

A Forrester Consulting Thought Leadership Paper Commissioned By Microsoft

Cloud Change Agents Drive Business Transformation

The Status Of Cloud Computing As A Business Transformation Tool In The UK

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FORRESTER

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Executive Summary

The adoption of cloud computing in all its facets is globally growing at a tremendous speed. However, the goals, motivation and people behind these cloud initiatives can vary widely, resulting in very different cloud solutions being implemented.

In June 2012, Microsoft commissioned Forrester Consulting to explore current cloud computing practices, challenges and future plans of enterprises based in the UK with 1,000 or more employees. The hypothesis of this study was to verify if change agents from the business exist that are initiating and driving their company's cloud activities. And if they exist, what are their motivations and the changes, if any, that result from such cloud projects in UK companies?

Cloud projects in UK driven by change agents improve business speed and collaboration while IT cloud projects focus mainly on cost and process efficiency.

In interviews with 22 cloud computing decision-makers from business and IT (see Appendix C), Forrester found that UK companies are using the whole spectrum of cloud solutions, but they're using them in different ways depending on whether the driver comes from the business or the IT side of the company. Change agents from within the business do exist, especially where IT departments are too slow or don't understand business needs; these change agents are driving their companies' cloud projects, independent of their IT departments. Such projects typically address key business needs such as agility, speed and collaboration, while IT-driven cloud projects mainly focus on cost reduction and IT performance improvements. Most companies clearly see the need for close alignment of IT and the business regarding cloud initiatives — and an opportunity for business transformation enabled by the use of cloud solutions. However, most companies are significantly lagging behind in their internal change management process.

Key Findings

Forrester's study yielded four key findings:

- **Cloud change agents accelerate business innovation and collaboration ahead of IT.** Where IT lacks the understanding or the speed to cope with fast changing business needs, change agents from the business side become the main driver for enterprise cloud projects. Such cloud initiatives mainly target improvements to business collaboration and the speed of implementing new, innovative processes.
- **IT's cloud agenda focuses on cost reduction and IT efficiency improvements.** In strong contrast to business-driven projects, most IT-initiated cloud projects target to improve IT performance and process efficiency. Almost all CIOs in this study highlighted cost reduction as one of the main goals of their cloud initiatives. IT and business goals seem to differ significantly as the driving forces behind cloud projects in UK enterprises.
- **Different goals lead to different cloud solutions for IT-led and business-driven cloud projects.** Depending on the cloud drivers, UK companies are using all of the facets of cloud resources. While IT-led projects tend to result in private cloud solutions with a focus on infrastructure, business-driven projects mainly focus on public cloud software-as-a-service (SaaS).
- **Successful cloud projects require close alignment of the business and IT.** For most projects, including those initiated by business change agents, IT typically gets involved at some point in time — at the latest when it comes to the implementation and integration of external cloud resources with the existing in-house IT landscape.

- **Enterprises are slow to adjust internal change management to the opportunities that the cloud presents.** Companies appreciate the flexibility and scalability of cloud business models (pay per use) but very few have implemented initiatives like flexible internal charging models between business and IT. Internal change management driven by cloud projects seems to lag significantly behind cloud-enabled process innovation with business partners and customers.

IT And The Business Are Driving Cloud Projects With Different Goals

Companies have many good reasons to be interested in cloud services, including financial, technical, and business goals.¹ As part of this study, Forrester asked cloud decision-makers in the UK why they were interested in cloud solutions for their company. Interestingly, the drivers turned out to be significantly different depending on whether the cloud project was initiated by the IT department or the business side of the company (see Figure 1).

Cost is not a major driver for the business, but scalability and flexibility are welcome cloud benefits.

The top priorities for IT-driven cloud projects were to mitigate risks (getting more reliable IT from external service providers), improve performance (as with scalable, external computing power) and reduce overall costs. All of the CIOs interviewed in this study listed cost as a top decision criterion for their cloud projects, while for the business cost apparently does not play a major role in such decisions:

“Cost did not play a huge role. We did have a budget, but the options coming from the RFP did not consider cost first. Functionality was paramount, and we considered cost to be negotiable. Price is left right until the end, but it has to be within a budget to make the project feasible.” (Procurement manager, international airline carrier)

Business-led cloud projects turned out to be more driven by the need for speed (getting access to new capabilities faster), easy access for business users (e.g., remote access from home or the road) and improved collaboration, both internally and with customers and business partners (e.g., a cloud hub for all parties to access information). Business goals clearly led the decision process for these projects; external cloud services turned out to deliver the best solution.

