LS:N GLOBAL THE : FUTURE : LABORATORY

Innovation Debrief 2023–2024

50 innovations to watch

Cover: AI imagery by **The Future Laboratory**, UK

Introduction

The ability to look is the root of creativity, according to Rick Rubin of Def Jam Records fame in his book, The Creative Act (Canongate, UK, 2023). But it is also the root of innovation, as we discover in our latest Innovation Debrief

It is a hunch, a process and a revelation that allows us to see past the ordinary, everyday and mundane – waste, sustenance, longevity, tourism – and to get to what otherwise might be invisible.

And most innovations are invisible – to others, to the wider business market, to those ordinary, everyday mundane brands we deal with daily – until the innovator sets about gathering the seed of an idea and plants it in a way that allows it to grow in extra-ordinary and far from mundane ways.

So waste, perhaps, but now recast as a grain and stalk flour (see page 4) that adopts a zero-waste policy. Sustenance, maybe, but revisited as bio-synth chicken (see page 10) and meat (see page 8). Longevity, certainly, but restyled as a phone with multiple replaceable and recyclable parts (see page 12). And tourism, doubtless, but as space travel done in hydrogen balloons (see page 41) instead of liquid hydrogen rockets.

Each innovation, as we shall see, is an act of belief, imagination and having a mission to instigate change before having a solution to deliver it, which is what many brands erroneously focus on – the strategy rather than the spark that informs it.

This places the creative urge and the disruptive act at the beginning of the innovation process rather than something that happens during it. As Rubin suggests, we need to embrace a 'beginner's mind, where rather than assessing what you know, and should know, you wipe the slate clean, starting with a childlike place of not knowing'.

You only have to look at the calibre and variety of our Futures 100 Innovators Awards to see that many have used this approach. Consider typographer Paul Hunt with their genderless, diverse, inclusive emojis. Think packaging from Anna and Maria Glansén that decays in keeping with its contents so you don't let things go to waste. Embrace Aakanksha Gulati's 'vagina on a chip', a polymer rectangle that mimics the vaginal tissue environment so that bacterial vaginosis can be understood and eradicated.

All are responses to everyday issues, but approached using very powerful, but straightforward innovation-first stepping stones – okay, so a framework of sorts: challenge, curiosity, change, collaboration, creativity and concept execution – but all embedding a beginner's or naivist sensibility:

: **Challenge** – where a question is posed, assumptions unlearned, a purpose defined

: **Curiosity** – where we actively ask why not, what if, how can I approach this from an instinct standpoint?

: **Change** – what am I trying to do, why, for whom?

: **Collaboration** – what are the unlike-minded skills I need to begin my journey, who are the people with them, how will they spark?

: **Creativity** – what is the seed I am trying to create, who will want it, why?

: **Concept** – are my prototypes making a difference, advancing a cause, adding value to people, planet and process?

: **Corroboration** – how are my target audience receiving it, how can I use this to challenge assumptions, investigate new opportunities?

And so the journey begins once more, new ideas are formed and new innovations considered – many of which you will find in our latest report, or on LS:N Global, our online trends, foresight and consumer behaviours platform.

Enjoy, and remember to read it with a beginner's mind and with a naivist outlook.

Martin Raymond, co-founder, The Future Laboratory





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Waste Re-invented

Increased concern about the climate crisis is resulting in businesses developing new products and services that can help mitigate environmental degradation and offset climate disaster. Waste, a contentious by-product of all industry, has become a focal point, but understanding its negative footprint is encouraging brands to effectively capture, dispose of or regenerate it – often transforming it into an entirely different material or food waste innovation



A Matter of Thyme by **Julia Pätzold** converts and concentrates harvested herbs into essential oils and hydrolates, Design Academy Eindhoven, The Netherlands

Lab Insight:

Martin Raymond, editor-in-chief

'Waste is no longer a by-product, but a valuable resource. But to be seen as a core part of the value chain, it needs to be seen as a profit centre that sits within our own eco-system rather than outsourcing it. Only when our organisations become circular can we truly say that we care about the planet'



Supplant, UK

Supplant
Purposeful Pasta

Supplant Pasta is made from the UK-based brand's signature flour, produced from both wheat grains and wheat stalks. Through upcycling an abundantly renewable resource, the flour's production involves a zero-waste policy, using nearly the entire body of a wheat plant.

Supplant also claims that its pasta is filled with six times more fibre than regular flour, and comes with fewer calories and net carbohydrates, making it a healthier alternative for more health-conscious consumers. The brand has caught the eye of seven-Michelin star chef Thomas Keller who is already using the raw material.

: What's next As we outlined in our **Adaptive Appetites** macrotrend, companies will soon face regulations requiring them to track their waste production and incentivising them to regenerate their waste into products like Supplant Pasta

Samsung
Guilt-free Laundry

Addressing the challenge of microplastics in garments, **Samsung** has worked with **Patagonia** to develop an innovative solution that can reduce emissions of harmful particles during laundry cycles. The breakthrough laundry technology hinges on a microfibre filter that captures the microplastics released by clothing before the end of the cycle. An additional feature, the **Less Micofiber Cycle**, will be made available on the machines and the company estimates this could cut microplastic emissions by up to 54%.

: What's next As our **Home Cleaning Market** analysis suggests, active brands in this sector are now assessing the technologies and ingredients they can use to reduce waste production and do right by the environment

Thought-starter:

Successfully re-inventing waste is possible through the amalgamation of technology and innovation. What does the lifecycle of your product look like? And how can various components of waste be deconstructed to find new value?



Samsung

Mill
Dehydrating Waste

US start-up **Mill** aims to revolutionise food waste through its dehydrating bin that dries, shrinks and eliminates all smells from food waste overnight. According to co-founders Matt Rogers and Harry Tannenbaum, unlike compost, which requires open space, Mill is simply a bin that requires no attention. Its dehydrating process helps prevent food waste from ending up in landfill and releasing methane. Instead, the soil-like product can be turned into chicken feed for use in the poultry industry. At present, food waste accounts for 8–10% of global emissions, according to the **Intergovernmental Panel on Climate Change** (IPCC).

Mill's monthly membership fee of £27 ($30, €31) includes the bin, a seamless mail-back service to deliver the waste to local farms, and personalised impact-tracking, making it the perfect product for those turned off by messy compost bins.

