The way cloud is moving …

When meeting with contacts, I always give my opinion that cloud is a journey and that most people are in different stages of this journey. However, as you start to mature in this journey, the destination often becomes a bit blurry. Questions arise like...

What exactly does the destination look like and how will I know when my journey is over?

The more I think about this the more I come to the realization that cloud is not a place – it is an operating model. Never has this been truer than today with the emergence of so many innovative business models and technological advances; such as digital music service Spotify or ride hailing service Uber.

The agility of cloud computing is great – but it simply isn't enough for everyone. Massive centralization, economies of scale, self-service and full automation get us most of the way there – but it doesn't over-come physics – the weight of data, the speed of light. Everyone has a different problem to solve and a different way to solve it, which is what makes this IT industry such a great place to work.

Imagine a world where 20.4 billion 'things' are connected to the internet.

According to Gartner's recent 'Forecast into the Internet of Things' report, this is right around the corner. The analyst firm predicts that by 2020 this proliferation of 'things' will put a growing pressure on analyz-ing data at source; be it via devices, sensors or gateways.

This accelerated adoption of IoT, AI, machine learning and big data is fast pushing enterprises into an intelligent age of computing; which demands that cloud use cases become more agile and mobile in order to move closer to the source to deal with the demands of connected 'things' and their applications.

But let us be clear, edge computing is there to compliment the power of cloud, not to try and replace it. Public and private clouds will still have an important role to play — work-horses where large data sets come into play for example.

Emerging technologies are bridging the gap for consistent hybrid cloud strategies.

The emergence of technologies, like Microsoft Azure Stack in conjunction with applications such as Azure IoT edge, attempt to address these issues and bridge the gap creating a consistent hybrid cloud strategy.

Enterprises can process data locally in Azure Stack, then assemble it in Azure for further analytics – addressing both latency and connectivity requirements. This way, enterprises can get the very best of both edge and cloud computing for their business needs.

At the Microsoft Build annual developer's conference this year, Microsoft's CEO Satya Nadella said, "we are moving from a mobile-first, cloud-first world to a new world that is made up of an intelligent cloud and an intelligent edge" – and he isn't wrong.

The benefits of edge computing.

Edge computing offers benefits in a host of industries especially to those in remote locations; such as oil, gas and mining, where transmitting data to the cloud can be an obstacle due to lack of reliable connectivity. Or in retail, manufacturing, IoT and mobile where near-instant edge analytics can provide unprecedented insight into customer behavior.

Let's not forget that this problem has existed for many years and has seen many attempts at plugging the gap by very clever people.

Look at Formula 1 and teams like Mclaren F1 for example.

They have been pushing edge data and doing analytics in some form or another for decades. The difference is that now the same problems exist for the masses and technology companies like Microsoft have made it their goal to fix them.

Edge computing can solve latency challenges and will undoubtedly enable enterprises to take advantage of new opportunities using a cloud computing architecture.

What we can expect to see.

We will see reduced network traffic bottlenecks as less data is transmitted from local devices via the network to the cloud. Without having to send unnecessary data across to a central data center, data analysis at the edge will be faster and less expensive.

It is therefore little surprise I'm seeing enterprises reach out to the edge to provide real-time analytics that can have a real impact on the bottom line.

For information on Azure Stack uses cases, including Edge computing, you can visit:
eu.ntt-azurestack.com/use-cases/

About the author - Jason Tomlinson:

Jason Tomlinson, as Senior Director of Product Management for NTT Europe, is charged with ensuring that this global powerhouse remains competitive in the IT services landscape by bringing new solutions to market that resonate with a demanding client base.

He is drawing on his rich experience spanning over a decade in ICT to deliver in this strategic position. Jason has built a wealth of knowledge in both ICT systems and how they impact on business outcomes from his foundational roles while rising through the ranks of NTTE.

Leveraging this extensive experience, he is well placed as a thought leader on the topics of digital disruption, automation and the future of cloud technologies.