Cloud UK

Paper fifteen

UK Cloud adoption snapshot & trends for 2016

The business case for Cloud

15

Introduction

Since the Cloud Industry Forum (CIF) first started its research programme in 2010, the rise of Cloud has been inexorable. From a novel, but relatively marginal, delivery model it has come to take a central role in the modern IT estate, bringing previously unseen levels of flexibility, agility and scalability to businesses.

Today, over four in five UK organisations have formally adopted at least one Cloud service, and importantly, with the vast majority reporting satisfaction with those services, Cloud is, by and large, delivering what the industry said it would deliver. Moreover, Cloud is helping organisations meet their business objectives, with a significant proportion of Cloud adopters managing to reduce their capital expenditure, improve the reliability of their IT and reduce the risk of data loss. With this being the case, it should come as little surprise that more organisations are expecting to venture into Cloud for the first time this year, or that those already using it expect to adopt more Cloud services over the next 12 months.

But what is clear is that Cloud isn't all things to all men and that Cloud will continue to sit alongside on-premise solutions for quite some time to come. Although penetration has increased year-on-year, and indeed, faster than we had anticipated, Cloud-based solutions still constitute a relatively small part of the wider IT estate and half of organisations expect to keep specific applications and services on-premise indefinitely. This, by no means, is to suggest that appetite for Cloud is on the wane; more a reflection of the fact that not everything can or should be migrated. With this being the case, the majority of organisations will be maintaining Hybrid IT environments for the foreseeable future.

Cloud-based solutions still constitute a relatively small part of the wider IT estate and half of organisations expect to keep specific applications and services on-premise indefinitely

2015 promises to be a step change for Cloud with end of support for Windows Server 2003 and Microsoft Small Business Server 2003 in July, which will add a significant amount of momentum to the industry. Somewhat worryingly, and in spite of the publicity surrounding the deadline over the past year, over half of organisations have failed to heed the warnings from the industry – scant change from 2014. As the deadline approaches, we expect to see a significant proportion of these organisations take the opportunity to move their server workloads to Cloud, and are confident that this will result in a substantial increase in Cloud adoption for both new and existing users.

However, the challenge remains for the industry to establish what it is exactly that Cloud can offer end users and try to qualify and quantify it; what is the return on investment? This is, admittedly, no trivial task but is critical if the Cloud industry is to demonstrate its worth and counterbalance persistent and recurring Fear, Uncertainty and Doubt (FUD) in the media. Although much has been written about the potential cost savings when compared to on-premise solutions, these do not always materialise and the fact is that the benefits of Cloud do not always reveal themselves on the balance sheets. With this in mind, we have, for the first time, sought to demonstrate in detail both the tangible and intangible benefits experienced by organisations using Cloud services, and this line of questioning (detailed later in the report) has proved highly insightful.

This White Paper will seek to distil with clarity the business case for Cloud, provide insight as to how and why UK-based organisations are using Cloud services and offer analysis on the key trends currently taking hold in the UK Cloud industry.

Snapshot of key findings

Cloud landscape

- Over four in five (84%) organisations use Cloud, demonstrating a steady increase in Cloud usage over the past 5 years (48% in 2010, 53% in 2011, 61% in 2012, 69% in 2013 and 78% in 2014).
- 78% are using more than one Cloud-based service and half of all respondents expected to move of their entire IT estate to Cloud at some point.
- 70% of those who already use Cloud expect their adoption to increase over the next 12 months, and 12% of those who do not use Cloud expect to do so within a year.
- The applications most likely to be Cloud-based are webhosting (58%), collaboration services (55%), and ecommerce (54%).
- Over three quarters (78%) of respondents' organisations predominantly run IT internally and the vast majority (85%) have on-site servers/data centres.
- Around six in ten (58%) are running Windows Server 2003 applications (which require a refresh by July 2015).

The adoption process

- The majority (78%) of those who have adopted Cloud services trial before committing to buy and most use Cloud provider (56%) or other third party (25%) assistance when migrating their services to Cloud.
- Final decision making falls to the Head of IT/CIO in almost six in ten (59%) respondents' organisations when choosing to move to the Cloud, but the CFO, MD and/or Head of Security are all likely to be involved.
- The complexity of migration was difficult for 38% of respondents as was data sovereignty (30%) and the dependency on internet access (29%).

Perception of Cloud benefits

- Nine in ten (90%) are satisfied with the results of using hosted and Cloud-based services, with over half (56%) seeing a competitive advantage from using Cloud and a further 22% anticipating seeing one.
- The vast majority (94%) have experienced tangible benefits of Cloud services, including more flexible access to technology (38%) and faster access to technology (37%).
- 84% have experienced intangible benefits of some kind, such as improved customer service (26%), improved collaboration between departments (25%) and improved customer engagement (23%).

Inhibitors of Cloud

- 70% cited concerns about data security and 61% about data privacy when moving to the Cloud, and security concerns are preventing certain applications from being migrated.
- However, the vast majority (99%) of all respondents have never experienced a breach of security when using a Cloud service.
- Some organisations are required to store certain applications in specific locations, including accounting and finance (49%), data backup/disaster recovery (43%) and data storage (43%).
- Of those who are required to store data in specific locations, just under half (47%) state that they are required to store it in the UK.

The vast majority (99%) of all respondents have never experienced a breach of security when using a Cloud service

Methodology and sampling

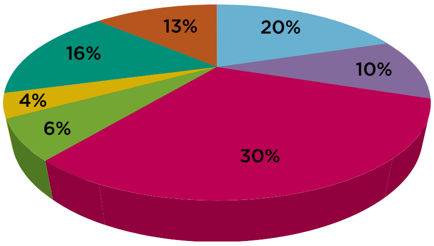
In February 2015 Vanson Bourne conducted the fifth annual body of research on behalf of the Cloud Industry Forum (CIF) to determine the level of Cloud adoption among participants and to gain insights into attitudes, experiences and trends across the UK end user community.

The research polled 250 senior IT and business decision-makers in enterprises, small to-medium sized businesses (SMBs) and public sector organisations. The organisations participating all had UK based operations.

Of the 250 end user organisations questioned, 15% came from the IT and technology sector, 14% from manufacturing, 12% from retail and distribution, 11% from financial services, 11% from business/professional services, and 5% from utilities and telecommunications. A further 20% comprised of public sector and not-for-profit organisations ranging from central and local government to healthcare and charities.

How many employees work in your organisation? Sample: 250

Total

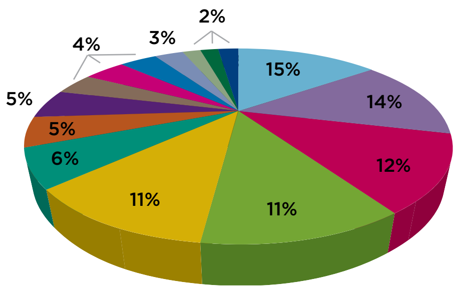


- 5 - 20 employees
- 21 - 50 employees
- 51 - 200 employees
- 201 - 500 employees
- 501 - 1000 employees
- 1001 - 5000 employees
- More than 5000 employees

The research polled 250 senior IT and business decision-makers in enterprises, small to-medium sized businesses (SMBs) and public sector organisations. The organisations participating all had UK based operations

In which sector does your organisation primarily operate? Sample: 250

Total



- IT and technology
- Manufacturing
- Retail, distribution and transport
- Business/professional services
- Financial services
- Private healthcare and services
- Utilities and telecommunications
- Public sector: central (inc HMRC, armed forces, emergency services)
- Public sector: local (including councils libraries, service delivery)
- Construction and property
- Education
- Public healthcare and services
- Local or central government
- Charity/not for profit
- Entertainment, media and leisure

This White Paper summarises the results of this research and sets out to comment on the following:

1. UK Cloud adoption trends
2. The business case for Cloud
3. Inhibitors of Cloud adoption
4. Future trends: An outlook to 2016

Cloud defined:

There has been many definitions of Cloud Computing since the phrase was first coined in the 1990s and it has, to an extent, become a catch-all term for hosted IT services of any type, including, but not limited to, multi-tenanted services accessed via the internet. However, for the purposes of this report, Cloud services have been defined as follows:

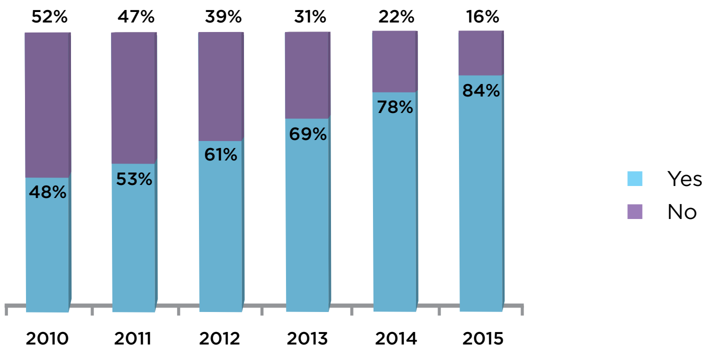
Cloud Computing is a term that relates to the IT infrastructure and environment required to develop/host/run IT services and applications on demand, with consumption-based pricing, as a resilient service. Communicating over the internet and requiring little or no client end components, it provides resources and services to store data and run applications, from many devices, anytime, anywhere, as-a-service. The services can, in turn, be scaled up and down as needed to meet a customer's variable operational needs, ensuring maximum cost efficiency.

