

Cambridge Judge Business School Executive Education

BT Future of Work event 13/14th March 2019

FUTURE OF WORK AND MOTIVATION

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UNIVERSITY OF
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Agenda

- Future of work – the changing workforce
- Motivation
- Trust, technology and ethics

The future of everything?

Last week, an English national newspaper asked five eminent people for their predictions as to what life will be like in 2030. I'd like to ask you the same question...

The answers in the newspaper were surprising...

By 2050 we'll be able to send memories, emotions and feelings across the internet. Brain science will have exploded, and it will have revolutionised communication. Teenagers will love it. Instead of putting an emoticon at the end of every sentence, they'll use an emotion: anger, happiness, excitement. This will replace entertainment; movies will become obsolete. I'm talking about telepathy, really.



Michio Kaku

*A theoretical physicist and futurist, Kaku is the author of several books of popular science, including the New York Times bestseller, *The Future of the Mind: The Scientific Quest to Understand, Enhance, and Empower the Mind*.*

We need philosophers and ethicists...

The winners will be those people in jobs we don't even know about yet, at the intersection of technology and other fields. Data and criminal justice. Data and homewares. Data and medical services. Data and biotechnology. It will be an exciting time for philosophers and ethicists. We'll quickly realise the need to understand how we treat, use, manage and live with artificial intelligence. We'll need philosophers and ethicists to legislate ourselves into the future.



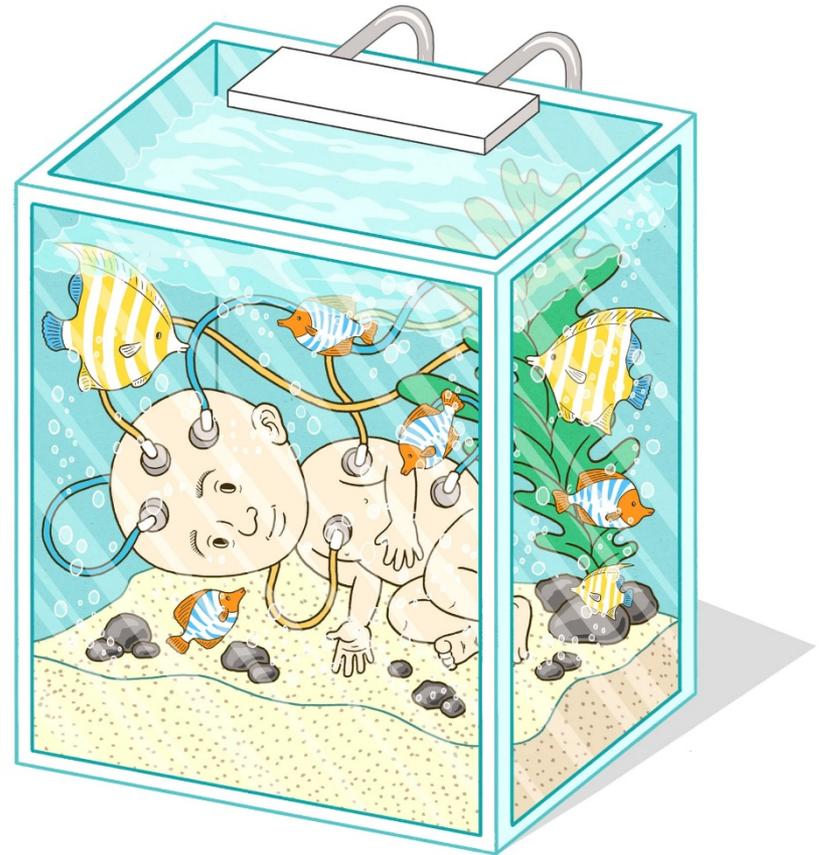
Amy Zalman

A global security futurist and an adjunct professor at Georgetown University, Washington DC, Zalman is the founder of the Strategic Narrative Institute, a futurist consultancy. Between 2014 and 2016 she was the CEO of the World Future Society.

