

Technology, Connectivity, Security & Network Trends 2022

PART TWO

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Over 42 independent sources used to gather James Barker's 2022 trends



10 Key UK Trends for UK 2022

PART TWO

- The Rise of the Hybrid Worker
- Acceleration of Digital Transformation
- SD-WAN & IoT
- The Effects of the Global Microchip shortage
- The Metaverse and its Business Potential



The Rise of the Hybrid Worker



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The Future is a Fluid Workforce

With now almost only 1 in 10 workers willing to consider a fully office-based job, remote working and hybrid working are here to stay. This more fluid, work-from-anywhere, workforce is aligned closely to millennial preferences but also provides a novel challenge to IT leaders.

WFH & Hybrid Tech Recruitment & Retention Asset

Technology choices that enable this style of working are going to factor majorly into talent recruitment and retention for businesses, and as any leader will tell you, any companies' greatest asset is its people. We can expect to see technology purchase decisions based more around these factors in 2022.



Hybrid & WFH 2022 Trends at-a-glance

- Businesses across all sectors will increase spending to improve IT and network infrastructure.
- Single-user SD-WAN devices will replace corporate VPNs, which were never invented for mass remote working and require a great deal of IT and Network time in management and fire-fighting.
- Device-as-a-Service (DaaS) and Software-as-a-service IT acquisition models will enable faster and smarter digital transformation and support the ever-increasing demands WFH and remote bring.
- More flexible payment and contract models will emerge such as pay-as-you-go options.
- Throughout 2022 more and more businesses will outsource their network tech and management.
- These last two trends above will, in turn, lead to 'niche experts' and smaller, more adaptable, and nimble to change business stealing a march from the big corporates.



“More than 90% of employers are planning to adopt a hybrid working model for their knowledge workers in 2022.”

Harvard Business Review

“We will see more products, solutions, and services designed for the employee experience, considering the office as a destination for collaboration while protecting the sense of personal space people have experienced working from home. New office designs and audio/video technology will pave the way for flexible meeting setups and new ways to build social connections.”

