

Webinar - Questions from the Audience

Answers from Robert Herian (RH) and Dr Charles Barthold (CB).

Disruption from within - any resonances with the Tory party? Or then chunk up to Brexit and EU or Italy last week...

CB - Technological disruption might operate at the level of political organisations on the one hand and on the other hand at the broader level of the political sphere. At the organisational level, technology was instrumental in creating innovation in terms of political organising, eg. the M5S in Italy. From a broader political perspective, in the hypothesis the Fourth Industrial brings about significant levels of unemployment, this might favour populism.

How can we be certain that changes are coming from 'within' only?

RH – No certainty is possible in these circumstances and any and all changes are invariably based on a variety of different contextual factors. But my research points to the influence of legacy and ‘traditional’ sources of capitalist power in many areas of blockchain development, and given the initial blockchain project that produced Bitcoin was ideologically aligned to libertarianism and anarcho-capitalist actors, I’m yet to see a great deal of evidence of influence from forms of economic, social or political thought other than capitalism. Hence, I claim, disruption, especially with regard to blockchain, is an internalised dynamic that is playing-out within the terms of capitalism, or more specifically neoliberal capitalism.

How will AI disrupt Financial Services?

CB - Financial services already use a high level of technology with High Frequency Trading and the computerisation of financial markets. The Fourth Industrial might further automatise the process through the use of AI. In addition, a number of highly skilled jobs might be at some stage replaced by robots.

I have difficulty in identifying how blockchain would be used in practice. Is it just a replacement for double entry book-keeping - with distributed ownership?

RH – correct, blockchain is effectively a digital form of double-entry bookkeeping, and thus its overriding purpose relates to the audit function. The somewhat tricky question that many people looking to ‘leverage’ blockchain have to ask themselves, therefore, is how an audit function can reasonably be applied to different circumstances. We might think this is a difficult question to answer, because audit seemingly has a very specific focus and practical application in the world – it is what auditors do, not ordinary people.

Yet, and I believe this is a consequence of the pervasiveness of economic reason in everyday life due to the influence of neoliberalism, auditing can and is actually applied in many areas of life that are now driven by metrics and the need for economic measurement and calculation. A number of use-cases show that blockchain has practical effect, in, for example, supply chains and artists revenue payments. But blockchain is not creating these contexts, it is simply offering a new and perhaps more efficient and effective way of doing things.

Why 'even an SNP member'?

RH – this was not meant as a slur on the SNP, far from it. Rather, I was trying to remember and list the parties involved with the APPG Blockchain, and it came out as ‘even an SNP member’, when I meant ‘I think there’s an SNP member’.

To what extent is the phenomena of Blockchain driven by a fear of being left behind?

RH – it is without doubt a fashion, and in that sense many people will panic if they are not seen sporting the latest look. The vast number of concept and use-cases show that value in blockchain does not simply reside in provable, practical or even functional applications, but in the idea of blockchain itself. Or, more cynically, value resides simply in the name ‘blockchain’, and we have seen in the recent past companies adding blockchain to their brand names or product lines in order to, or in the hope of, driving revenue by association.

Is this is a question of risk - are we suggesting that capitalist attitude to risk is significantly greater than those who follow a socialist model?

RH – risk in this context is indexed to finance and market activity and therefore a product and shaper of capitalist attitude. It is not simply a case that capitalism naturally produces risk, but that risk is motivating force promoted within capitalism, and especially within neoliberal capitalism. The American economist Philip Mirowski, for example, argues quite acerbically that neoliberals, ‘insist upon the thoroughgoing ignorance of everyone in the face of the all-knowing market. Therefore, for them, accepting risk is not the fine balancing of probabilities, the planning for foreseen exigencies and the exercise of prudential restraint; rather, it is wanton ecstasy: the utter subjection of the self to the market by offering oneself up to powers greater than we can ever fully comprehend’ (Never Let a Serious Crisis Go to Waste. London: Verso, p.119) Socialism and communism do not place this emphasis on financial risk as a central driver for economic organisation. This does not mean risk does not exist in the socialist or communist imagination, but it resides elsewhere and, quite specifically, is shared and (re)distributed throughout society as a whole.