1. UK Cloud adoption trends

This research project polled 250 IT decision-makers from a broad and representative cross section of industries. The sectors included IT and services; business & professional services; education; manufacturing; financial services; and retail, distribution and transport. The public sector was also well represented, constituting a fifth of total respondents.

The results of the research continue to validate that Cloud is now a widely accepted and established delivery model in the UK, regardless of organisational size, sector or vertical. The rate of adoption has shown a healthy increase since 2014 and this is set to increase further over the course of 2015.

Does your company have any hosted or Cloud-based services in use today? Sample: 250



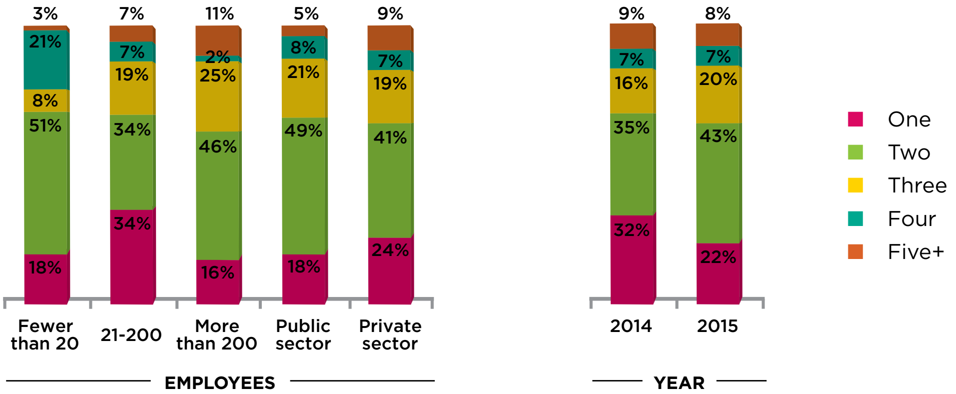
The rate of adoption has shown a healthy increase since 2014 and this is set to increase further over the course of 2015

The UK Cloud adoption rate has climbed to 84%, up by six percentage points from the figure reported in 2014, and a 75% increase since the Cloud Industry Forum first began its research programme in late 2010.

Broken down by size, it's clear that large enterprises are considerably more likely to have taken to Cloud than their smaller counterparts; 96% of organisations with more than 200 employees are using at least one Cloud service, compared with 76% of those below this threshold. Although this difference has been observed in previous years, it was not as pronounced. By sector, public sector adoption lags behind that of the private sector, standing at 78% and 85% respectively.

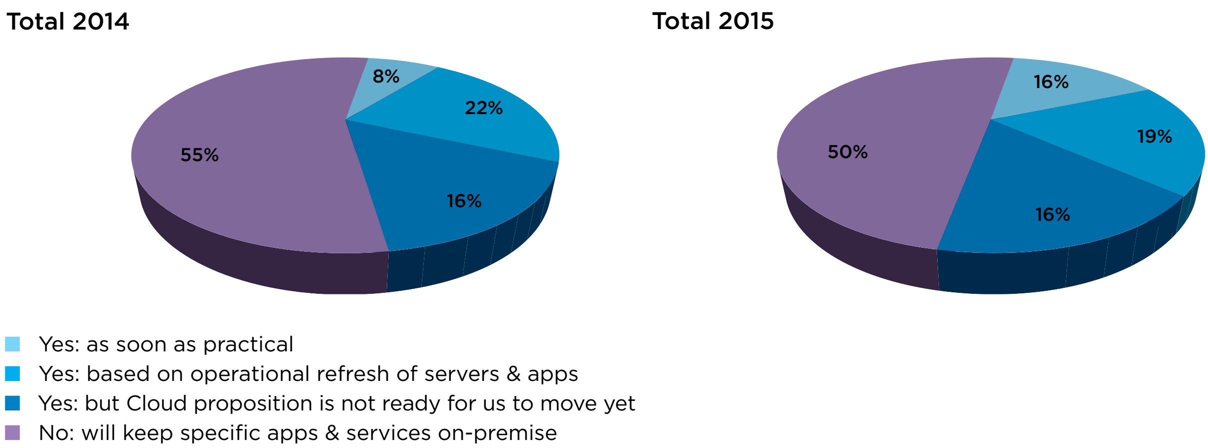
The penetration of Cloud services within organisations has progressed at a faster rate than we predicted in 2014. Today, 78% of organisations using Cloud use two services or more, up ten points from 2014, confirming our belief that once over the initial hurdle of adoption, more migrations typically follow.

How many different Cloud-based services does your company use today?



As with previous years, the results confirm that the majority of organisations will be managing a Hybrid IT environment for some time to come, if not indefinitely. However, the results do suggest that more organisations than ever are committed to a 100% Cloud environment; 16% of respondents intend to move their entire IT estates to the Cloud as soon as possible, compared with just 8% in 2014.

Do you foresee that you will ever move your entire IT estate to remotely hosted Cloud services? Sample: 250

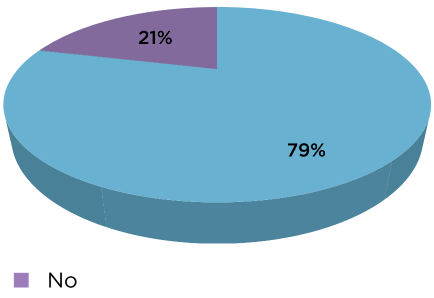


Assessing the organisational environment is critical to complete our understanding of how and why organisations are using Cloud services – or not, as the case may be. The research indicates that 85% of organisations operate on-site servers or data centres, representing no change from 2014. These investments have a direct impact on the economic sense and viability of Cloud services, and by necessity, slow the pace of adoption within organisations. The majority of respondents stated that the natural refresh of infrastructure is the point at which any IT deployment model is likely to be reviewed, and with over half of respondents still running Microsoft Window Server 2003, there is a significant opportunity for migration over the course of 2015:

- Around eight in ten (79%) of those who use Cloud, or expect to, include consideration of Cloud services within their wider IT strategy.
- 77% of organisations make new deployment decisions based around infrastructure refresh.
- 58% of organisations reported running Windows Server 2003, support for which formally concludes in July 2015. In spite of the impending deadline, this figure has declined only slightly from the figure in 2014 (60%).
- Broken down by size, it is clear that enterprises are significantly more likely to still be using Windows Server 2003. Given the added complexities that come with Cloud migrations in larger organisations, moving away from the Operating System should be seen as a priority.
- 78% of organisations run IT predominantly with in-house personnel and 22% use a managed service provider.

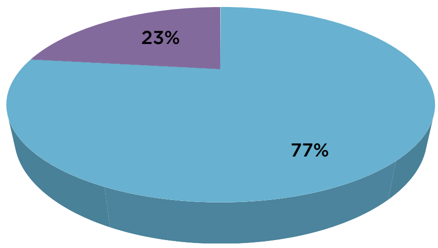
Does your company include consideration for Cloud services within its wider IT strategy? Sample: 219

Total



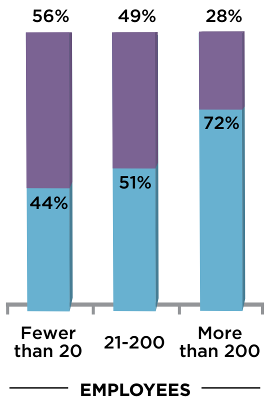
Do you consider infrastructure refresh to be an opportunity to adopt alternative deployment models such as Cloud IaaS/SaaS or third party hosting? Sample: 250

Total



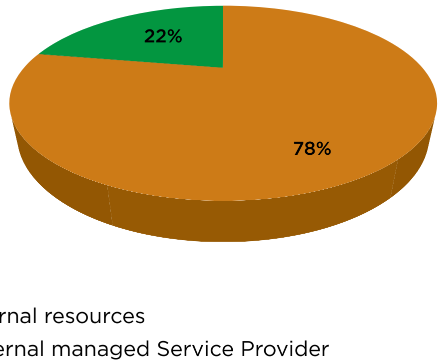
Are you running any Windows Server 2003 operating systems that require a refresh by July 2015? Sample: 250

Total



Do you predominantly run IT internally or use a third party service provider to deliver your IT services? Sample: 250

Total



In addition to Cloud being pervasive across all organisational sizes and verticals, it is equally diverse in terms of the spread of application areas being accessed as a Cloud service, as reflected in the next table. The chart also shows the timeline associated with adoption in the last 12 months is higher than the preceding periods, demonstrating the growing momentum in the pervasiveness of Cloud.