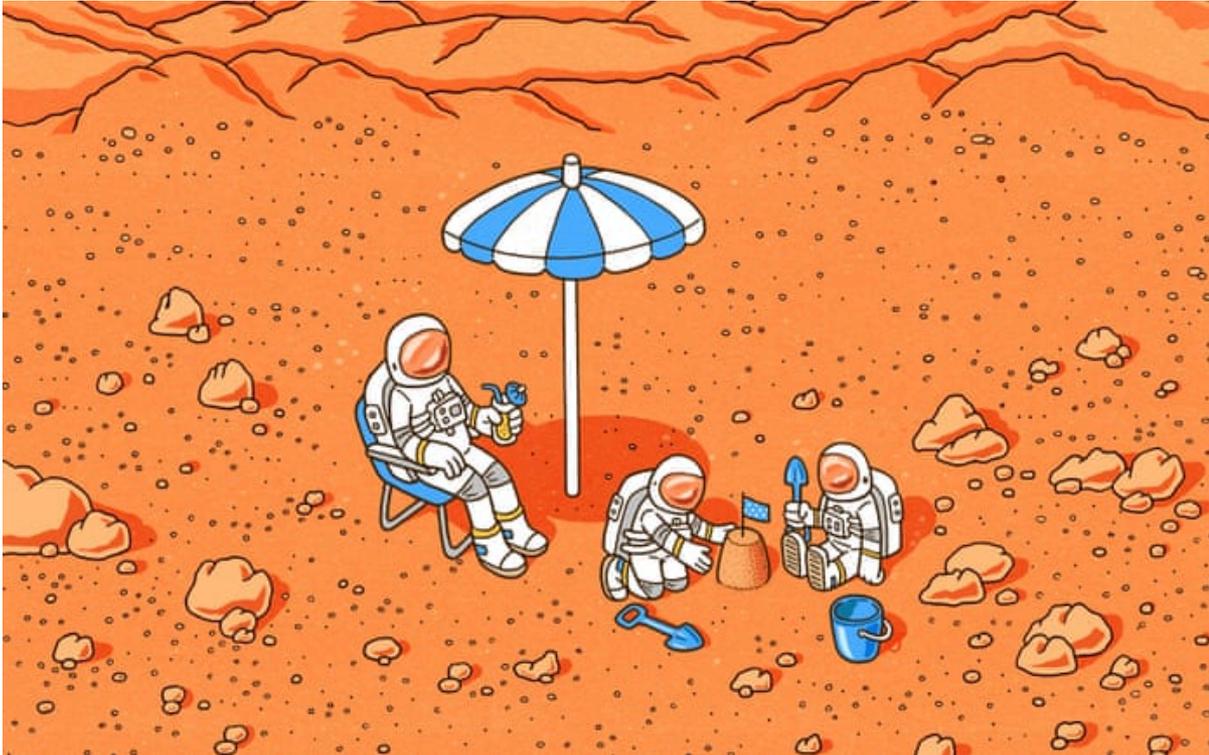
Technology will be ever more personal...

“Everything will be implanted: the ability to dispense medicine (the “robo-release”), the ability to predict cancer, the ability to measure the function of our heart or lungs. Tiny chips will be implanted within our bodies at birth, around the same moment you cut the umbilical cord. We will store our medical records in our fingertips.

We won't be having babies naturally by that point. Pregnancy will have become outdated. People will grow babies in labs, or their living rooms, in what look like fish tanks. And gender will have become irrelevant.”



And we'll be used to very long-distance travel...



“By 2050, I can imagine Mars becoming a vacation site. Instead of going to the beach, people will spend money to go and hang out in space.”

Neil DeGrasse Tyson

The workforce in 2030 will be

- Multi-generational
- Older
- More international
- The highly skilled will push for a better work-life balance, many others will experience increasing insecurity of employment and income.
- Businesses will shrink their workforces to a minimum using flexibly employed external service providers to cover shortfalls, a much smaller group of employees will be able to enjoy long-term contracts.

Source: UK Task Force on the Future of Work, 2018

Technology will also change the way we think about engagement...

- AI will outperform humans in the next 10 years in tasks such as translating languages (by 2024), writing high school essays (by 2026), and driving trucks (by 2027).
- AI won't be better than humans at working in retail until 2031, able to write a bestselling book until 2049, or capable of working as a surgeon until 2053.
- 50 percent chance that AI will be better than humans at more or less everything in about 45 years

Source: MIT Technology Review, May 31, 2017

How can we best think about the future of work

- A narrative about augmentation
- About lifelong learning
- Culture and structure in the future

A story of augmentation...?

