



FUTURE 2043



20 GLOBAL FUTURISTS PREDICT THE NEXT TWO DECADES



What will the world look like in 20 years' time?

ALONG WITH TWENTY FUTURISTS, SPRINGWISE PRESENTS A SNAPSHOT OF WHAT WE MIGHT SEE IN COMING DECADES.

To celebrate two decades spent in the service of showcasing sustainable innovation, the Springwise team has put twenty pivotal questions to global experts for a snapshot of 2043.

The questions range from the metaverse and autonomous transport to decentralised renewable energy. They seem resolutely futuristic. But strangely in future casting, we are following a long tradition. The social theorist Barbara Adam reminds us that future-gazing (or the art of prophecy) originated some 5000 years ago in Mesopotamia, likely in the form of dream interpretations. Later methods included Hepatoscopy, the inspection of the liver to understand what might come next.

However, rest assured, for this special report at Springwise we neither mined our

dreams nor surveyed our livers. Instead, we consulted twenty leading futurologists with unparalleled experience in forecasting. The resulting insight is both fascinating and important. You may not agree with all our experts, and that's to be encouraged. I found myself bristling at a future that might include divorce lawyers arguing over assets in the Metaverse, and I was understandably sensitive about a future workplace that may replace me with a robot. But the future is a provocative place. It is a rich, complex terrain that is ignored at our peril.

Often the flux and the enormity of the climate crisis seem insurmountable. But as the great climate policy broker, Christiana Figueres has put it, we're at a crossroads and we can either shrink from that responsibility and maintain the biosphere-



trashing status quo, or dream and implement with courage and vision.

Of course, you can't future-cast without the reality of the present and ours is extraordinary, whichever way you cut it. We have entered the age of the Anthropocene, where humankind has forced a geological epoch shift through its demands on planet Earth. An understanding of planetary boundaries gives us an unprecedented degree of understanding of the true cost to the biosphere (and life-sustaining systems) of our take, make, and waste attitude to services and products. It's clear that all these systems (the paraphernalia of humanity) from food production, to energy, to transport and housing need to be transitioned to sustainable versions. Innovation isn't just interesting or nice to have, it's a matter of survival.

Right now, we are in a period where it can feel like a constant tussle between the old and the new, and the possible and the entrenched. It feels uncomfortable, and so it should. But it is not impossible. One thing you need whether you are a global FTSE company, an SME, a lone sustainability warrior, an educator, or a practitioner is a good guide. That's part of our role here at Springwise. We are a daily guide, pinpointing you towards the most promising and pertinent solutions and building blocks for a future on a healthy resilient planet. This unique report, produced with global futurists to forecast answers to the major questions of 2043, is part of our toolkit to help you navigate the now for a better tomorrow. We hope you enjoy it, find it useful, and that it stimulates big discussions and ideas.

LUCY SIEGLE, SPRINGWISE EDITORIAL DIRECTOR



ABOUT SPRINGWISE

Springwise is the leading global platform for innovation and positive change. For the last 20 years, we've been discovering and publishing the world's newest, most important innovation solutions for positive change and the transition economy.

With a global community of more than 2 million, we're essential reading for CEOs, innovators, investors, educators, and corporates in all sectors and geographies.

We're also the trusted innovation and sustainability content partner for many leading global brands and organisations.

We're proud to be a member of 1% for the Planet, plus a certified B Corporation.

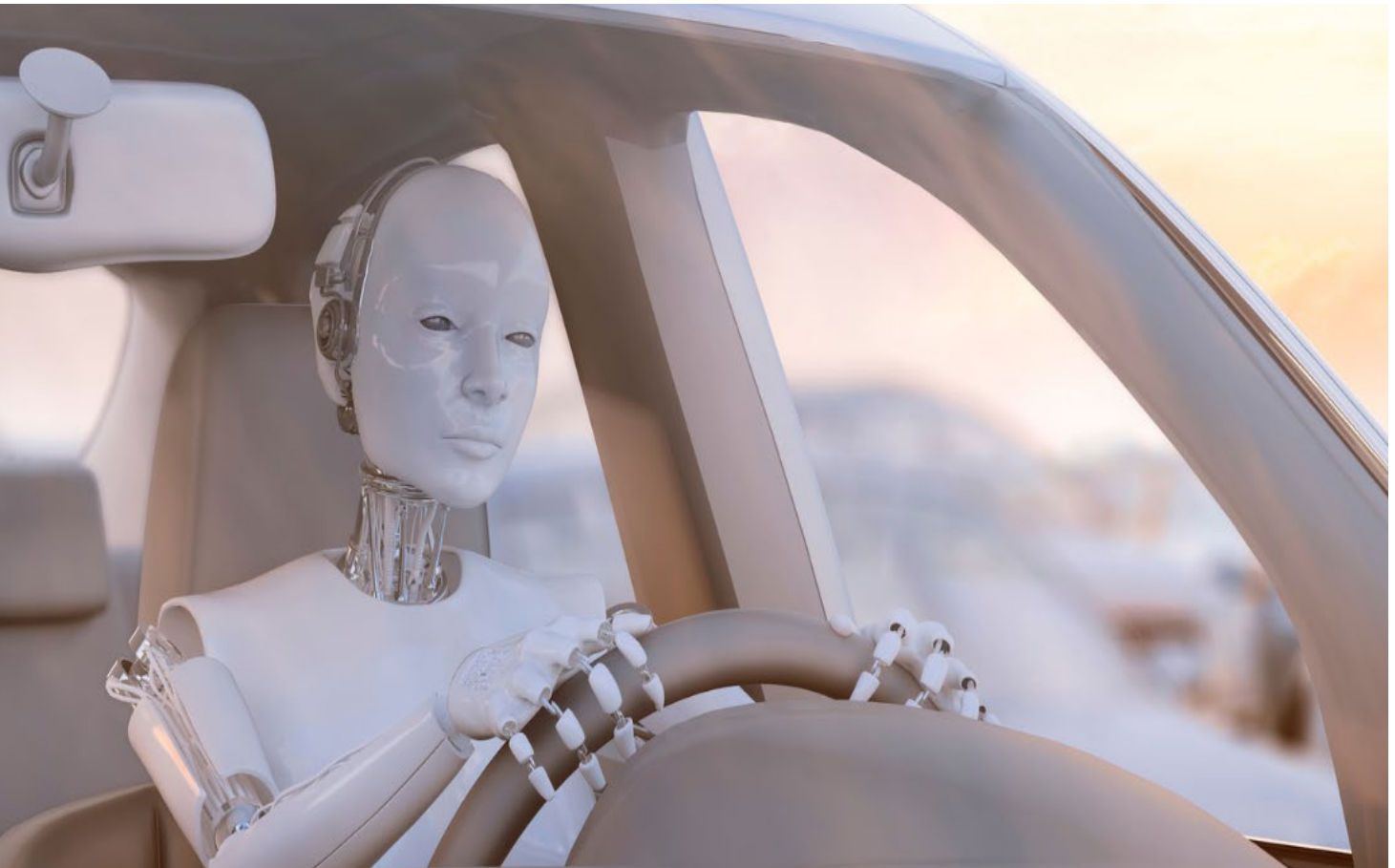
Want to join the Springwise global community and receive our insightful innovation digests, direct to your inbox every week-day? Visit us at springwise.com and sign up for our free newsletter.

THE QUESTIONS

5 WORK	Will robots and AI take our jobs? Which new jobs will the metaverse open up? What will Gen-Z bosses be like?
10 FOOD	What will we eat? Will alternative meat go mainstream?
13 MOBILITY	How will we get from A to B? Will people want a driverless car?
16 HEALTH	Will we be healthier? Will there be another pandemic? Could children born in 2043 live forever?
20 CITIES	What will cities look like? What is the biggest environmental threat to cities?
23 MONEY	Will Universal Basic Income become a reality? Will we all be using crypto?
26 ENERGY	Where will we get our energy from?
29 EDUCATION	What will 'school' look like? What will education need to prepare students for?
27 RETAIL	How will we shop? Will instant delivery exist?
29 TRAVEL	How will we travel?

Work

1. WILL ROBOTS AND AI TAKE OUR JOBS?



“

Machines aren't coming. They are already here. From reading X-rays and MRIs, to stock trading to conversational chatbots such as Alexa or Siri, Artificial Intelligence (AI) is already present in almost every profession and industry. When machines can do everything, many wonder what will be left for us to do. How will we make a living when machines get cheaper, faster, and smarter?

While it is true that machines will take over jobs involving repetitive and monotonous tasks, many new jobs will also be created in the future. For example, can a machine (in its software or hardware form) create itself, market itself, and sell itself? Deliver itself? Feed itself? Clean itself? Fix itself? Machines are tools, and tools need to be used. By people.

In the future, many types of jobs will disappear. Many workers will struggle to adjust to the disappearance of the work they understand and find it hard to thrive with work they don't understand. But while work will change, it won't go away.

Manish Bahl, Chief Executive & Founder, Curious Insights





The speed of advancement in robotics and AI means that, to a large extent, the revolution is not being televised. In most applications, robots are already faster, more accurate, and more consistent than the humans who might otherwise have performed those tasks. From brick laying and restaurant kitchens to surgery and goods distribution, adoption of robotic technology is accelerating.

AI is also advancing rapidly and, by 2043 (if not sooner), it's feasible we will have reached the goal of many in the field – that of creating artificial general intelligence (AGI) or artificial super intelligence (ASI). These are forms of AI that are as smart or smarter than humans in pretty much every cognitive task we perform – although consciousness and spirituality might take a while longer.