: What's next Smart bins of the future will incorporate app-based dehydrating technologies to encourage consumers to be more mindful of their waste disposal, and indeed its potential after it leaves their bins and homes

Food waste accounts for **8–10%** of global greenhouse gas emissions

Source: Intergovernmental Panel on Climate Change

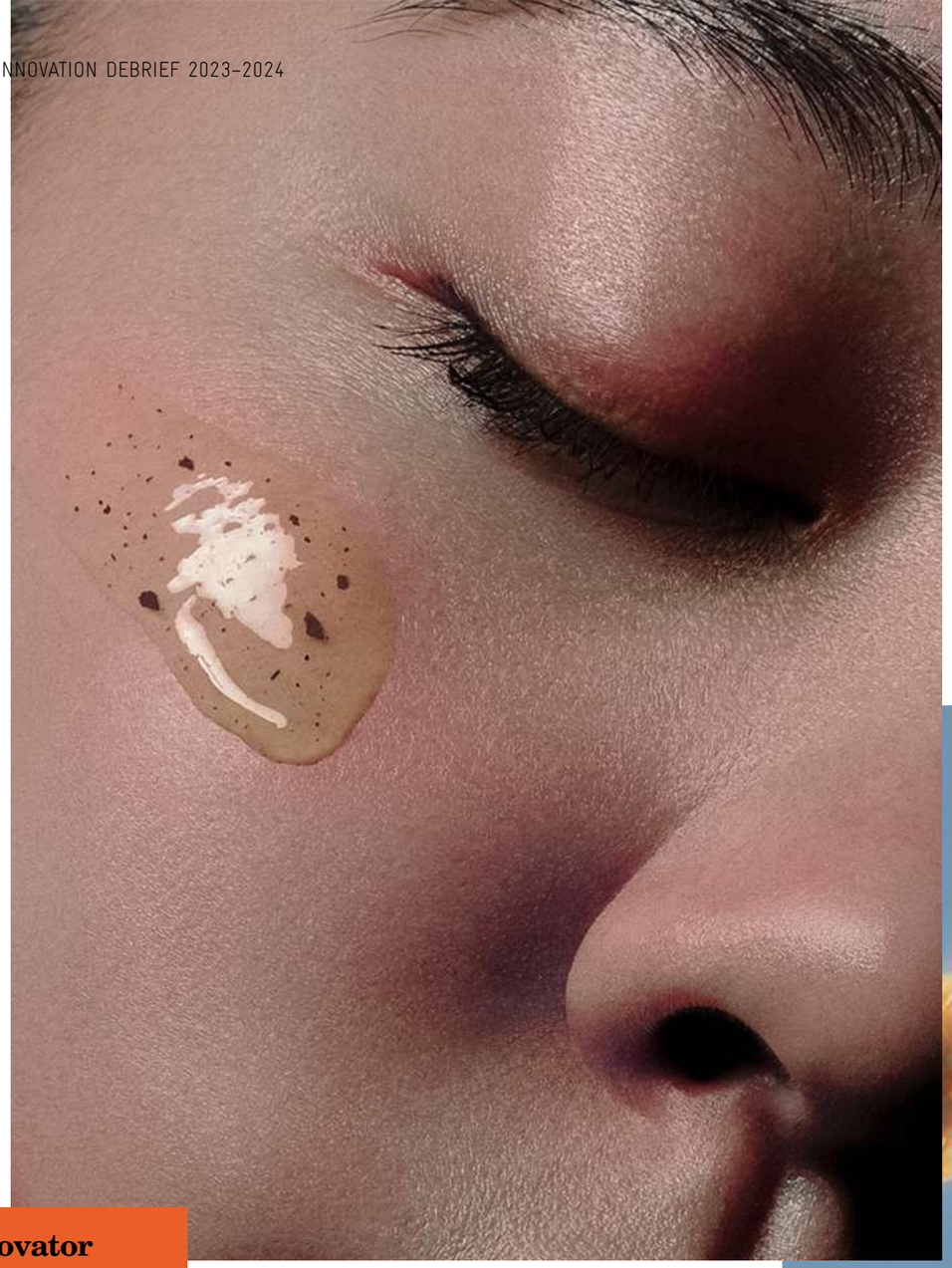
Mill, UK

Aizome
Wastewater Wellness

Japanese-German start-up **Aizome** has collaborated with creative agency **Serviceplan Innovation** and New York-based design studio **Workbyworks** to create Wastecare, the world's first skincare range made from waste water collected at its textile dyeing factory. Aizome claims that since it uses only plants, water and ultrasound in the dyeing process – instead of synthetic chemicals – its waste water offers natural health benefits, including anti-inflammatory, pain-relief and skin rejuvenation qualities.

According to the **UN**, chemical use in the dyeing process is the second biggest cause of water pollution. Aizome hopes to show that if its waste water is clean enough to be certified for skincare use, the processes and materials used in its factories are truly natural.

: What's next Legislation on environmental waste practices will be introduced in Europe and the US. Businesses should look at formulating solutions including regenerating the waste into new products to get ahead of regulatory requirements



Eclo
Supermarket Superfood

Belgian organic grower **Eclo** has teamed up with supermarket group **Bio-Planet** to rescue unsold loaves of bread and put them to good use as a base for growing mushrooms. Eclo collects the bread from supermarkets and mixes it with sawdust to create the perfect growing medium. It then uses a 3,000-square-metre network in Brussels' Cureghem Cellars to grow organic eryngii and nameko mushrooms. The process takes 4–12 weeks, and the grown mushrooms are then sold in Bio-Planet's supermarkets – creating a 100% regenerated lifecycle.

: What's next Circular production is an important offering for sustainable products and more brand collaborations in the food and agriculture industry will focus on closing the loop



Above: **Aizome**, Japan; Right: **Houston** user-orientated microdosing companion app, US

Futures 100 Innovator
Felix Böck, founder and CEO, ChopValue

An engineer by training, Felix Böck launched **ChopValue** in Vancouver in 2016 as a sustainable design and furniture business that recycles chopsticks to make items including charcuterie boards, shelving units and desks. Böck realised that ChopValue's local concept could have a massive global impact and pushed to make it franchiseable. Today, ChopValue has 11 microfactories in six countries and has signed up hundreds of restaurants globally to recycle their chopsticks

Cultivated Cuisines

The next iteration of sustainable foods pushes the boundaries beyond meat, dairy and fish alternatives created from vegetarian substitutes and instead looks at lab-grown, artificially cultivated productions. This synthesised food future elevates previous offerings as it incorporates a core value proposition that consumers seek: nutrition but combined with revived flavours, textures and scents. Cultivated meat and fish alternatives are similarly advanced enough to offer consumers the same dietary nourishment without causing harm to animals or the environment

A Flower Symphony is an design installation by **Adelaide Lala Tam** deploying ephemeral delights, drenching liquids and sticky nectars personified and tuned together in a spring choreography, Rotterdam

Lab Insight:

Gabriela Białkowska, creative foresight analyst

'Cultivating food has immense potential as mainstream meat replacement. But to alter our diets, brands must prioritise making these alternatives palatable to consumers. Effective communication of lab-grown meat's core advantages can drive widespread adoption, paving the way for sustainable food futures'



Wildtype, US

Wildtype
Sea-friendly Sashimi

The world's first lab-cultivated salmon has been created by San Francisco-based start-up, **Wildtype**. Its sushi-grade salmon – which can only be consumed raw at present – is created using the cells of Pacific salmon and then encouraged to grow by recreating the same conditions required for cells to grow naturally: temperature and PH nutrients.