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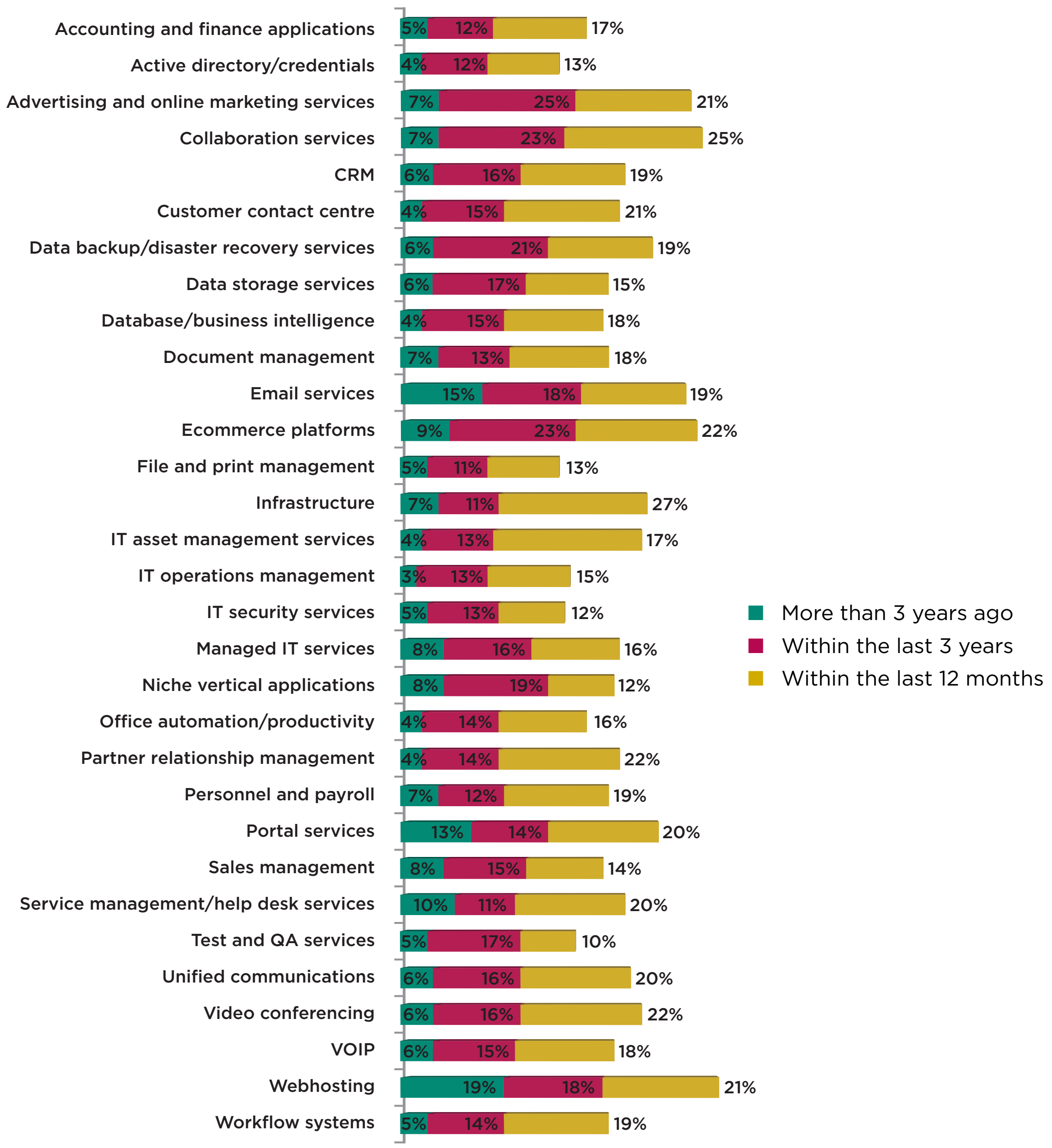
Do you use hosted or Cloud-based services for the following applications?



Looking ahead, the areas set to show the largest increases in adoption are CRM, data backup/disaster recovery services, and data storage – areas which stand to benefit significantly from being based in the Cloud

The applications most likely to be Cloud-based today are webhosting, collaboration services, ecommerce platforms, advertising and online marketing services, and email, while the least likely came out as active directory/credentials, and file and print management. Looking ahead, the areas set to show the largest increases in adoption are CRM, data backup/disaster recovery services, and data storage – areas which stand to benefit significantly from being based in the Cloud.

In what areas do you expect your adoption of cloud services to increase over the next 12 months?

Respondents who expect their adoption of Cloud services to increase over the next 12 months. Respondents only see the applications they use	Total	Fewer than 20	21 - 200	More than 200	Public	Private
CRM	**33%**	37%	38%	28%	31%	33%
Data backup/disaster recovery services	**32%**	30%	44%	26%	31%	32%
Data storage services	**31%**	33%	27%	32%	28%	32%
Email services	**29%**	26%	33%	28%	34%	28%
Collaboration services	**21%**	22%	22%	19%	24%	20%
Accounting and finance applications	**16%**	15%	16%	16%	10%	17%
Document management	**16%**	26%	16%	12%	17%	15%
Advertising and online marketing services	**15%**	19%	13%	15%	10%	16%
Customer contact centre	**14%**	22%	11%	14%	21%	13%
Database/business intelligence	**14%**	4%	13%	19%	3%	17%
IT asset management services	**14%**	11%	11%	16%	10%	15%
Office automation/productivity	**12%**	11%	9%	14%	21%	9%
File and print management	**11%**	4%	16%	11%	14%	10%
Infrastructure as a service	**11%**	7%	7%	15%	7%	12%
IT security services	**11%**	15%	9%	11%	14%	10%
Ecommerce platforms	**10%**	15%	7%	11%	10%	10%
Portal services	**10%**	7%	4%	15%	3%	12%
Sales management	**10%**	7%	9%	11%	3%	11%
IT operations management	**9%**	15%	7%	8%	10%	9%
Personnel and payroll	**9%**	7%	4%	12%	14%	8%
Managed IT services	**8%**	7%	4%	11%	7%	9%
Webhosting	**8%**	7%	13%	5%	10%	8%
Video conferencing	**7%**	7%	7%	7%	3%	8%
Active directory/credentials	**6%**	7%	11%	3%	10%	5%
Test and QA services	**5%**	4%	2%	8%	7%	5%
Niche vertical applications	**5%**	0%	2%	8%	7%	4%
Service management/help desk services	**5%**	4%	7%	4%	10%	3%
Unified communications	**5%**	7%	2%	5%	7%	4%
Partner relationship management	**1%**	4%	0%	1%	0%	2%
VOIP	**1%**	0%	4%	0%	0%	2%
Workflow systems	**1%**	0%	2%	1%	0%	2%
Base	**146**	27	45	74	29	117

Interestingly, and counter to popular opinion that they are too sensitive to be hosted in the Cloud, accounting and finance application have shown a reasonably large increase over the last 12 months. That being said, over half of respondents expect to keep these applications in-house for the foreseeable future, which can likely be attributed to regulatory requirements, legacy restrictions and concerns about security.

Looking at the IT estate more generally, end users report a number of reasons for not wishing to move specific applications to the Cloud, ranging from security, investments already made in proprietary technology, to protection of intellectual property. While largely surmountable through legal and technical means, these remain areas that end users need greater reassurance on.

What are the primary reasons for not wishing to move specific applications to Cloud services?

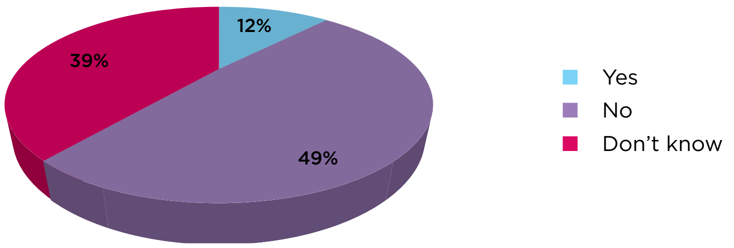
Respondents who do not intend to move their entire IT estate to remotely hosted Cloud services

	Total	Fewer than 20	21 - 200	More than 200	Public	Private
Security concerns	**75%**	65%	74%	78%	79%	74%
Data protection concerns	**60%**	41%	60%	67%	75%	56%
Investments already made in on-premise	**44%**	35%	60%	35%	39%	46%
Legacy technology restrictions	**41%**	24%	38%	48%	43%	41%
Efficiency	**40%**	65%	55%	20%	36%	41%
Protection of intellectual property	**30%**	18%	30%	33%	18%	33%
Retention of key skills	**23%**	12%	28%	23%	18%	25%
Proprietary technology	**19%**	12%	19%	22%	18%	20%
Base	**124**	17	47	60	28	96

In terms of future adoption, seven in ten (70%) of those who already use Cloud-based services expect their Cloud adoption to increase over the next 12 months. The data does, however, suggest that the rate of first-time adoption is likely to slacken, and we expect the overall adoption rate by the end of 2015 to fall short of the projections we made last year. 12% of those organisations not currently using Cloud expect to do so over the next 12 months, representing a decline from the rates in 2014 (29%) and 2013 (31%). Just 6% of organisations expect to never make use of Cloud services.

Do you anticipate Cloud services being adopted by your organisation within 12 months? Sample: 41

Total



The data does, however, suggest that the rate of first-time adoption is likely to slacken, and we expect the overall adoption rate by the end of 2015 to fall short of the projections we made last year

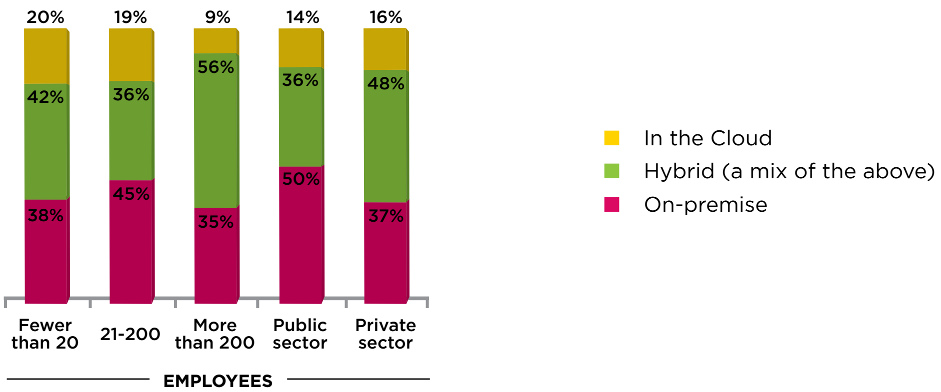
Do you expect your adoption of Cloud services to increase over the next 12 months?