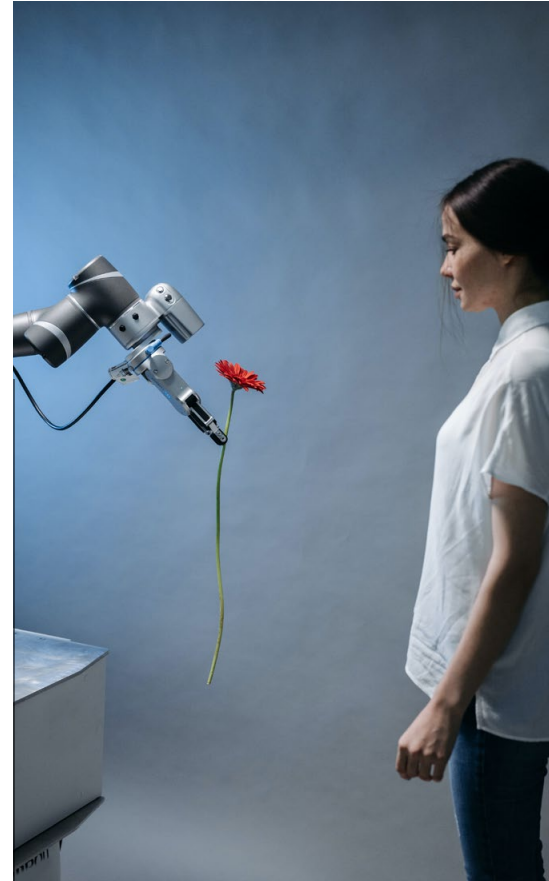
Already, DeepMind's 'Generalist AI Agent' is capable of outperforming its human equivalent in over 65 per cent of the 600 tasks it can perform in parallel. Combine AGI/ASI with robotics and the scope is almost unimaginable – and very frightening for those who haven't been paying attention.

Even those of us who think we can never be replaced by AI are often shocked by just how capable the technology is becoming and how quickly it is eating away at our domains of expertise. Within 20 years it is highly conceivable that many organisations will have been hollowed out – shedding 70, 80, or even 90 per cent of their workforce.

The remaining roles might be those requiring deep creativity, expertise, and regulatory understanding. We are also likely to preserve those activities where people skills are still essential, such as handholding customers through the resolution of complex multi-dimensional issues, relationship development, partnership building, and collaborative cross-organisational working.

While the technology will become increasingly functional, the question will be how far we will go in its deployment. Organisations committing to maintain a certain level of human jobs may find their commitment challenged when others go deeper and faster in their tech-for-human replacement process. It may be hard to compete in the face of faster, more efficient, and lower cost entities.

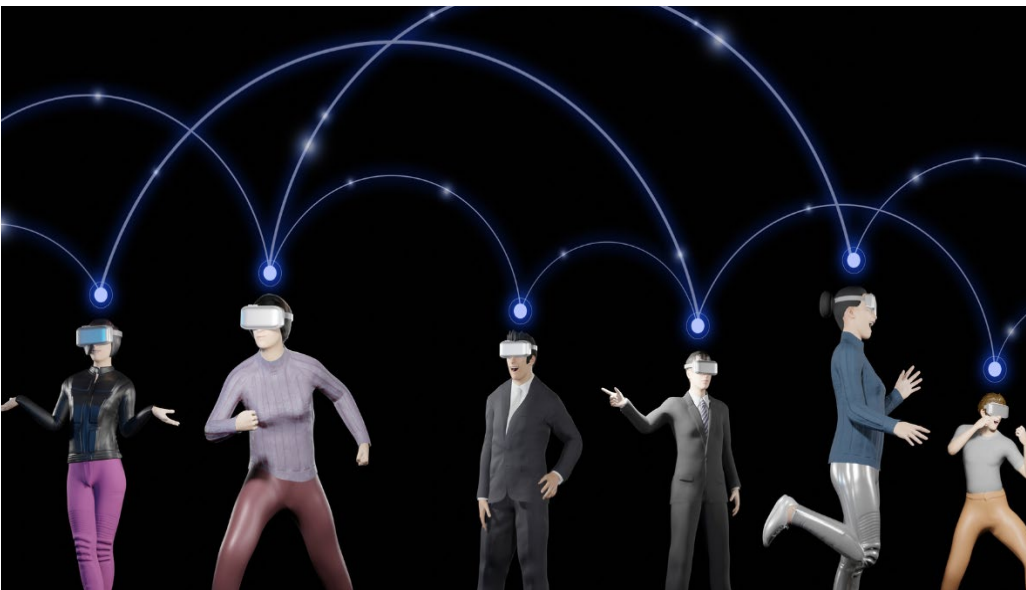
Rohit Talwar, Global Futurist and CEO, Fast Future



AI and robotics will usher in a second Renaissance of flourishing humanism, creativity, and sustainable innovations, as we are liberated from mental drudgery.

Anders Sörman-Nilsson, Australia





2. WHICH NEW JOBS WILL THE METAVERSE OPEN UP?

“If a picture says a thousand words and video says a thousand pictures, just imagine how many immersive videos the metaverse can curate for your mind. It will create an entirely new form of digital nutrition mix – for good and bad.

Just as the social dilemma and addictive power of social media has become evident in the last few years, it is easy to imagine how an immersive world that blurs the boundary between the real and the virtual may play some serious mind tricks on us mere mortals.

We may grow to think of the metaverse as a tech equivalent to psychedelic trips, which have both potent healing powers, but also need to be administered carefully and under supervision. Metaverse Detox Clinics and Rehab Centres will mushroom as the addictive and immersive (potential) toxicity of the metaverse becomes clear.

Beyond psychology, the metaverse will open up a kaleidoscope of opportunities for lawyers (including divorce lawyers who have new digital assets to figure out), virtual real estate agents, metaverse education content specialists, truth auditors, and metaverse ethicists. These professions will all flourish, as will real-life designers and integrators who help people straddle the two worlds of the analogue and digital verses.

Anders Sörman-Nilsson, Global Futurist



JOB TITLES OF THE FUTURE

REAL-TIME COLLABORATOR

Imagine a world where you can ‘teleport’ to another person’s office and collaborate on a project in real-time. The job of a real-time collaborator will be to ensure the collaboration happens effectively and provide the necessary tools to make it happen.

EXPERT FINDER

Imagine being able to search for and find the best experts on a given topic without ever leaving your office. Or imagine being able to find the perfect job or employee without ever having to go through a recruiter. That’s exactly what an expert finder will do for you.

METAVERSE ATTACK AGENT

Providing for safety and security will be crucial in how comfortable living and working in the metaverse will be. In the complex world of the metaverse, the attack agent will ensure that customers’ data and profiles are safeguarded.

Manish Bahl

3. WHAT WILL GEN-Z BOSSES BE LIKE?

“

As someone who started working in the late 80s, I'm blown away by how different workplaces are now. Startup culture has a lot to answer for, but so does Gen-X and its laid-back, casual Friday, no consequences, management style.

I sense that Gen-Z bosses might actually double down on mid-20th-century-style corporate management practice as they seek out a more stable, rules-based, and process-oriented work culture. They will train people, educate people, and support people.

This could make it harder to 'fail upwards' as well-qualified, and more diverse candidates are in the pool and have a more equitable chance of getting hired. The 'old boys network' and 'culture fit' codes might die on the vine.

The mechanics of running a business today are helpfully streamlined by technology, but human resources will hopefully return focus to humans and resources. Unlike the past (and present), real commitment to Diversity, Equity, and Inclusion (DEI) must become a cornerstone of management practice.

Remote, flexible, or hybrid work is probably going to remain the norm, but onboarding and training new hires would be done in a way that builds connection within a common space – whether that's online co-working or a physical office. Organisations will want to invest in talent, retain good hires, and support them in long-term employment by paying good wages and offering benefits.

Susan Cox-Smith, Partner and Director, Experience, Changeist



TOMORROW'S INNOVATIONS, TODAY

AI TRAINING PLATFORM HELPS BUSINESSES PREDICT FUTURE SKILL GAPS

Retrain.ai is able to map the knowledge, personal attributes, and qualifications currently available to a company.

RESTAURANT CHAIN TRIALS ROBOT WAITERS FOR TABLE SERVICE

The smart robots (pictured, above) deliver food to tables and provide on-demand services to diners.

DIGITAL EMPLOYEES COULD TRANSFORM FINANCIAL SERVICES

From explaining complex financial concepts to encouraging more responsible spending decisions.

Find these (and 10,000 more) innovations in the [Springwise Innovation Library](#).



D

O

O

L

4. WHAT WILL WE EAT?



By 2043, we'll have a range of new protein and other food products unlike anything we've ever seen before. For example, plant-based meats are in their infancy – the next phase will be products that are great tasting in their own right, not merely mimics of existing products.

Add in mycoprotein, biomass, cellular agriculture products, and precision fermentation-produced flavours, and the possibilities are endless. And all this will be possible without ruining the planet, since so many of these technologies use little, or no, arable land or fresh water – and have much-reduced GHG emissions.

The biggest impact on what we eat will be the personalisation of our diets. Research from the Weizmann Institute has already shown that something as simple as a banana can spike one person's glucose, but not another's. As we continue to explore our genetics and microbiome, we'll come to understand just how individual we are in our nutritional responses to food. To gather and interpret the data to make these useful changes, we'll need advances in three key driving technologies: AI; sensors; and quantum computing.

Combining AI and sensor technology will enable real-time nutritional and physiological feedback. Already, one in four people in the US have a glucose tracking device, but in the future we'll also be able to track ketones, lactate, even alcohol in our blood, and all from thin film sensors or even tattoos.

To crunch this volume of data into usable information we'll require enormous computing power – which is where we could see quantum computing making an appearance. With ageing increasingly being seen as a 'curable' disease, such a treasure trove of individualised data could be part of the cure.

In terms of the future of global food production, the biggest threat is thinking that we can keep producing more food using the current global food system. Reimagining it will require new technologies – and the greatest challenge will be consumer attitudes to these. Take 'precision fermentation' as an example. With the process using genetically modified organisms to produce many everyday products, today's consumers are sceptical. But by 2043, this seemingly sci-fi technique will be responsible for many of the ingredients used to make our bread, milk, ice cream, and many other foods.

Tony Hunter, Food Futurist



ON THE MENU IN 2043...

EDIBLE INSECTS

We'll overcome the 'ick' by grinding them into flours or pastes for use in cooking.

JELLYFISH

Low in calories and fat, yet high in protein and antioxidants – could it be the new superfood?

PSEUDOCEREALS

Providing an alternative to wheat, pseudocereals are plants that are neither grass nor grain – but can be used in the same way.

The Springwise team

5. WILL ALTERNATIVE MEAT GO MAINSTREAM?

“

The success of alternative protein suppliers hangs in the balance. The future of food comes down to three boring, but important aspects: price, the ability of a food business to control costs, and the level of management skills of the business leadership.

