5G: finally something we can all get excited about

It's fair to say that businesses have had it tough in recent times. Coronavirus regulations and restrictions have seen millions of businesses globally refocus their operations, rapidly reshaping their networks to support adapted working from home. Many then realised that their previously secure network had become exposed to cyber threats, sparking a scramble to find security solutions fit for remote working, while fighting to deliver business continuity in the face of major uncertainty.

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However, beyond these obstacles, there is increasing cause for optimism; business confidence is returning and the lifting of restrictions is in sight. As many businesses shift from continuity to growth mode, 5G presents another exciting cause for positivity. This emerging, transformative technology could have a major impact on the recovery from the pandemic, and now is the perfect time to investigate its business potential.

Why get excited?

There is a reason why many have labelled 5G as 'game-changing'. In comparison with current 4G capabilities the step up in performance is exponential - network speeds are roughly 100 times faster and the number of devices supported per square kilometre jumps from 4,000 to around one million. While undoubtedly this presents huge benefits to consumers looking to stream Netflix without having to worry about

bandwidth issues, the major value lies in business and industrial applications.

Speed and security for SMBs

5G provides immediate benefits for SMBs as an option for WAN failover. In the event of the primary WAN line dropping out, whether copper or fibre, 5G's ability to establish immediate business continuity as a second WAN line could prove invaluable. Another major benefit to business is the jump up in connection speeds and bandwidth, which is why so many customers, keen to future-proof their networks, are upgrading to 5G. This also sidesteps the cost and complexity issues of installing multiple layers of WAN infrastructure.

Industry 4.0

Just as for consumers, 5G's faster speeds, lower latency, and greater bandwidth present fantastic opportunities for industry. The manufacturing sector alone is projected to see an additional <u>£5.2B</u> thanks to these new 5G capabilities.There is simply no need to be locked into inflexible, immovable linear production lines, dealing with inaccurate asset tracking now that industry 4.0 and smart factory automation is within reach. Smarter factories means safer, more productive, efficient and sustainable systems, requiring less maintenance downtime and greater production flexibility.

5G also allows warehouses and factories to connect their indoor networks to their outdoor spaces. This opens up the automation of the manufacturing and supply chains process, from managing inventory to precisely tracking and synchronising of trucks.

Typically, factories face a major issue resulting from the differing and competing needs of their office and factory networks, each with their own

wired and wireless WLANs, often producing poor or patchy internet with regular dropouts. 5G's network slicing solves all these issues, avoiding network delay or interference with a high-quality internet service that can also maintain network security. 5G also makes perfect sense for new factories as the primary WAN, as it's able to achieve manufacturing and supply chain automation for real-time vehicle movement monitoring and data synchronisation.

Ease of integration

As always, there are a range of solutions to suit each customer's needs. For example, factories can take advantage of incredibly robust, gale and lightning-proof products that can survive blizzards and extreme heat, while delivering interference-free performance across long distances. Even better, it's now possible to install and configure these solutions without needing an electrician, as fibre-optics would demand. Instead, it is possible to precisely pinpoint optimal deployment locations through a mobile app.

Race for adoption

There are fascinating signs of 5G growth across EMEA, particularly in the Nordics, where 4G continues to dominate and accounts for over 90% connection time for the majority of operators. This adoption is being driven by both governments and ISPs. 5G's portability suits the Nordic families that alternate their time between winter and summer houses, saving the expense of two separate networks.

Meanwhile in the UK, there has been a sizeable commitment in the shape of the joint £28.3M investment at the start of the year from British businesses and the government to trial innovative uses of 5G. This investment will see many of Britain's largest, high-profile venues -

including London's O2 Project Vista, Milton Keynes' MK Stadium and Cornwall's Eden Project - harnessing the power of 5G technology across their sites.

Quite understandably, we know that cybersecurity is the number one area of concern, requiring a sophisticated solution to ensure existing infrastructure's protection is capable of meeting evolving threats from cyberattacks. As more businesses return to a solid financial footing and shift their attention beyond security in the immediate term, 5G will play a major part in helping them develop and accelerate in a sustainable way.

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