Respondents whose company has any hosted or Cloud-based services in use today

	Total	Fewer than 20	21 - 200	More than 200	Public	Private
Yes	**70%**	69%	61%	77%	74%	69%
No	**30%**	31%	39%	23%	26%	31%
Base	**209**	39	74	96	39	170

It is worth noting here that, even taking into account the anticipated increases in adoption, Cloud services are likely to constitute a relatively small part of the overall IT estate for the majority of organisations. Today, just 15% of organisations report their primary approach to IT as being Cloud, with the remainder stating either on-premise or a mixture of the two.

Would you describe your primary approach to IT as being:

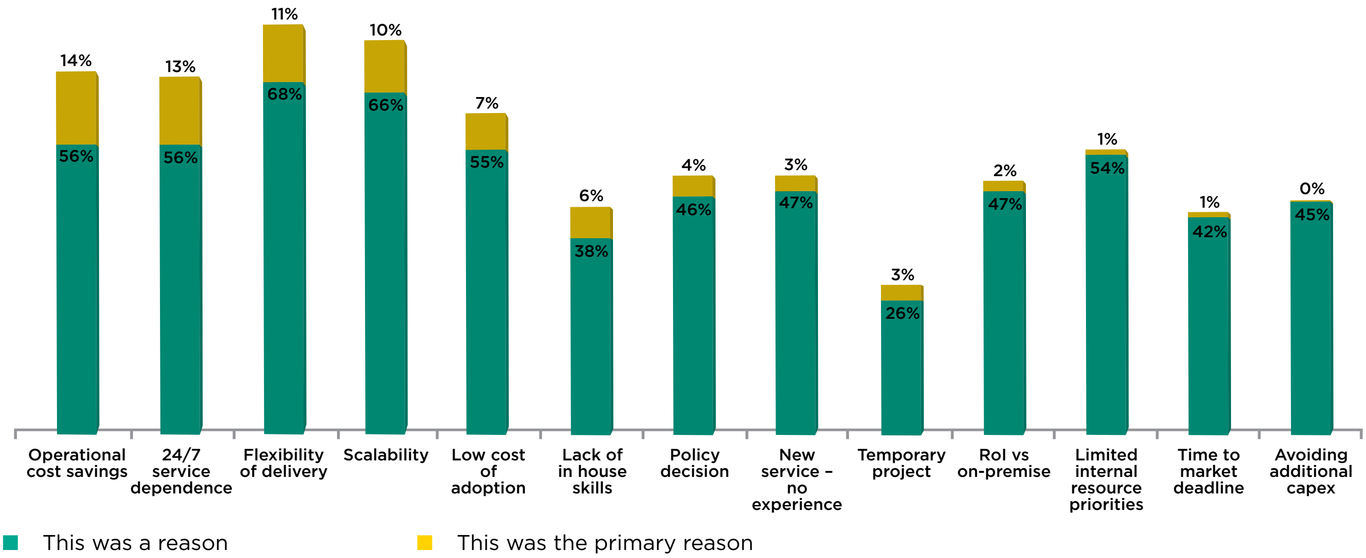


Drivers of Cloud adoption

End users continue to put forward a wide range of reasons for their initial adoption of Cloud-based services, although the most-commonly-cited primary reason appears to be operational cost savings, when compared to on-premise solutions, followed closely by 24/7 service dependence. Perhaps not surprisingly, cost savings were considerably more important for public sector organisation than for those in the private sector (12%), where the primary drivers were more mixed (26%).

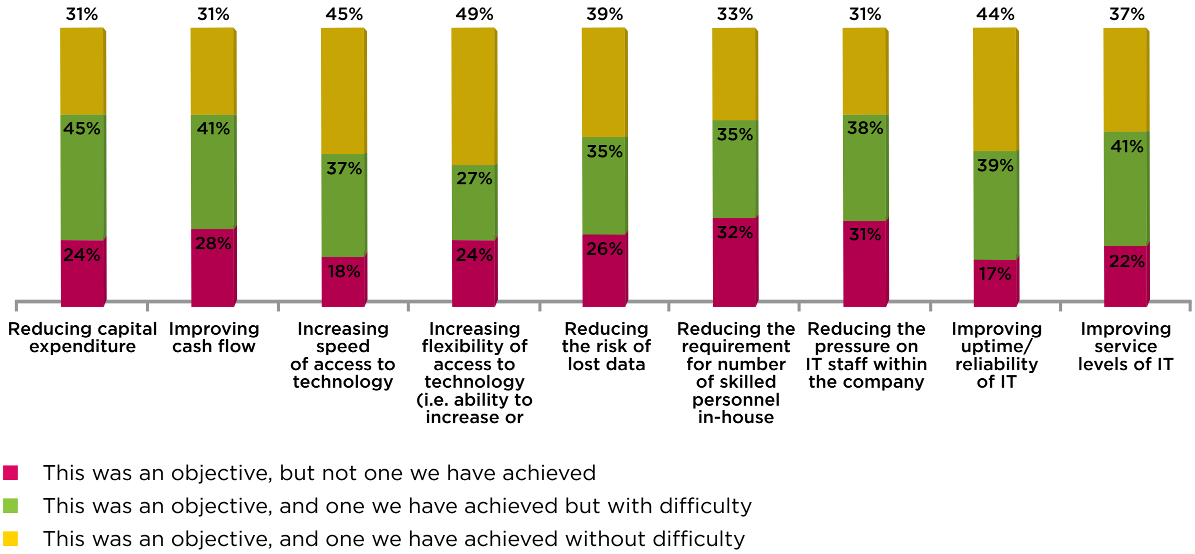
Today, just 15% of organisations report their primary approach to IT as being Cloud, with the remainder stating either on-premise or a mixture of the two

Which of these were reasons for initially adopting hosted or Cloud-based services?



High levels of satisfaction with the use of Cloud services, and the Cloud's ability to support business objectives help to fuel further adoption within those organisations already using the delivery model. Nine in ten (90%) are satisfied with the results of using hosted and Cloud-based services, 76% of those whose objective was to reduce capital expenditure have done so, while 83% successfully improved the reliability of their IT.

Which of the following business objectives were achieved when migrating to the Cloud?



Around one third of respondents, whose organisations use or are planning to use Cloud, say that the business objectives driving investment in the delivery model include enhancing business continuity (35%), replacing legacy IT technologies (33%) and improving customer support/service (32%). Over half of these respondents consider that it is, or will w , or will be, easy to measure the success of these business objectives (53%, 58% and 64% respectively).

Which of the following business objectives have or are driving investment initiatives in Cloud within your organisation?

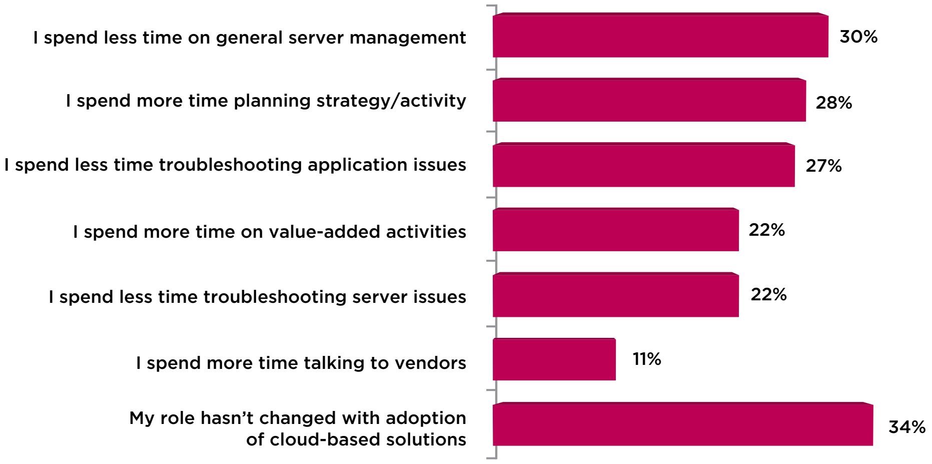
Respondents whose organisation uses hosted or Cloud-based services or plans to in the future for at least one application	Total	Fewer than 20	21 - 200	More than 200	Public	Private
Enhancing business continuity	**35%**	32%	45%	27%	29%	37%
Replacing legacy IT technologies	**33%**	23%	35%	35%	33%	33%
Improving customer support/service	**32%**	43%	33%	25%	27%	33%
Lower total cost of ownership	**29%**	26%	28%	32%	36%	28%
Enabling innovation	**29%**	30%	24%	33%	36%	27%
Development of new product or services	**28%**	23%	32%	27%	27%	29%
Capex savings	**27%**	21%	19%	38%	33%	26%
Greater flexibility to react to changing market conditions	**25%**	30%	29%	20%	22%	26%
Gaining competitive advantage	**22%**	28%	25%	17%	13%	24%
Enhanced data analytics	**21%**	30%	24%	15%	16%	23%
Speed of deployment	**19%**	9%	19%	23%	22%	18%
Improved return on investment	**17%**	17%	9%	25%	18%	17%
New revenue generation opportunities	**8%**	6%	6%	11%	9%	8%
None of the above	**4%**	4%	5%	2%	7%	3%
Base	**236**	47	93	96	45	191