“We didn’t look for a specific solution, but it turned out that a public cloud was the best fit to meet our need for speed and flexibility.” (Head of knowledge and information management, European software and services company)

Among the many different cloud projects, we found that the change agent — the person who drives and sponsors the cloud initiative — can come from any area within a company, including C-level executives (CIO, CFO), heads of business lines (e.g., marketing, sales), or business services (e.g., human resource management, risk management):

*“The **CIO** is the sponsor. Executive management is involved through the communication strategy the CIO put in place.”* (Director of information technology, UK higher education institution)

*“The **head of R&D** is the sponsor; the business and IS teams then deliver based on the requirements of the business.”* (Global category lead, international pharmaceutical firm)

*“The overall sponsor for the project is our **health and safety director**. He, along with the other C-level management, regulates the entire identification and gives support in real time.”* (Senior manager, national utilities company)

*“The **chief financial officer** is the overall sponsor of the entire project, which he discusses with top-level management and makes the final decision.”* (Operations manager, a financial and insurance firm)

Regardless of whether IT or the business initiated the cloud project, at some point all of these projects resulted in IT and the business coming into alignment sometime before the project got to the implementation or integration with the existing IT landscape. (Pure infrastructure private cloud projects that the business wasn’t usually aware of were the exception.) None of the interviews revealed any unsanctioned ‘Wild West’ cloud projects that were completely business-driven and executed without any IT involvement. Although interviewees had different perspectives, most of them mentioned the importance for business and IT to align their cloud approaches.

*“IT **thinks** it knows what the business needs — but this actually requires a lot of conversation and collaboration to work out.”* (Senior manager, international electronics manufacturer)

Figure 1

IT And The Business Are Driving Cloud Projects From Different Angles And With Different Goals In Mind

IT	Business
<p>Mitigate risks</p> <ul style="list-style-type: none"> • “The business saw an increasing risk that the data center would fail at some point; thus, it needed to be replaced.” • “The size and scale of running and backing up increased the business risk of running internally.” 	<p>Ease/speed of implementation</p> <ul style="list-style-type: none"> • “The business sees it being spun up quickly and they do not need to go to IS.” • “Speed was the defining factor; claims were coming in very fast and they needed to facilitate this processing very quickly.” • “Time-to-market or providing a service in a timely manner through the cloud should be advantageous.”
<p>Improve performance</p> <ul style="list-style-type: none"> • “Performance has increased. We do not need to manage local offices; now we can send a standard laptop to an office to plug into the system. The possibilities have increased due to the reduction in hardware and personnel costs.” • “The computational power and benefits that they would be able to offer.” 	<p>Flexibility and access</p> <ul style="list-style-type: none"> • “The external workforce is increasing very fast. So we were looking for a solution that could make the information available to all our employees in an easy, simple, and timely manner from any platform they use.” • “Research and commercial teams do not want big investments. They want to be able to set up pilots quickly and (relatively) cheaply and then scale accordingly.” • “We’re more worried about being able to access from any device at any time.”
<p>Reduce costs</p> <ul style="list-style-type: none"> • “Being really innovative, forward thinkers and using the company’s assets in a cost-effective manner.” • “The initial virtualization was to reduce overhead and consolidate underutilized servers.” • “Cost was the main criterion. It was a lot cheaper to do this than implement traditional on-premises solutions.” 	<p>Collaboration</p> <ul style="list-style-type: none"> • “We wanted to be able to share information with external partners — where they want to share with outside parties and potentially competitors without someone picking up the bill.”

Source: Forrester Research, Inc.