They are then produced using plant-based structures and ready to eat. Wildtype's synthesised salmon offers the same amount of Omega 3 and 6 as regular salmon, and doesn't risk carrying mercury, antibiotics and other parasites often found in conventional fish. Its sustainability offering also surpasses that of farm-raised or wild-caught fish and other vegan alternatives too.

: What's next Synthesised salmon will become more readily available in supermarkets as it diminishes the possibility of mercury poisoning and other diseases, making it a safer product to transport, distribute and sell

Futures 100 Innovator
Echo

Branding agency **Echo** uses the power of bold messaging, packaging design and nostalgia to shift perceptions of unusual ingredients like jellyfish. 'We must think differently to tackle climate change and feed 8bn people. This means eating unfamiliar alternatives like pea protein, insects and jellyfish,' says Nick Dormon, managing director of Echo

Steakholder Foods
Guilt-free Steak

Advanced biology coupled with its proprietary 3D bioprinting technology has been deployed by Israel-based **Steakholder Foods** to create fresh-to-market bio-synth steaks. It selects cells from a sample batch of stem cells and formulates them into bio-ink using carefully selected cell lines that are then loaded into a 3D printer. In just a matter of minutes, this innovative technology can produce cuts of real meat with pinpoint precision based on digital design.

: What's next 3D-printing meat could mitigate the environmental impact of intensive cattle-rearing, while at the same time allowing people to consume bio-meat products without slaughtering animals in the process. But it remains to be seen when consumer adoption – hinging on taste, availability, cost and palatability – will increase



Steakholder Foods, Israel

Magic Valley
Stem-cell Cuisines

Australia-based **Magic Valley** is on a mission to challenge the traditional food system's reliance on intensive animal farming by developing healthy, cruelty-free meat products. Its two main products, lamb and pork, are created through the artificial growth of muscle fibres in a lab and, as the business grows, it will scale into using bioreactors that can produce 300,000kg of meat annually.

The process from stem cell to final product requires only three weeks, and can substantially reduce harmful emissions, according to CEO Paul Bevan. 'From a greenhouse gas perspective, and from a water use and a land use perspective, we're looking at between a 70% and 90% reduction compared to conventional meat.'

: What's next As synth meat businesses scale up, the cost of production per unit will decrease, allowing lab-grown meat to be sold at more affordable prices for the end consumer

Thought-starter:

Consumers continue to seek climate-friendly alternatives to meat and fish. How can your business create products that meet the requirements of taste, texture, cultural preference and sustainable practices?

Ameon, US

The Drop Store is an innitiative created to show consumers what life might look like in a water-scarce future by Department Ministry of Foreign Affairs, The Netherlands



Upside Labs, US

Upside
Meet Meat

Chicken has been added to a growing bio-synth menu (see Guilt-free Steak) as Berkeley-based **Upside** becomes the first lab-cultivated synth chicken producer certified as safe for consumption by the **US Food and Drug Administration** (FDA).

As with other synthetic meat, Upside's chicken – its only current product offering – is created using chicken cells, but the focus is on growing only the meat that is required. On a larger scale, lab-grown meat is at the forefront of offering meat-eaters a solution that is effective, delicious, forward-thinking and animal cruelty-free.

'This is a big moment for the future of food,' says Upside COO Amy Chen, adding that the company plans to launch its lab-grown chicken first in restaurants. It is also developing other lab foods including duck, beef, lobster and scallops.

: What's next Fast food chains will adopt products such as Upside's chicken as an alternative option for climate-conscious consumers, amid growing pressure from scientists and environmentalists to reduce our meat-eating habits

The global cultured meat market was valued at **£196.7m** ($246.9m, €229.5m) in 2022 and is expected to expand at a compound annual growth rate (CAGR) of **51.6%** from 2023 to 2030

Source: *Grand View Research*

Landless Food by **Malu Lücking**, Embassy of Food, Dutch Design Week, The Netherlands



Landless Food
Algae Appetites

Landless Food is a new project proposing a regeneration of humanity's food system by introducing a new family of timely flavours that bring our culinary memories back to the table. These are based on microalgae, which can offer a variety of tastes and can be diversified and refined through metabolic manipulation. The first outcomes are a line of seafood flavours. Local strains of algae have been cultivated on edible gel-like objects and after two weeks they are ready to be harvested and consumed.

: What's next How this particular innovation will enter mainstream consumer diets will depend on how these flavours are incorporated into more familiar shapes

Longevity Products

Growing urgency around our climate emergency is pushing consumers into demanding longevity from goods and services. Rather than frequent, low-quality purchases, consumers are seeking products that can be repaired; their lifespan lengthened so that they don't end up in landfill. Responding to this demand, businesses are developing solutions that range from repairable technology and fashion to educating consumers on how to fix their products and maintain them with some TLL, as in tender, loving longevity

Makers Cabinet, UK



Lab Insight:

Olivia Houghton, deputy creative foresight editor

'Over the past few years, people have been living in survival mode, ranking health and safety top of their priorities list. Today, however, a renewed sense of purpose and drive is emerging, and people are re-evaluating their lifestyle opportunities – from pastimes to product purchases. When it comes to purchases, many are asking: 'Do I really need this?', suggesting there is little room for surface-level experiences, products and services in this era. Everything must now add value to people's day-to-day lives'



Loewe ReCraft, Japan

Loewe
ReCrafted Redemption

Spanish luxury house **Loewe** has opened a **ReCraft** store in Osaka, Japan, with the aim of repairing and restoring handbags. The ReCraft store is the first of its kind from the brand, launched specifically with the purpose of maintaining Loewe leather goods and which will take place under the guardianship of full-time leather artisans in-store. Services include re-stitching, edge painting and hardware replacements. In addition, the store will also offer a selection of woven leather baskets created from repurposing high-quality surplus materials from previous collections.

: What's next Luxury brands will become the charge-leaders in owning their responsibility for incorporating sustainable and circular practices. Offering repairs not only lengthens the life of a product, but reflects the high craftsmanship involved in its production

Nokia
DIY Devices

Ahead of the opening of **Mobile World Congress 2023**, **Nokia** launched its first affordable DIY repairable smartphone. The **Nokia G22** addresses consumers' long-standing desire for durable and accessible smartphone innovation. The phone has been designed to be disassembled and re-assembled; its back is removable and its internal components, including the battery, screen and charging port, can be easily unscrewed and swapped out. This device was created in partnership with online tech repair guru **iFixit**, which will make repair guides and produce parts for the G22 for the next five years. Nokia's repairable phone shows how consumers can reduce their dependence on businesses and instead empower themselves with the skills and knowledge to extend their products' lives.