Impact on the IT department

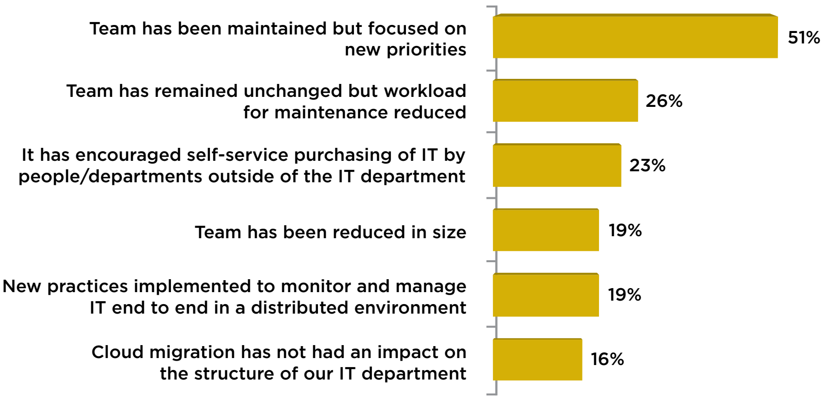
A persistent worry amongst IT professionals is that Cloud poses a threat to the very existence of the IT department. However, the research suggests these concerns are largely unfounded, with the majority of respondents' IT departments either remaining unchanged or refocused on new priorities as a result of their respective migrations. Moreover, for many, Cloud has led to the emergence of a more strategically-led IT department; with 30% now spend less time on general server management, 27% spend less time on troubleshooting application issues, and 28% spend more time on strategy and planning.

Cloud has, however, given rise to more employees from outside of the IT department procuring their own applications in roughly a quarter (23%) of organisations – in other words, shadow IT, or Bring Your Own Application (BYOA) – which brings with it its own potential for complication.

Has your role changed with the adoption of Cloud-based solutions in your organisation? (2015) Sample: 209



What impact has Cloud migration had on the structure of the IT department in your organisation? (2015) Sample: 209



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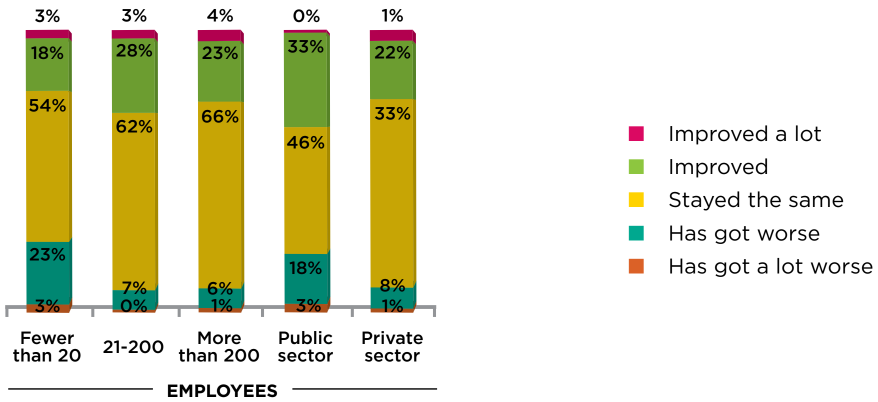
Looking at the impact of Cloud on the relationships between IT departments and the rest of the business, the vast majority state that it has either remained the same or improved, with collaboration and communication the areas most likely to have seen improvements.

How has the relationship between your organisation's IT department and the rest of the business changed since adopting any Cloud services? Sample: 209

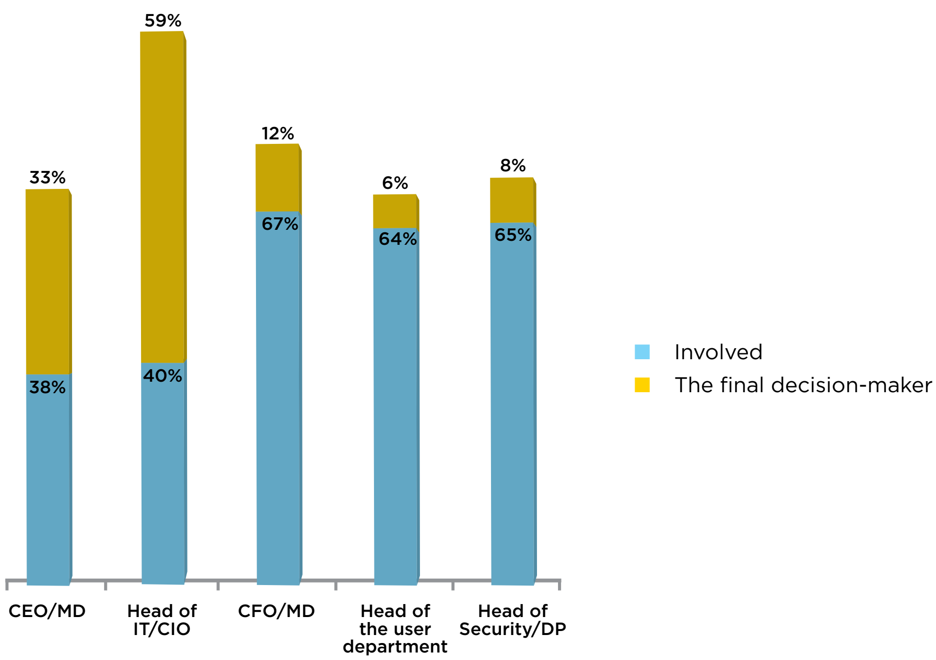


The proportion of organisations trialling Cloud services before committing to buy is increasing so ensure that services ultimately procured are fit-for-purpose and will support business objectives

The adoption process

The decision to move to the Cloud involves a wide range of stakeholders within organisation, although the final decision sits with the Head of IT/CIO in the majority of organisations and it is clear that the role of the IT department in Cloud procurement is increasing; the Head of IT/CIO was the final decision-maker for 59% of Cloud users in 2015, up from 50% in 2014, and 38% in 2013.

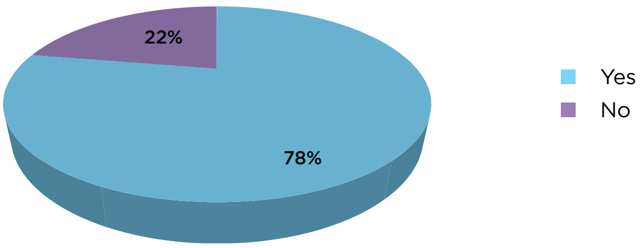
Who was involved, and to what extent, in the decision-making process to move to the Cloud?



Growing levels of confidence have not quelled the desire to 'try before you buy'. Indeed, the proportion of organisations trialling Cloud services before committing to buy is increasing so ensure that services ultimately procured are fit-for-purpose and will support business objectives. This approach conforms to the Cloud Industry Forum's view of best practice in Cloud procurement, and is one that should, where possible, be encouraged.

Did you trial Cloud services before committing to purchase? Sample: 209

Total



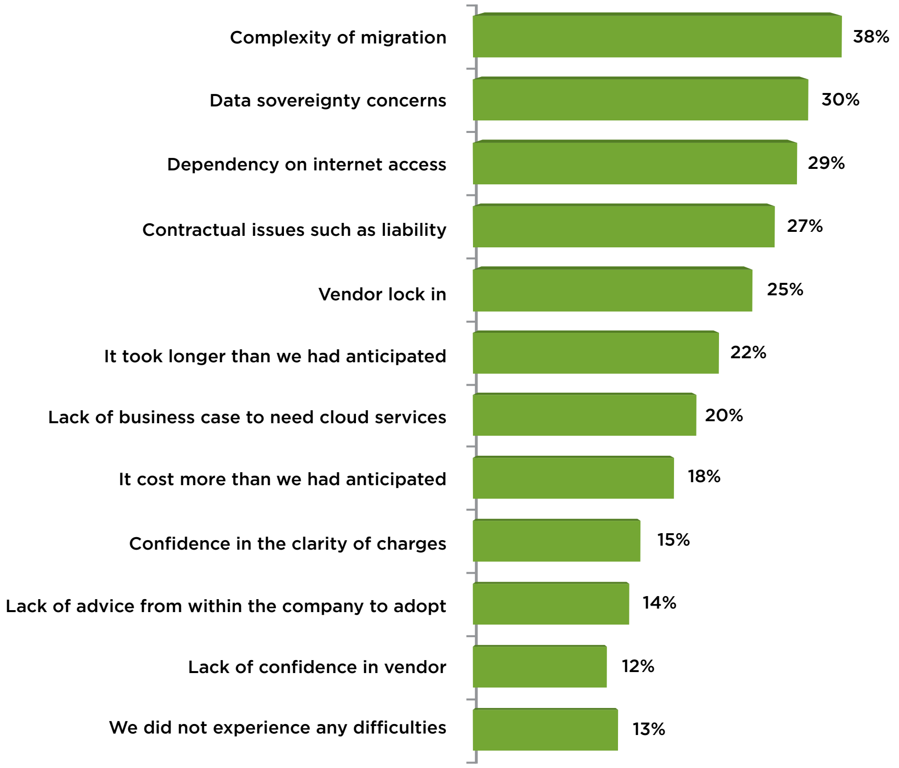
Although the majority of respondents were satisfied to some extent with their chosen method of migrating to the Cloud, just 13% stated that they were completely satisfied. This represents a decline from the 2012 figure of 16%. The remainder felt that it could have been improved in some way, with 37% wishing it had been easier and the same proportion wishing that it had cost less.

