Will 2019 will be the year of the data-driven digital ecosystem?

By Jeff Clarke

7 Dec 2018

It's that time of year - our planet has made its trip around the sun and as we close out 2018, we look ahead and think about the possibilities for 2019. And we're closing in on the next decade of innovation that takes us into 2030, where we at Dell Technologies predict we'll realise the next era of Human-Machine Partnerships - where we will be immersed in smart living, intelligent work, and a frictionless economy.

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We made some bold predictions last year – some coming to fruition a bit faster than others...there's still much to do in advancing artificial intelligence and machine learning technologies, and autonomous systems are continuing to take shape as organisations build the digital backbone to support them.

So what's in store for 2019? Read on to see our top predictions for 2019 as we enter the data-driven digital ecosystem.

We'll be more immersed than ever in work and life

Virtual assistants continue to be pervasive in consumer technology – smart home technologies, "things" and connected cars – learning your preferences and proactively serving up content and information based on previous interactions.

We'll see this machine intelligence merge with augmented and virtual reality in the home to create truly immersive experiences – like a virtual sous chef that can help you whip up an easy meal for the family. And you'll be more connected to your personal health with even more intelligent wellness tracking devices that can capture more information about the body, like heart rate variability (HRV), sleep patterns and more that you can easily share with health care providers for better care.

Immersive intelligence will also follow us to work. Our PCs and devices we use every day will continue to learn from our habits and proactively boot up with the right apps and services at the right time.

The big 3 questions on healthcare and AI
Karen Feldscher 21 Nov 2018

Advances in natural language processing and voice technologies will create a more productive dialogue with machines, while automation and robotics will create faster, more fluid collaboration with technology to get more done. And, with augmented and virtual reality applications creating on- and off-site immersive experiences – people will have access to the data they need to do work whenever, wherever they are.

Data gold mine will spark next "Gold Rush" in tech investments

Organisations have been stockpiling big data for years. In fact, it's predicted that by 2020, the data volume will reach 44 trillion gigabytes, or 44 zettabytes. That's a lot of data. Soon they'll finally put it to work as digital transformation takes shape.

The right software can ensure 'Big Data' doesn't overwhelm your business
Modeen Malick 3 Dec 2018

As they derive more value from that data – with insights driving new innovations and more efficient business processes – more investments will be born out of the technology sector. New startups will emerge to tackle the bigger challenges that make AI a reality: data management and federated analytics where insights can be driven from virtually everywhere, and data compliance solutions for a safer, smarter way to deliver amazing outcomes.

5G will have us livin' on the edge

The first 5G devices are slated to hit the market sometime next year with the much-anticipated next-generation network that promises to completely change the data game in terms of speed and accessibility.

Low-latency, high-bandwidth networks mean more connected things, cars and systems – and a boatload of AI, Machine Learning and Compute happening at the edge, because that's where all the data will be generated.

5G will become the mainstream ecosystem by 2022
27 Nov 2018

It won't be long before we begin to see micro-hubs lining our streets – mini datacenters if you will – that will also give rise to new "smart" opportunities for real-time insights happening on the corner of your street.

Cities and towns will become more connected than ever, paving the way for smart cities and digital infrastructure that we predict will be thriving in 2030. And it'll be a game changer for industries like healthcare or manufacturing, where data and information being generated out in the field can be quickly processed and analyzed in real time – versus having to travel back and forth to a cloud – and then readily shared with those who need it.

Data forecast will call for more clouds

Last year we predicted the arrival of the Mega Cloud – a variety of clouds that make up a powerhouse operating model as IT strategies require both public and private clouds. So far that's holding true.

The public vs. private cloud debate will continue to wane as organisations realise that they need to effectively manage all the different types of data they'll be processing. A recent IDC survey pointed to more than 80% of respondents repatriating data back to on-premise private clouds – and we can expect that trend to continue, even with projections for public cloud growth.

The rise of multi-cloud brings challenges and benefits

3 Dec 2018

Multi-cloud environments will drive automation, AI and ML processing into high gear because they give organizations the ability to manage, move and process data where and when they need to. In fact, we'll see more clouds pop up as data becomes increasingly distributed – at the edge in autonomous car environments or in smart factories, in cloud-native apps, in protected on-prem centers to meet a host of new compliance and privacy standards and of course, the public cloud for a variety of apps and services that we use every day.

Move over millennials, Gen Z will clock into the workplace

Millennials are going to have to make room for the next generation with Gen Z (born after 1995) badging into the workplace over the next year – creating an increasingly diverse workforce spanning five generations!

This will create a rich range of experiences in life and technology. 98% of Gen Z will have used technology as part of their formal education, many already understand the basics of software coding and expect the only the best technology to be a part of their work experience.

Generation Z will transform African business

3 Jul 2018

Gen Z will spark a new evolution in technology innovation for the workplace and create more opportunities for technology literacy and on-site learning for new skills with older generations of workers. AR and VR will become increasingly commonplace and close the skills gap across an ageing workforce – while giving Gen Z the speed and productivity they demand.

No more weak links or waste: Supply chains will get stronger, smarter and greener

Believing in the many advantages to running a sustainable business, organisations will follow our lead and begin to accelerate ways to design waste out of their business models through new innovation in recycling and closed-loop practices. To help, we at Dell are sharing our blueprint for turning ocean-bound plastics into recycled packaging and turning soot from diesel generator exhaust fumes into ink for printing on boxes.

Supply chain networks evolve as a result of digitisation

29 Nov 2018

We'll see advances in supply chain traceability, by scrutinizing and harnessing emerging technologies to identify precise opportunities to course correct. Blockchain will likely play a role as well, to ensure trust and safety in sourcing, while also securing information and data about goods and services along the way.

There's never been a better time for technology – with innovation in 5G, AI and Machine Learning, cloud and blockchain throttling full steam ahead. I'm willing to bet that we'll make great use of those 44 zettabytes of data in 2020. We'll unlock the power of data in ways never before imagined before, transforming everyday business and everyday life. So buckle up – we're riding full speed into the Data Era – and 2019 is going to be one heck of a year.

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