: What's next Education will play a significant role in consumers' adoption of repairable technology, so brands should invest in those resources that can make such knowledge more easily accessible, as our recent **DIY Tech** report suggests



Nokia G22

Makers Cabinet
Time-tested Tools

Makers Cabinet was founded in London with the mission to create unconventional tools to the highest standard, so they can last a lifetime and be passed on to younger generations. Dissatisfied with the disposable and wasteful nature of the stationery market, the founders developed simple products that can endure the test of time. The tools are created with a culture of care in mind; making each tool repairable ensures that the products come with a built-in right to repair while also making concerted efforts to maintain our environment.

: What's next Makers Cabinet frequently hosts repair workshops at its studio where customers can drop by with any product or home appliance and have it fixed at no cost. More businesses will turn to educating local communities to help tackle environmental issues

Makers Cabinet, UK

Thought-starter:

Longevity expands beyond products; consumers are moving towards living longer, healthier lives after recalibrating their lifestyle choices post-pandemic. How can businesses institute practices to create products that can match this test of time?

D Line
Re-handled Repairs

D Line is a leading Danish design brand that hand-crafts architectural hardware and sanitary ware. Along with high-quality craftsmanship, D Line is also prioritising the longevity of its products. It has introduced the **Re-handled** programme, which ensures 100 years of product use by re-handling the same product up to four times; each re-handle comes with a 20-year product warranty period. D Line understands that low-quality products are a waste of resources, and fixing and brushing up products can help them work as good as new. With each Re-handle, it saves the environment 90% in carbon dioxide emissions.

: What's next Businesses with traditional product offerings will be able to stand out among the competition by adding value for customers – especially if the offerings incorporate sustainability and value for money





Left: **D Line**, Denmark; Above: **Coach** and **Tomorrow's Vintage**, UK

Coach
Circularity Craftsmanship

American luxury fashion house **Coach** partnered with east London-based **Tomorrow's Vintage** to create a pop-up concept store offering customers repairs, customisations, monogramming services and leather care. As a part of the brand's circularity programme, the pop-up also celebrated local craftsmanship and featured a selection of upcycled and repurposed vintage furniture.

The pop-up was created to enlarge Coach's **(Re)Loved** programme, which was launched in 2021 with the aim of accelerating its sustainability offerings.

: What's next More businesses will focus on activations and measured collaborations that help establish authenticity, especially vital when communicating about sustainability

Futures 100 Innovator
Josephine Philips, founder, Sojo

Twenty-four-year-old entrepreneur Josephine Philips identified a gap in the market for consumers who are conscious of damaging the environment but lack repair skills, specifically for clothing that often ends up in landfill. So she launched **Sojo**, a convenient and accessible app that profiles local tailoring businesses in London and empowers people to extend the lifespan of their garments

Advanced Audiences

Hype surrounding Gen Z has seemingly proliferated into every aspect of our lives, news and culture, making the group a top priority for businesses to target and engage with. In the process to win them over, many brands have stopped investing in connections with older audiences – Baby Boomers in particular. This generation, however, remain important, with high household incomes and therefore large spending capacities. Brands are beginning to recognise that neglecting them is a poor business decision and are launching innovative campaigns focused on their physiological needs and self-actualisation desires

Photography by **Shvets Production**

Lab Insight:

Dan Hastings-Narayanin, deputy foresight editor

'As they dominate the property market, govern countries and lead businesses, Baby Boomers and Gen Xers will demand that brands move away from ageist narratives and make them feel visible. Consider how to simultaneously channel these generations' nostalgia and young consumers' curiosity for vintage art forms and aesthetics. In a digital age where niche has become mainstream, a youthful approach is ageless'



Above: **Jems**, Canada; Right: Martha Stewart for **Sport Illustrated**, US

Jems
Anti-ageist Education

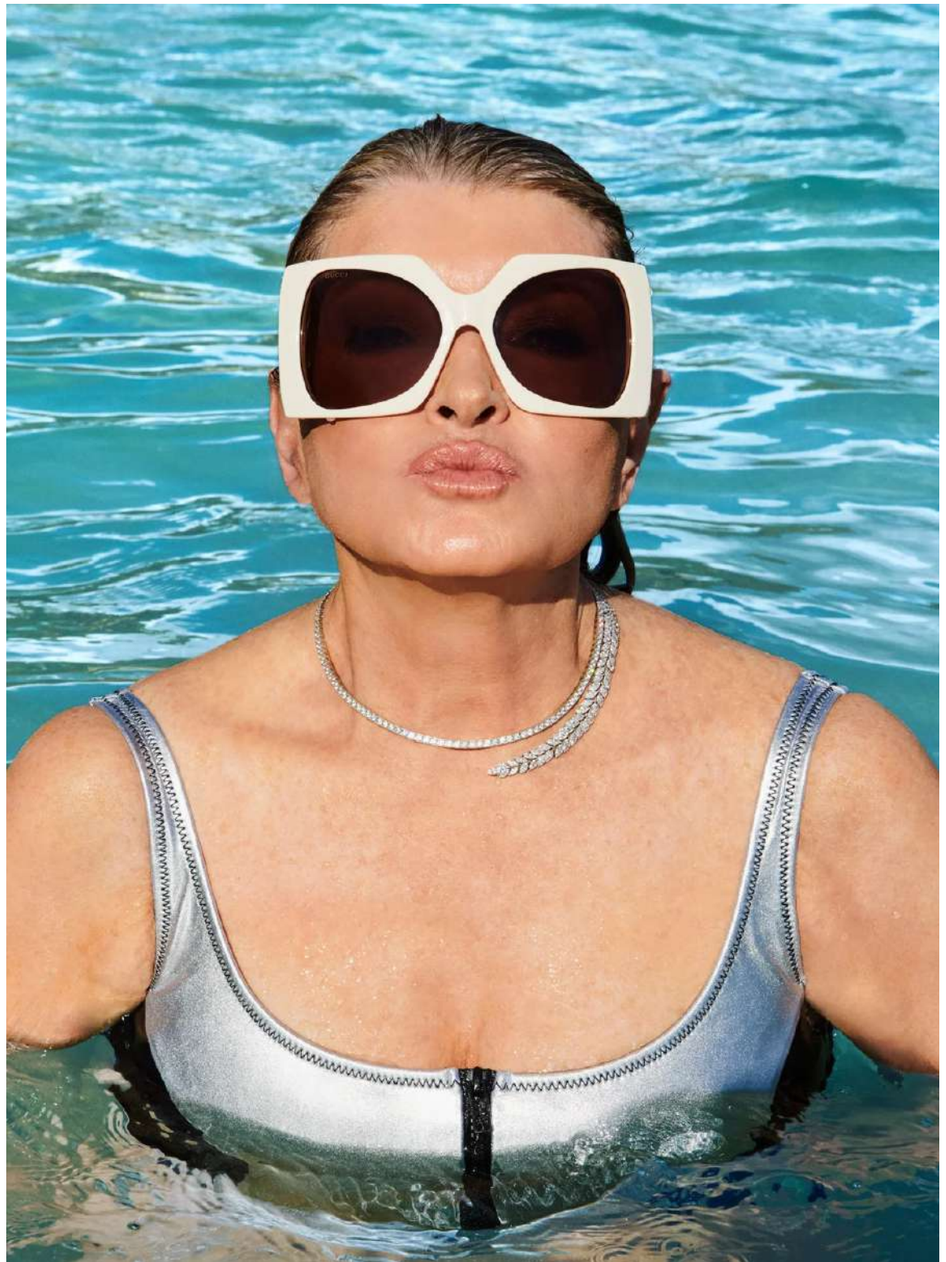
Canadian condom brand **Jems** has launched a campaign focusing on safe sex advocacy for senior audiences. The body-safe condom brand is committed to making the industry more inclusive. Its new campaign, **F*cking Old**, aims to provoke uncomfortable but necessary conversations about sexual health. In Canada, STIs have been rising in this age group, according to Jems, with chlamydia up by 267% and syphilis up by 340% in the past decade.