How could your chosen method of migration have been improved?

Respondents whose company has any hosted or Cloud-based services in use today	Total	Fewer than 20	21 - 200	More than 200	Public	Private
Cheaper	**37%**	51%	30%	38%	46%	35%
Easier	**37%**	36%	38%	36%	21%	41%
Cloud provider could have offered more/ better support	**35%**	38%	32%	35%	38%	34%
Cloud provider could have offered more/ better tools	**32%**	46%	38%	21%	33%	31%
Quicker	**31%**	21%	30%	36%	23%	33%
Cloud provider could have offered a more customised service	**22%**	26%	23%	21%	28%	21%
The migration into the Cloud was excellent and could not be improved	**10%**	5%	11%	11%	5%	11%
Base	**209**	39	74	96	39	170

The complexity of migration to Cloud was difficult for 38% of respondents whose organisation uses Cloud, as was data sovereignty concerns (30%) and the dependency on internet access (29%) for around three in ten. Of those that experienced difficulties, one third (33%) noticed a delay in product or service development, and just under three in ten (28%) encountered a loss in employee productivity.

Which, if any, of the following difficulties did you experience when migrating to a Cloud solution? Total Sample: 209

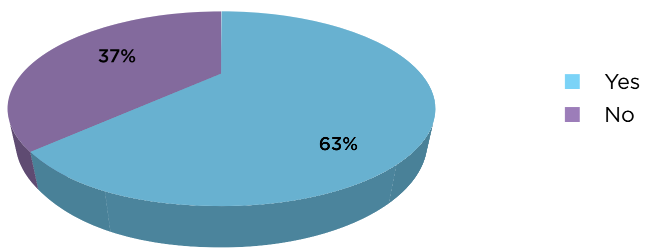


Trust remains a key factor when selecting a CSP, with the majority of organisations (63%) stating that they would prefer to work with a provider that has publicly committed to a code of practice over one with no public accountability. This figure rises to almost three in four (73%) in organisations with more than 200 employees. Today, CIF continues to operate the only certified Code of Practice for Cloud Service Providers, and this has now been formally recognised by the European Union Agency for Network and Information Security (ENISA). The CIF Code of Practice exists as an independent benchmark of best practice and key credentials that credible CSPs should be able to measure up to and be able to provide sufficient assurance about their transparency, capability and accountability of their offering to the market.

The CIF Code of Practice exists as an independent benchmark of best practice and key credentials

Do you see value in working with CSPs who sign up publicly to an industry code of practice that is independently audited over those that have no public accountability? Sample: 250

Total



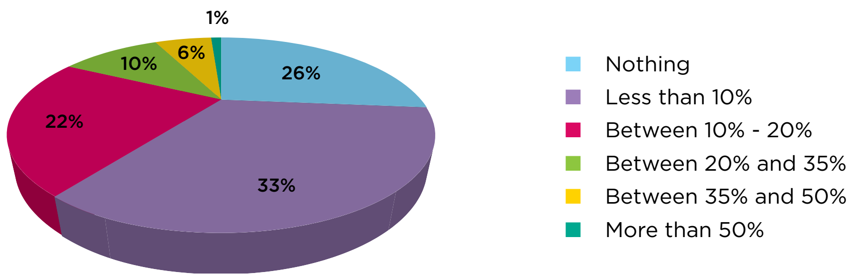
2. The business case for Cloud

CSPs routinely put forward the cost savings to be had from using Cloud services, but while a significant proportion of Cloud users do experience cost savings, the benefits of Cloud do not start and end with the bottom line. Demonstrating the Return on Investment (ROI) for Cloud is critical to supporting the business case for Cloud, and it is essential that ROI calculations can encapsulate the broader, less easily quantifiable intangible benefits of Cloud Computing, such as improved service, collaboration and employee satisfaction.

On average, organisations are currently saving 11% from their use of Cloud services, slightly lower than what was expected this time last year (13%). Respondents expect this saving to increase to an average of 19% in the next five years.

What cost savings are you experiencing from your organisation's use of Cloud services?

Currently saving



Cloud has helped to improve customer service and customer engagement in around a quarter of organisations, improve collaboration between departments (25%) and open the door to Agile development (21%)

What cost savings are you experiencing from your organisation's use of Cloud services?

	Average cost savings (%)	Nothing	Less than 10%	Between 10% and 20%	Between 20% and 35%	Between 35% and 50%	More than 50%
Currently saving	**11%**	26%	33%	22%	10%	6%	1%
Savings in the next 12 months	**14%**	20%	30%	27%	14%	5%	4%
Savings in the next 2 years	**16%**	18%	24%	26%	22%	7%	3%
Savings in the next 5 years	**19%**	17%	19%	22%	24%	15%	4%

The vast majority Cloud users (94%) have experienced tangible benefits (see table below) from using Cloud services, with the most popular reported as being more flexible access to technology, faster access to technology and cost savings. Over one third (35%) of organisations with fewer than 20 staff report benefitting from a reduction in capital expenditure and an improved cash flow.

Though perhaps more interesting are the intangible benefits experienced. For example, Cloud has helped to improve customer service and customer engagement in around a quarter of organisations, improve collaboration between departments (25%) and open the door to Agile development (21%). These benefits appear to be felt more by SMEs by some margin; fully 97% stated that they had experienced some sort of intangible benefit.

Which of the following tangible benefits of Cloud services deployment has your organisation achieved?

	Total	Fewer than 20	21 - 200	More than 200	Public	Private
More flexible access to technology	**38%**	45%	38%	36%	44%	37%
Faster access to technology	**37%**	33%	34%	40%	32%	38%
Cost savings over on-premise solutions	**28%**	28%	23%	33%	22%	30%
Reduction in capital expenditure	**23%**	35%	18%	23%	24%	23%
An on-demand/predictable cost	**23%**	20%	29%	19%	24%	22%
Improved cash flow	**21%**	35%	19%	18%	27%	20%
A reduced risk of loss of data or service by hosting externally	**20%**	28%	22%	16%	24%	19%
Higher availability through fault tolerant solutions	**20%**	20%	20%	20%	22%	20%
Higher service level achievement for IT	**20%**	15%	30%	13%	12%	21%
Reduces the pressure on IT staff within the company	**19%**	15%	25%	16%	27%	17%
Enhanced productivity	**17%**	23%	13%	19%	17%	17%
Reduces requirement for number of skilled personnel in-house	**16%**	18%	16%	16%	20%	16%
Reduction of energy costs	**12%**	8%	13%	14%	10%	13%
Ability to reach new market opportunities	**9%**	8%	14%	6%	2%	11%
Faster design and testing of new products	**8%**	13%	3%	11%	5%	9%
My organisation has not achieved any tangible benefits of Cloud services deployment	**6%**	5%	6%	7%	12%	5%
Base	**219**	40	79	100	41	178

Which of the following intangible benefits of Cloud services deployment has your organisation experienced?

	Total	Fewer than 20	21 - 200	More than 200	Public	Private
Improved customer service	**26%**	35%	29%	21%	32%	25%
Improved collaboration between departments	**25%**	38%	23%	21%	27%	24%
Improved customer engagement	**23%**	43%	19%	18%	20%	24%
Doing more development through an Agile methodology	**21%**	23%	22%	21%	24%	21%
Improved communication between departments	**20%**	33%	15%	18%	24%	19%
Lowering barriers to IT	**19%**	10%	25%	18%	20%	19%
Improved communication within the IT department	**19%**	25%	19%	16%	22%	18%
Improved employee satisfaction	**19%**	13%	27%	15%	20%	19%
Improved collaboration within the IT department	**18%**	13%	19%	20%	20%	18%
Improved business resilience	**17%**	23%	16%	16%	12%	19%
Preventing vendor lock-in	**3%**	8%	1%	2%	2%	3%
My organisation has not experienced any intangible benefits of Cloud services deployment	**16%**	3%	18%	20%	20%	15%
Base	**219**	40	79	100	41	178

Around half of respondents whose organisation has any hosted or Cloud-based services in use consider IT service management (53%), business continuity provision (50%) and financial initiatives (49%) in their top five areas where positive impacts have been made apparent following the undertaking of Cloud initiatives. That over half of organisations have felt a tangible improvement in IT service management (rising to 62% in organisations with fewer than 20 employees) is significant. Easing and streamlining internal IT processes has an obvious impact on end user satisfaction, but also frees the IT department up to concentrate on delivering value to the business.

It is, however, important to note that Cloud has not been universally successful in supporting business objectives and has, in some cases, had an adverse effect. Roughly two-fifths of respondents feel that Cloud has led to complications with governance and regulatory compliance, and supplier management, while 35% feel that they lacked the skills in-house to manage it. The data does not give any indication as to why these issues arose, though there may be a case that Cloud providers need to do more to inform their customers about the possible impacts of Cloud on business ecosystems, or that end users should do more to ensure that they are not walking blindly into Cloud service agreements.

