Talking society and COVID-19 impact with Amazon Web Services

Maddyness speaks to David Roldan, Head of Startup Business Development (UK and Ireland) at AWS – Amazon's cloud computing business.

To conclude our Q&A series with Roldan, we hear about how AWS facilitates startup-government collaboration, and how it enabled organisations like Zoom and Morrisons to meet increased and changing demand during the pandemic.

How have you worked with the government (for example through G-Cloud)?

Through the government's G-Cloud framework, more than 150 companies have already used AWS to help them provide more than £1.3B of their own services to government. More than half of these companies are categorised as small and medium enterprises (SMEs).

Thanks to the framework, these businesses can now compete effectively for larger public sector contracts that they would not have been considered for in the past. It has also enabled public sector customers to reinvent themselves and use the cloud to more rapidly experiment at a lower cost and lower risk than ever before.

Take Kainos, which provides digital services and platforms to public and private

organisations, as an example. Working with the DVSA, Kainos developed an ambitious online service that has reduced the operational costs of the MOT service and improved standards.

Another example is Swansea-based company Mobilise. Mobilise built an automated voice service on AWS to arrange medical sharps collection for the public via phone for Adur and Worthing Councils, reducing individual call times from 10 minutes to a few seconds and cost per call from £15 to £0.03.

In November 2020, we announced a _new agreement between AWS and the UK government_ – the One Government Value Agreement (OGVA) – to accelerate adoption of cloud computing in the public sector while saving taxpayer money, boosting digital skills across the civil service, and increasing the diversity of suppliers to the government by helping more SMEs to take part in public sector contracts.

By treating participating UK government and public sector organisations as a single client, it offers greater cost savings for cloud deployments, similar to those available to large commercial customers.

Why do you think there is such a regional difference in AWS uptake?

The UK has one of the most _unequal distributions of economic growth_ of any advanced economy. On average, workers in the most productive region – Camden and the City of London – generate _thirty times as much growth_ as those in the least productive areas.

This disparity also translates into cloud uptake across regions. According to research _conducted by Public First_, while 52% of companies in Greater London reported using cloud platforms, only 25% of companies in the East Midlands have adopted cloud.

The most significant barrier was a lack of knowledge of what the cloud could offer and how to adopt it.

We believe that increasing cloud prevalence has significant potential for helping local economies. For example, if we could increase the cloud adoption

of the North East to match London, for example, it would _boost local productivity and wages by 2.6%_, or around £1.4B a year in total. Based upon recent trends in real wages, that would be the equivalent of three years' worth of pay rises in one go.

You say boosting uptake of cloud is one way to help level up the growth of left behind companies and regions in the UK. What other initiatives would you like to see?

Cloud computing has become increasingly important to the UK's fastest-growing companies, and boosting cloud adoption is one way to level up growth across the UK. _Public First's research_ found that more than half (58%) of cloud-using companies say that their business or operating model would not be possible without it, and that those running on the cloud are nearly three times more likely to be growing at over 5% a year than those that are not.

However, if the country is to realise the true potential of cloud computing, we need to invest in people so they can develop the skills needed to make the most of the cloud opportunity. According to _LinkedIn_, cloud computing was the most in demand hard skill for employers last year.

With COVID-19 pivoting businesses and consumers online, the demand for cloud skills has soared. Finding and employing people with the right skill set is often a problem for businesses. Nearly _80% of IT decision makers see hiring as a challenge_.

This is where programmes like AWS re/Start come in. AWS re/Start is a skills development and job training programme, which prepares learners from unemployed and underemployed populations – such as young people, veterans, or people made redundant from non-tech careers – for entry-level careers in the cloud, and at no cost to the learner.

The 12-week programme covers fundamental AWS Cloud skills, alongside practical career skills such as communication, time management, collaboration, interviewing, and CV writing.

AWS re/Start also covers the cost and prepares participants for the AWS Certified Cloud Practitioner exam, validating their cloud skills with an industry-recognised qualification. The programme builds a diverse pipeline of new talent

and is designed to accommodate differing levels of experience; even those with no previous technical knowledge can apply.

On completion of the programme, graduates are connected with potential employers. The programme is part of our commitment _to help 29 million people_ around the world grow their tech skills with free cloud computing skills training by 2025. In addition to AWS re/Start, we also offer a number of programmes such as _AWS Academy_, _AWS Educate_ and _AWS Returners._

The UK's digital skills gap could pose a risk to the country's economic recovery after COVID-19.

