

# GOVERNMENT I.T. DISAGGREGATION (AND THE ATOM)



Addressing the public sector challenges of shifting to a multi-sourcing cloud procurement process

What drives physicists to persist in trying to split the atom into infinitely smaller molecules? The answer is the production and release of ever greater amounts of energy, at a comparatively low cost, while having a vastly reduced detrimental impact on the environment, in comparison to fossil fuels.

Breaking apart the current government IT oligopoly, where a small number of firms have dominated – a National Audit Office¹ statistic stated that until recently, 80% of central government IT work was undertaken by just 18 large suppliers – will have the same impact, releasing a number of benefits, provided by the increased use of SMEs. The driving force behind this is clear:

"We have examples of a service costing £50,000 from one supplier on the G-Cloud and one of our traditional suppliers quoting £5 million. That's not a rare occurrence", says UK Government Chief Technology Officer. Liam Maxwell.

Today's annual government IT spend is a whopping £14 billion. The target moving forward is to increase the use of smaller businesses to the point where they are accounting for over 25% of that spend by 2015. It is hoped this could even reach 50% in the future.

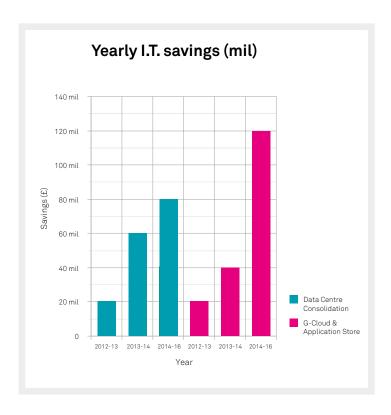
Government departments now have the opportunity to utilise the G-Cloud framework and gain greater control over their own IT to deliver even more effective citizen services.

One of the guiding points of the seven government open standards principles<sup>2</sup> summarises this well: 'place the needs of your users at the heart of your standards choices'. With great power comes greater responsibility; a delightful challenge to some and a burden perhaps to others.

This whitepaper is designed to consider and highlight the most effective routes to follow and which pitfalls to avoid, when going through the process of procuring smaller, modular services from a much deeper pool of providers residing on the G-Cloud.

#### SO WHAT'S NEW?

By adopting cloud computing, government departments are able to exploit and share commodity Information Communication Technology (ICT) products and services.



This enables the move from a solutions-based approach on high-cost customised ICT applications and physical infrastructure, to low-cost, standard, interchangeable services where quality and cost are driven by the market.

To help force this change, central government has put certain constraints in place:

- No IT contract will be allowed over £100 million in value: unless there is an exceptional reason to do so, meaning smaller contracts which enable competition from the widest possible range of suppliers
- Integration and service must be delivered separately: companies with a contract for service provision will not be allowed to provide system integration in the same part of government
- There will be no automatic contract extensions: the government won't automatically extend existing contracts unless there is a compelling case to do so
- Limited hosting lifespan: new hosting contracts will not last for more than two years, under the G-Cloud framework

The objective is clear – to make it easier to transact, reduce the lock-in and get away from legacy supplier behaviour, where long protracted contracts follow a typical profile of: good service at the beginning; a significant tail off in the middle; a scramble to bring things to order during the final months of a contract; before negotiations commence again. Sound familiar?

#### PROCURE IN WEEKS NOT MONTHS

Disaggregation has led to greater emphasis on the Digital Marketplace, which includes the G-Cloud framework – a catalogue of services where the basic terms of use have already been agreed between the government and suppliers, following a formal Official Journal of the European Union (OJEU) procurement process.

This means public sector organisations can buy services quickly because there is no need to run a full OJEU tender process (as an OJEU process has already been conducted in order for suppliers to have gained entry onto the framework in the first place). This reduces six to twelve month procurement cycles to just weeks.

For suppliers who wish to offer their services through the G-Cloud, there is a business imperative to adhere to security classification principles<sup>3</sup> and industry standards, such as ISO27001. Gaining external certification of security services and promoting factors such as UK sovereign delivery capability for the Public Services Network (PSN), will add an extra level of assurance for departments. For the 30,000+ UK public sector organisations out there, this means they will be afforded additional levels of protection and security when engaging with chosen suppliers.

#### FLOATING ON A CLOUD

There are many well-documented advantages to using cloud services. To cite an example in the retail market: on Christmas Day 2014, John Lewis set new sales records during Black Friday, where sales rose by 21.8% compared to the equivalent day last year, while online sales grew by 42.2%.