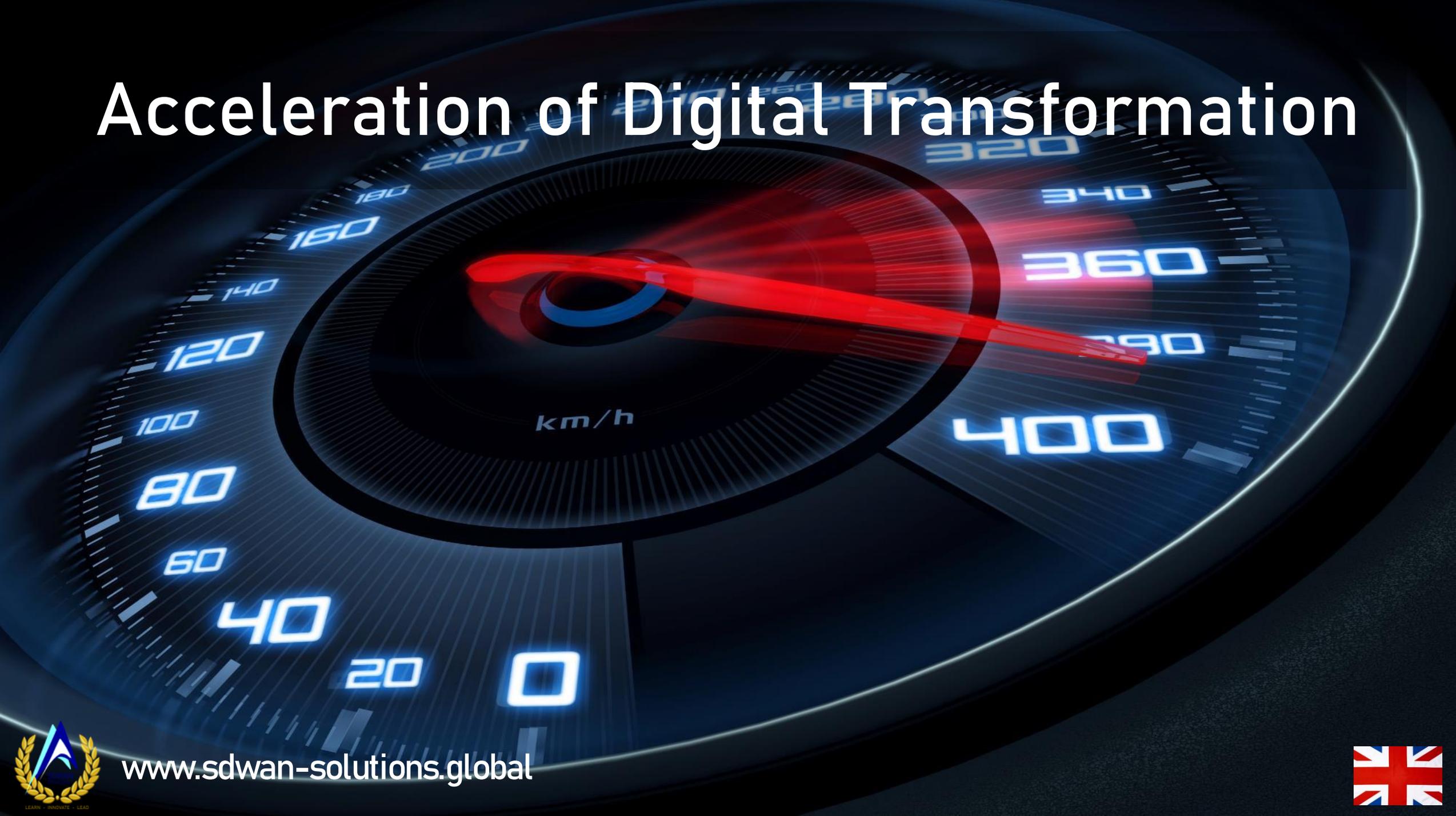
eTechnology Services



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Acceleration of Digital Transformation



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Forced Change Brings Long-term Advantages

The step change in working patterns, almost overnight, brought around network and IT challenges that were completely unforeseen and unplanned for. The result of this is that companies required agility and flexibility - something that requires investment in infrastructure and new technologies. This has had the knock-on effect of accelerating digital transformation strategies with increased spending throughout 2022.