The industry demand for cloud is outpacing the number of cloud-savvy workers entering the workforce. To overcome this challenge, talent must be cultivated from non-traditional sources. Now more than ever it is important that regional businesses have access to an inclusive, diverse and steady supply of local cloud talent.

How did cloud allow for flexibility and pivoting at the start of the COVID-19 pandemic?

When the COVID-19 pandemic began, organisations quickly realised that they had to become more flexible and streamline the way they work in order to get through this crisis. As a result, we saw businesses turn to the cloud to pivot, innovate, adapt, and scale services up and down to meet their customers' changing needs.

The hospitality industry was hit especially hard by the pandemic, as social distancing, travel restrictions, and economic hardships forced the cancellation or alteration of millions of travel plans around the world.

Meliá Hotels International (Meliá), the third-largest hotel chain in Europe and the largest leisure hotel company in the world, used AWS to respond and adapt to those challenges. Thanks to its cloud-based IT architecture, Meliá was more prepared than most when the pandemic caused a 95% decrease in reservations virtually overnight. They were able to scale down quickly, saving

58% in cost.

If Meliá had retained its on-premises architecture, it would have had to pay for servers regardless of the drop in reservations. Meliá tested the elasticity of the cloud again when the company offered 20,000 free room nights to medical professionals as thanks for their service during the pandemic.

The company released 2,000 rooms every day over a 10-day period, and the rooms sold out in minutes.

After weeks of relatively low activity, Meliá was able to efficiently scale its infrastructure up again to accommodate these spikes. The company has also been able to use AWS to quickly modify its traditional call centre model to a work-at-home model with Amazon WorkSpaces and to experiment with an expedited, contact-free check-in process for its hotels.

The healthcare sector was also significantly impacted by the pandemic. We saw healthcare organisations lean on technology and the cloud to get accurate, trusted information to patients and either reassure them, or quickly direct them to the appropriate level of care during the pandemic.

Technology also helped direct patients to educational information related to COVID-19, guidance on when to be tested for the virus, and instructions on what to do if they have a confirmed positive result. Furthermore, it helped streamline research efforts, increased global collaboration, and facilitated vaccine development – all while organisations supported their employees working from home.

Take Nye Health, who built a scalable desktop and mobile-based NHS-compliant platform that allows all NHS staff in the UK to offer consultations to patients via video or phone call from any device, anywhere. Using AWS, Nye Health had the flexibility to scale its business quickly and easily and in a secure way to meet the increased demand from clinicians and patients during the pandemic.

Why has COVID increased the

importance of cloud for the UK economy?

The COVID-19 pandemic changed the way that we live and work, and as a result, all organisations have had to adapt to the challenges – and opportunities – it has raised.

For many, businesses had to change almost overnight, and it simply would not have been possible for them to adapt if it wasn't for the flexibility, scalability and cost effectiveness of the cloud.

Zoom – which became an integral part of most people's lives during the pandemic – had to move at lightning speed to meet rising demand during the pandemic for everything from online education to business meetings, social gatherings and exercise classes. Using AWS, Zoom scaled to accommodate an increase from 10 million daily meeting participants in December 2019 to 300 million in only a matter of weeks.

UK retailer, Morrisons, also used the cloud to respond quickly to the challenges of the pandemic. They built a self-serve contact centre in just eight weeks on Amazon Connect, and within a day they got every person in their contact centre working from home.

The flexibility of remote working and the fast onboarding process also meant Morrisons could quickly hire a broad range of people across the nation—such as travel-industry employees who had lost jobs—to respond to the increased call volume, which had swelled to as much as six times the weekly average.

Morrisons were also able to quickly deploy a new service providing doorstep deliveries for people more vulnerable to COVID-19, and the new solution meant they could update their automated messages for customers in a matter of minutes—a process that previously took 5–10 business days and required third-party involvement.

Teachers, students and parents were able to maintain educational continuity by adopting cloud-based online tools like Firefly, through which teachers can set homework, students can share and access resources, and parents can track their children's progress.

Hundreds of schools around the world already use Firefly, and the company made the platform available for free to any school that was forced to close because of COVID-19. Delivering its software as a service via the AWS Cloud gives Firefly the ability to onboard schools in one day rather than weeks, and using AWS, Firefly was able to quickly and easily scale to handle an increase in ten-fold of peak daily usage during the pandemic.

In all of these sectors, cloud technology not only became a necessity, it also proved real utility and value.

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