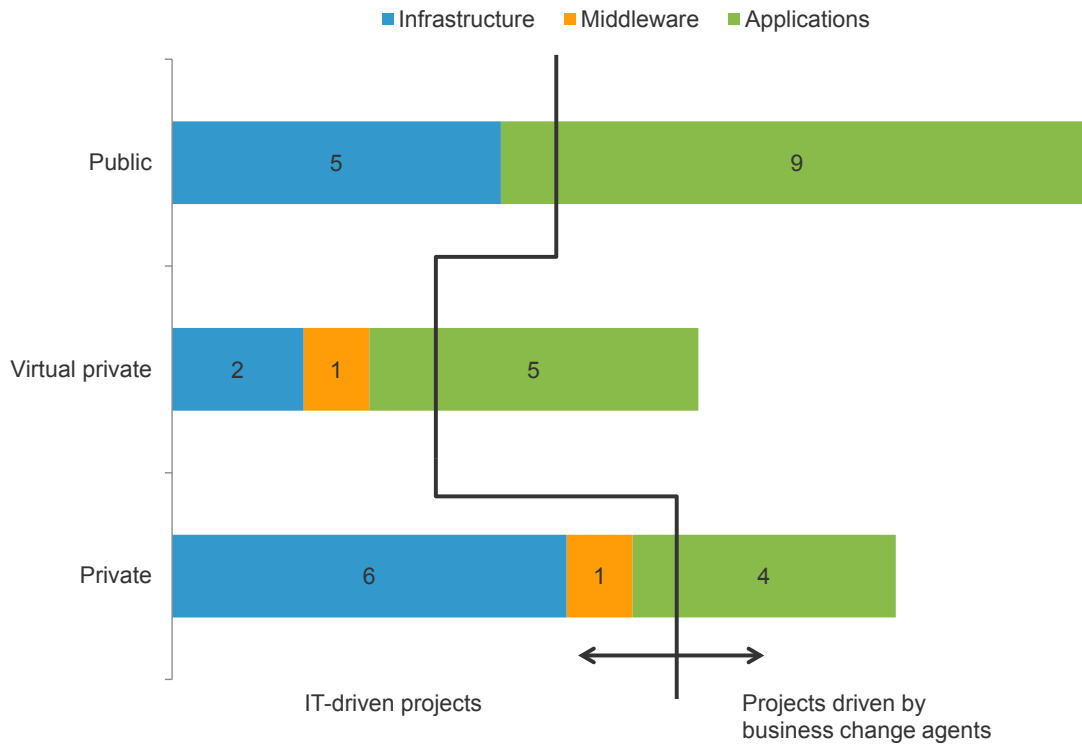
Different Business And IT Goals Lead To Different Cloud Solutions

The essence of cloud computing is the sharing of IT resources in a flexible and scalable business model. However, what resources are shared can vary and can be infrastructure, middleware, applications, or human-centric business processes. In addition, the level of sharing can range from internal private clouds to external hosted clouds with dedicated environments to public clouds where customers don't know who they're sharing resources with.²

In this study, we asked business and IT decision-makers at UK-based companies about the scope of cloud projects that they have already implemented or are planning to implement in the near future. Respondents indicated that they are already using (or plan to use) cloud infrastructure, middleware or applications at all levels of sharing, from internal to public clouds (see Figure 2).

We then looked at the differences between IT-driven and business-driven cloud initiatives. It was interesting to see that most of the IT projects focus on private cloud solutions, including infrastructure or desktop virtualization. On the other hand, business-driven projects mainly target public cloud solutions, including public email, business applications like CRM, or information-sharing and collaboration hubs. External but dedicated cloud environments (virtual private cloud) were used by both business and IT for projects that had a similar scope but which also had more restrictive data security and privacy requirements.

Figure 2
Companies Are Using A Broad Spectrum Of Cloud Solutions



Base: 22 UK professionals involved in cloud projects.
(some respondents described multiple cloud projects)

Source: A commissioned study conducted by Forrester Consulting on behalf of Microsoft, October 2012

Our interviewees gave some more insight into the scope of their various private cloud projects:

“We are looking at internal cloud, to quickly provision capacity for internal users.” (Senior IT manager, international personal care products manufacturer)

“We have a private cloud, virtualising and consolidating our data centers.” (Strategic planning manager, national utilities company)

Virtual private clouds:

“We are looking at the creation of a virtual private cloud together with other institutions.” (Director of information technology, UK higher education institution)

“We’re implementing a web content management system, so all of the web pages that we currently host internally are on a private cloud provided by a third party.” (Head of IT, UK university)

Public clouds:

“We are about to implement a learning, performance and talent management system, available to all employees for them to manage their careers.” (Procurement manager, international airline carrier)

“There are risks to our employees in their daily routine work and sometimes we have accidents with the Safety Hub, which is the subject of our cloud implementation.” (Senior manager, national utilities company)

Successful Cloud Projects Require Close Alignment Between Business, IT And The Vendor

When we asked interviewees about the key challenges in their cloud initiatives, it turned out that businesspeople mainly raised concerns about data security and compliance, while IT people addressed technical issues like bandwidth and performance. As such, the top cloud concerns of employees seem to match their individual goals. Businesspeople who want to improve information access or collaboration are primarily concerned with whether this information is safe and the processes are compliant, whereas IT people who want to reduce operating costs and improve IT processes are more concerned with network bandwidth implementation efforts to stay within budget. Companies still lack experience and confidence that their cloud projects will deliver on expectations.

Strong SLAs are needed to overcome concerns and build trust with cloud service providers.

Business concerns:

“Legal and security are our biggest concerns. Do the risks outweigh the benefits?” (Business services manager, international airline carrier)

“The main challenge is to make sure that we do not store any sensitive data in the cloud.” (Senior manager, national utilities company)

IT concerns:

“Bandwidth — from the internal private network to the outside world, despite it being large, it is still the limiting factor. This is very important for user experience and therefore acceptance.” (CIO, multinational FMCG manufacturer)

“More of the technical challenges, like clustering and understanding virtual machines sometimes require experts. The challenge is to get a real understanding of the overall network as a single virtual resource.” (Senior manager, international electronics manufacturer)

The service-level agreement (SLA) between a cloud vendor and user is a key instrument to address and mitigate any concerns and challenges that companies see in their cloud projects. Apparently, SLAs are not necessarily fixed or non-negotiable. Many interviewees highlighted the importance and the effort they put into negotiating SLAs that address their needs — both with virtual private and public cloud providers:

“Another concern was the availability of services and security, which was later made clear in the service-level agreement.” (Customer insight analyst, telecommunications and technology company)

“We do not want to hear about various vendor issues — we want one SLA showing what to expect. No middleman like a services company renting from a vendor. We want to be dealing with the horse, not the wagon.” (CIO, multinational FMCG manufacturer)

“We want a clear service-standard agreement, clear communication and a trust relationship. Safe-harbour agreements really help build this trust.” (Director of information technology, UK higher education institution)

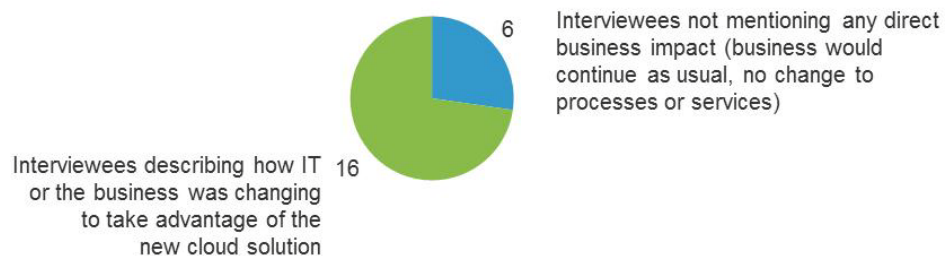
“Is customer support as good as it can be? Because we would be one among many, this may be lost.” (Network manager, international transport and logistics service provider)

Cloud Computing Changes Roles And Processes

Not all cloud projects result in significant changes of roles or processes. Six out of the 22 decision-makers in this study reported little to no change management as a result of their cloud initiatives (see Figure 3). In most cases, those six were IT-driven private cloud projects that the business was not involved in or aware of.