For public sector organisations, the benefits remain the same, for example: accredited and secure cloud platforms have been used to help Shropshire Council deliver £500,000 worth of savings.

Unless you've invested significantly in data centre infrastructure, numbers of this magnitude are only possible with a scalable 'always on' cloud platform.

#### **CLOUD FIRST**

Cloud services can provide increased data security, improved availability and mobility and, in some cases, significant cost savings.

For good reason, the government's Cloud First policy requires public sector organisations with an ICT requirement, whether for new digital workloads or to replace existing ICT services, to consider and fully evaluate potential cloud solutions first. The G-Cloud enables buyers to easily compare and benchmark the different options available.

The G-Cloud is also enabling public sector organisations to buy cloud services through a framework that is compliant and regularly refreshed, ensuring it catalogues the best solutions the market has to offer.

Removing the OJEU process makes it a fundamentally easier and quicker approach for buying organisations. It enables them to assess a much wider range of services, whilst providing a quick, compliant and transparent means of awarding a contract and placing an order. Customers across public sector have procured cloud services in a matter of weeks when previous OJEU procurements have taken months (even years, in some cases).

Cloud services offer a flexible approach to ICT that can reduce costs for UK taxpayers and enable better value public services. The G-Cloud framework and the Digital Marketplace are providing buying organisations with a very real opportunity to deliver significant value and transformation quickly.

### NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY (NIST)

One of the most widely accepted definitions of cloud computing comes from the US organisation NIST.

It is also the definition most closely aligned to the UK government's own appropriation:

CLOUD COMPUTING IS A MODEL
FOR ENABLING CONVENIENT, ONDEMAND NETWORK ACCESS TO A
SHARED POOL OF CONFIGURABLE
COMPUTING RESOURCES (E.G.
NETWORKS, SERVERS, STORAGE,
APPLICATIONS AND SERVICES) THAT
CAN BE RAPIDLY PROVISIONED
AND RELEASED WITH MINIMAL
MANAGEMENT EFFORT OR CLOUD
PROVIDER INTERACTION.

In this sense, the shared pool of resource comes primarily in the following guises:

#### **SOFTWARE-AS-A-SERVICE (SAAS)**

SaaS is software deployed over the internet and consumed via a personal computer or Local Area Network. One of the major benefits of SaaS is metered billing, on a 'pay-as-you-go' basis. This helps keep costs down outside of peak usage, whilst providing a more predictably budgeted IT solution. As well as removing the need to buy, install and manage software at the user end, it also has the advantage of the software being accessible from anywhere with an internet connection and via the PSN for those workloads requiring additional security levels. As of May 2015, there were 5,136 G-Cloud accredited SaaS providers. 4

#### **INFRASTRUCTURE-AS-A-SERVICE (IAAS)**

laaS is a highly automated offering where compute resources, complemented by storage and networking capabilities, are owned and hosted by a service provider and offered to departments on demand. Each department is able to self-provision this infrastructure, using a web-based graphical user interface. laaS can be provided over the internet and from networks offering higher levels of security, such as the PSN, for more data sensitive workloads. As of May 2015, there were 1,220 G-Cloud accredited laaS providers. 4

#### PLATFORM-AS-A-SERVICE (PAAS)

The PaaS cloud model effectively delivers applications automatically and programmatically. In a PaaS model, cloud providers deliver hardware and software tools – usually those needed for application development – to departmental users as a service. It is important to ensure suppliers are offering true PaaS and not just managed laaS. PaaS should not require human intervention. As of May 2015, there were 802 G-Cloud accredited PaaS providers. 4

#### **SPECIALIST CLOUD SERVICES (SCS)**

For bespoke requirements, Specialist Cloud Services offer a route to providers more apt at moulding the cloud service to those needs. For example, integrating existing on-premises applications with cloud platforms may require a unique approach. And if the support needs are unique, then an SCS provider may be better suited. As of May 2015, there were 12,296 G-Cloud accredited SCS providers. 4

### MEETING THE CULTURAL SHIFT OF DISAGGREGATION

Cloud procurement and supplier disaggregation represents a radical change in the way public sector organisations source providers, use and pay for ICT. In order to adapt to the government's Cloud First reform, there will undoubtedly be some short-term pain, as organisations wind down and move away from large outsourced contracts into multi-sourcing, to achieve a long-term gain.

And the gains are significant, particularly if you consider that on average only 15% of the capability of purchased hardware is utilised. Buying virtually on an as-you-consume (or pay-as-you-go) basis is a far more financially beneficial and a less resource-intensive method.

