

CLOUD: IT'S ABOUT ECONOMY, STUPID

What is 'cloud' when it comes to software and services management? Graham Oakes gets to the point.



Graham Oakes: need to focus on managing abundance

Clouds are grey fuzzy things that rain on you. So who decided on 'cloud' as a metaphor for delivering services?

Even worse, the more we talk about 'the cloud', the fuzzier it gets. Vendors have stretched the definition in so many directions that it's becoming increasingly difficult to work out what this cloud is. Nonetheless, it is an important mechanism for delivering services, so let's get a few things clear:

1. Cloud is about economics, not technology. The technologies underpinning the cloud have been around for years. Virtualisation goes back to mainframes. The internet isn't new. Cloud simply configures these technologies to let people rent capacity rather than buy it.

2. It's not a new economic model. Renting isn't new. It's how most organisations bought access to mainframes four decades ago. Cloud just changes some of the parameters. Mainframe capacity was specialised, expensive and tightly rationed. Cloud capacity is commoditised, cheap and abundant.

3. Changed parameters require changed management. Managing abundance is different to managing scarcity. When resources are scarce, you grab them and hold onto them. That's expensive, so you focus on using them efficiently. You optimise. You analyse carefully.

When resources are abundant, on the other hand, you take what you need when you need it. You spend resources in one area to buy value (eg, flexibility or resilience) elsewhere. This increases the number of variables, so analysis is no longer tractable. Instead, you focus on experimentation and learning. This is a very different management style.

4. Managing abundance is hard. People think that it's easier to manage abundance than scarcity. There are fewer constraints, so things should be easier, shouldn't they? Not necessarily: abundance gives you more variables to trade off.

You need to balance the cost of capacity against the value of flexibility. You need to map different types of capacity against changing demand patterns. None of this is possible when resources are scarce – you just make do with whatever you can get.

5. Competing under abundance is hard. Your competitors also have abundant resources. So competition is no longer about marshalling scarce resources. You compete by being smarter, faster and more flexible. You have to work your resources intelligently.

6. We need tools for managing abundance. Vendors who 'get' the cloud are focusing on managing abundance: modelling the economics of different demand scenarios, building capacity management into the stack, etc. This is where the technology is still immature.

So cloud is about management. If you use it to improve the way you allocate, account for and flex resources, then you'll add value. Otherwise, you'll get stuck in the grey fuzz.

● SOA, Web Services & Enterprise Integration Evaluation Centre Expert Dr Graham Oakes is the principal of content management, product development and customer service strategies consultancy Graham Oakes Ltd. Email: graham@grahamoakes.co.uk. Website: www.grahamoakes.co.uk.