Jems has created boxes of condoms and sweets featuring conversation-starters on safer sex on their wrappers. 'Ultimately, the candies are a sweet prompt to help bridge the gap and promote healthy sexual habits among seniors,' explain Whitney Geller and Yasemin Emory, co-founders of Jems. 'Instead of your grandma giving you a hard candy, this is a chance for you to give her one and ignite a conversation.'

: What's next Brands will look at changing expectations and culture in senior life stages and help older generations embrace these changes through celebratory campaigns

Baby Boomers hold half of the US's **£114 trillion** ($140 trillion, €130 trillion) in wealth

Source: The New York Times/Federal Reserve



Martha Stewart
New-age Cover Stars

Television personality and entrepreneur **Martha Stewart** has become American magazine **Sports Illustrated**'s oldest cover model, posing for its annual swimsuit edition at the age of 81. Stewart is one of four women gracing the cover of the magazine's most popular issue, which this year aims to celebrate powerful women who 'live in a world where they feel no limitations, internally or externally'.

On the confidence it took to pose for the publication, Stewart told **The New York Times**: 'When the offer came, I thought: 'I can do this. I don't have to give in to convention'.' Sports Illustrated is following a trend we highlighted in our **She Is Mother** report, which explores how talented women over 60, especially in the entertainment industry, are being seen and celebrated by consumers of all ages.

: What's next Outdated conventions surrounding older women celebrities are being turned on their head. Expect to see more brands collaborate with influential over-60s to represent the confidence older consumers both express and seek

Beck's Brewery
Better Beer

Acknowledging the growing recognition of the pro-age movement and the individual needs of older consumers, **Beck's Brewery** has launched a limited-edition beer for septuagenarian sippers. Repackaged in a silver colour, the beer has been reformulated with stronger bitter notes in view of how taste buds age and develop more resistance to acidic flavours as we age.

The brand also launched an anti-ageism campaign, with agency **AKQA Brazil**, alongside the release of Beck's 70+ tongue-in-cheek short film featuring an older consumer having to produce ID proof when trying to buy a six-pack. The campaign also features billboards and posters showcasing individuals over 70, challenging stereotypes while enjoying the age-positive brew.

'The idea of ageing well, which used to be limited to a younger appearance, without wrinkles or grey hair, has gained new meaning,' says Rodrigo Barbosa, creative director at AKQA. 'Today, ageing well is being able to continue enjoying all the most delicious experiences in life – including a great beer. It is a dialogue with the pro-ageing culture movement, which understands that age does not limit people's desires and aspirations.'

: What's next More brands will turn to generational myth-busting when developing their campaigns and rethink how to market products and services for older audiences

Beck's Brewery, Brazil

Thought-starter:

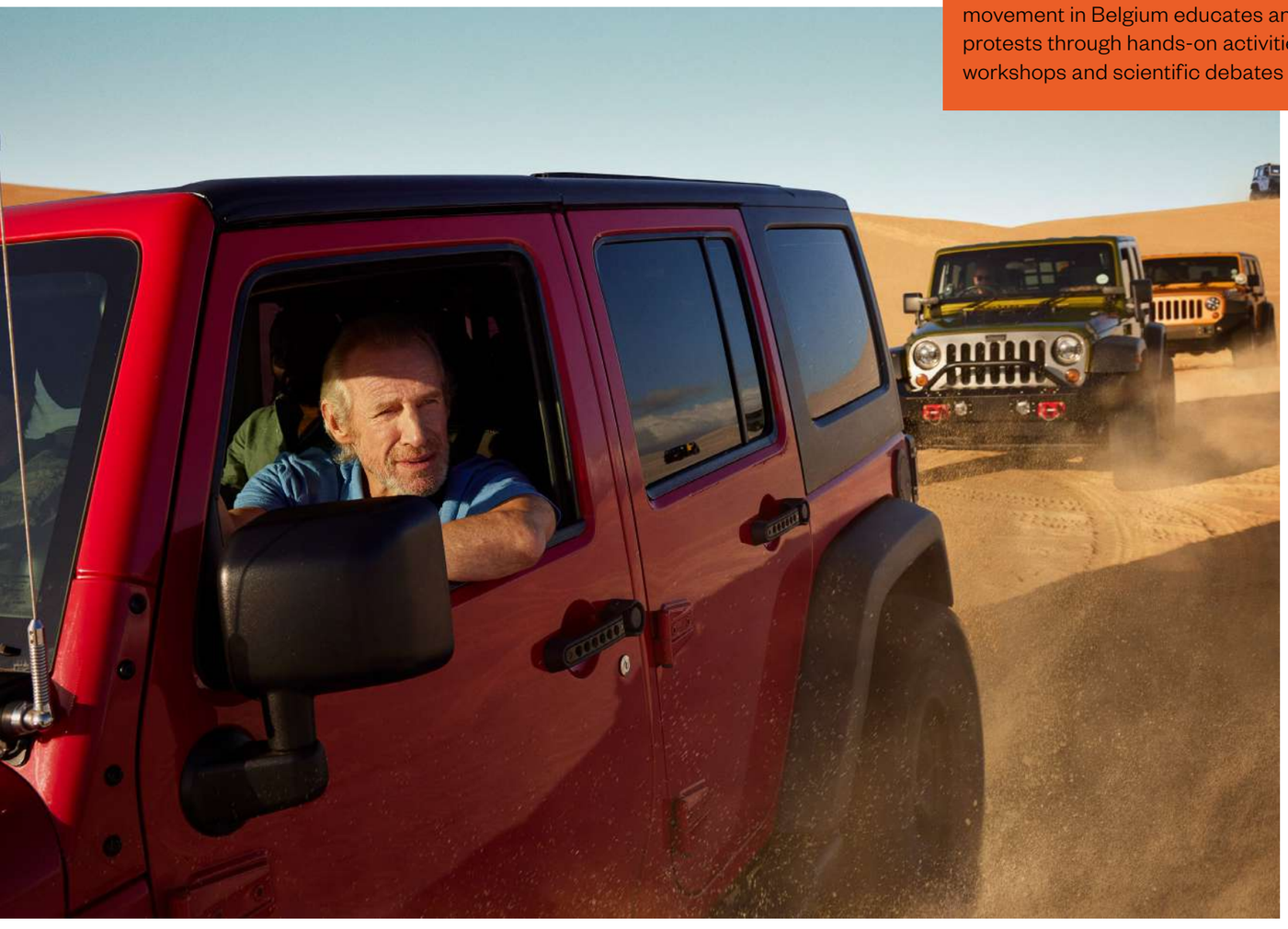
Forgetting Baby Boomers is a costly mistake for brands to make – but patronising them is worse. As a business, what is the tone employed in your marketing and communications to this group? Will they feel empowered and energised or hurt and dismissed?