The Build-up of Budgets

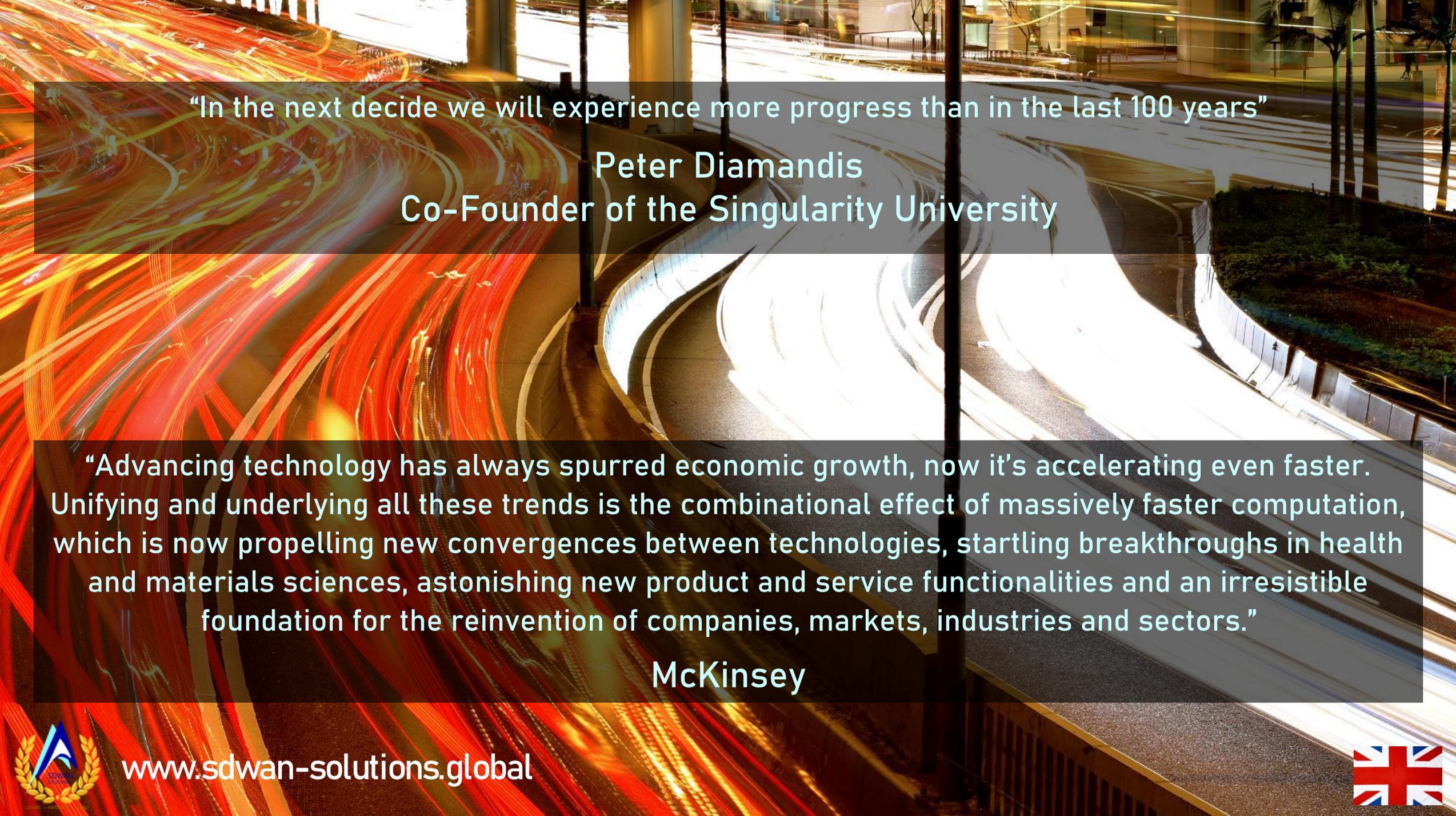
IT spend will outstrip not just the 'Covid years' but anything seen in the last decade. This is not only due to build up in budget spend that has stagnated over as the pandemic took hold, but the fact that it has changed the digital landscape forever. Crisis management means being able to turn on the proverbial penny should calamity come again, but the successful adoption of new technology, however enforced it may have been, brings confidence to adopt yet more!



Digital Transformation Fact and Stat File

- Post digital transformation companies report 45% of companies report higher net revenue growth. (Deloitte)
- Despite executives believing it would take 454-days to implement remote working during COVID-19, on average it took just 10.5-days. (Statista)
- In 2022, spending on digital transformation is projected to reach \$1.8 trillion. By 2025, global digital transformation spending is forecast to reach \$2.8 trillion. (Statista)
- By 2023, digitally transformed organisations are projected to contribute to more than half of the global GDP, accounting for \$53.3 trillion (IDC).
- Despite 87% of companies thinking digital will disrupt their industry, only 44% are prepared for it. (Deloitte)
- 91% of businesses are engaged in some form of digital initiative. (Gartner)





“In the next decade we will experience more progress than in the last 100 years”

Peter Diamandis
Co-Founder of the Singularity University

“Advancing technology has always spurred economic growth, now it’s accelerating even faster. Unifying and underlying all these trends is the combinational effect of massively faster computation, which is now propelling new convergences between technologies, startling breakthroughs in health and materials sciences, astonishing new product and service functionalities and an irresistible foundation for the reinvention of companies, markets, industries and sectors.”

