents of an email stored in datacenters overseas.

So, in December 2014, we filed our Appeal - and a few days later, we were joined by a who's who of the technology world, academia and the Irish government themselves, who all filed briefs to support our appeal. We're still fighting this battle - and it's just one of the ways in which we protect our customers and demonstrate our credibility when it comes to cloud privacy and security.

For more details on the case, visit **www.digitalconstitution.com**

IT'S YOUR CHOICE

Moving your business into the cloud is no small decision. But, hopefully, we've helped you understand what the cloud is and what it can do for your business.

To us, the cloud is one of the biggest opportunities in the business world since the internet itself. It's transforming how we work and interact with one another and our customers and, as we've seen, it's transforming business models - and making new ones too.

The cloud is not the domain of just IT anymore either. It operates across the business and delivers benefits to all departments.

But that's not to say that you should put all of your business processes in the cloud. We've shown you how different configurations work for different organisations - some choose to move part of their operations to the public cloud, some to the private cloud, and some to a mix of both, with a hybrid solution.

Microsoft gives you the freedom to choose, and the confidence to know that we will help keep your data safe.

To find out more about how Microsoft can help your business make the move to the cloud, **register now for Future Decoded 2015**.

Future Decoded

Future Decoded 2015 is a unique event in London, November 10-11, that explores the social, economic and technological impact of the digital revolution shaping all of our lives.

Future Decoded 2015 includes opportunities for you to see the Microsoft Cloud in action, speak to our customers about their experience of moving to the cloud, and to us about helping your business make the transition.

Statements in this chapter apply to Microsoft's key cloud enterprise services. For full details of the online services that apply, you can download the Online Services Terms (OST) here.

More cloud resources

Microsoft Trust Center overview (PDF)

Microsoft O365 Trust Center

Microsoft Azure Trust Center

Microsoft Dynamics CRM Trust Center

Microsoft Intune Trust Center

14 Cloud Security Principles

Digital Constitution

Cloud customer stories