International Datacentre Day | What is the future of the datacentre?
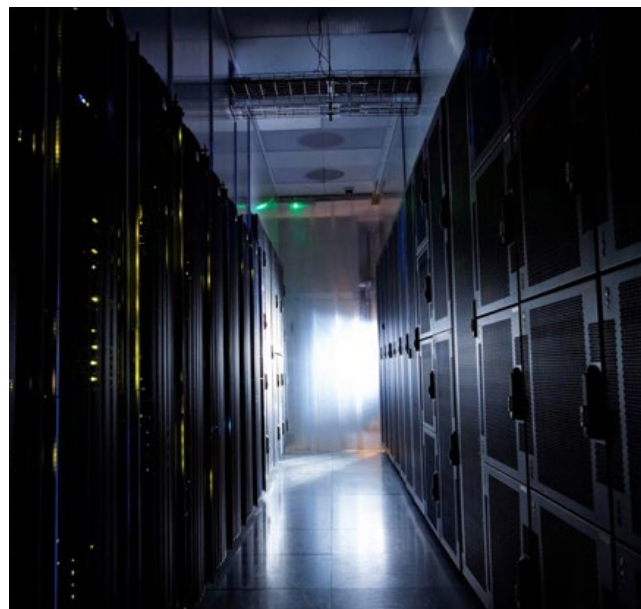
International Datacentre Day (24 March 2021) is 'designed to create awareness of the datacentre industry and to inspire the next generation of talent.' With more data being shared than ever before, this national day also seeks to outline what a big role datacentres play in the digital world and safeguard their future.

It is therefore timely to commemorate this occasion with this blog post which will look at the future of the datacentre, from Microsoft's landmark underwater trial to sustainability initiatives being put in place.

Demand for data security

The Covid-19 pandemic has meant that many businesses have had to adapt to working from home. The legacy of this is that many have chosen to continue with more hybridised working long-term, due to the reduction in office costs and improved employee benefits it offers.

Datacentres have been vital in facilitating remote working over the past 12 months, as they provide a secure place for companies to store their data. With this in mind the demand for datacentres is increasing and according to a report by M Capital Group in 2020, the global datacentre industry 'will achieve strong growth over the next five years, reaching a compound annual growth rate (CAGR) of 10% to 15%.' With online security more important than ever, datacentres will play their role in protecting against cyber threats and we believe this increased demand will continue.

Sustainability

With the UK government legislating the target of net zero carbon emissions by 2050 and businesses becoming more environmentally conscious, 2021 has been tipped as 'the year of the sustainable datacentre' as they do their bit to go greener.

Energy consumption, water usage and greenhouse gas emissions are all areas which the industry is looking to address. The way in which sustainability initiatives are adopted and the impact on the environment is minimised will play a large role in the success of data centres in the future. Investment in renewable resources, liquid cooling to reduce power consumption and greener energy sources are just some of the ways this is being achieved

Innovative solutions

As with all industries, innovation is key to progress. Microsoft's recent Project Natick, which involved deploying a datacentre module underwater off the Orkney Islands in 2018 to monitor performance and reliability, is a great example of this. It proved that 'the concept of underwater datacentres is feasible, as well as logistically, environmentally and economically practical.' The latest phase of the project continues with research into using a full-scale module powered by renewable energy in the North Sea.

Emerging technology is also having an impact from the widespread adoption of 5G to AI and machine learning. While these innovative solutions and ground breaking trials are more accessible to industry giants like Microsoft, they will no doubt shape the future of the datacentre.