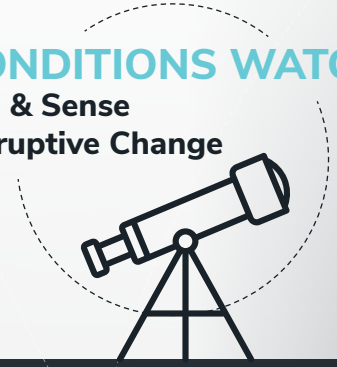




## CONDITIONS WATCH

See & Sense  
Disruptive Change



FOOD FOR THOUGHT

# TECHNOLOGY FUTURES

July 2019

[www.resilientfutures.com](http://www.resilientfutures.com)

**When conducting our research into the disruption readiness of business leaders, we find four points that are quite telling about the overall disruption readiness of all organisations and their people in general, and the capability of these leaders to leverage disruptive change.**

**Firstly**, too many business leaders aren't across the convergence of multiple technologies, the resulting impact on their business and operating models, capability requirements and, more so, the broader implications for the social-economic realities of the business's customers.

While technologies like Big Data, Edge Computing, AI, Blockchain and IoT are partly understood, the systemic impact of their convergence as

a whole system of change is largely unappreciated by senior executives who are making product and service decisions for end users.

**Secondly**, we see the above as an outcome of how technology companies are currently influencing and working with business product and service client providers.

This appears to be occurring through a lack of what we call 'creative education'. By that we mean that technology suppliers are not sitting in the shoes of their client providers; educating them while being part of a co-creation of new product or service innovation.

Co-creation of product and service is part and parcel of the traditional relationship between (tech) component providers and manufacturers.

For instance, this is common practice in the auto industry where component providers work together with the manufacturer of a motor vehicle to create the new model car. Without this partnership, we would not have the adoption of new cars occurring at the rate that it does. If optimal tech adoption (that is both uptake and utilisation) is the endgame for tech companies then it is vital for this type of thinking to permeate the customer / supplier relationship,

**Thirdly**, a key part of any customer / supplier relationship is to also work through how the end-user will be engaged, sold and guided in the use of new products and services. We call this guided end-user adoption; something that happens through more than the provision of a manual or a You Tube video.



This is about being an essential part of the training that takes place to ensure the robust adoption and utilisation of the product or service generates a win-win between all parties – the tech provider, the business client and the end-user.

**Finally**, for the tech industry, a key challenge is that investing in guided end-user adoption is an up-front cost that is retrieved by the more rapid and profitable adoption and utilisation of technology by all. The adoption of this thinking starts with leaders seeing their organisation's capability as part of a whole system of capability and a whole system of value-adding that only generates value for one if all parties value the outcomes.

So, the key take-away is – think and develop in a whole system of capability and value generation, and in doing that, gain an understanding of all the component technologies and their ability to innovate a whole system of service together with your clients, and their customers. And above all ... ensure that all three parties are not falling foul of the exponential changes in technology but being leaders in leveraging disruption.

**Larry Quick, Resilient Futures**



## INTRODUCTION

The following links are provided to stimulate your thinking, knowledge and conversation on key aspects of future technology and its uses. This extends to the role you might play in being personally ready to leverage disruption and the role you will play in supporting your organisation's focus on disruption readiness.

While the information provided is only a snap-shot of the kinds of things we think you should be across as leaders, we hope it also provides a good starting point for those who are committed to taking responsibility for the disruption readiness of themselves, their teams and organisations.

The more you and your team share a common understanding of these topics, and the resulting conditions impacting both you as an individual and your organisation, the stronger you will be in collectively identifying and addressing opportunities and risks you may face in the future.

Please do not see this information as providing a definitive view of the future. It is more descriptive of a mix of possibilities, probabilities and certainties in some shape or form. As such, pursuing your own in-depth learning about the issues raised in these links is a way of continuing to expand your view of what is happening, or may happen, in the world.

Finally, as you review the links provided, continue to think through the following question:

“ What else am I seeing, in the immediate and emergent conditions, that are, will or may impact my organisation, and myself? ”

It is your continuous focus on conditions, especially those that are emergent, that will point the way forward to building the capability to leverage disruption.

## LINKS FOR THINKING

*When clicking on the link, if you have a problem locating the correct information, please cut and paste the URL into your web browser.*

### Future You - A Hint for Your Future?



#### **BBC Click – 20 Bits of Tech in 19 Minutes**

**British Broadcasting Corporation (BBC)**

**Video: 24mins 10secs**

**Published: 14 January 2019**

A video showing 20 gadgets in 19 minutes! The CES Team showcase the latest products from the world's largest technology show in Las Vegas, Nevada. Everything from OLED TV's, Eye Tests on your mobile to innovative, sustainable options to enable the charging of your devices.