At the risk of sounding blunt, I have to say that alternative protein producers come quite short on all three counts. Unless deep change takes place in these areas, the best they’ll achieve is to develop niches – some of them successful – and ironically perhaps more so in the market of feed for animal farming than for consumer goods.

Christophe Pelletier, Founder, The Food Futurist



TOMORROW’S INNOVATIONS, TODAY

‘ARTIFICIAL PHOTOSYNTHESIS’ COULD BE THE FUTURE OF FOOD

New research paves the way for food production independent of sunlight (pictured, above).

WORLD’S LARGEST VERTICAL MYCELIUM FARM PRODUCES ALTERNATIVE BACON

The site is expected to grow three million pounds of mycelium each year.

UPCYCLING BARLEY BYPRODUCTS INTO HIGH-PROTEIN FLOUR

A Korean company has created a new flour alternative using barley from beer production.

Find these (and 10,000 more) innovations in the [Springwise Innovation Library](#).

MOBILITY

6. HOW WILL WE GET FROM A TO B?



“ Many younger millennials and Gen-Zers have never learned to drive, particularly those who live in cities. I think this will continue with the younger generational cohorts. I don’t think this is predicated on an anticipation for self-driving cars as much as it’s an intentional choice led by climate responsibility, or anxiety about the dangers inherent in driving.

Electric vehicles will still be produced as some form of family car, but full ownership will probably decline as micro-rentals and shared vehicles become the norm. Buses, trams, trains, and metro systems will also convert fully to electric or hydrogen-based engines. I do think most nations will legislate the end of sales of petrol-based engines before 2043, though there will probably still be legacy petrol vehicles on the road, but as high-priced nostalgia vehicles more than anything else. The tipping point for electric vehicles has already been hit.

The concept of transport *between* places could morph into transport *as* place – that is our living, working, learning, and entertainment spaces may move around us, and with us, either in private, or as groups or teams.

Susan Cox-Smith, Partner & Director, Experience, Changeist

“ The concept of transport *between* places could morph into transport *as* place... ”

7. WILL PEOPLE WANT A DRIVERLESS CAR?



Have you ever been squashed by an automatic door in a shop?

I have, when I was a kid in a supermarket ‘testing’ how well the IR sensor worked. While this was entertaining at the time, I recall seeing older people rush through these doors so as not to be caught in the ‘jaws’ of the new fangled machine.

While driverless cars are more advanced than automatic shop doors, both are forms of AI. For much of the population, AI cars will initially be regarded with scepticism and trepidation. Of course, unlike the shop door, which has a trivial failure mode, a car has a possibility of killing us, which should weigh heavy on our minds.

Many driverless cars have started out being driven on smooth, level, wide Californian roads – and they will need to learn how to navigate less perfect roads, unexpected obstacles, and random events. Sadly, too many engineering safety upgrades are ‘written in blood’, or with the benefit of hindsight, and the truth is that the driving AI, like a child, will have to be allowed to make some mistakes in order to learn. The notable justification for this, is that, unlike human learning, any ‘error’ that is identified and corrected is not bound to one individual car, but can be updated to the entire fleet of cars almost instantaneously.

Ironically, I wonder if being able to apportion ‘blame’ to the AI car for a collision (legally and emotionally), will partially lead to its eventual acceptance. And if, say, a car owner was faced with the choice between telling their insurance company they were being reckless and blaming the computer, I suspect few people will choose ‘principles’ over a manslaughter sentence.

The AI car will surely mark a significant milestone in how humans delegate (and perhaps abdicate) responsibility of the tech they use. Ethically and psychologically, I see driverless cars as a major step towards redefining a shift in social responsibility, that will likely have repercussions for other industries from medicine to food.

Jude Pullen, Creative Technologist



TOMORROW'S INNOVATIONS, TODAY

SOLAR-POWERED TUK-TUKS COULD BE COMING TO A CITY NEAR YOU

The future of urban driving could be solar-powered tricycles (pictured, above), which use much less energy to run and manufacture.

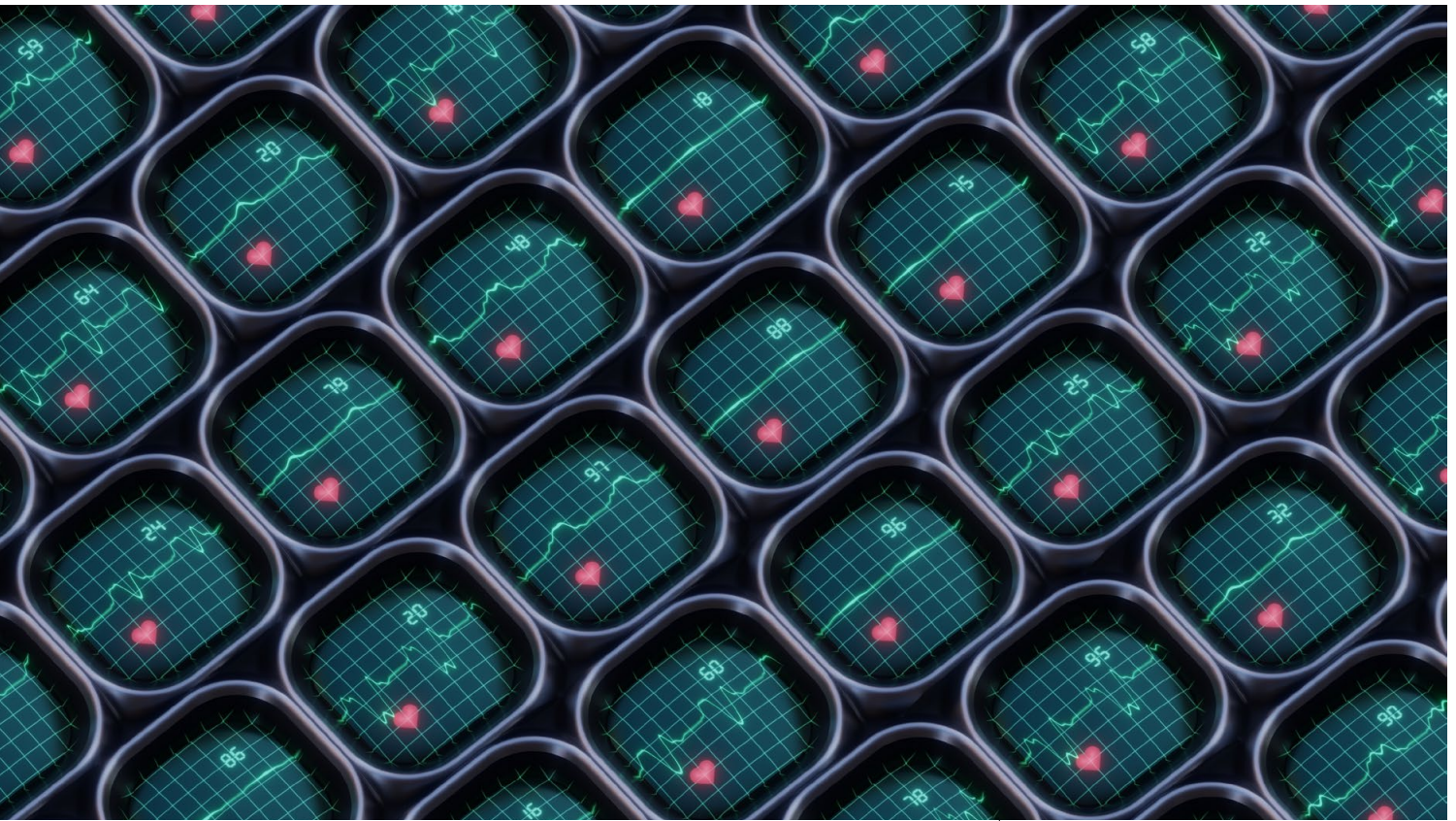
STARTUP PLANS TO CREATE A WORLDWIDE NETWORK OF FLYING TAXI AND CARGO DRONE HUBS

The ‘vertiport’ sites will provide essential infrastructure to transform the way people and goods are transported in city centres.

Find these (and 10,000 more) innovations in the [Springwise Innovation Library](#).

HEALTH

8. WILL WE BE HEALTHIER?



“

Unfortunately, I predict the world will be less healthy in developed nations, as we aren't addressing primary prevention.

The budget for treating an escalating number of increasingly sick people won't be there, and the drivers for non-communicable diseases (which include a lack of active transport, diets comprising ultra-processed foods, and poor air quality) are sustained.

But there are things we can do. Low-carbon living, for example, is good for our health and also for the planet. Thus, active transport (walking and cycling, rather than relying on motorised power) results in better health, cleaner air, and a reduction in climate change. Another is eating a diet based largely on local seasonal vegetables. This leads to greatly improved health, as well as lower emissions from food production, transport, and processing.

If governments also acted properly on urban planning and taxation policy to address food, activity, tobacco, and alcohol, most ICU beds would be empty.

Hugh Montgomery, OBE, Professor of Intensive Care Medicine, University College London

“

Low-carbon living is good for our health and the planet.

”

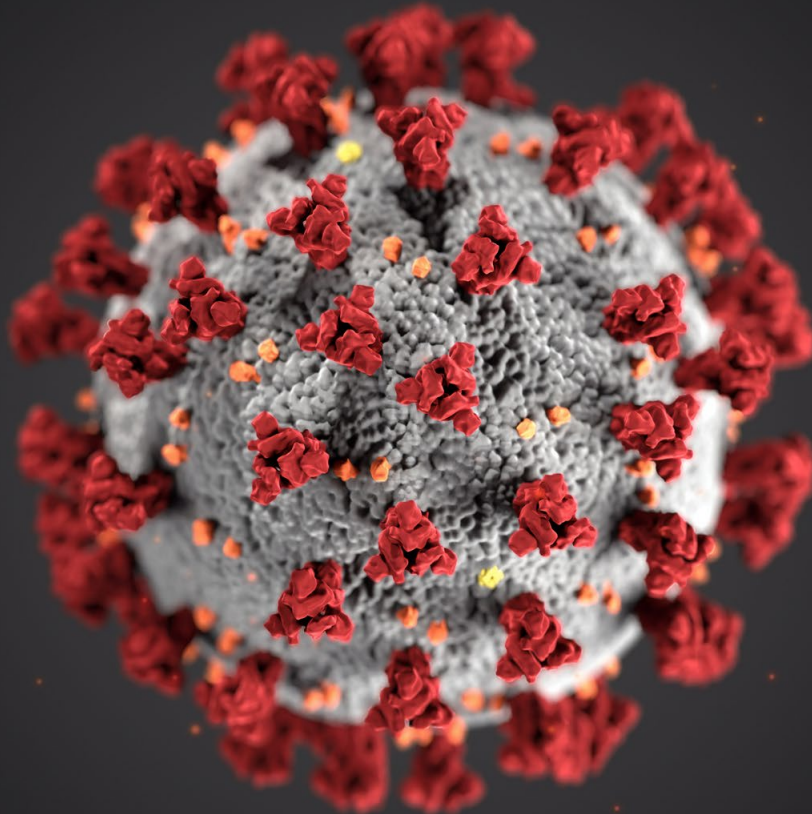
9. WILL THERE BE ANOTHER PANDEMIC?