Saga
Generational Myth-busting

Over-50s travel brand **Saga Holidays** has launched a television commercial that aims to challenge perceptions about the types of holiday people in this group enjoy. The ad, entitled You're Not Wrong, is part of Saga's Tailor-Made Travel campaign and follows actor Nicholas Farrell on a range of adventurous trips where he pokes fun at assumptions that over-50s want sedate breaks.

'Saga Holidays. What springs to mind?' asks Farrell. 'Experience tells me you probably think we're constantly stopping for tea. It's not entirely unfair,' he continues as he carefully cups a bowl at a Japanese tea ceremony. Saga's campaign encourages us to understand the complex characteristics of over-50s who are focused on pursuing experiences rather than being pigeonholed by outdated expectations.

: What's next Travel and hospitality brands will develop more adventurous and off-the-path experiences for 50+ audiences who are as physically active and mentally curious as younger generations



Futures 100 Innovator
Grandparents for Climate

The generation gap is most often felt during discussions about ethics and values, but recently we have seen unanimity emerging across key issues – the environment being an important one. **Grandparents for Climate** bust all generational myths by campaigning for climate action and biodiversity protection. Set up with the aim of leaving behind a liveable world for their grandchildren, this citizens' movement in Belgium educates and protests through hands-on activities, workshops and scientific debates



Left: You're Not Wrong campaign by **Saga Holidays**, UK ; Right: **Grandma Droniak**, US

Grandma Droniak
TikTok Queen

No one expected a 93-year-old grandma to turn into a global sensation on **TikTok**, a platform used mostly by teens and tweens. **Grandma Droniak**, however, is considered iconic by her young audience who live for her irreverence and motivational mottos.

With over 9.7m followers, Grandma Droniak combines conventional content-creation (get ready with me, date recaps, meal prepping) with humorous wisdom, showing that age is in fact just a number, and TikTok can be used by all.

: What's next Grandma Droniak's success shows that although younger generations ooze confidence and self-assurance, they are still willing to learn from mature audiences. Brands will consider strategies to bring the two audiences on to common platforms to encourage communication and engagement between these groups

Tech-enabled Inclusivity

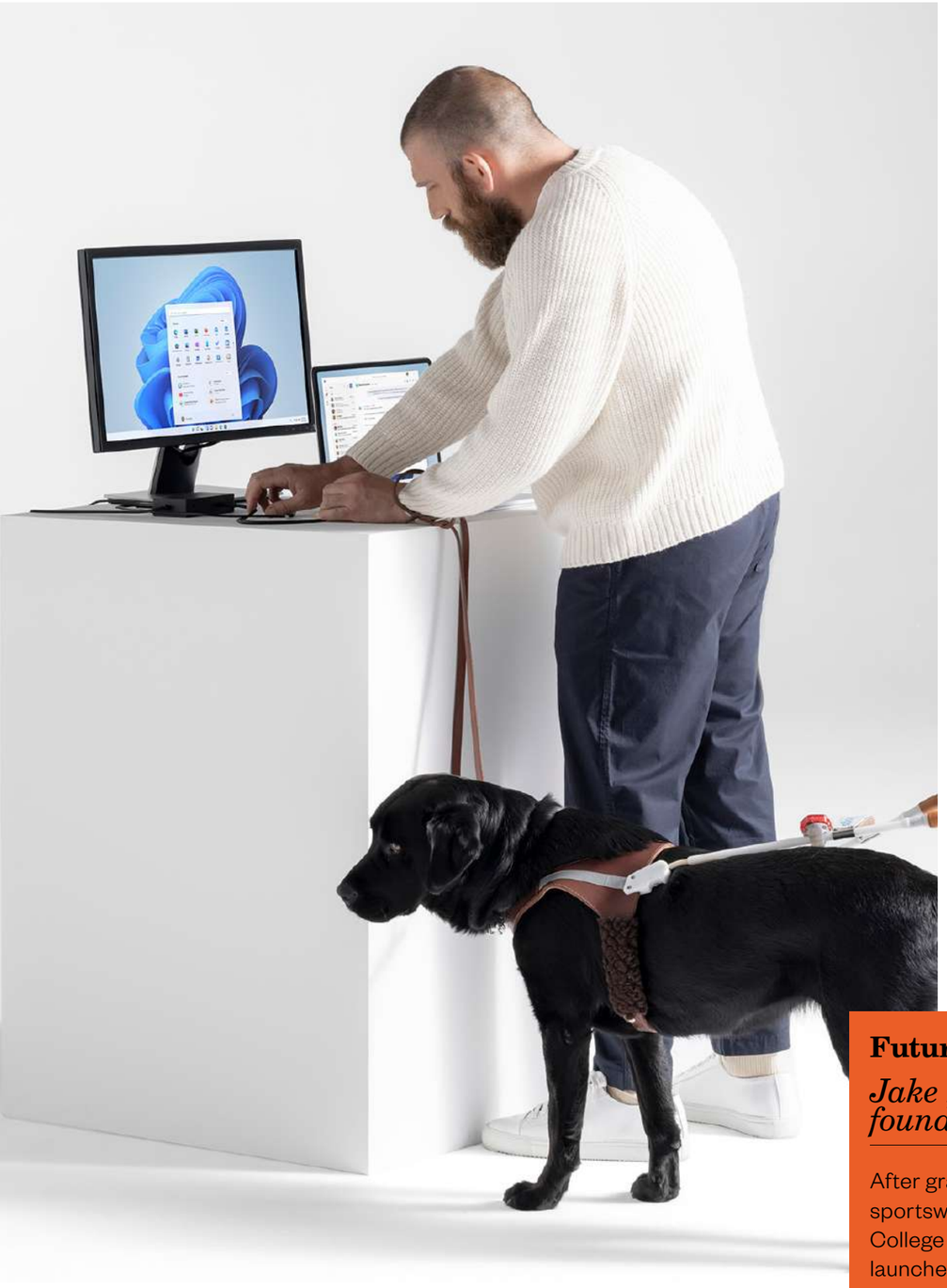
In the past decade large strides have been taken in representation of a more varied talent pool as consumer demand for body inclusivity, racial diversity and less abled bodies has increased. Discourse around ableism has also proliferated and social media has allowed influencers with disabilities such as Alice Wong, Aaron Rose Philip and Shane Burcaw to spearhead anti-ableist education. Alongside this, innovative brands have been researching and creating products that bring divergent design to the fore, and using advanced technologies that can offer freedom and inclusion for people with various impairments