Elon Musk: regulate AI to combat 'existential threat' before it's too late

Tesla and SpaceX CEO says AI represents a 'fundamental risk to human civilisation' and that waiting for something bad to happen is not an option

<https://www.youtube.com/watch?v=kaJgt1uyiJ8>



Musk and Zuckerberg clash over future of AI

BBC News 25th July 2017

Google's AI boss says fears of a killer robot uprising are overblown and blasts scare tactics used by Elon Musk

Daily Mail 21st Sept 2017

Stephen Hawking: AI will be 'either best or worst thing' for humanity

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

Technology and motivation – easing work or work intensification

‘Automation of routine tasks can reduce pressures on human workers and free them to carry out more fulfilling, creative or human-facing tasks.

On the other hand technology can also lead to the ‘intensification’ of work

1. Because the technology itself enables longer and more uninterrupted work as well as greater monitoring of worker activity to ensure efficiency.
2. Because more work is needed to meet the demands of the technology itself. This can be, because the technology produces large volumes of new data that need to be analysed or because of new cyber security work required.
3. Management adjusts expected production outputs for workers to account for the greater productivity that they believe the technology allows, erasing or even over-compensating for the gains

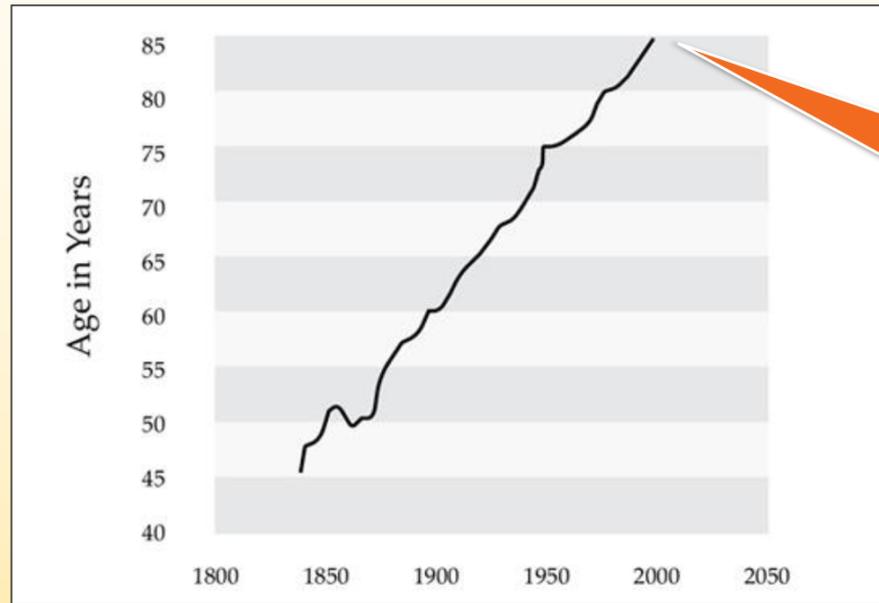
Technology, motivation and anthropomorphism

1. Anthropomorphism is the recognition of ‘inter-subjectivity’ in action
2. It can be seen as very positive. The goal is to make “the user [affectively] respond and step-by-step feel more and more involved with the system”

Creating a narrative about the individual's future - the 100 year life is changing the way we think about engagement

“Since 1840 there has been an increase in life expectancy of three months for every year.”