“

In 2043 the threat of another pandemic (or multiple pandemics) will likely continue to loom large. While medical advances could help in the early identification of pandemic threats, many of the issues we have seen with COVID-19 are likely to persist. These include inequality in the distribution of vaccines, treatments, and protective attire and equipment, as well as the spread of misinformation.

The biggest single factor worsening the threat of pandemics will likely be a general decline in the overall health of the population. A healthy immune system is the body's foremost line of defence against disease, but this will continue to be threatened for reasons including, but not limited to: food scarcity and malnutrition; air pollution and its effects on the respiratory system; and threats from microplastics in the air, sea, rainwater, and our drinking supplies.

Melissa Sterry, Design Scientist, Systems Theorist, Biofuturist



10. COULD CHILDREN BORN IN 2043 LIVE FOREVER?

“

In theory, our biological structure has a limit of around 120-130 years, if everything is in line with our metabolic/molecular makeup and we have all the good environmental conditions. Therefore even with a healthy amount of luck, reaching that age is challenging. However, with better access to care, with engaging patients in their health journey through their own data, and with artificial intelligence improving healthcare efficiency, more people will have the opportunity to reach that milestone.

By 2043 we may have eliminated – or at least minimised the risks associated with some of today’s most devastating diseases, including Parkinson’s, Alzheimer’s, HIV, Type-2 diabetes, and a range of cancer types. And, as precision medicine, personalised solutions, and digital health technologies gradually become available to the masses, we would have enough data to make better decisions in research, to put drug targets with a higher success potential into clinical trials and, in general, provide better care for patients in their journeys. The overall goal would be making a diagnosis of cancer or another major condition a bump in life instead of being a roadblock to a healthy and long life.

Dr. Bertalan Meskó, Founder, The Medical Futurist



TOMORROW'S INNOVATIONS, TODAY

HOLOGRAM PATIENTS HELP TO TRAIN DOCTORS

The technology (pictured, above) can be used remotely, making it easier to reach more students.

LAB-GROWN BREAST MILK COULD REPLACE FORMULA

A startup has begun producing breast milk made from cell cultures as an alternative to formula for those struggling to breastfeed.

WOUND DRESSINGS DELIVER MEDICATION ON DEMAND

The material responds to the presence of bacterial enzymes by releasing a cargo of therapeutic nanoparticles.

Find these (and 10,000 more) innovations in the [Springwise Innovation Library](#).

SEITZ

11. WHAT WILL CITIES LOOK LIKE?



“

Today we talk a lot about ‘smart cities’, but in 2043, a truly ‘smart’ city will be one in which human-scale choreography in natural environments takes precedence. This will be very different to how they are currently envisaged by the technocratic elite who have ‘techne’ as their dominant epistemological frame for urban everything.

Just look at the sterile, brutal, machine-like, material jungles that populate the imaginations of most technologists. They have lost what it really means to be smart – empathic, spiritual, inspiring, natural. In fact they are relics of neocolonial racism, given that the inhabitants will only be those who cannot afford to live elsewhere. The technology that will have the biggest impact on the ‘smart’ cities of 2043 is human imagination – compelled to reinvent what is meant by ‘smart’.

Richard David Hames, Founding President of the Asian Foresight Institute

12. WHAT ARE THE BIGGEST ENVIRONMENTAL THREATS TO CITIES?



There are many and diverse environmental threats facing the cities of the world. The nature of these threats, though variable, has, in each instance, the capacity to not only destroy critical infrastructure at scale, but with near immediacy.

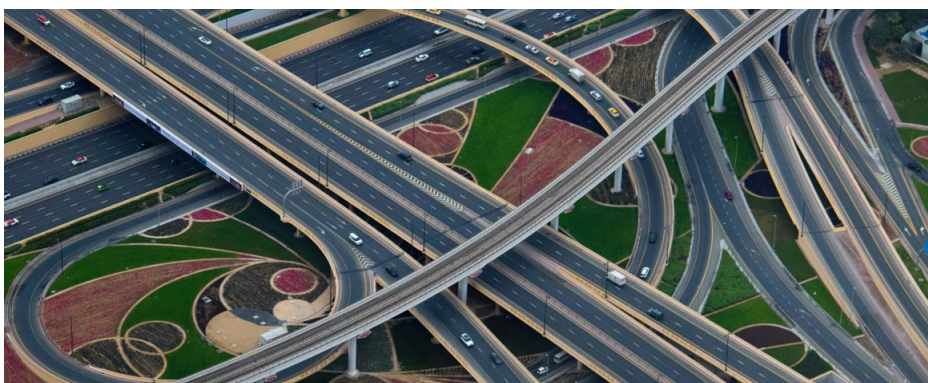
Threats to city dwellers in the year 2043 will likely include extreme weather events and other natural hazards that bring about wide-scale damage to property and infrastructure. Every current meteorological threat is set to scale up, including floods, wildfires, heatwaves, droughts, storm-force wind events, and dust storms.

For the cities of the Western United States, and with them, cities in Mediterranean and temperate climates around the world, wildfires will become a significant threat. In some regions, these can increase the number of landslides and debris falls.

For cities already experiencing water scarcity, the problem is set to worsen. Other cities will experience their first 'Day Zero' (when the city water supply runs dry). Places with water-saving solutions are not scaling quickly to avert a wide-scale urban water crisis by 2043. At the other end of the spectrum, it's a matter of time before not one, but many cities see flooding on the scale that New Orleans experienced when Hurricane Katrina hit.

Though we can largely anticipate which threats a given city may face, can we really make the necessary changes to avert multiple city-scale catastrophes before 2043? What's needed is agreement from policymakers – local, national, and global – on which solutions to implement, and to quickly raise the finance to design and test them. In the meantime, citizens can still use their agency to create small-scale interventions that heighten the resilience of their individual homes and communities.

Melissa Sterry, Design Scientist, Systems Theorist, Biofuturist



AS SPOTTED BY
SPRING WISE
INNOVATION THAT MATTERS



TOMORROW'S INNOVATIONS, TODAY

MAKING CITIES MORE LIVEABLE THROUGH URBAN REFORESTATION

A startup deploys plant canopies (pictured, above) to tackle 'urban heat islands'.

AI-POWERED WASTE MANAGEMENT KEEPS CITY STREETS CLEAN

Vehicle-mounted cameras track waste as small as cigarette butts.

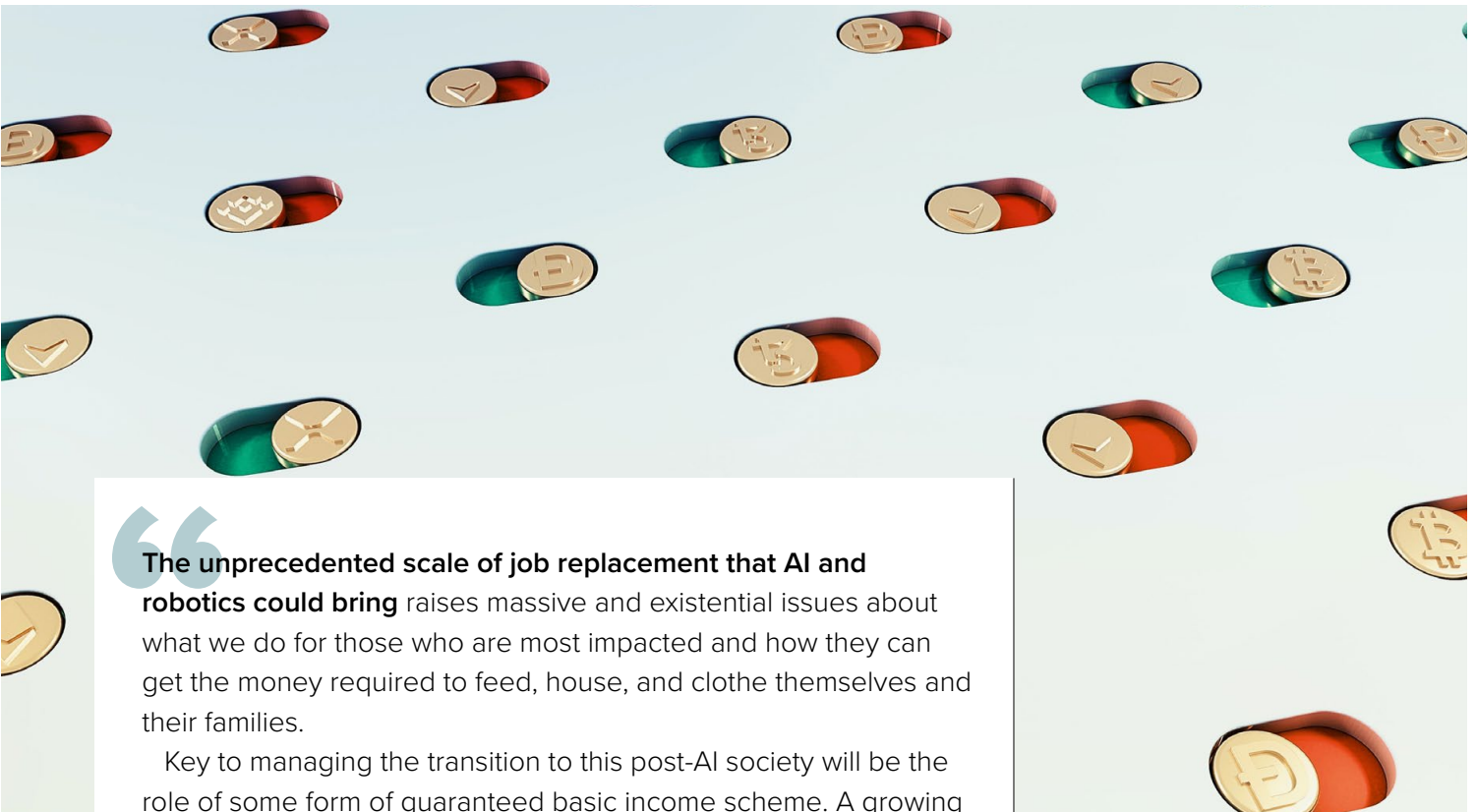
PLANNING PLATFORM HELPS DECARBONISE CITIES

Transport analysis tracks emissions to help planners construct healthier spaces.