Photography by **Anna Shvets**

Lab Insight:

Carly Ettinger, US foresight analyst

'Consumers with neurological, mental, hearing and visual impairments may go through life differently, but they aren't different. They are human. Brands should replace othering practices with humanising ones. Don't design at them but with them. Bringing them into your field of vision will not only elevate your brand but also build a better future'



Surface Adaptive Kit by **Microsoft**

Papara Bank
Voiceover Banking

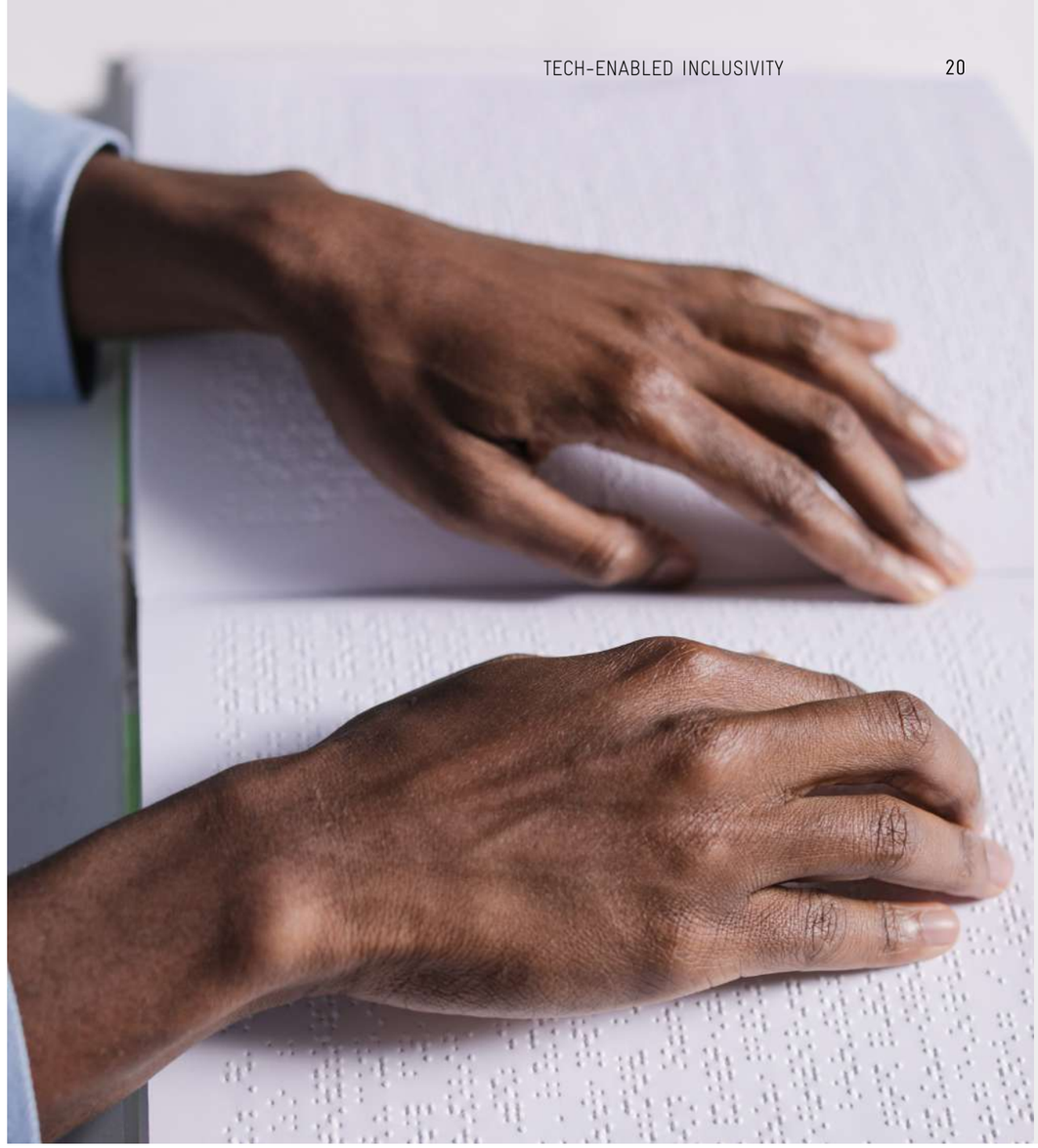
Turkish bank **Papara** has launched the world's first debit card for the visually impaired. **The Voice Card** is linked to a smartphone app, so when inserted in a point-of-sale payment terminal the user will hear the amount due to be paid on their phone. This lets visually impaired customers listen to the details of their spending in real time.

Papara's card was developed in partnership with **BlindLook**, and global payments company **Mastercard** and French multinational **Thales Group** also supported the bank in creating the Voice Card. Papara hopes the card's technology will allow the estimated 285m visually impaired people worldwide, according to the **World Health Organization**, greater access to financial services, letting them spend independently and giving them autonomy over their finances.

: What's next Consumers expect businesses to find technological solutions. Expect to see more brands invest in R&D to create products and services that meet more diverse criteria

Futures 100 Innovator
Jake Baker-Cliff, founder, Wecanfly

After graduating in fashion sportswear from the London College of Fashion, Jake Baker-Cliff launched his own fashion brand specifically designed for people with disabilities. **Wecanfly** includes innovations such as jackets with magnetic sleeves to allow for easier dressing. Baker-Cliff envisages creating a community for those who are disabled and passionate about fashion



Photography by **Cottonbro Studio**, Russia

British Vogue
Braille Edition

British Vogue released the first braille edition of its magazine in May 2023. The issue was also made available in audio format to increase access for blind and partially sighted people. The issue, **Reframing Fashion**, focused on disability justice, accessibility and pride. Each of the five covers shows an influential disabled activist or prominent individual, including actor Selma Blair.

Says editor Edward Enninful: 'I've had five retinal detachments, I'm partially blind and my hearing is less than 50% – I'm wearing hearing aids now. It's never stopped me, but there are so many people with invisible disabilities who never talk about it, because it might hinder them. I've never had that fear.'