This doesn't need to lead to job losses, but rather skills can be redeployed to deliver the transformation required for new services and improved service delivery. ICT teams are freed from a keeping the lights on approach and their potential is released: to deliver value-added business services.

#### STEP FORTH AND PROCURE

There are, quite literally, thousands of services available on the G-Cloud framework, so in order to get meaningful results from searches, buyers need to be clear about their requirements and engage with suppliers preprocurement, in order to fully understand and test their capabilities.

A number of suppliers will offer a free trial and/or proof of concept, in order for departments to test capability and firm up requirements before finalising on a supplier.

Short-listing will help reduce a long-list down into a manageable number and buyers can achieve this by assessing each service offering against the original mandatory requirements.

### SERVICE IS IN THE EYE OF THE BEHOLDER

Public sector organisations are being encouraged to develop their approach to service management around user needs and it is hoped a growth in accessible skills and technologies, combined with greater management and control, will enable those organisations to do just that.

However there is one caveat, as the government is encouraging competition and tighter control of performance measurements: if a company has a contract for service provision, it should not also be awarded one for the integration of that service.

There may be occasions when everything can be done in-house. Other times, there may be a need to combine in-house support for end-to-end operations and then buy in specific services where needed. For example, these services could be performance monitoring, service desk monitoring, or service level reporting.

### COMMERCIAL TRAINING FOR CIVIL SERVANTS

Dealing with a range of suppliers and a cacophony of personalities, in often limited timescales, is challenging for even the most experienced of Project Managers. To that end, the government has set aside a range of commercial training support materials, designed to help public sector organisations deal with suppliers confidently and begin to quickly understand the issues that motivate them.

Some of the Civil Service Learning courses and resources<sup>5</sup> for developing skills include:

- Commercial masterclasses
- Effective commercial planning and contracting
- Achieving supplier engagement (for middle managers)
- Developing commercial awareness

### PROCUREMENT IN THE 'NEW WORLD'

The G-Cloud allows all public sector bodies to purchase cloud services from a wide range of SMEs. Compliant with the OJEU, the framework is regularly refreshed to ensure the best the market has to offer is available to government organisations and it offers a vastly more open and competitive environment, based on choice.

Every time the framework is refreshed, suppliers have to re-compete to offer their services and a new iteration is made available, with the latest iteration – G-Cloud 6 – going live in 2015 and G-Cloud 7 coming later in the year.

Therefore, through the framework, buyers have access to the very latest service innovations and suppliers. What's more, all of the information on the G-Cloud is transparent and publicly available. This approach drives competition and value and allows buyers to easily compare and benchmark service characteristics and prices.

Advantages of disaggregation and buying through the G-Cloud include OJEU compliance, rapid engagement, transparency and access to a wide range of innovative services, many of which can be deployed within hours. The G-Cloud's transparent and open approach to pricing also means services can be purchased at considerably less cost than today's traditional large-scale contract awarding.

#### THE RIGHT SKILL SET

The government is effectively turning 180 degrees and placing the onus of IT management squarely on the shoulders of each public sector organisation, which may or may not have experience in procurement and supplier management. Therefore, by arming individuals with some of the following skills, it is hoped the knowledge divide will be quickly bridged.

#### PRE-MARKET:

The process and skills to understand the marketplace in the development and delivery of a commercial strategy.

#### **SOURCING:**

The commercial process, agreements and skills required to acquire works and services that will deliver business outcomes against the original objective, specifically legality and value for money from existing commercial agreements.

## CONTRACT AND SUPPLIER MANAGEMENT (POST-CONTRACT AWARD):

The process and skills used to manage the successful delivery of business outcomes and maximise value through the duration of the contract.

#### STEPS TO PROCUREMENT

YOUR NEEDS 1

#### PREPARE YOUR REQUIREMENTS

Define a list of 'must-haves' and 'wants'.
Understand the technology: do you wish to procure
SaaS, IaaS, PaaS or Specialist Cloud Services?
Decide on the network – internet or the PSN?

#### **REVIEW SECURITY PRINCIPLES**

What security features do you require?
For example, do you require your
data to be hosted in the UK?
Do you require a supplier with Pan Government
Accreditation (PGA), ISO standards, or other
external certification?

#### **ENGAGE WITH SUPPLIERS**

If required, pre-engage to discuss requirements and gain further insight into supplier capabilities. A number of suppliers will offer a free trial and/or proof of concept to test capabilities and support the business case.



### CREATE A LIST OF POTENTIAL SUPPLIERS

Be aware of some suppliers appearing multiple times under other organisations when preparing your list.

> Send your RfP to all the suppliers on your list – make this concise (between one and five pages).