Find these (and 10,000 more) innovations in the [Springwise Innovation Library](#).

MONKEY

13. WILL UNIVERSAL BASIC INCOME BECOME A REALITY?



“

The unprecedented scale of job replacement that AI and robotics could bring raises massive and existential issues about what we do for those who are most impacted and how they can get the money required to feed, house, and clothe themselves and their families.

Key to managing the transition to this post-AI society will be the role of some form of guaranteed basic income scheme. A growing number of governments are already evaluating the idea, and it is increasingly featuring in the manifestos of political parties around the world.

It seems that the most widely adopted model will be some form of transitional basic income to support those who are undergoing retraining to take up a new career, enter a different profession, or start their own business. This might be supplemented by some form of loan which the individual started to pay back once they achieved a certain level of income – similar to the student grants scheme in the UK.

Inevitably, reactions to UBI are likely to vary quite dramatically. Some may welcome its introduction as a human and forward-looking solution that helps society to transition to new possibilities as AI eats away at our past. Inevitably some may stigmatise those in receipt of UBI. At the extremes of the spectrum, ideologues will argue that either the schemes are not pure enough to be classified as true UBI, or counter with the argument that this is nanny state communism to be resisted at all costs.

Rohit Talwar, CEO, Fast Future

WHAT IS UBI?

Universal Basic Income (UBI) is a sociopolitical financial transfer policy proposal in which all citizens of a given population regularly receive a legally stipulated and equally set financial grant paid by the government, without a means test. A basic income can be implemented nationally, regionally, or locally.

14. WILL WE ALL BE USING CRYPTO?

“

We may have hit the peak of inflated crypto expectations in 2022, but the technology will continue to evolve. As the user experience improves and becomes more seamless (think Spotify and Netflix versus Napster and illegal downloads), crypto’s utility will scale. We will see it democratising investments into micro-businesses globally. Customer-funded business models will expand, and enable a diverse, inclusive, and equitable broadening of entrepreneurship and value-creation as founders cut out the financial middleman.

By 2043, the blockchain more broadly will have become a critical store of information and value, and will be fully integrated in sustainability reporting (such as verified and traceable emissions) and marketing.

Anders Sörman-Nilsson, Global Futurist

“

While much of the noise around crypto in 2022 was not much more than a fad at best, and a scam at its worst, the underlying technology is here to stay.

In 2043, crypto will make sense for solving non-common goods problems. I expect we will see a few dominant chains, each responsible for managing different sets of ‘community specific’ information. On that point, I hope we’ll have moved to the terminology of ‘community specific’ rather than ‘decentralised’, because chains are a single central store of a specific form of community-consensus defined ‘truth’.

The less positive side of crypto will be how it will have been adopted by governments to launder ‘immutable truth’ out of the many white and not so white lies that comprise society. Central bank digital currencies (some of which are already in development) which are programmable, expirable and linked to social credit/citizenship score, are just one such example.

Bronwyn Williams, Partner at Flux Trends



TOMORROW'S INNOVATIONS, TODAY

A DECENTRALISED NFT MARKETPLACE FOR GOOD CAUSES

The blockchain and smart contract-powered marketplace is designed to let charities and non-profits benefit from the emergence of Web 3.0.

A NEOBANK TACKLING CLIMATE CHANGE

The female-led social impact company aims to be the biggest sustainable bank in Europe.

USING OPEN BANKING TO CREATE A LOYALTY PROGRAMME FOR THE PLANET

The company combines sustainability data from brands with information on customer transactions – rewarding environmentally conscious choices.

Find these (and 10,000 more) innovations in the [Springwise Innovation Library](#).

ENERGY

15. WHERE WILL WE GET OUR ENERGY FROM?



“

It will be easier for developing countries to leapfrog to **renewable energy** than for developed countries. Indeed, the profitability of existing energy infrastructures, the weight of energy lobbies, and the high needs of a heavy industrial system make it difficult for industrialised countries to move from a centralised energy system based on fossil fuels to a decentralised and demultiplied system based on renewable energy.

Thus, in 2043, we could have two very different energy systems. In the developed countries, a new energy transition would be underway, with the definitive disappearance of fossil fuels, the dismantling of non-eco-friendly renewable energy infrastructures, such as offshore wind turbines, the generalisation of solar energy and heat pumps for domestic needs, and the beginnings of fusion for industrial use. Smart grid networks will be the norm, to efficiently distribute energy and allow positive-energy systems to contribute to this distribution.

In developing countries, solar and decentralised power systems will become dominant once the unsustainability of wind turbines and osmotic energy is proven. Storage systems like the Powerwall will spread as prices fall.

Fabienne Goux-Baudiment, PhD, Futurist, Head of proGective, Research Centre for Futures Studies



“

In 2043, the developed and developing worlds could have two very different energy systems.

”



We mostly already have the technologies we need to realise more sustainable energy – solar, geothermal, wind, and even nuclear. Whether we will have shifted over to them by 2043 depends more on the political will to challenge big business, along with sustained levels of ignorance (and thus apathy) in society.

While the shift to renewables is inevitable, the time it takes to move from oil, coal, and gas will depend on several factors, not the least being: (a) whether you live in a country like Australia, which has shown such marked resistance to any rapid shift to renewables because of profitable legacy industries, and (b) the extent to which the big players in the fossil fuel and old smokestack industries are prepared to continue to dig in their heels and pursue profits at any cost.

An associated factor is how quickly citizens cotton on to the fact that the propaganda to which we are exposed daily is sustaining conditions that are killing us. The shift from inaction to informed action depends on the climate breakdown becoming much, much worse and the emergency being appreciated by everyone. That said, the fact that a city like London suffered temperatures over 40 degrees Celsius in 2022 for the first time ever might goad the populace into action in some form.

Richard David Hames, Founding President of the Asian Foresight Institute



AS SPOTTED BY
SPRING WISE
INNOVATION THAT MATTERS

TOMORROW'S INNOVATIONS, TODAY

AN ISLAND DEDICATED TO GREEN HYDROGEN

A project proposed for the Dogger Bank in the North Sea would produce hydrogen using wind power.

SMALL TURBINES TURN ANY RIVER INTO A HYDROELECTRIC POWER SOURCE

The system (pictured, above) can harness untapped waterways, operating at low speed without damaging marine life.

RESEARCHERS TEST SPACE POWER STATION TECHNOLOGIES

Orbiting solar panels could produce continuous power by avoiding any darkness.

Find these (and 10,000 more) innovations in the [Springwise Innovation Library](#).



EDUCATION

16. WHAT WILL 'SCHOOL' LOOK LIKE?



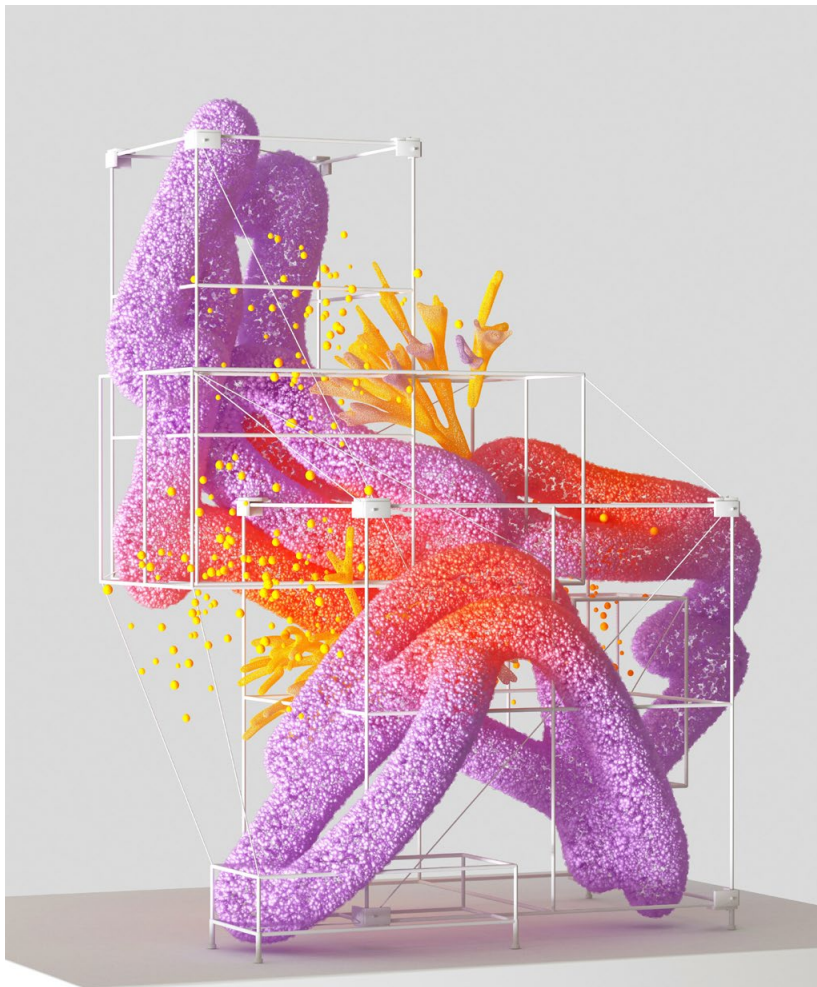
“

In 2043 school will likely be a concept rather than a place where our children go to learn. Systems of education led by governments will not be able to keep up with innovation, and a decentralised offering will be where most parents go to educate their children.