But ... technology can be so unreliable ... even participants to this session have been confounded by the audio provision - and so much money has been wasted by Government failed technology projects - and then there is cybercrime and its impact - and even cyber wars...

CB - This is absolutely true. At this stage the Fourth Industrial Revolution is starting and we do not know to what extent it will correspond to predictions. Furthermore, any technology is associated to risk, e.g. nuclear power plants. Finally, the economy will be more reliant on cyber-physical objects. Therefore, they will be vulnerable strategic points to control and/ or destroy by cybercrime and for military purposes.

Would AI disrupt knowledge worker roles - e.g. law and medicine?

CB - If AI does develop significantly, then the answer is yes. However, again at this stage we are only at the beginning of the process, so it is difficult to know to what extent AI will be used in the economy and in this case to replace highly skilled professionals.

Not just diversity in the workplace - there is going to be tremendous diversity created in Society - how we live

In reality, our education system is still skewed towards male domination of science and technology. Until we change that, then it is difficult to see how a fourth industrial revolution will increase diversity.

CB - I would agree with this. Overall technology does not change society in a linear way as it is appropriated by the latter. It is clear that patriarchal hegemony is part of this process. However, counter-hegemonic struggles might help democratise higher education in this specific case.

What will the future skills landscape look like? What skills do you anticipate people will need?

CB - If the Fourth Industrial Revolution happens as planned, I guess that adaptability would be very important for the whole of the labour market. Additionally, it seems clear that more science and technology jobs would be needed, e.g. technicians and engineers.

Think social media platforms as a place for unrest would stop those who are not on the said platforms being able to have their say... So barriers to entry for complaining as well as for entrepreneurs

Is profit made through blockchain operations still subject to income tax regulations? (I'm curious why you would think that it might not be subject to income tax regulations?)

RH – that entirely depends on the use to which blockchain is put, but generally I would say yes it would be. If blockchain is simply used as tool for conducting business, like any other form of ICT, then there is no reason why exemptions would apply. The only firm comment on blockchain-related tax I can recall in the UK is HMRC's initial statement on VAT applied to cryptocurrency.

What skills do the future generations need to be successful and contribute to society? As social media doesn't butter parsnips so to speak!

CB - As mentioned above, adaptability for everyone on the one hand and science and technology jobs/ skills seem to make sense.

Skills - interesting point - engineering and tech, suspect the reliance on AI and robotics will remove the need for verbal and non-verbal comms. I see this with my children every day - what skills will we lose - compassion, empathy etc.?

CB - Very interesting point. As I mentioned above, technological change has a non-linear influence on society, which makes it difficult to analyse. However, there is a danger we move towards a society with less compassion and empathy for other human beings.

Interesting about the changes required - currently reading Brain Based Enterprises: Harmonising the Head, Heart and Soul of Business by OU MBA alumnus Peter Cook which covers much around not just disruption also the way that work and leadership could develop.

How does the impact of technological disruption change corporate identities and collaborations - big corporates appear to pay less tax in a home HQ because of global operations - perhaps?

CB - On corporate identities, it might have significant impacts as there will be losers and winners because of technological change. Accordingly, the identity of workers will be impacted in terms of identity insecurity or creation of new identity narratives.

Is the Chinese socialist market economic model better placed to deploy such technological disruptions?

RH – a lot of significant blockchain activity in recent years has been emanating from China. The Chinese state, for example, were very keen on seizing control of Bitcoin mining (the creation of Bitcoin by using a great deal of computing power to solve increasingly difficult puzzles), and created huge mining stations in outlying provinces. Ironically, many of these stations were built in old, disused factories and warehouses. But unlike the mass employment required to work the 'old' industrial hubs in China, the 'new' cryptocurrency stations require only a handful of engineers to monitor and service the vast array of computers working 24/7 365 days a year mining coins. If the Chinese capitalist state monopoly model (I insist on this rather than calling it a socialist market model, because I believe one only has to look at the model face on to see it is motivated by state monopoly in capitalist not socialist terms) is more effective or better placed in this regard, it is perhaps only because there is a greater level of coordination that is, importantly, enforced and enforceable at the state level.