Gratton, Lynda; Scott, Andrew.
The 100-Year Life



Today's Millennials have a 50% chance of living to 100+

Increase in Life Expectancy Over Time

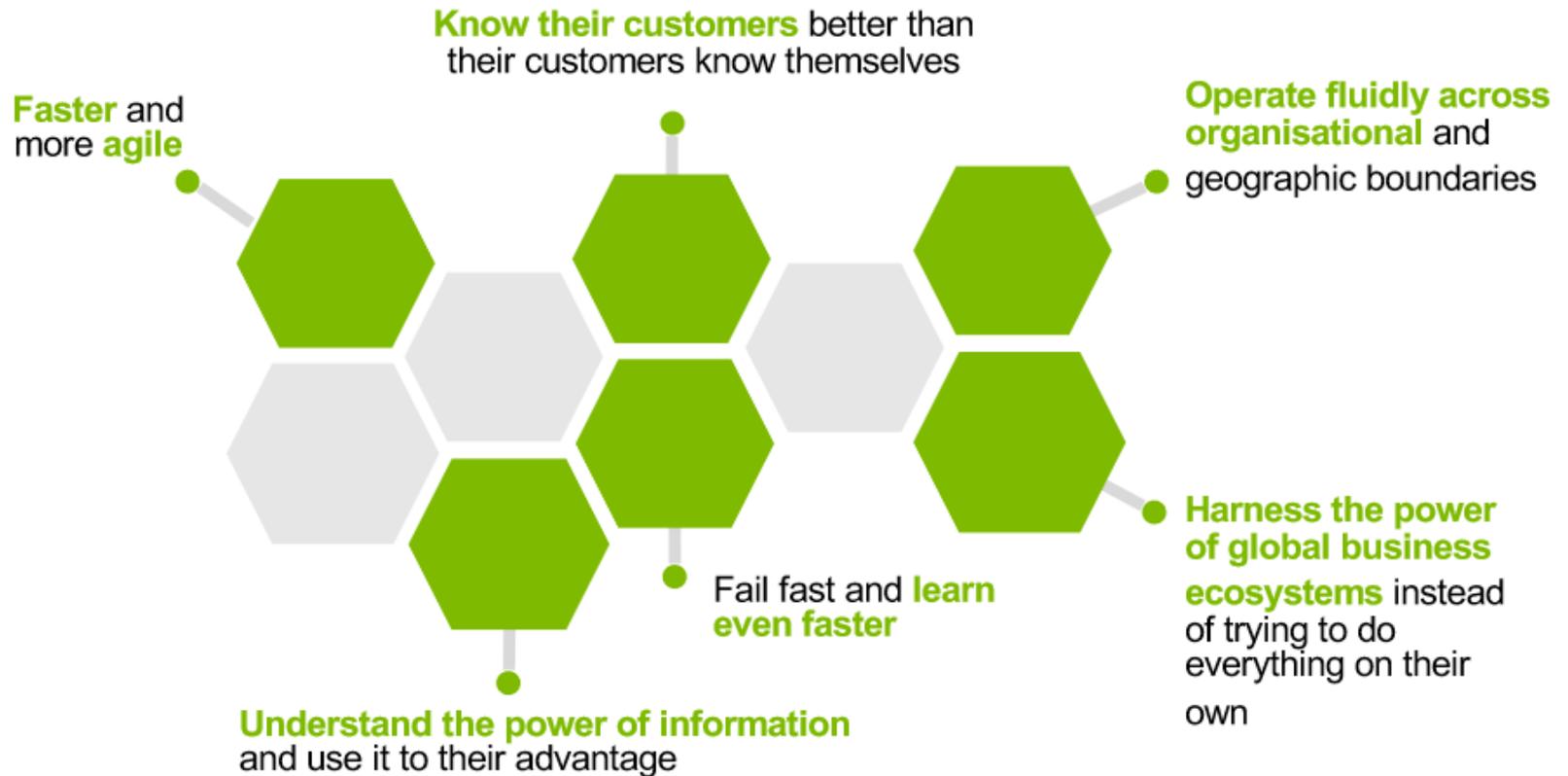
There is a mismatch between skills & technologies

New tasks tend to require new skills. But to the extent that the workforce does not possess those skills, the adjustment process will be hampered . Even more ominously, if the educational system is not up to providing those skills (and if we are not even aware of the types of new skills that will be required so as to enable investments in them), the adjustment will be greatly impeded.

The fact that while there is heightened concerns about job losses from automation, many employers are unable to find workers with the right skills for their jobs underscores the importance of these considerations

Source: Deloitte and the Manufacturing Institute, 2018

Culture for the future of work



How will organisational design look

The top 10 organisational capabilities for the future

- Trusted by society
- Human skills
- Well-being
- Output not hours
- Collaborative environment
- Adaptability
- Re-skilling
- Work–life balance
- Innovation
- Pay transparency

Organisational structures of the future: possibilities

- Traditional organisations but with added flexibility and agility
- Reducing boundaries and focusing on teams rather than organisations (highlighting ecologies)
- Huge concentration into a very small number of very large firms who dominate