Emerging technologies will also supercharge the decentralisation of learning. By 2043, the metaverse will no longer be an interesting concept, but the place where most of us learn, work, and live. Remote learning will no longer be the poor relation to a classroom, as children interact immersively with people and environments from anywhere in the world. The integration of blockchain technology into education will mean that learners are no longer users but owners of their education.

Dan Fitzpatrick, Director, Edufuturists





“ It seems likely there will be a range of personal presence modes, from entirely in person to all online, and all kinds of hybrids in between. Be ready for ‘HyFlex’ classes with mixes of in-person and online students and faculty. Depending on local and national politics, classes may enroll an international group of students, most of whom aren’t physical neighbours.

Imagine a student entering a virtual reality space overlaid on their home town, exploring a massive, multimedia educational environment, and engaging with people around the world. At the same time the learner interacts with nonhuman agents powered by AI, while the AI also gathers user data in order to improve their learning experience.

We should expect more robots doing a wide range of functions: some staff operations; as teachers; and representing remote users.

Bryan Alexander, Higher Education Futurist; Senior Scholar, Georgetown University

“

Some teachers will use gamification to spark learning, while others refuse – deeming such teaching approaches shallow or gimmicky. Some schools will use student analytics to improve learners’ experiences, while others will shun them, arguing they are biased, inhumane, and insecure.

”

17. WHAT WILL EDUCATION NEED TO PREPARE STUDENTS FOR?

“

The largest and most challenging topic to cover is the climate crisis. The full nature of global warming and its myriad impacts on the world, how humanity might mitigate it, and how civilisation can adapt to a transformed Earth – all of this is essential for any mid-century curriculum.

STEM (science, technology, engineering, math) education will likely expand, especially as each field introduces innovations – from nanotechnology to editing genomes, new transportation designs to AI and puzzling out dark matter. Some schools will want to add non-STEM fields to STEM topics to bring their intellectual firepower to bear. For example, philosophy can add ethics to medicine. History can give useful precedents for how humans respond to new technologies. Taken together, we could see an expanded yet critical approach to the sciences and technology.

Bryan Alexander

“

While schooling today focuses on ‘giving’ a limited set of knowledge to learners, education in 2043 will inspire learners to be agents of their own learning. The current system is also obsessed with results and the ‘just in case’ model; in 2043, there will be a full embrace of the ‘just in time’ model where learning will be about real-time needs.

The progress of automation and artificial intelligence will enable people to develop the skills that makes them different from technology. Skills such as empathy, critical thinking, communication, and moral awareness. In a world where technology takes care of many tasks, the skills that are unique to humanity will become more and more valuable.

There will also be more of a need for learners to be self-motivated and agile. It’s predicted that technological progress will continue to increase at speed, so our children will need to know how to keep up with changes. Survival in the coming decades will depend on a person’s ability to learn, un-learn, and re-learn.

Dan Fitzpatrick



TOMORROW'S INNOVATIONS, TODAY

A TOOL IDENTIFIES STRUGGLING READERS SOONER

An online tool slashes the time it takes to identify children who need additional help when learning to read.

SCHOOLS ON WHEELS FOR REMOTE AREAS IN UZBEKISTAN

The preschools are housed in brightly painted buses that travel to remote villages, bringing early education to children who would otherwise have no access to it.

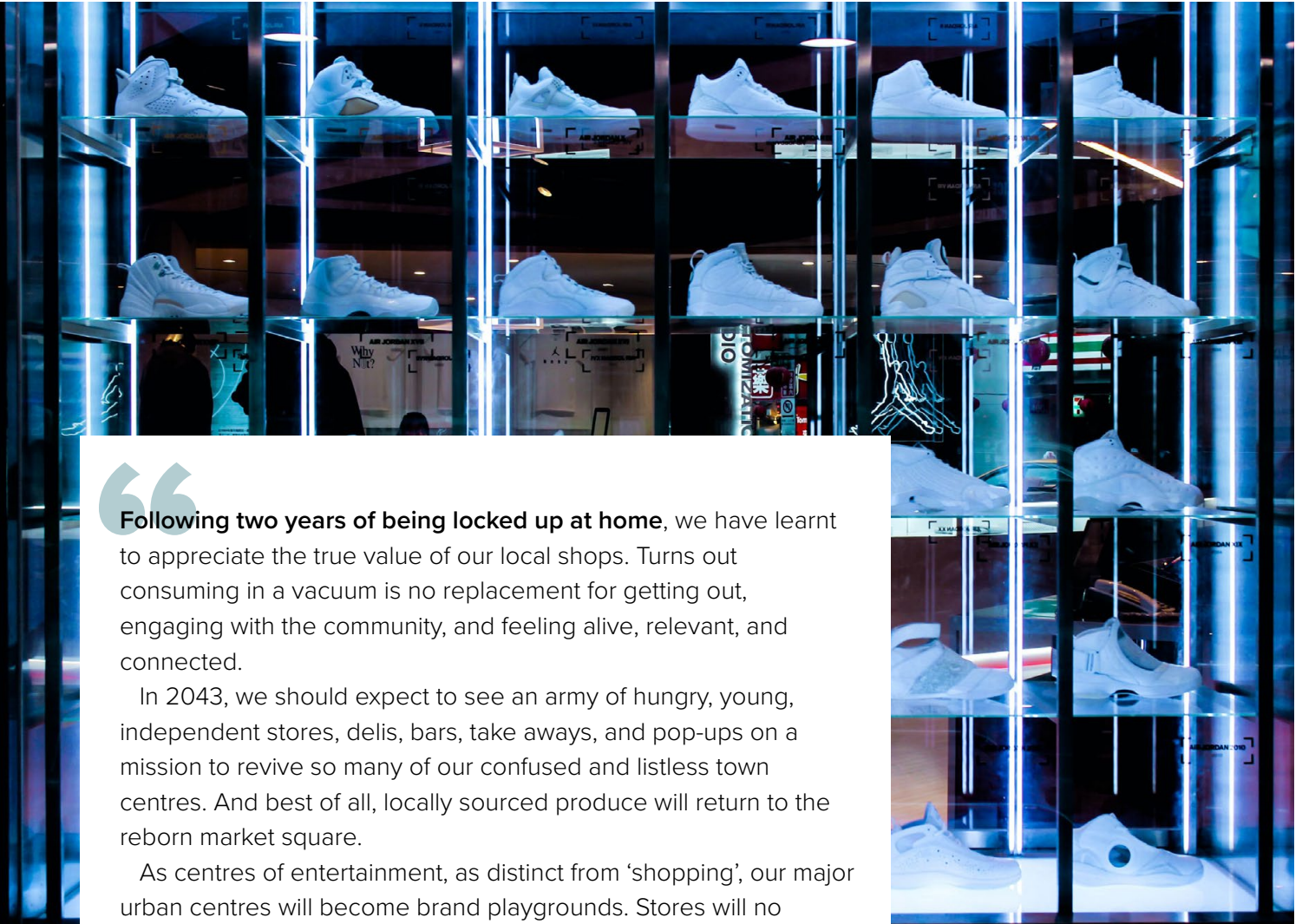
MOBILE-FIRST EDUCATION PLATFORM LAUNCHES IN PAKISTAN

The gamified learning experience (pictured, above) is personalised and covers material from K-12.

Find these (and 10,000 more) innovations in the [Springwise Innovation Library](#).

RETTA

18. HOW WILL WE SHOP?



“

Following two years of being locked up at home, we have learnt to appreciate the true value of our local shops. Turns out consuming in a vacuum is no replacement for getting out, engaging with the community, and feeling alive, relevant, and connected.

In 2043, we should expect to see an army of hungry, young, independent stores, delis, bars, take aways, and pop-ups on a mission to revive so many of our confused and listless town centres. And best of all, locally sourced produce will return to the reborn market square.

As centres of entertainment, as distinct from ‘shopping’, our major urban centres will become brand playgrounds. Stores will no longer need to ‘store’ things, nor necessarily display products tidily on shelves. Conventional ‘stores’ will be reborn as venues for brands to show off, seduce us, and tell us why we should include them in our lives. ‘Stores’ will be replaced by ever-changing, immersive and interactive digital experiences. It will be the age of immersive storytelling. These brand playgrounds will help us determine which products are cool of course, but more importantly, which best align with our personal values. In the same way that our individual preferences shape our social media feeds today, digitally immersive spaces will shape the brand stories around us individually. Imagine how seductive it will be when we become central to a brand’s story. Once upon a time, marketers talked of demographics. In 2043, egographics will enable AI to target you specifically.

Howard Saunders, The Retail Futurist

19. WILL INSTANT DELIVERY EXIST?

“

Currently, the economics of delivery don't support same-day or same-hour propositions. The costs are simply too great. However, advancements in autonomous (driverless) technology, electrification, and drone delivery will allow most brands to provide delivery within hours on most stocked items. Indeed, it will likely be table stakes by 2043.

However, I also believe that our environmental crisis will also escalate over the next 20 years to the extent that governments may place some level of restrictions or thresholds on what can or cannot be delivered with this sort of speed and convenience. So, will you be able to get a ballpoint pen delivered in 10 minutes? Perhaps not. But your weekly grocery order may be almost instantly despatched.

Doug Stephens, Founder, Retail Prophet

“

The continued rise of digitalisation, 6G networks, IoT, and AI will bring us many new possibilities for virtual shopping – including deliveries. As AI algorithms get smarter and faster, quantum computing evolves, and more data is collected on us, it's possible we arrive at a situation where companies know our needs before we do, and can provide us with the appropriate goods before we even think about placing an order. A system that tracks your personal immune health as well as seasonal sickness trends in your local area could see a drone despatched to your door to bring you flu medicine before your first sneeze.

Elina Hiltunen, Futurist



TOMORROW'S INNOVATIONS, TODAY

SELF-DRIVING DELIVERY ROBOTS

A major autonomous delivery robot company has raised new funding as investors bet that the future of delivery is robotic (pictured, above).