Figure 3

Most Cloud Projects Change Processes In Business As Well As Roles In IT



Base: 22 UK professionals involved in cloud projects

Source: A commissioned study conducted by Forrester Consulting on behalf of Microsoft, October 2012

However, the majority (16 respondents) reported that their cloud initiatives led to small to significant changes. Specifically, cloud projects that accelerate innovation by offering new capabilities to business users obviously require some change management and end user training — but these are not really very different in that regard than traditional in-house implementations of new solutions. The biggest changes come from cloud projects that are initiated by change agents from within the business. These projects that typically result in the use of external (virtual private and/or public) cloud resources have an impact on many roles and processes in a company. But it is not the role of the change agent that is touched and transformed — the real change is happening within the IT departments and the relationship between IT and the business at cloud-using companies:

- **Cloud shifts IT skill requirements from technology to business management.** With fewer in-house IT resources, there is less need for traditional skills to maintain and operate these assets. However, at the same time IT sees an increasing demand to manage the relationship(s) with its cloud providers. And with an increasing number of different cloud providers, IT needs to orchestrate not only the process and data consistency of C2C (cloud-to-cloud) solutions, but also provide business with an easy-to-use single point of access (e.g., via corporate app stores).

“We will have to start having people with different skills. 80% of the department today consists of technical resources, 20% is business. We will shift to more business management skills when managing multiple services.” (Head of IT, UK university)

“We are changing the requirements for internal IT skills toward vendor management. We are changing to business-critical solutions, not just supporting roles.” (Senior manager, multinational construction company)

“Our IT will need more collaboration and management skills.” (Senior enterprise architect, international pharmaceutical company)

- **Cloud can turn IT departments into profit centers.** Pay-by-use cloud subscription models offer companies much more financial scalability and flexibility compared with traditional capital expenditure (capex) investments. However, very few companies have used this flexibility to change the internal funding and charging rules between their IT department and the business. Many of the interviewed decision-makers see the opportunity to establish new models but still follow annual budgeting processes. When IT makes more and more decisions on how to flexibly source business requirements with internal and/or external resources (i.e., acting as the “cloud broker”), it needs to be able to operate as a business within a business, take risks and operate as a profit center.³

“In theory, the business should benefit from the cost flexibility, but this is currently too complex.” (Head of knowledge and information management, European software and services company)

“We should have a more flexible charging model, but we handle everything internally like fixed costs and capex investments.” (Enterprise architect, European airline)

“We still need to build the right business model and align the company on the new model” (Strategic planning manager, national utilities company)

- **Cloud accelerates the transformation from IT to BT.** Cloud computing will continue to grow at high speed driven by business and/or IT; not to use any facet of cloud solutions and ignore its benefits will no longer be an option and will put companies at a severe disadvantage. On the other hand, cloud computing offers a tremendous opportunity for CIOs to increase the value of IT at their company and make IT an integral part of the business — in other words, to accelerate the transformation from IT to business technology (BT).

“Our IT department used to be something of a commodity. With cloud, it is more of a marketplace, both external and internal. As business moves forward with legal, compliance, and processes, this will change the skill and financial sets of the IT department to complement the business.” (Senior enterprise architect, international pharmaceutical company)

KEY RECOMMENDATIONS

Most UK companies seem to understand the concept and importance of cloud computing pretty well and have many different cloud projects underway. Regardless of whether these projects are driven by technical, financial or business goals, cloud initiatives require close alignment between IT and the business and provide a strong tool that can be leveraged for successful business transformation. We recommend that UK enterprises consider the following directives:

- **Everyone can be the cloud change agent in your company.** Cloud projects can be driven from many different perspectives within IT or any line of business. Many ideas for efficiency improvements, innovation or cost reduction can point to cloud solutions. Employees should feel encouraged to move their ideas forward; cloud computing might be today's opportunity to turn those ideas into reality.
- **Base your cloud initiative on a set of IT *and* business goals.** While IT cloud projects are mainly driven to reduce cost and improve IT performance, companies should build their cloud business cases on a balanced set of IT *and* business targets, such as internal and external customer satisfaction, business agility and innovation.
- **Successful cloud projects require close alignment between the business and IT.** Independent of the origin or executive sponsorship of a cloud project, successful initiatives require strong collaboration between business and IT. The vision of 'swiping a credit card' and getting a complete, functional cloud solution is a fairy tale in most cases.
- **Negotiate strong and reliable SLAs to address your company's needs and concerns.** A strong SLA is the cornerstone of a successful, reliable cloud solution. Companies need to negotiate the SLA with their cloud service provider to address their security, availability, performance or other business-critical requirements.
- **Leverage your cloud initiatives for business transformation.** Companies should use the flexibility and scalability of cloud business models to redefine their internal funding and charging models between business and IT. With more and more flexible IT costs, companies should consider implementing similar flexible internal charging models, turning their IT departments over time from cost into profit centers.
- **CIOs should embrace their new *cloud broker* role.** When CIOs start to source business needs flexibly with internal and/or external IT capabilities, they have become the "cloud broker" for their company. In this role, the CIO is a business partner of his C-level peers who manages a business within the business, transforming IT into BT.