**AWARD CONTRACT** 



AWARD CALL-OFF CONTRACTS WITH STATEMENTS OF WORK (SoW).



### OBTAIN APPROVAL TO BUY WHAT YOU NEED

Your list will form the basis of your request for proposal (RfP) document.



## VISIT: DIGITAL MARKETPLACE<sup>4</sup> AND SELECT 'FIND CLOUD TECHNOLOGY AND SUPPORT'

Search for the services you need so you can create a list of appropriate suppliers and prices. Whilst the Digital Marketplace continues to enhance the search facility, you may need to scroll down several pages to ensure you have captured all suppliers.



### EVALUATE SUPPLIERS' RESPONSES

Find the one that best meets your needs and offers best value for money.



#### WHEN TO USE THE G-CLOUD

Think of the G-Cloud as your first port of call for procurement of replacement legacy IT systems, or new digital workloads, whether it is to replace hardware, software, services or a combination of these. Some example case needs around which to consider cloud services are:

- Testing and development (laaS):
   Virtual Machines (VMs) can be switched off out of hours when not required, thereby saving you money
- Enhancing Unified Communications (SaaS):
  You can combine instant messaging and presence with telephony (e.g. Skype for Business with Enterprise Voice) drastically reducing costs, increasing collaboration, all delivered through 'pay-as- you-go' billing
- Delivering production environments (laaS):
   If you're utilising services from a particular set of suppliers, you may benefit from commercial discount offerings for steady usage
- Moving to a SaaS model:
   Everything up to and including the application is managed for you, increasing predictability, usability, and consistency
- Operating with unpredictable workloads (laaS):
   With additional compute resources being available
   when required during peak times of year (e.g. tax
   returns), performance remains consistent without
   requiring additional infrastructure investments

Next time someone in your organisation asks you to procure ICT services, think Cloud First and check out the G-Cloud.

### SOME THINGS TO REMEMBER:



- Have clear, concise requirements and understand the type of service you require e.g. laaS or SaaS
- Compare specific capabilities against suppliers (i.e. compare apples with apples) and costs
- You are not locked into a G-Cloud contract – if you decide to stop using services during the two year contract term, then there is no need to pay – simply stop using services when they are no longer required (always check suppliers' terms and conditions to ensure this is the case every time)
- Pay only for what you use, when you use it
- Not sure a two year contract is long enough? Technology is changing rapidly and organisations should be constantly checking the market for better services at lower cost – shorter contracts drive departments to re-evaluate the market, ensuring better value for the taxpayer



#### **MYTHBUSTERS**

Make no bones about it, disaggregation is a step change from the previous expensive IT provisioning environment. Embracing it will lead to a stronger and more competitive marketplace, greater control of public sector IT, more effective budgetary spend and, most importantly, better citizen services. At this point it's worth quelling some of the myths preventing the uptake of this new model:



#### SECURITY

**MYTH:** Data is more secure as it's based within in-house data centres.

**FACT:** Leading cloud providers will be externally vetted and able to produce Risk Management Documentation to outline levels of compliance and security. Some providers such as Outsourcery will also be in a position to ensure all public sector services are delivered from UK sovereign data centres by one of the last few suppliers who still have PGA.



#### **BUSINESS**

**MYTH:** Services are too big, too small and/or too important to be in the cloud.

**FACT:** The beauty of this model is that the majority of virtualised services are suitable for the cloud, which enables delivery of a more flexible, agile and predictable service whilst increasing productivity. Suppliers like Outsourcery work with public sector organisations to determine what workloads can or can't move to the cloud, the reasons for this and a roadmap for the future.



#### **DEPARTMENTAL**

**MYTH:** Unbundling contracts for smaller scale engagements could prove difficult to manage because of the larger and wider community of suppliers.

**FACT:** This is an opportunity to swap out underperforming suppliers for quicker, leaner, hungrier organisations who are ultimately driven to support you however they can.

With the procurement tools and support provided centrally, the goal is to actually make management easier and the fruits of labour more bountiful.



**MYTH:** Internal technical positions and roles will be made redundant, with diminished control.

FACT: Internal technical skills are needed now more than ever; consider this as a drive to increase control and deliver even greater value to the business. The need to deliver in-house capability via agile development, bringing value quicker and in a more flexible manner, is not going away.



#### **STANDARDS**

**MYTH:** Public sector organisations should be concerned about the quality of service and the workmanship they can expect.

FACT: Even though the G-Cloud has a maximum two year contract period, organisations are not subject to lock-in or forced to continue with a service should they decide it is not suitable.