Following the Cloud initiatives undertaken in your organisation, please indicate which of the following areas have seen the most positive impact?

Respondents whose company has any hosted or Cloud-based services in use today	Total	Fewer than 20	21 - 200	More than 200	Public	Private
IT Service management	**53%**	62%	54%	48%	49%	54%
Business continuity provision	**50%**	36%	59%	49%	51%	50%
Financial	**49%**	38%	36%	64%	41%	51%
IT reaction time to organisational need	**48%**	44%	47%	51%	41%	50%
IT Staff Skill requirements	**40%**	31%	39%	45%	46%	39%
IT Staffing requirements	**38%**	49%	39%	33%	36%	39%
Customer engagement/experience	**36%**	33%	45%	31%	38%	36%
IT asset management	**31%**	38%	26%	32%	41%	29%
IT's relationship with organisation	**25%**	15%	27%	27%	28%	24%
Governance & regulatory compliance adherence	**23%**	41%	18%	20%	28%	22%
Procurement and supplier management	**20%**	33%	16%	17%	23%	19%
Overall organisational culture	**19%**	21%	22%	17%	26%	18%
BPM (Business process management)	**19%**	26%	19%	16%	18%	19%
Base	**209**	39	74	96	39	170

Despite the widespread adoption of Cloud across all sectors and verticals, respondents still feel that using Cloud gives them the edge against their business rivals and has made them more competitive; over half (56%) of Cloud users say that their organisation has a competitive advantage as a result of using Cloud services, and a further 22% anticipate seeing one.

Has using Cloud services given your organisation a competitive advantage?

Respondents whose company has any hosted or Cloud-based services in use today	Total	Fewer than 20	21 - 200	More than 200	Public	Private
Yes, a significant advantage	**9%**	18%	7%	7%	15%	8%
Yes, some advantage	**47%**	59%	45%	43%	36%	49%
No advantage yet, but anticipating to see one	**22%**	10%	24%	25%	18%	23%
No advantage and not anticipating one	**22%**	13%	24%	25%	31%	21%
Base	**209**	39	74	96	39	170

3. Inhibitors of Cloud adoption

Confusion reigns over the legal, security and regulatory environment surrounding Cloud, and while security continues to be cited as the number one inhibitor to Cloud adoption, evidence suggests that these concerns are not reflected in the reality experienced by a significant proportion of Cloud users. To be clear, this is not to trivialise security – it is an important and valid concern – more to suggest that, with the correct technical precautions in place, the issues are largely surmountable.

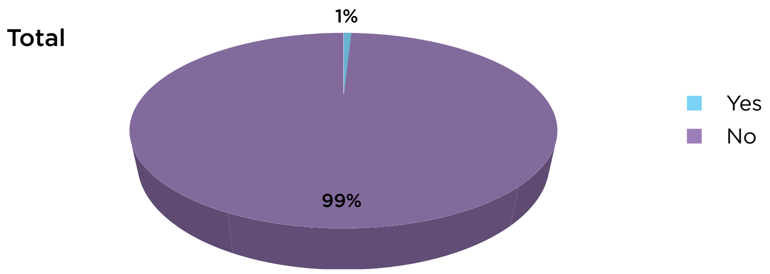
Whilst it is undoubtedly true that Cloud computing is not suitable for every circumstance and potential customers would be well advised to undertake a detailed risk analysis before committing new applications to the Cloud, the legal issues relating to the use of the Cloud are well established and indeed have been so for some time. Over the course of this research project, data security and data privacy have remained constant as the two primary concerns cited by end users when migrating to the Cloud, and while one might reasonably expect these to lessen as the industry matures, the data suggests that they have heightened. 70% cited data security as a concern and 61% data privacy in this research, compared with the 2014 figures of 61% and 54% respectively. There has been an even more marked increase in those worried about losing control/manageability of their IT systems; in 2014, just 24% cited this as a concern, compared with 40% today.

What concerns were expressed during the decision-making process to migrate to the Cloud?

	Total	Fewer than 20	21 - 200	More than 200	Public	Private
Data security	**70%**	62%	64%	78%	74%	69%
Data privacy	**61%**	67%	54%	64%	59%	61%
Fear of loss of control/manageability	**40%**	28%	39%	45%	33%	41%
Data sovereignty/jurisdiction	**30%**	28%	32%	29%	31%	30%
Cost of change/migration	**29%**	36%	27%	27%	36%	27%
Confidence in the reliability of the vendors	**28%**	38%	30%	23%	38%	26%
Dependency upon internet access (availability and bandwidth)	**26%**	28%	30%	23%	21%	28%
Contract lock-in	**25%**	28%	24%	25%	41%	22%
Regulatory constraints	**23%**	23%	20%	26%	31%	22%
Contractual liability for services if SLAs are missed	**20%**	8%	22%	24%	23%	19%
Lack of clarity of impact of Cloud services on business processes	**19%**	3%	16%	27%	21%	18%
Confidence in the vendors business capability	**17%**	21%	18%	15%	18%	16%
Confidence in the clarity of charges (i.e. will they be cheaper than on-premise)	**15%**	21%	12%	15%	28%	12%
Confidence in knowing who to choose to supply service	**13%**	21%	15%	9%	21%	12%
Lack of clarity in most appropriate Cloud deployment model	**9%**	13%	5%	9%	10%	8%
Lack of confidence in the business case to need Cloud services	**8%**	13%	9%	5%	10%	8%
Lack of clarity in most effective service delivery model	**7%**	5%	8%	6%	10%	6%
Lack of any advice from within the company to adopt	**6%**	0%	7%	8%	10%	5%
Lack of any promotion or awareness by the people we buy IT from	**3%**	5%	0%	4%	5%	2%
Base	**209**	39	74	96	39	170

Concerns about security do, however, appear to run counter to the reality experienced by the majority of Cloud users. Just 1% of Cloud users report having had a Cloud service-related security breach, confirming that while organisations are correct to be mindful of their data, Cloud does not in itself pose an inherently greater risk than on-premise solutions. Indeed, in the view of the Cloud Industry Forum, the opposite holds true. Of course there are risks in transferring services to the Cloud but what the risks are, and how they should be mitigated, will depend on the services in question. Cloud Service Providers are likely to have better business continuity and disaster recover plans than a typical SME so in some cases transferring services to the Cloud will actually reduce the risk to the business.

Have you ever experienced any breach of security when using a Cloud service? Sample: 250



In spite of this, security concerns are the primary reason organisations put forward for not wanting to move specific applications to Cloud services, cited by 75% of respondents, with those deemed to pose the greatest risk being backup/disaster recovery services (35%), data storage (33%), and accounting and finance applications (30%). Respondents were most likely to report that they were required to store these applications in specific locations.

Cloud Service Providers are likely to have better business continuity and disaster recover plans than a typical SME so in some cases transferring services to the Cloud will actually reduce the risk to the business

Is your organisation required to store data for the following applications in a specific location?

Respondents only see the applications they use	Yes	No	Unsure
Accounting and finance applications	**49%**	38%	13%
Active directory/credentials	**34%**	54%	12%
Advertising and online marketing services	**25%**	63%	13%
Collaboration services	**27%**	62%	11%
CRM	**40%**	51%	9%
Customer contact centre	**41%**	48%	11%
Data backup/disaster recovery services	**43%**	49%	8%
Data storage services	**43%**	48%	9%
Database/business intelligence	**38%**	50%	13%
Document management	**38%**	51%	11%
Email services	**34%**	56%	11%
Ecommerce platforms	**35%**	53%	11%
File and print management	**32%**	56%	12%
Infrastructure as a service	**32%**	55%	13%
IT asset management services	**27%**	61%	11%
IT operations management	**38%**	53%	9%
IT security services	**39%**	52%	10%
Managed IT services	**34%**	54%	12%
Niche vertical applications	**34%**	49%	18%
Office automation/productivity	**30%**	57%	14%
Partner relationship management	**34%**	50%	17%
Personnel and payroll	**38%**	49%	13%
Portal services	**33%**	52%	16%
Sales management	**29%**	59%	12%
Service management/help desk services	**25%**	64%	11%
Test and QA services	**27%**	61%	13%
Unified communications	**26%**	59%	15%
Video conferencing	**27%**	61%	12%
VOIP	**27%**	61%	12%
Webhosting	**27%**	59%	14%
Workflow systems	**30%**	56%	14%

In spite of the fact that there are few regulations requiring organisations to store data in the UK (rather than the EEA), just under half (47%) believe that they are required to do so, up from 44% in 2014. The requirement to store data on-premise has however decreased from 43% in 2014 to 37% today. Just 14% believed they could store data elsewhere in the EEA, despite being under the same umbrella legislation, while only 2% stated that regions outside of the EEA were acceptable.

Interestingly, those organisations with more than 200 employees appear to be significantly more open to storing data outside of the UK than their smaller counterparts, perhaps pointing to a greater awareness of the regulatory framework governing data location. Over a quarter (27%) were happy to store data within the EEA, compared with just 6% of organisations with fewer than 200 employees.

In regard to the data that you are required to store in a specific location, where are you required to store it?

