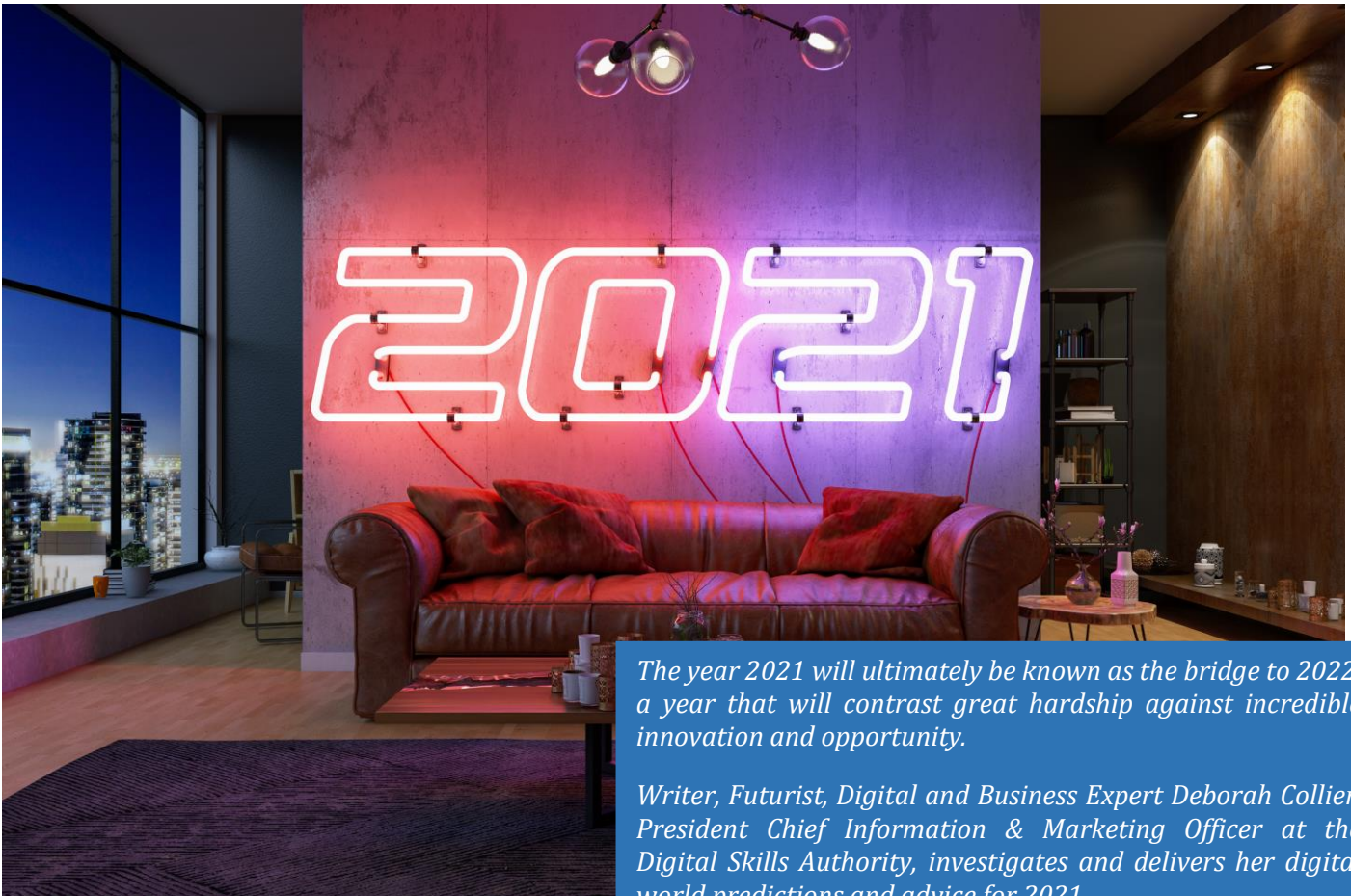


2021 Digital World Predictions

By Deborah M. Collier



The year 2021 will ultimately be known as the bridge to 2022, a year that will contrast great hardship against incredible innovation and opportunity.

Writer, Futurist, Digital and Business Expert Deborah Collier, President Chief Information & Marketing Officer at the Digital Skills Authority, investigates and delivers her digital world predictions and advice for 2021.

In 2021, we are presented with continued significant challenges, but are filled with hope and the chance to re-ignite toward a better version of ourselves globally, economically and as an inspired humanity in 2022.

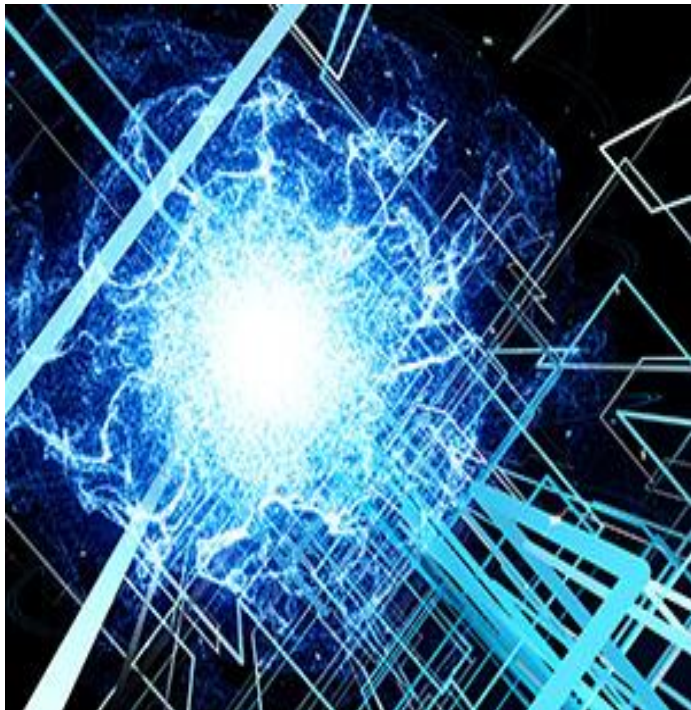
What will our bridge to 2022 look like? What are the challenges, major shifts and possibilities for 2021? Let's explore the challenges and opportunities in my predictions for 2021 and beyond, and consider how they might help you:

1) Winning Combination for Healthcare, Retail and Beyond - Internet-of-Things, 5G and Artificial Intelligence

'Internet-of-Things' (IoT), 5G and artificial intelligence will unite to revolutionize automation. Industry anticipates that around 1-trillion IoT sensors will be placed globally by 2022. These will be employed in clothing and other apparel, household appliances and office, professional and personal devices, for example. 5G provides high-speed, while artificial intelligence (intelligent software programs) uses the data provided by the sensors to make informed and calculated decisions. AI will decide what to do with data, such as providing scientific analysis to universities or manufacturers about 'wear and tear' and product demand, for example. It can make intelligent buying decisions linked to e-commerce and throughout the supply chain to delivery. One example is replenishing the contents of a fridge. Sensors in the fridge order to grocery retailers through e-commerce, based on learned buying behaviour, but with the ability to have human buyer intervention, as

required. In a professional setting, healthcare providers can reduce workload, improve efficiency, reduce costs and reduce errors, during the pandemic and beyond by employing these technologies together. A pharmacy restocking medicines, hospitals and medical centres replenishing medical supplies are two functions I suggest would benefit from this winning technological combination.

2) The Fastest Race Since the COVID Vaccine



In 2021, the race for the 'Quantum Internet' ignites. In 2020 NASA scientists had a major breakthrough in the transference of data known as 'Long Distance Quantum Teleportation'. According to reports, they managed to place data 27-miles away, without any flow of the data in between the start point and the destination. The 'Quantum Internet' is now a future reality rather than a possibility. The future Internet will deliver not only instantaneity but an advanced cybersecurity called 'Quantum Key Distribution', without the need for encryption, and any hackers leaving a provable trace, making it secure far beyond the realms of today's Internet and cybersecurity standards.

For citizens, as well as organizations, it provides confidence, but also the opportunity to deliver multi-dimensional media including virtual world content in high-volumes to global audiences without interference or security hindrance. In short, while the Quantum Internet may take some years to arrive, the opportunities will be endless.

3) Import Export Bureaucracy – High-Speed Systems Enhancements

Brexit may have offered certainty with regards to trade tariffs, but it will, in the near term, cause an additional headache as a result of bureaucracy, for both importers and exporters to and from the EU, as well as outside. Import and export specialist software developers will need to upgrade their systems at stealth speed. Many had already completed some work in preparation for the final December 2020 result, but did not have 100% clarity. In the interim, we are informed by specialist software and solution providers with an objective of fully automated solutions, that the Brexit deal will put an addition burden of up to 10% more workload on importers and exporters with regards to declarations. Hopefully, governments will provide the necessary support, as well as lenience with regards to any errors posed by the challenges. This may require further staff recruitment in customs and excise departments, as well as port and border officials, thus generating new jobs for those made unemployed by the pandemic.

4) Traditionalists Befriend Online and Job Opportunities Evolve

For over a decade, many traditional in-store retailers and staff have felt threatened by the surge of purchasing online, with fears for both high-street culture and jobs in retail. The COVID pandemic, though harsh, is changing the perception of e-commerce to that of a saviour rather than a competitor. E-Commerce leads retail and beckons in-store staff with opens arms to translate their skills to online. Skills and experience which can be used both during and post-pandemic, when workers understand that E-Commerce and in-store retail form part of one whole and work symbiotically as 'Omni-Channel', a term we use in the E-Commerce business world to mean one single seamless purchase experience for the customer, no matter what channel. The E-Commerce boom will continue and will enable entrepreneurship, as well as increased Citizen-to-Citizen commerce

through marketplaces such as Amazon and EBay. Marketplaces combined with drop-shipping do not require a trader to have an e-commerce storefront and they enable income generation to those without the resources to start a higher investment e-commerce or product development venture.

5) Subscription Innovation

The best e-business models are those that require the least resources, the lowest investment and costs, the least risks and ultimately high demand, revenue and profit potential. As someone who has developed both digital and physical products and services, scoped and implemented the systems to sell and deliver them, and the strategies to market those products and services, I've become a strong advocate of subscription services. They are a sensible choice for both profitable and speedy innovation, for those with resources and know-how. There are a number of revenue models for different types of online subscriptions for businesses and entrepreneurs to explore. Intelligent models also look at strategic partnerships to diminish the burden on consumers and business customers juggling multiple subscription accounts, purchasing and login credentials. For further information, please explore my 2018 prediction and advice '*Subscription Services Joining Forces*' and my 2020 prediction and advice '*Streaming Entertainment Takes Centre-Stage*'

2021 '*The Bridge of Hope*' must be carefully and strategically planned, with every opportunity to secure a safe, healthy, happy and prosperous future for all. Coronavirus has forced a global reset, regardless of whether many businesses were in dire need of a relaunch – a reboot ensuing from unfavourable economic events since 2008. Whatever our actions, it is imperative that address not only businesses, wealth and prosperity, but the employment and support of our fellow human-beings. We will have some turmoil ahead, but ultimately the future can be bright.

Further reading

- [Digital Skills Authority](#)
- [The Certificate in Online Business](#)
- [More future predictions](#)
- [Deborah on Twitter](#)
- [Deborah's Blog](#)