**[https://www.youtube.com/watch?v=Gvh\\_Fkg9VJw](https://www.youtube.com/watch?v=Gvh_Fkg9VJw)**

#### **The Digital Skills Gap and the Future of Jobs 2020 - The Fundamental Growth Mindset**

**Growth Tribe**

**Video: 5mins 48secs**

**Published: 4 April 2017**

The threat of digital technology is real and is happening now! Technology has allowed the emergence of exponential organisations that are tech savvy. Global companies are being built on lower number of employees. Train yourself and be curious!

**<https://www.youtube.com/watch?v=Y9FOyoS3Fag>**

## Technology: The Bigger Picture



### 8 MWC19 Take-Outs from an Australia Market Perspective

**Price Waterhouse**

**Insight Report**

**Published: 2019**

An article published by PwC drawing on over 200 content meetings with senior industry executives, analysts and ecosystem players at the 2019 Mobile World Congress. PwC used these meetings to help their clients to network with each other and compare market perspectives. The article provides a synopsis of that process and key learnings across 3 Themes – Where's the Money?, Mind the Gaps and Big Society Agenda.

[https://www.pwc.com.au/industry/telecommunications/assets/mwc19-take\\_outs-from-an-australian-market-perspective.pdf](https://www.pwc.com.au/industry/telecommunications/assets/mwc19-take_outs-from-an-australian-market-perspective.pdf)

### Gartner Top 10 Strategic Technology Trends for 2019

**Gartner (Kasey Panetta)**

**Insight Article**

**Published: 15 October 2018**

This report investigates 10 key 2019 strategic technology trend developments that include everything from AI and Blockchain to Quantum Computing.

<https://www.gartner.com/smarterwithgartner/gartner-top-10-strategic-technology-trends-for-2019/>

### Amy Webb's Emerging Tech Trends Report (SXSW Conference)

**South by Southwest Incorporated**

**Video: 1Hour 0Minutes 44Secs**

**Published: 4 January 2019**

Amy Webb presents her 12th Annual Emerging Tech Trends Report looking at emerging technology and science trends. In the video, she explores scenarios for the future of business, government, education, media, and society in the coming year – all as preparation for a future of continuous disruption.

<https://www.sxsw.com/interactive/2019/amy-webbs-2019-emerging-tech-trends-report-at-sxsw-2019-video/>

### Amy Webb highlights over 300 Tech Trends in Annual Report

**Venture Beat (Khari Johnson)**

**Online Article**

**Published: 9 March 2019**

Further to the video listed above, this article discusses the 300 Tech Trends that are in Amy Webb's Annual Report. The report includes optimistic, pragmatic, and catastrophic scenarios for things like a collision between autonomous driving data and regional privacy laws, flying taxis, and drones as a source of renewable energy.

<https://venturebeat.com/2019/03/09/amy-webb-highlights-over-300-tech-trends-in-annual-report/>

When clicking on the link, if you have a problem locating the correct information, please cut and paste the URL into your web browser.

## Big Data



### Big Data & Analytics Explained

**Systems Applications and Products in Data Processing (SAP)**

**Video: 2mins 19secs**

**Published: 18 April 2019**

This video investigates big data and how it is analysed and addresses issues such as the amount, type, speed and reliability of data using real-world examples such as football. The video reinforces that having the right data is paramount.

[https://www.youtube.com/watch?v=q7m\\_dFFst0U](https://www.youtube.com/watch?v=q7m_dFFst0U)

## Edge Computing



### Understanding the Edge

**Ericsson**

**Online Article**

**Viewed: 8 July 2019**

An Ericsson investigation looks closely at Edge computing and distributed cloud along with orchestration, intelligent placement of workloads and possible uses through 5G networks.

[https://www.ericsson.com/en/digital-services/trending/distributed-cloud?gclid=EAlaIQobChMlw9i9xOej4wIVmAVyCh1AxgMyEAYASAAEgK9FPD\\_BwE](https://www.ericsson.com/en/digital-services/trending/distributed-cloud?gclid=EAlaIQobChMlw9i9xOej4wIVmAVyCh1AxgMyEAYASAAEgK9FPD_BwE)

## Blockchain



### What is BLOCKCHAIN? The Best Explanation of Blockchain Technology

**Centre for International Governance Innovation**

**Video: 6mins 26secs**

**Published: 14 January 2018**

A concise presentation of how blockchain technology works with simple examples that bring the key concepts to life.

