



SCALING ON DEMAND: HOW THE CLOUD MAKES BUSINESSES MORE AGILE?

Introduction

Cloud computing is incredibly powerful - that much should be clear to anyone by now. If you're paying even a little attention to the media, you've probably heard all about how cloud computing can make your organization smarter, faster, and better. We're going to start things off by saying that everything you've heard is true - to an extent.

Used right, the cloud can indeed make your business more agile and flexible than ever before. Here's the kicker, though - you need to have some understanding of how it works, first. That's where we come in.

In today's piece, we're going to explain a bit about cloud scaling, and how it can help your business. Let's start by talking about cloud bursting.

An Explanation Of Cloud Bursting

Although the cloud offers unprecedented scalability, many businesses still prefer to keep their core infrastructure in-house. That's fine - cloud infrastructure isn't for everyone, after all. The mistake a lot of these organizations make is that they assume this means the cloud holds no advantages for them.

Those with an understanding of cloud bursting know otherwise.

A term used to refer to the augmentation of physical hardware with cloud hardware to respond to increased demand, cloud bursting allows even businesses whose infrastructure is primarily in-house to adapt with the agility of the cloud. Perhaps it'd be easier to explain this with a simple example. Let's say you run a relatively popular ecommerce site, hosted on your own servers.

With the holiday season fast approaching, you're scrambling to find a way to prepare. You know very well that with the increased traffic your site receives, you might exceed your server capacity - resulting in a poor experience for customers, and more business for competitors. You might consider buying extra servers, but this is hardly economical; for most of the year, this additional hardware will simply sit idle.

Here's where the cloud comes in. In order to accommodate resource demands generated by the additional traffic, your servers can 'burst' into the cloud. Whenever traffic exceeds the resources of your inhouse infrastructure, new resources requests are instead routed to a synced copy of the site on a cloud server. This server can be scaled according to demand, and shut down when the demand no longer exists - and you'll only pay for what you use.

Now, do note that this is something of a simplified example. In reality, cloud bursting is actually quite complex, and keeping inhouse data synced with the cloud isn't exactly easy. This is particularly true if you're running a database both inhouse and on the cloud.

That said, this is hardly an insurmountable challenge. So long as you account for the additional latency introduced by the cloud, you'll be fine. You can focus on using the cloud to augment your business operations.



See, web hosting's hardly the only scenario in which cloud bursting is useful. Whenever you need to process workloads that exceed your usual capacity, there's a case for moving a portion of your workload into the cloud. This is true regardless of industry - with cloud bursting, you can leverage existing infrastructure without losing out on the cloud's unique abilities.

Of course, scalability is just one of the reasons businesses now deploy their applications in the cloud.

Why Deploy Applications In The Cloud?

If you've been around corporate IT for a while, you no doubt have less-than-fond memories of software rollouts and updates; the tedious process involved in managing the installation and patching of software across hundreds (or maybe even thousands) of desktop machines. It was an expensive, difficult, and time-consuming affair, even with proper automation. Thankfully, it's also a thing of the past.

By deploying applications in the cloud, businesses ensure that they're updated once and available for every user. That may be something of an oversimplification, certainly - but things are definitely more streamlined than they once were. Easy rollouts and upgrades aren't the only benefit of SaaS applications, either - they're really just the tip of the iceberg.

Portability And Mobility

It's hard not to see the enterprise desktop as a relic of the past; a cumbersome dinosaur that'll soon be replaced by laptops, smartphones, and tablets. Thanks to the mobile revolution, companies have been forced to rethink their development and deployment strategy. Unfortunately, it's been anything but an easy road.

If you thought rollouts across a dozen or so PCs difficult, then the idea of managing software deployments across dozens of mobile device variations will give you nightmares.

Thankfully, this is where the cloud comes in. SaaS and mobile devices are practically made for one another; applications deployed on a cloud platform become device-agnostic. In essence, it marks a return to the old days of thin clients and centralized servers, albeit with vastly more power and flexibility.

Modern employees value the productivity and freedom offered by mobile devices - and the cloud allows businesses to equip them with that freedom.

Security

The idea that deployment of an application on a third-party platform is more secure may at first seem counterintuitive. After all, businesses control the devices that they own, right? Third-party deployment represents a loss of control, doesn't it?

Not really.

Hand a mobile device or a laptop to an employee, and you're bound to see sensitive data leaked out at some point. By moving the data and applications into the cloud, companies are able to exert direct control over both access and security. There's little chance of an employee leaving sensitive data on the train or in a cafe, as it's held in a secure repository, accessible only at your discretion.



Interoperability

Because cloud applications “live” on the same platform, it’s much easier to create integrations between them. This can lead to great gains in both productivity and efficiency on the part of your business. Let’s offer up some examples:

A software PBX system integrates with a CRM system to allow for better communication with clients.

Calendars sync between email applications and CRM to make for easier scheduling.

Sales floor software connected to database software to allow salespeople better, more complete information.

The potential integrations are limitless, and far easier to implement through the cloud than with installed applications.

Conclusion

SaaS is here to stay - no one wants to go back to the old way of doing things, with redundant hardware and cumbersome rollouts. Thanks to the cloud, businesses are able to develop, test, and deploy applications more quickly. They’re able to enjoy lower expenses, greater mobility, interoperability, security, and scalability.

It isn’t just development that stands to benefit, of course. It’s just one of the more obvious examples. In actuality, the prospective gains offered by cloud scaling are hardly limited to one department or industry.

