

July 2021

“**Resilience**” is flavour of the month. All the top consultancies are running programmes or re-branding previous work – we’ve commented on some in our blogs recently. But we’ve noted a worrying blindspot in the approaches – a belief in maintaining the status quo in the face of “unprecedented” events. Change is inevitable, often to be welcomed, and sometimes to be engineered. At SAMI we relish exploring the alternative futures described in scenarios, their advantages and challenges, and opportunities for action. Relatively few crises are true “black swans”.

We are also keen to encourage clients to exploit the opportunities of change that crises create, becoming “anti-fragile” in Taleb’s terms. We are working on a more extensive version of our thoughts on resilience – “**To resilience and beyond**” - for future blogs and Working Papers. If you’d be interested in a webinar on the topic, please contact us at info@samiconsulting.co.uk.

The “**heat dome**” over North-West Canada and USA, with its consequent wildfires and droughts creates another spur to thinking about resilience – or “adaptation” as it is termed in the climate emergency lexicon. Thinking through the implications of a similar event in the UK or Europe should be high on the to-do list of authorities and major organisations everywhere. Identifying the second-order effects can be crucial too: in Canada the helicopters they’d planned to use to put out fires were themselves put out of action by overheated engines. Internet back-up centres use huge amounts of air-con – can they survive extended power outages?

The last in our first series of **SAMI cohort** was held this week. We are now recruiting for a second phase where in a small group with other professionals you can explore the issues surrounding your foresight work. Cohort members choose the topics for discussion. Contact Jane.Dowsett@samiconsulting.co.uk if you are interested.

Our series of blogs on [the effect of the pandemic on drivers of change](#) has been consolidated into a new Working Paper, available on our website. Other Working Papers on climate change, and the US National Intelligence Center [Global Trends](#) report will be available shortly.

Huw Williams is presenting an updated version of his **Megatrends** presentation to the Derby and Nottingham branch of CQI. If you’d like a copy, or to talk about the major drivers of change, please contact him at huw.williams@samiconsulting.co.uk. The Government Office for Science’s Foresight team has itself produced a “[Trend Deck](#)” of 10 major drivers of change. These cover the usual areas – as identified in our [MetaMegatrends](#) document – but interestingly also have a focus on health, infrastructure and governance and law.

Executive Education

Our online course “Understanding the Future” will be run again on 20th to 24th September. The course fee is £490 + VAT, and discounts may be available for self-funded individuals. For more information, please email us at

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A range of information on various [futures techniques](#) – our version of the GOS Futures Toolkit - is available on our website.

Futures Issues

The pandemic has meant challenges for the traditional exam system, with some moving online. These appear to be vulnerable to [cheating](#), but maybe we should be encouraging research and collaboration rather than penalising it.

Getting CRISPR into the body to slice DNA in the tissues where it's needed has been a challenge. In a medical first, researchers have [injected a CRISPR drug into the blood](#) of people born with transthyretin amyloidosis - a disease that causes fatal nerve and heart disease - and shown that it can shut down production of toxic protein by their livers.

A "[brain stethoscope](#)" attached to a sweatband around the head can convert the brain's electrical signals into sound. As different types of sound can be associated with different brain illnesses, this provides a simple, non-invasive diagnostic tool.

[Disruptive technologies](#) are difficult to identify - markets are inefficient and slow to recognise genuine disruptive innovation or accept its impact until it has become blindly obvious. They do have two important characteristics: they typically present a different package of performance attributes – ones that, at least at the outset, are not valued by existing customers; and the performance attributes that existing customers value improve at such a rapid rate that the new technology can later invade those established markets.

The EU Joint Research Council recommend repurposing existing natural gas pipelines for hydrogen use as the most competitive [hydrogen delivery solution](#). This reduces the costs of green hydrogen production. Chemical carriers such as ammonia or liquid organic hydrogen carriers (LOHC) become more economically competitive with longer delivery distances, opening up import options from suppliers located, for example, in Chile or Australia.

And a new [solar powered hydrogen production](#) system that operates at -20°C has been developed. This is of particular use in the Antarctic, avoiding the needs to introduce potentially polluting fossil fuels into the delicate ecosystem.

Israel Defense Forces (IDF) used a [swarm of small drones](#) to locate, identify and attack Hamas militants. Swarms are usually controlled by AI, so this may have crossed an ethical line.

Our Blogs

Our latest blogs have continued with our theme of resilience. Firstly we looked at the recent McKinsey report, following that of Boston Consulting Group, which [identified 6 dimensions of resilience and proposed ways of changing organisations to become more resilient](#). We then took the theme of a recent [Tweet by Janice Turner about the need for plans for unlikely events and examined what does currently exist](#) and what

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might need to be done to increase a country's resilience to the unexpected. And, lastly, we published a blog about the [trends underpinning the 4th Industrial Revolution](#) which was taken from a recent speech given by Jonathan Blanchard Smith to a seminar run by APEC.