<https://www.youtube.com/watch?v=3xGLc-zz9cA>

## Artificial Intelligence (AI)



### What is Artificial Intelligence for People in a Hurry

**Raj Ramesh**

**Video: 5mins 27secs**

**Published: 13 August 2017**

A concise presentation of how AI works.

<https://www.youtube.com/watch?v=2ePf9rue1Ao>

When clicking on the link, if you have a problem locating the correct information, please cut and paste the URL into your web browser.



## How to Apply AI in Business

**Raj Ramesh**

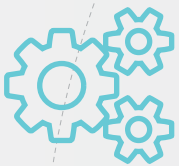
**Video: 5mins 31secs**

**Published: 28 July 2018**

A brief exploration of how AI is used in business including an example of how licence plate recognition is used in a carpark to charge a person's account using integrated systems of data.

[https://www.youtube.com/watch?v=N\\_eHmaRf9T4](https://www.youtube.com/watch?v=N_eHmaRf9T4)

## Automation



### Automation Explained

**VodunAutomation**

**Video: 2mins 9secs**

**Published: 9 January 2013**

A concise presentation of how automation works with a particular focus on how different devices and products can be integrated and work together.

<https://www.youtube.com/watch?v=ojdXC096JsE>

### The Levels of Automation - Autonomous Cars Explained

**Volkswagen - The Wheel Network**

**Video: 2mins 21secs**

**Published: 2 March 2018**

An explanation of a possible journey from the realities of 2018 to a point in time, 2050, when cars are fully autonomous. The video details levels of control including driver assistance, partial, conditional, high and full automation.

<https://www.youtube.com/watch?v=2ZcjOK3zZtk>

## 5G



### How 5G will change your smartphone, and your life in 2019

**Digital Trends**

**Video: 6mins 38secs**

**Published: 26 December 2018**

An exploration of how a range of every-day activities will change with the introduction of 5G networks.

[https://www.youtube.com/watch?v=MC\\_Sfkh5-zQ](https://www.youtube.com/watch?v=MC_Sfkh5-zQ)

## IOT (and Blockchain)



### AWS – IoT (Amazon Webservices – Internet of Things)

**Amazon Web Services (AWS)**

**Online Article**

**Viewed: 8 July 2019**

This article explores the Internet of Things and the implications of all our products in our homes, cars and workplaces communicating with one another; collecting data so that they are making better, smarter and more accurate decisions for us every minute of the day. AWS IoT shows how Industry, The Connected Home, and Commerce are doing this now and will do into the future.

[https://aws.amazon.com/iot/?sc\\_channel=PS&sc\\_campaign=acquisition\\_AU&sc\\_publisher=google&sc\\_medium=iot\\_nb&sc\\_content=iot\\_p&sc\\_detail=iot&sc\\_category=iot&sc\\_segment=154387165874&sc\\_matchtype=p&sc\\_country=AU&skwid=AL!4422!3!154387165874!p!!g!!iot&ef\\_id=EAAlQobChMI5-m37YCF4wIVhwsrCh0JM AxNEAAYBCAAEglg4\\_D\\_BwE:G:s](https://aws.amazon.com/iot/?sc_channel=PS&sc_campaign=acquisition_AU&sc_publisher=google&sc_medium=iot_nb&sc_content=iot_p&sc_detail=iot&sc_category=iot&sc_segment=154387165874&sc_matchtype=p&sc_country=AU&skwid=AL!4422!3!154387165874!p!!g!!iot&ef_id=EAAlQobChMI5-m37YCF4wIVhwsrCh0JM AxNEAAYBCAAEglg4_D_BwE:G:s)

### Internet of Things (IoT) | What is IoT | How IoT Works | IoT Explained

**Cognixia**

**Video: 2mins 1sec**

**Published: 10 April 2019**

A clear and simple explanation of IoT showing how a network of interconnected devices works.

<https://www.youtube.com/watch?v=HD3XSAu9lnw>

## Social Economic Futures



### What will future jobs look like? | Andrew McAfee

**TED Talk**

**Video: 14mins 25secs**

**Published: 20 June 2013**

Economist, Andrew McAfee looks at the development of technological unemployment, talks about the change that computers and machines are enabling and explores what that means for the development of our societies. He thinks about what future jobs might look like and how to prepare coming generations for that possibility.

[https://www.youtube.com/watch?v=cXQrbxD9\\_Ng](https://www.youtube.com/watch?v=cXQrbxD9_Ng)

**For further information on this Food for Thought, or  
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