Outsourcery does not penalise organisations who wish to stop using its services, as they simply stop paying for them. A two year life cycle encourages departments to re-evaluate the market, through the contract lifespan. The control is in the hands of the procurer, so if a supplier is not performing they can easily be replaced. For too long, the UK public sector has been locked in to long-term contracts with under-performing suppliers.



**MYTH:** The G-Cloud isn't a compliant framework and local procurement rules are restrictive.

**FACT:** All – and we mean all – public sector bodies can procure via the G-Cloud framework, as it is a pre-tendered OJUE framework. The G-Cloud issues a list of all public sector buyers via the Digital Marketplace<sup>4</sup>.

#### SUMMARY

Clearly identified as an area where significant savings can be made, disaggregation may look simply like a cost-cutting exercise, rather than a drive to ensure maximum value for the taxpayer. Partly it is, with a mooted 50% saving on average per transaction on what would have been spent previously<sup>6</sup>. But is all that glitters gold when it comes to saddling public sector departments with the burden of managing their own IT requirements?

Ultimately, it's for those organisations to make their own case for or against. What we can say for certain is that what will be lost in the relative comfort of familiar processes, familiar standards and familiar stakeholders, will be gained in choice, control and a predictable route to the market's most competitive cloud services, without hindering service delivery.

It's really the latter of these that sits most comfortably with all stakeholders concerned in the government's cloud-enabled world; from the taxpayers whose hard-earned money will receive the proper investment treatment demanded, the citizens who feel the benefits of better services enabled through improved distribution of budgets, the SMEs who become part of the fabric of public sector society and those within the hallowed halls of Westminster who will begin to feel more connected to the people they serve.

It's time to saddle up the cloud pony because it is here to stay. Disaggregation means a new direction and, yes, it will need more than a small degree of adjustment, but ultimately the power has been put back into the hands of each public sector organisation – cherish it, nurture it, and learn to become more than you could have possibly been within the constraints and confines of long-term and expensive lock-ins.

**Break open the atom** and get ready for the challenges and opportunities of IT flexibility and control, through disaggregated IT.

### OUTSOURCERY AND THE PUBLIC SECTOR

The greatest single advantage public sector organisations can take from the G-Cloud is the control of: provider, budget and service.

This way of working is new to many public sector organisations, therefore government departments must arm themselves with the right tools, in order to maximise on the benefits of hybrid cloud environments. As with any technological transition, there will be challenges along the way, as departments learn to manage multiple providers whilst maintaining a consistent level of service. So, whilst changing from such an ingrained set-up may not be completely seamless, with the right partners, suppliers and platforms in place, it needn't be approached with too much trepidation either.

Working alongside Microsoft, UK-based Cloud Services Provider Outsourcery realised the opportunity for cloud computing in the public sector and together invested heavily into both the accreditation of Outsourcery's existing platform, to meet OFFICIAL internet (formerly IL2) standards, whilst also developing a new cloud platform to meet OFFICIAL PSN (formerly IL3) standards, enabling a full-scale accredited cloud offering for UK government.

Both of these platforms are built using best-of-breed Microsoft technology, with the primary focus being to help government to embrace the opportunity for cloud services and deliver greater cost efficiencies than ever before, through metered 'pay-as-you-go' style billing. This enables government and public sector bodies to pay only for services they need, when they need them.

Outsourcery holds all the accreditations you would expect from a market-leading CSP, including ISO9001, ISO14001 and ISO27001 and was the UK's first certified carbon neutral cloud provider - a status we are proud to maintain today. We were also named as a finalist for the 2015 Microsoft Public Sector: Government Partner of the Year Award – one of just three organisations, and the only UK business, honoured among a global field of top Microsoft partners for demonstrating excellence in innovation and implementation of customer solutions, based on Microsoft technology.

#### **NEXT STEPS**

Outsourcery is able to provide a proof of concept to support your business case, identify any constraints and demonstrate the benefits of cloud. For more information please contact:

Simone Hume Head of Public Sector, Outsourcery publicsector@outsourcery.co.uk

www.outsourcery.co.uk 0843 366 6060

#### **DIGITAL MARKETPLACE**

Find out more about Outsourcery's cloud services for public sector:

IaaS OFFICIAL Internet
IaaS OFFICIAL PSN
SaaS Microsoft Unified Communications
SaaS Microsoft Exchange 2013 Email
SaaS Microsoft Dynamics CRM



#### **Microsoft Partner**

Gold Communications

Gold Hosting

Gold Customer Relationship Management

Silver Datacenter

Silver Cloud Productivity









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