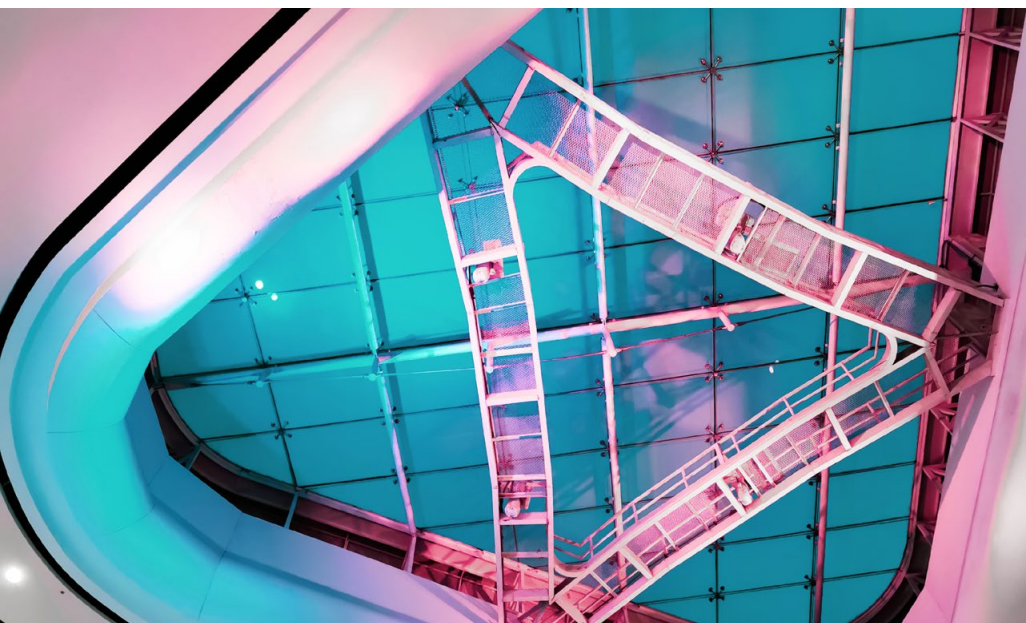
EDIBLE FOOD PACKAGING MADE FROM KELP REPLACES SINGLE USE PLASTICS

The compostable materials are created from sustainably-sourced farmed seaweed.

A PLUGIN LETS CUSTOMERS SELL BACK THEIR OLD CLOTHES IN EXCHANGE FOR REAL-TIME CREDIT

The technology can be integrated into retailer apps and websites.

Find these (and 10,000 more) innovations in the [Springwise Innovation Library](#).



TRAVEL

20. HOW WILL WE TRAVEL?



“Fewer and fewer places on earth will feel truly like we are exploring foreign cultures. Everything will feel even more familiar. The result? An emergence of de-globalised, truly authentic experiences that will try to rescue some of the adventure. The value of authenticity will increase.

The drive towards sustainability, artificial intelligence, and virtual access to our work will only enhance this trend. We will need more and more true disconnection and it will get harder to come by. ‘Holidays’ will have to cater for leisure (“I want to sit around in very familiar environment and have everything done for me”) with adventure (“Help me experience something authentic and completely foreign”).

Sustainability will drive changes in pricing (things will be fairly priced), access (places we can’t go any more), decision-making (people will chose differently), and hopefully the way in which we travel and how conscious we are of our impact. Perhaps more people will decide to leave the Antarctic alone and experience it via a documentary or with a pair of VR goggles.

Gus Balbontin, Alternative Futurist





“While the tourist of 2022 was often the worst version of ourselves, travellers in 2043 will be idealists, less concerned with taking home a stone from a beach and more focused on giving back – to society, to local community, to wildlife. We want to be part of the world we are visiting.

We'll go diving to not just enjoy the sights, but to restore a coral reef. We'll realise tourism can save, not destroy, the world, and return from our vacations as protectors and warriors of Planet Earth.

Anne Skare Nielsen, Co-Founder of Universal Futurist, Author, and Keynote Speaker



TOMORROW'S INNOVATIONS, TODAY

DRINKING FOUNTAIN MAP OF VENICE ENCOURAGES SUSTAINABLE TOURISM

The community hopes to combat plastic waste by making it easy to refill bottles.

A SOLAR-POWERED TOURIST CATAMARAN

In addition to running on clean energy, the catamaran causes no engine noise or vibration.

'SHARKSKIN' TECHNOLOGY REDUCES AEROPLANE EMISSIONS

A thin film on the plane's surfaces reduces drag while adding very little weight.

Find these (and 10,000 more) innovations in the [Springwise Innovation Library](#).

CONTRIBUTORS

Anders Sörman-Nilsson, Australia



Anders Sörman-Nilsson (Global EMBA / LLB) is a futurist and the founder of the think tank and trend analysis firm - Thinque, which provides data-based research, foresight, and thought leadership assets for global brands across 4 continents.

The company's vision is to disseminate and decode 'avant-garde ideas which expand minds and inspire a change of heart', and clients like Microsoft, Apple, Meta (Facebook), McKinsey, Jaguar Land Rover, Adobe, MINI, Rugby New Zealand, and Lego trust his future guidance.

He has published three books on digital transformation and innovation, including 'Aftershock' (2020), 'Seamless' (2017), and 'Digilogue' (2013), is a member of TEDGlobal, Entrepreneurs Organization, where he is the Sydney Chapter's Leadership Impact Chair, and was nominated to the World Economic Forum's Young Global Leaders in 2019.

He is the author of the Microsoft & Thinque whitepaper "How Artificial Intelligence is powering Australian Retail", the co-creator of the B2B marketing award-winning Adobe Creative (CQ) Intelligence test, and is the host of the 2nd Renaissance Podcast as well as the Entrepreneurs Organization's Scaling Impact podcast.

anderssorman-nilsson.com

Susan Cox-Smith, Netherlands



Drawing on over 20 years' experience as a writer, designer, creative director, interactive producer, and researcher, Susan seeks to enrich public engagement with possible futures.

Across multiple engagements for Changeist, she has consulted on futures projects for ADCB, AXA, BBC R&D, Comcast, International Federation of Red Cross and Red Crescent Societies, National Lottery Fund UK, Nesta, and several Silicon Valley tech companies. She has contributed to trend research and scenario development looking at the futures of personal transport, health and wellness, entertainment, arts and culture, and emergency response practices. Recently, she led the design and delivery of a public workshop platform exploring feminist futures in a post-Covid world for the International Women's Development Agency.

Susan also oversees the design of and co-leads Changeist's capacity building workshops, and the development of related instructional materials, developing futuring skills in leaders from organisations ranging from Microsoft to Netflix to Wells Fargo to NASA JPL. She was the contributing editor on How to Future: Leading and Sense-making in an Age of Hyperchange (2020).

changeist.com

CONTRIBUTORS



Manish Bahl, India

In more than 20 years as a thought leader and futurist, Manish Bahl has interviewed thousands of people, published hundreds of compelling reports, and provided market guidance to Fortune 500 companies. He's a trusted thought leader and advisor, from business strategies to management models, consulting to research, location to competition.

Before founding Curious Insights, he established and grew Cognizant's Center for the Future of Work in the Asia Pacific and helped Cognizant gain strong mindshare in the region. Prior to this, he served as a Vice President with Forrester Research. [curious-insights.com](https://www.curious-insights.com)



Bertalan Mesko, Hungary

Dr. Bertalan Meskó, PhD is The Medical Futurist and the Director of The Medical Futurist Institute, analysing how science fiction technologies can become a reality in medicine and healthcare. A geek physician with a PhD in genomics, he is also an Amazon Top 100 author and private professor at Semmelweis Medical School, Budapest, Hungary.

He's delivered more than 500 presentations for organisations including Harvard, Stanford and Yale Universities, NASA Ames Research Center, and many global pharmaceutical companies. [medicalfuturist.com](https://www.medicalfuturist.com)



Doug Stephens, Canada

Doug Stephens is one of the world's foremost retail industry futurists. His intellectual work and thinking have influenced many of the most widely known international retailers, agencies, and brands including Walmart, Google, Estée Lauder, BMW, and LVMH.

Prior to founding Retail Prophet, Doug spent more than 20 years in the retail industry, holding senior leadership roles. Doug is the author of three internationally bestselling books: *Resurrecting Retail: The Future of Business in a Post Pandemic World* (2021), *Reengineering Retail: The Future of Selling in a Post-Digital World* (2017), and *The Retail Revival: Re-Imagining Business for the New Age of Consumerism* (2013). [retailprophet.com](https://www.retailprophet.com)



Elina Hiltunen, Finland

Credited by Forbes as one of the 50 leading female futurists in the world, Elina Hiltunen is a futurist, key-note speaker, consultant, author and co-author of 14 books (including one sci-fi title).

She has a doctorate in economics and a Master's degree in chemical engineering.

Currently, she is working on her second doctoral thesis, at the National Defence University, Finland, on the topic: *How to use science fiction in foresight process of defense organization*.

[whatsnext.fi](https://www.whatsnext.fi)

[whatsnext.fi](https://www.whatsnext.fi)

Howard Saunders, UK



The Retail Futurist, otherwise known as Howard Saunders, is a writer and speaker whose job it is to see beyond retail's currently choppy waters.

Howard spent the first 25 years of his career at some of London's most renowned retail design agencies, including Fitch & Company, where he created concepts, strategies, and identities for dozens of British high street brands. In 2003, he founded trend-hunting agency, Echochamber, inspiring his clients with new and innovative store designs from across the globe. Howard relocated to New York in 2012 where the energetic regeneration of Brooklyn inspired his book, *Brooklynization*, published in 2017.

His newfound role as champion for retail's future in our town and city centres gave rise to the title The Retail Futurist. Howard has been interviewed on numerous television and radio programs and podcasts for BBC Radio 4, BBC Scotland, the British Retail Consortium, Sky News Australia, and TVNZ, New Zealand. His talks are hi-energy, jargon-free journeys that explore the exciting, if not terrifying, retail landscape that lies ahead. When not in retail mode, Howard has recorded, literally, thousands of digital music masterpieces, most of which remain, thankfully, unheard.