Appendix A: Methodology

In this study, Forrester interviewed 22 organizations in the UK to evaluate current and future strategies and tactics for cloud computing. Survey participants included decision-makers in IT and various lines of business. Questions provided to the participants asked “What is the scope of the cloud project that you are (or have been) involved in?”, “What were the main drivers for the decision to use this cloud solution?” and “What role did cost considerations and the financial business model play in the decision process?” The study began in June 2012 and was completed in October 2012.

Appendix B: Supplemental Material

Related Forrester Research

“Business Networks Will Push The Cloud Beyond IT,” Forrester Research, Inc., October 18, 2012

“Write An Effective Cloud Use Policy,” Forrester Research, Inc., August 31, 2012

“Cloud Brokers Become Change Agents,” Forrester Research, Inc., June 14, 2012

“Make The Cloud Enterprise Ready,” Forrester Research, Inc., June 1, 2012

“Assess Your Cloud Maturity,” Forrester Research, Inc., May 29, 2012

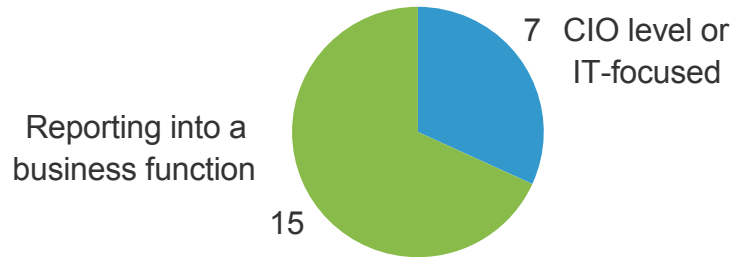
“The Changing Cloud Agenda,” Forrester Research, Inc., April 24, 2012

“Cloud Broker — A New Business Model Paradigm,” Forrester Research, Inc., August 10, 2011

“The Evolution Of Cloud Computing Markets,” Forrester Research, Inc., July 6, 2010

Appendix C: Demographics

Figure 1A
 Context Of Interviews: IT Versus Business



Base: 22 UK professionals involved in cloud projects

Source: A commissioned study conducted by Forrester Consulting on behalf of Microsoft, October 2012

Figure 2A
 Interviewees: 22 Change Agents And CIOs

Industry	Job title
Airline carrier	Business services manager
Airline carrier	Enterprise architect
Airline carrier	Procurement manager
Construction	Senior manager, networks
Cosmetics and beauty products	Senior manager, information technology
Financial services and insurance	Group operations business
Financial services and insurance	Compliance manager
Financial services and insurance	Operations manager
Fast-moving consumer goods	CIO
Higher education	Head of information technology

Figure 2A (Cont.)

Interviewees: 22 Change Agents And CIOs

Industry	Job title
Higher education	Director of information technology
Pharmaceuticals	Senior enterprise architect
Pharmaceuticals	Global category lead
Public sector and healthcare	Business management consultant
Technology (electronics)	Senior manager of information technology
Technology (software)	Head of knowledge and information management
Technology (software)	Head of product development
Technology (telecommunications)	Manager of managed services operations
Telecommunications and technology	Customer insight analyst
Transport and logistics	Network manager
Utilities	Strategic planning manager
Utilities	Manager

Appendix D: Endnotes

¹ An analysis of cloud drivers and how they are changing over time in other markets like North America and Europe can be found in a report. Source: “The Changing Cloud Agenda,” Forrester Research, Inc., April 24, 2012.

² For a full description of Forrester cloud definition and taxonomy of the different cloud markets, read the related report. Source: “The Evolution Of Cloud Computing Markets,” Forrester Research, Inc., July 6, 2010.

³ An explanation and description of the cloud broker model can be found in the related report. Source: “Cloud Broker — A New Business Model Paradigm,” Forrester Research, Inc., August 10, 2011.