McKinsey

SDWAN & IoT



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Big Players in IoT & the Networks

As IoT technology matures it is becoming accessible to increasingly smaller players in the marketplace, which will enable them to compete at the enterprise level by giving them world class analytics based on real, actionable data. This is also in keeping with the growing percentage of decision makers made up of millennials, who, prefer making decisions based on data rather than intuition and have already recognised the need for the latest networking and security to support IoT.

2022 BIG year for IoT & the best Supporting Networks

LPWAN or Low-Power Wide Area Networks, enable long range communications for IoT type devices at an affordable price point due to their cost being optimised due to low power consumption. In 2017, just 20% of the planet was covered by this sort of network. This is expected to become 100% by the end of 2022, dramatically increasing the feasibility of IoT networks.



The SD-WAN & IoT Landscape

- The main revenue driver for **54% of enterprise IoT projects** is cost savings.
- Many IoT devices are run on consumer sim cards!
- Since the 'Fish Tank Hack' businesses are waking up to the fact that hackers are gaining access to their network and data via unprotected IoT devices.... and that SD-WAN and SASE will protect these.
- 98% of IoT devices are unprotected!
- By the end of 2022, **100% of the global population** is expected to have LPWAN coverage.
- There are expected to be more than **64 billion IoT devices worldwide by 2025**.
- By 2027 the IoT device market will be worth 1.4 trillion
- IoT has the potential to generate **\$4T to \$11T in economic value** by 2025.



Way back in 2019 a Kaspersky report found, *“Nearly two-thirds (61%) of companies globally implemented IoT applications. The technology is benefiting businesses with savings, new income streams and increased production efficiency, but the fact that 28% of organisations experience cybersecurity incidents targeting connected devices also reveals the need to carefully protect IoT.”* As the rapid rate of adoption of IoT leads to hundreds of billions of devices over the coming years, so will the cyberattacks grow to billions. There is security technology available now to protect IoT devices and experts, such as ourselves, to help businesses deploy it.

Anthony Senter CEO, SDWAN Solutions

“28% of companies using IoT platforms stated that they experienced incidents involving non-computing connected devices last year. These incidents can be critical as sensors and smart devices collect terabytes of data, including sensitive information such as business data or customers’ personal information. Also, IoT platforms can be connected with critical systems, like traffic, power or transportation processes, so it is vital to ensure their continuity and integrity.”

Kaspersky



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The Effects of the Global Microchip Shortage



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Global Shortage Makes Chips Hot!

The global chip shortage has been perhaps the most hotly discussed topic in the channel in recent months, with some vendors quoting up to 300-day lead times for certain items. Such extreme wait times will undoubtedly make IT decision makers factor this in when selecting a technology vendor for their projects.

On National Agendas Globally

The ongoing chip shortage will cause governments to invest heavily in boosting localised supply of chips in an effort to not only avoid shortages, but also to improve national security for those nations as the geographic concentration of chip manufacturing has been identified as a risk due to the pandemic.



How the Global Chip Shortage is Impacting Business

- Demand for chips was as much as 17% higher in 2021 than 2019.
- As of 2020, 81% of semiconductor contract manufacturing was based in Taiwan or South Korea.
- The United States, the European Union and China have all committed to growing their country or region's semi fabricating capacity.
- Global semiconductor sales were up by 25% in 2021 despite ongoing shortages, and they are predicted to rise a further 10% to US\$606 billion in 2022.
- The world's three largest semiconductor manufacturers announced cumulative annual capital expenditures of more than US\$60 billion for 2021 and will likely spend even more in 2022.
- Some IT vendors and channel suppliers are seeing over 200 day waiting times for technology devices and the automotive sector have been sending out cars with analogue dashboards since mid 2021.



[15:22] Kelly Rogers

“It has become highly visible that some technology vendors are still taking orders for devices they clearly cannot deliver on due to the global chip shortage. To counter lost sales they are lowering prices and adding in many ‘extras’ in the hope of keeping their market share. Our advice is to look closely at all digital transformation projects to ensure they can be delivered in the time frame you need and deliver the technical functionality as promised.”