22and5.com

Fabienne Goux-Baudiment, France



Fabienne Goux-Baudiment earned a Masters in Political Science (France) and a PhD in Human and Social Foresight (Social Sciences, Roma, Italy). She has been the founding head of the consulting firm proGective in France (Paris) since 1994; centre of application, research, and training in futures studies, proGective meets its clients' needs (central or local governments, businesses, NGOs) by working out innovative and foresight-oriented solutions.

Associate Professor of Foresight and Innovation, she coordinates the curriculum "Knowledge Engineer" at ISTIA, the College of engineering of the University of Angers. She is also serving as a member of the Foresight section of the Regional Economic, Social and Environmental Council of Ile de France.

Former president of the World Futures Studies Federation (2005-2009), she is a founding member of the French Society for Foresight which she chaired from 2013 to 2016.

Author and referee of several international Journals, Fabienne is also a member of the Association of Professional Futurists and a Fellow of the World Futures Studies Federation.

projective.com

CONTRIBUTORS



Dan Fitzpatrick, UK

Dan is director at Edufuturists, and the Strategic Lead for Digital Skills at Education Partnership North East. He is a certified Google Trainer, Microsoft Innovative Educator and an Apple Teacher, with an M.A. from Durham University. Over the last few years, Dan has led training on cloud technology in education and industry. He has a background in leadership, media, stand-up comedy, and school governance. He was recently named as a Top Educator and Expert on Twitter. He tweets at @danfitztweets

edufuturists.com



Gus Balbontin, Australia

Gus Balbontin is the former Executive Director and CTO of Lonely Planet. Having led the brand through significant business transformation, he's perfectly placed to speak about the complexities of running a business in an ever changing, highly competitive world. Today, Balbontin is involved in the startup scene, as a founder, investor, and advisor. He currently runs a Design and Innovation agency called Neu21 (www.neu21.com) and is a Co-Founder at Carnival.art.

gusbalbontin.com



Christophe Pelletier, Canada

Christophe Pelletier is one of the world's true experts on the future of food and agriculture. During his studies and his career, he has been active in Beef, Dairy, Animal Feed, Nutrition, Pork, Poultry, and Seafood. As 'The Food Futurist' he has provided his services and vision to organisations in about all sectors of food value chains, from small niche players to some of the world's largest food and agriculture corporations.

hfgfoodfuturist.com



Anne Skare Nielsen, Denmark

Anne is one of Scandinavia's - in fact the world's leading futurists. With her great interest and knowledge in radical change and transformation of thinking, she is in high demand as a lecturer and provocateur all over the world.

However, her heart lies with the people who 'can and will': those who dare to be passionate about what they do - and who know that hard work never goes out of style.

universalfuturist.com

CONTRIBUTORS

Jude Pullen, UK



From the iconic BBC Two's Big Life Fix and winner of the 2020 IMechE (Institution of Mechanical Engineers) Alastair Graham-Bryce "Imagineering" Award, Creative Technologist and Physical Prototyping Expert Jude Pullen has worked for the NHS, Dyson, LEGO, and a number of start-ups, and his clients include IKEA, RS Components, Children in Need, Bare Conductive, Raspberry Pi, Mayku.

With an unparalleled appetite to investigate each subject matter that crosses his path, Jude often blends artistic provocation with novel application of technology in his work, and has won various awards, for products, strategy - and for communicating the power of creative engineering to global audiences.

Jude typically begins his work using prototypes to help visualise ideas and validate their performance, but increasingly he uses prototypes as a means to explore the unknown or uncertainty in new technologies and experiences.

He works with startups through to international brands using such techniques to help them design products and services not just for people, but with people.

judepullen.com

Rohit Talwar, UK



Rohit Talwar is a global futurist, award-winning keynote speaker, author, and the CEO of Fast Future. His prime expertise lies in helping clients understand and shape the emerging future. He has a particular interest in how we can create a very human future by putting people at the center of the agenda.

Rohit is the co-author of *Designing Your Future*, lead editor and a contributing author for *The Future of Business*, *Beyond Genuine Stupidity—Ensuring AI Serves Humanity*, *The Future Reinvented—Reimagining Life, Society, and Business*, *A Very Human Future—Enriching Humanity in a Digitized World*, editor of *Technology vs. Humanity*, and co-editor and contributor for two forthcoming books: *Unleashing Human Potential—The Future of AI in Business*, and *50:50—Scenarios for the Next 50 Years*.

fastfuture.com

CONTRIBUTORS

Richard David Hames, Asia



Richard David Hames is an Entrepreneur, Strategic Futurist, Mentor and Author. Described by Forbes Asia as one of the “smartest people on planet”, Richard is among the world’s most influential thinkers. Sought by governments and corporations for his intellect and remarkably accurate insights, Richard provides his clients with deep wisdom on a range of issues concerning the future of humanity.

He is the founding president of the Asian Foresight Institute, elected Fellow of the World Academy of Art & Science, and the personal mentor to Heads of State, CEOs and entrepreneurs.

An Australian citizen, educated in Europe and domiciled in Asia, Richard has been honoured with numerous awards. A compelling speaker and the author of seven books, Richard is Executive Director of Centre their Future. In 2015 he co-founded MiVote – one of the fastest growing direct democracy movements in the world.

In 2022 Richard was appointed Chief Strategist to Eternus - a diverse ecosystem of social impact businesses working globally to solve some of our most persistent problems.

richardhames.com

Melissa Sterry, UK



Transdisciplinary design scientist and complex systems theorist Melissa Sterry is recognised as a world-leading authority on the science, technology, design, and thinking that could help humanity to build a better world.

Primarily working with projects that chart unprecedented conceptual, creative, and commercial potentialities, including several first-to-market start-ups, Melissa has extensive experience of working with leading-edge ideas, individuals, and institutions worldwide.

A recipient of several national and international innovation, creativity, and enterprise awards, including the Mensa Education and Research Foundation International Award for enhancing intelligence that benefits society, Melissa is a ‘40 over 40 Women to Watch’ honouree, was listed in the ‘Libertine 100’, and is an inductee of the Global Women Inventors and Innovators Network Hall of Fame.

Specialising in futures in the built environment, utilities, manufacturing, engineering, design, publishing, media, and communications, she has contributed to groundbreaking projects and publications as far and wide as the United States, South and South East Asia, UK, and Europe.

melissasterry.com

CONTRIBUTORS

Bryan Alexander, USA



Bryan Alexander is an award-winning, futurist, researcher, writer, speaker, consultant, and teacher, working in the field of higher education's future. He completed his English language and literature PhD at the University of Michigan in 1997, with a dissertation on doppelgangers in Romantic-era fiction and poetry.

From 2002 to 2014 Bryan worked with the National Institute for Technology in Liberal Education (NITLE), a non-profit working to help small colleges and universities best integrate digital technologies. With NITLE he held several roles, including co-director of a regional education and technology center, director of emerging technologies, and senior fellow.

In 2013 Bryan launched a business, Bryan Alexander Consulting, LLC. Through BAC he consults throughout higher education in the United States and abroad. Bryan speaks widely and publishes frequently, with articles appearing in venues including *The Atlantic Monthly*, *Inside Higher Ed*. Bryan is currently a senior scholar at Georgetown University and teaches graduate seminars in their Learning, Design, and Technology program.

bryanalexander.org

Hugh Montgomery, UK



Dr Hugh Montgomery is Professor of Intensive Care Medicine at University College London (UCL), where he also directs the Centre for Human Health and Performance. He is also a broadcaster, fiction author, scientist, and clinician.

He still works clinically, caring for patients in an Intensive Care Unit in North London. He is also on the Council of the UK Intensive Care Society, chaired the UK National Emergency Covid Critical care Committee, consults for an international pharmaceutical company on novel vaccine development, and is principal investigator for trials of a novel therapy.

In his research capacity, Montgomery has published over 500 scientific papers, several in *Nature*. He described the first 'gene for human fitness'.

In innovation, Montgomery holds patents for new metabolic therapies, (for cancer wasting and prevention of injury in stroke); a new technology for patient hydration; a novel mask for the removal of pollutants; and a new asthma inhaler. He chairs the board of Cambridge-based adaptive learning company Obrizum. He chairs Dyson's Independent Medical and Scientific Board.

CONTRIBUTORS

Bronwyn Williams, South Africa



Bronwyn Williams is a Futurist, Economist, and Business Trends Analyst. She has over a decade's experience in strategic management, trend research and foresight; consulting to clients in the public and private sector across the African continent.

Her educational credentials include tertiary qualifications in Marketing Management (University of Johannesburg), Economics (University of London), Foresight (University of Manchester), and Future Studies (University of Stellenbosch). She is currently completing a Masters in Applied Economics from the University of Bath

As a partner at Flux Trends, Bronwyn's research focuses on how macro socio-economic trends and emerging technologies will impact businesses, industries, and nations in the near and long term future. Part economist, part strategist, Bronwyn's particular areas of expertise include fintech trends, alternative economic models, and sustainable future design.

Bronwyn's clients include Top 40 JSE listed companies, The South African Reserve Bank, African government departments, and global business leaders. She also guest lectures for business schools, such as Duke, GIBS, UCT, and the University of Johannesburg. Bronwyn is also the co-author of *The Future Starts Now*. She is a member of the Association of Professional Futurists. fluxtrends.com

Tony Hunter, Australia



Tony Hunter is a Global Food Futurist Speaker, Food Scientist, author, and strategic foresight consultant specialising in the Future of Food. His Big Idea is that food is now technology and technology advances exponentially. Food is now TECHXponential™.

As an acknowledged expert on the Future of Food, he speaks globally at international conferences in person and virtually on the technologies and trends that are shaping the rapidly changing food sector. He provides expert and strategic foresight advice on new food technologies and their industry impacts to global food companies from PepsiCo to KFC. He also advises VC investors and top four global consulting companies on these topics.

His distinctive combination of scientific qualifications, business experience, and detailed understanding of food technologies allow him to deliver a unique perspective on the Future of Food.

futuristforfood.com

START D E R C

Created by Springwise

**For further information on
how Springwise intelligence
and content services can help
your organisation please email
james@springwise.com**

Visit us: springwise.com

Springwise
Somerset House
Strand, London
WC2R 1LA

Copyright 2023
Springwise Intelligence
All rights reserved

Springwise is a certified B Corp and member of 1% for the Planet



Certified



Corporation