



# Are you paying too much for cloud?



## Disciplined cloud cost management helps enterprises unlock the benefits of cloud – and get greater value from cloud commercial models

Cloud has come of age. Eleven years after Amazon first introduced its EC2 platform, more than a third of IT budgets are now expected to be spent on hosting and cloud services – and this is rising rapidly.<sup>1</sup>

But as public and private cloud usage continues to rise, are enterprises staying on top of their expenditure? A recent report by Gartner suggests not, commenting that many organisations are “ill-prepared for managing costs”<sup>2</sup> In a separate survey of 1000 technical professionals, “wasted” cloud spend is estimated to be as much as 45 percent.<sup>3</sup>

There are several reasons why cloud spending is not fully under control. Firstly, getting workloads onto the cloud is highly complex, costly and time-consuming; once this transformation has been achieved, many enterprises place less organisational focus on the ongoing management of cloud, which can lead to cost inefficiencies.

Then there’s the fact that cloud opens up thousands of options, which are harder to keep under control, as they require new techniques for cost optimisation.

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Non-cloud IT infrastructure procurement typically involves a big negotiation upfront for physical assets and management contracts, resulting in a structured deal with agreed prices: there is less opportunity for value erosion from this baseline. Today, both prices and services can change constantly in a dynamic

marketplace, with instant provisioning for users driving greater changes in consumption and value. In short, there are a large number of smaller technology decisions driving cost, made at more junior levels (as opposed to fewer major choices).

DevOps is a similar example of this trend. Enterprises increasingly relying on cloud tools to automate, consolidate and speed up software development across an organisation. There’s a wealth of tools for developers to choose from. But many businesses are spending a lot on DevOps cloud tools, when it’s possible to gain the same benefits for far less.

Put simply: technical people make far more cost-sensitive decisions in cloud – but they may not fully understand how these decisions are driving cost. It’s hard to put in controls at an enterprise level without compromising the benefits of speed and agility which cloud is supposed to bring.

Moving to cloud requires a permanent team of specialised IT professionals to oversee all this complex activity, stay on top of ever-changing prices and a constant array of new services, and actively manage the many ‘levers’ that drive cost. Few organisations currently have this capability; mainly because the old way of purchasing infrastructure centred on fixed, multi-year contracts with relatively less need for ongoing management.

With cloud, on the other hand, virtual servers may be charging by the month, hour or second, and new services may be bought at any time by any part of the organisation. In this dynamic climate it’s quite possible to pay for things that you may not need – especially as the organisation may be using thousands of different cloud services.

## Coping with the demands of the digital era

The shift to cloud reflects a changing strategic purpose for data centres. For 20 years, most businesses chose IT infrastructure to reduce costs (with notable exceptions for capabilities like high-performance computing). But, as the 2017 global Harvey Nash/KPMG survey of 4500 CIOs reveals, the number one reason for moving to the cloud is agility, with cost ranked only fifth.<sup>4</sup>

In the digital era, it seems that enterprises are prepared to pay a premium for agility. But can this premium be curbed? We believe it can. Indeed, several cloud spend analysis tools are already out there in the market, with more emerging, but these are often good point tools which only address one dimension of cost saving – a holistic view looks at many more cost levers.

Many enterprises may gain visibility over cloud spend, but lack the insight and capabilities to identify and execute wide scale cloud savings.

Real value lies in tackling this problem end-to-end, to get all the desired benefits of cloud at the optimum price, by selecting the right configurations of the various services available. This can be done in-house – if the expertise is available – and involves a detailed audit of everything an organisation buys on cloud.

The alternative is to use the kind of managed service or deep-dive assessment for cloud cost management that KPMG has pioneered. A managed service can combine transparency with dedicated analytical resources, to pinpoint where costs can be reduced.

One of the critical levers is forecasting demand for cloud. Armed with a more accurate view of its future needs, an organisation can access a range of cost-saving measures, namely:

- Volume discounts
- ‘Reserved instances’, to gain an additional discount based on committed consumption levels for 1-3 years
- Increasingly common granular models including spot-pricing, where services are bought at cheaper rates during windows of lower demand

Compared to costly, on-demand purchases, such savings may be considerable.

Another critical lever is data storage, which again pushes up costs. By applying the right archiving policies – including storage levels – to the data needs of the applications, organisations can reduce their outgoings.

DevOps is a further potential area for improvement. If developers only acquire (costly) licenses for tools they are actively using, and which can drive a specific business outcome, there is a better chance of gaining the optimum DevOps outcome at the optimum price.

Finally, closer monitoring of the software development cycle can help ensure that cloud services are not being accessed 24/7 and are only utilised when needed (with downgraded support), scaling up and down according to demand. All of which can bring further savings.

Cloud is bringing a step change in capability and underpins the most exciting technological developments of our era. But its model of consumption pricing, if not carefully managed, can push up costs. By gaining a holistic view of cloud usage, it should be possible to take control over this vital innovation, to deliver technical value and cut costs.

#### Sources:

- (1) *The Voice of the Enterprise: Hosting and Cloud Managed Services – Organisational Dynamics Study*, 451 Research, November 2016
- (2) *Comparing Tools to Track Spend and Control Costs in the Public Cloud*, Gartner, July 2017
- (3) *2017 State of the Cloud Report*, Rightscale, 2017
- (4) *Navigating Uncertainty*, Harvey Nash/KPMG CIO Survey 2017

### KPMG's 5 cloud cost management levers



#### Right-sizing instances for lower cost

Up to 15% cost reduction on total cost of ownership\*



#### Reducing environments and use auto scaling

Up to 10% cost reduction on total cost of ownership\*



#### Match usage to storage class

Up to 10% cost reduction on total cost of ownership\*



#### Picking the right pricing model

Up to 15% cost reduction on total cost of ownership\*



#### Continuous measuring and monitoring

Keeps total cost of ownership in line

\* KPMG modelling based on representative enterprise cloud scenario

## Cutting cloud costs

26%

A major energy client saved 26% of its annual cloud expenditure by optimising its IaaS license purchases

40%

A financial services company reduced cloud costs by more than 40% through auto-scaling, utilisation and periodicity usage tuning

Some clients have started to create the role of 'cloud economist' to lead teams to drive savings in cloud – with one media company reporting seven-figure savings.

£Xm

## 3 questions for CIOs

1

Do you have a dedicated cloud cost management capability with appropriately skilled resources?

2

Do you execute initiatives across a wide range of areas to reduce cost?

3

Are you increasing the efficiency of your cloud usage over time i.e. lower cost per unit consumed?

## KPMG's Cloud Cost Management team

KPMG maintains a proprietary database of over 150, high-value, cloud spend levers and has a specialist team that executes cloud cost optimisation exercises to help reduce the cost of cloud for clients.

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