Toby Sturridge – CTO SDWAN Solutions

“More than 150 companies in the chip supply chain, shows ‘there is a significant, persistent mismatch in supply and demand for chips,’ and companies don’t see the problem being solved in the next six months. The semiconductor supply chain remains fragile,” the report said, despite months of work by the Biden administration to try to relieve shortages, demand continues to far outstrip supply. Most industry executives have cautioned that the shortage won’t ease until the second half of this year, with some products continuing to be delayed by the scarcity of parts into 2023. While the industry may never be able to escape its roller-coaster nature, the current boom may last until 2025.”

Bloomberg on US Government Commerce Report Jan 2022



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The Metaverse and its Business Potential



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The Metaverse No 'Far-Fetched Future'

Several notable tech leaders have voiced their intention to create an enterprise grade metaverse. This may sound far-fetched and futuristic, but it's all started already! The implications for business are huge. Think virtual offices, virtual industry events and virtual meetings that take place as if you are really there and in any setting your mind can imagine. Streaming entertainment might be the obvious early adopters, with forward-looking marketers not far behind.

Digital Twin, Ar, Vr & Ai Meet the Metaverse

There are already technologies long in business play that will become immense game-changers when combined with the metaverse and next generation internet. Think digital twin humans for healthcare, as-real-as-life try before you travel experiences, architecture the public can visit before it's even built..... The list goes on and on....



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Our Metaverse Matrix

- Categorised as “the next iteration of the internet” it will create 10.000 jobs in the next five years
- At its core, the metaverse is designed to enhance human interactions, and that includes work environments as well as social and play
- Microsoft’s CEO Satya Nadella stated he wants his company to build an "enterprise metaverse."
- The Metaverse market was worth \$46 billion in 2020 – it’s predicted to reach \$800 billion by 2024
- According to a recent Grayscale report some think the Metaverse could reach \$1 trillion in annual revenue.
- Facebook has already invested \$10 billion in the Metaverse via Meta’s (the company previously known as Facebook) Reality Labs.
- Interest, use and early adopters of the metaverse for work and play will be from the digital native demographic (Millennials, Gen Z and Alpha)



"The metaverse will eventually encompass work, entertainment, and everything in between. Like phones and laptops today. Soon we'll begin testing *Quest for Business* — a new suite of features designed for businesses, which will also enable access to dedicated platform functions that businesses need for work, like account management, IDP and SSO integration, third-party mobile device management, and more. We plan to start in limited beta this year, expand to more beta participants in 2022, and fully launch to all businesses in 2023."

Tech@FACEBOOK

"Much like the internet's beginnings in the 1960s, the metaverse is at its core a manifestation of first principles design thinking applied to the way we as human beings interoperate with each other and the world around us."

devprojectjournal.com



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As the trusted experts in all things SD-WAN, our focus is and always has been 100% SD-WAN and SASE.

Multi-award winners and the only company in the world with 2 recognised SD-WAN Subject Matter Experts, we design, demonstrate, install and manage solutions according to your exact budget, applications and business requirements.

We partner with 9 of the world's top proven SD-WAN vendors and the top 4 security vendor technologies, all running on our powerful VENA and VECTA hardware range.

We have deployment capabilities in 190 countries worldwide and provide connectivity to any place on the planet using 1,952 telecoms providers.

CONTACT US TO ARRANGE YOUR NO OBLIGATION DEEP DIVE 1-2-1 SESSION AND SEE HOW WE WILL TAILOR YOUR SD-WAN AND SASE SOLUTION AROUND YOUR BUSINESS, BUDGET AND APPLICATIONS

Email James.Barker@sdwansolutions.co.uk and visit www.sdwan-solutions.global for more information



Report sources include

- Afripol
- Avant
- Bloomberg
- Business Insider
- Comms Business
- DCMS Cyber Security Breaches Survey
- Deloitte
- Europol
- Forbes
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