Respondents whose organisation is required to store data for any application in a specific location	Total	Fewer than 20	21 - 200	More than 200	Public	Private
Hosted within the United Kingdom	**47%**	53%	52%	37%	50%	46%
On-premise	**37%**	43%	39%	32%	47%	35%
Hosted within the EEA	**14%**	5%	7%	27%	3%	17%
Base	171	40	69	62	34	137

Around three quarters (74%) cite concerns over security as one of the reasons they are required to store data in a specific location, a slightly larger proportion than 2014 (70%), the other most commonly reported reasons being regulation, lack of available bandwidth and the need for integration with related on-premise applications.

Why are you required to store this data in a specific location?

Respondents whose organisation is required to store data for any application in a specific location	Total	Fewer than 20	21 - 200	More than 200	Public	Private
Concerns over security	**74%**	65%	72%	81%	65%	76%
Regulation	**51%**	50%	36%	69%	71%	47%
Size of database vs available internet bandwidth	**36%**	33%	45%	29%	38%	36%
Integration to related application on-premise	**35%**	48%	39%	21%	38%	34%
Operational preference	**23%**	23%	23%	23%	18%	24%
Base	171	40	69	62	34	137

Around one third of all respondents believe business security and privacy concerns (35%) and lack of budget (32%) are two of the biggest inhibitors to moving apps and infrastructure to the Cloud. Of the respondents whose organisations do not expect their adoption of Cloud services to increase over the next year, one in three (30%) put this down to a lack of funds and resources needed to make further changes to systems.

Other practical constraints often identified by end users as issues that impact their choice of deployment model relate to:

- The levels of integration between applications – which, if significant, may limit use of public Cloud services.
- The degree of flexibility in scale of use that is required over time – the more flexible the need, the more pro-Cloud the outcome.
- The perception of risk associated with the sensitivity of the data – organisations typically avoid public Cloud solutions for high-risk applications.

4. Future trends: An outlook to 2016

With a body of research that spans five years, its proximity to end users and the industry as whole, CIF is in a strong position to be able to assess and evaluate market trends.

The following statements are considered as market forecasts from the Cloud Industry Forum based on the extrapolation of empirical trends witnessed to date and reflecting on current and emerging attitudes towards Cloud services and innovation. Clearly, the past is not always an accurate predictor of the future, but these statements reflect a pragmatic assessment of likely outcomes:

- As technologies continue to mature, going forward CIF will place greater emphasis on Cloud penetration within companies as opposed to first time adoption.
- Penetration of Cloud services in existing users will continue to increase, with 70% expecting to increase their usage in 2015. We predict that by the end of this year, in excess of 85% of Cloud users will be using multiple Cloud services (currently 78%).
- First time Cloud adoption will continue to increase, driven in no small part by the End of Support of Microsoft Windows Server 2003, though this will likely be at a slower rate than we have previously witnessed.
- CIF believes that, after July 14th, with Microsoft no longer issuing security updates for Windows Server 2003 there will be significant risk to customers who have not acted. Cloud services now represent the only viable short term fix for many customers who lack the in house resources.
- Of those organisations not currently using Cloud services, 12% expect to do so within 12 months, meaning that by early 2016, 86% of UK-based organisations will formally use at least one Cloud service.
- IT delivery will inevitably become more service led, which will require changes to the supplier landscape. Many vendors will start to see the need for deeper levels of certification to meet customer expectations and ensure confidence.
- As Cloud service providers become more efficient at delivering credible Cloud service, customers will see significantly increased financial savings from the utility billing model models.
- Procurement sponsored or instigated outside of the IT department will continue apace. However IT departments will begin to take back control of the evaluation and migration stages as Cloud is now accepted as a mainstream alternative to legacy solutions.
- Public sector Cloud adoption will accelerate rapidly over the next 12 months to a closer alignment with private sector adoption. The public sector will also begin to move away from long term locked in contracts as Cloud services are customised to ensure data protection and sovereignty needs.
- Security will remain the top Cloud inhibitor for the foreseeable future. The role of the industry and employers must be to educate users on their responsibilities for data protection and enforce policy management as necessary.
- The perceived intangible benefits of Cloud highlighted for the first time in this report (collaboration and customer service), will become more tangible as organisations begin to consider and measure the positive impact of Cloud to their overall business.
- In this report, 51% of organisations have reported a shift in their IT priorities from operational administration (keeping the lights on) to more strategic and service driven needs. CIF believes this trend will rapidly increase over the next 12 months.
- Hybrid IT will continue to be the norm for the foreseeable future, however this report shows double the number customers intend to fully migrate to Cloud only services. CIF believes this trend will continue for the next two years.
- Although initial adoption of Cloud services continues to be led by more traditional or obvious technologies such as web hosting or email services, confidence has broadened significantly enabling most IT services capable of being delivered via the Cloud. 2015-16 will see a plethora of new Cloud services come to market.

In this report, 51% of organisations have reported a shift in their IT priorities from operational administration (keeping the lights on) to more strategic and service driven needs. CIF believes this trend will rapidly increase over the next 12 months

Conclusion

Cloud adoption will reach another peak throughout 2015, increasing in breadth with more organisations overall using Cloud services, and in depth, as existing users expand their use of Cloud services, emboldened by Cloud deployment successes, mounting levels of confidence, and, perhaps most significantly, the end of support for Microsoft Windows Server 2003 in July; the single biggest catalyst for the Cloud industry since the term came into use.

We know that Cloud migrations tend to happen on needs-based activity: users migrate because of a definitive business need, be it business growth, security, or in this case, a technology refresh cycle. With almost three in five organisations still using the Operating System, many of these will take the chance to move their systems to the Cloud. But this is not a foregone conclusion and Cloud service providers that expect to be able to sit back and watch the business roll in will be sorely disappointed. Yes, the opportunity is real, but the industry will need to overcome a number of hurdles to help organisations over the line – the opportunity must not be squandered.

As stated previously, Hybrid will be the modus operandi for the majority of organisations for the foreseeable future, being either not yet ready to move everything to the Cloud, or unwilling to. There are a number of contributing factors here: fear of losing control of IT systems, security and privacy concerns, and lack of budget currently stand in the way of greater adoption of Cloud by businesses. While there is little that can be done about organisations' finances, CSPs and the industry do have an element of control on the other inhibitors.

The primary issue relates to trust: trust that Cloud-based data will be securely looked after, that it won't be accessed by third parties, and that end users will be able to get their data back at the end of a contract, regardless of how it ends. And unless providers of Cloud services can offer this reassurance, either through certification against relevant standards or codes of conduct, such as the CIF Code of Practice, this trust, and subsequent business, will not be forthcoming.

It has been shown that Cloud is driving both tangible and intangible change for a large proportion of businesses, transforming the relationship between the IT department and the business at large, improving collaboration and streamlining business functions. Cloud has also given rise to a more strategic IT department, spending less time on mundane day-to-day IT management, and more time on adding value to their respective organisations.

But the transition to Cloud services has, for many, not been as straightforward as expected. Our latest research indicated that complexity of migration was a challenge for 38% of Cloud users, which in turn had a knock-on effect on the rest of the business; one third (33%) noticed a delay in product or service development, and just under three in ten (28%) encountered a loss in employee productivity as a result of the difficulties they experienced.

There may be a case that Cloud service providers need to be better at either setting end user expectations or easing the pain of migration to their services. But equally, it's important that end users equip themselves with enough knowledge about Cloud to be able to manage it and ensure that the Cloud-based services rolled out can support business objectives – not hinder them.

With almost three in five organisations still using the Operating System, many of these will take the chance to move their systems to the Cloud. But this is not a foregone conclusion and Cloud service providers that expect to be able to sit back and watch the business roll in will be sorely disappointed

Call to action:

The next year holds a great deal of promise for the Cloud industry and a tangible opportunity for end users as Windows Server 2003 finally comes to the end of its shelf life in July. This event will no doubt spark a wave of new adoption and further adoptions, but, plainly, Cloud is not the only option. To encourage those moving on from the Operating System, the industry must work to win end user trust and try to overcome primary barriers to adoption.

At the same time, it is incumbent on Cloud users, and would be adopters, to educate themselves on the pitfalls of Cloud adoption and migration, and to understand their potential vulnerabilities and the regulatory framework governing data, so that they can enter into Cloud service arrangements with their eyes wide open. The success, or failure, of a Cloud project is heavily dependent on being able to choose an appropriate provider, be it by opting for a CIF-certified provider, or knowing what questions to ask to get to the bottom of a CSP's capabilities.

Training has a significant role to play here, and that is one of the reasons why we've launched our end user membership scheme. The programme will allow individuals within organisations to maximise the potential of Cloud, become more valuable to their businesses in the process, and enhance their worth in the labour market, covering everything from Cloud basics to the legal and regulatory frameworks and Cloud licensing. It's only when armed with this information is it possible to make good, sensible Cloud decisions.

Notes

Notes

The Cloud Industry Forum (CIF) was established in direct response to the evolving supply models for the delivery of software and IT services. Our aim is to provide much needed clarity for end users when assessing and selecting Cloud service providers based upon the clear, consistent and relevant provision of key information about the organisation/s, their capabilities and operational commitments.

We achieve this through a process of self-certification of vendors to a Cloud service provider Code of Practice requiring executive commitment and operational actions to ensure the provision of critical information through the contracting process. This Code of Practice, and the use of the related Certification Mark on participant's websites, is intended to provide comfort and promote trust to businesses and individuals wishing to leverage the commercial, financial and agile operations capabilities that the Cloud-based and hosted solutions can cover.

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