: What's next Simple modifications can result in increasing accessibility for larger audiences and brands need to look deeper into incorporating changes in order to be more inclusive



L'Oréal

L'Oréal
Smart Make-up

L'Oréal presented **Hapta** at **CES 2023**, a smart beauty tool designed to help people with limited hand and arm mobility to apply make-up. Partnering with health research company **Verily** to adapt its technology, which was originally used for adaptive cutlery and utensils, L'Oréal created its first smart, hand-held make-up applicator.

Hapta enables precise and steady lipstick application at home and can help make beauty routines more inclusive.

'Beauty tech has enabled us to provide every woman with beauty solutions adapted to their needs. With Hapta, we are making beauty more accessible because everyone should have equal access to it,' says Françoise Lehmann, global brand president of L'Oréal brand **Lancôme**.

: What's next Moving beyond paying mere lip service to inclusivity, expect the mainstream beauty sector to further innovate in this area

'With Hapta, we are making beauty more accessible, because everyone should have equal access to it'

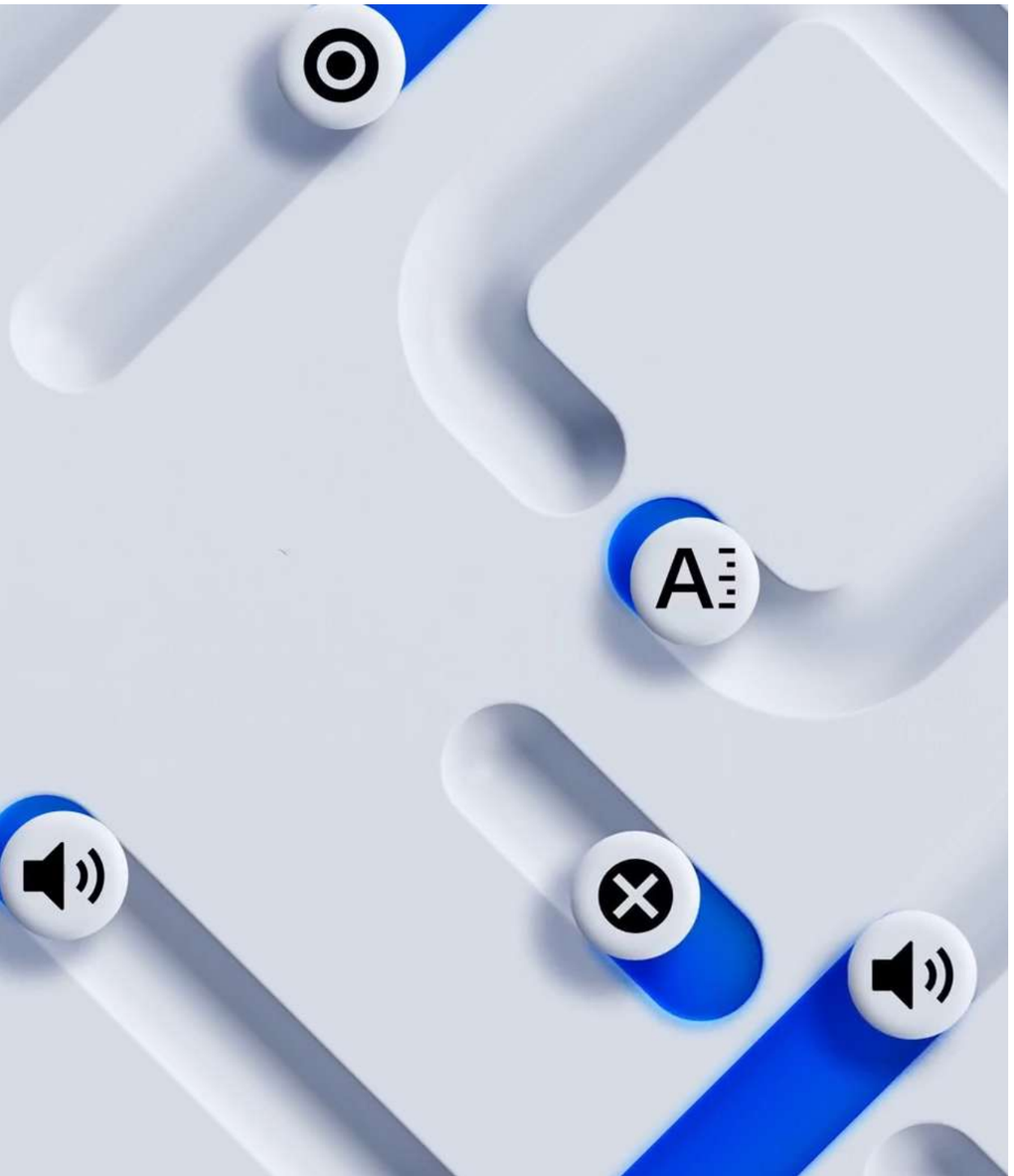
Françoise Lehmann, global brand president, Lancôme

Sony
Inclusive Gaming

Sony has raised its accessibility game with the **Access Controller**, a highly customisable controller designed to enhance the gaming experience for players with disabilities. The Play Station 5 Access Controller is nothing like a conventional gaming remote control, but presented as a kit that is entirely customisable to meet unique user requirements or preferences.

To come up with the optimal configuration options, Sony called on accessibility experts and organisations such as **AbleGamers**, **SpecialEffect** and **Stack Up**. The result is a controller that addresses common challenges for many players with limited motor control.

: What's next As brands become more attuned to the sensitivities of their consumers, they will increasingly rely on third-party organisations to lend their expertise and talent in product and service development





Left: **Sony**; Right: **Zalando** Adaptive Fashion

Hiki
Dynamic Dating

Founded in New York in 2019, **Hiki** (meaning 'able' in Hawaiian) is the first-ever mobile app helping adults with autism to date and meet new friends. The platform fills a crucially important gap for neurodivergent adults to socialise and connect with a community online.

The app's founder, Jamil Karriem and his design team all experience autism themselves. This inherent understanding of neurodiversity helps ensure the app is representative, sensory-aware and works well for all abilities. Says Karriem: 'We look forward to effecting positive change and bringing happiness to millions of people around the world.'

: What's next Expect to see more businesses purposefully build up internal teams of people with neurodivergent backgrounds and personal experiences who can bring unique perspectives to the table and be relied upon to develop effective products and services

Thought-starter:

Inclusivity repeatedly tops the chart in consumer values, making it pivotal for brands as a core brand quality. Have you considered how your products can be used by people with disabilities – including invisible ones?

Next-level Memberships

In a bid to model the success of membership hospitality leaders like **Soho House**, brands are adopting similar structures in order to enhance connectivity with their clients. In our **Guilded Luxury** report we analysed how luxury brands are exploring new forms of brand-building to offer their clients enriching services that create a sense of exclusivity and value. The bid to deepen engagement with customers is resulting in brands innovating with new systems of membership that offer both exclusive community and flexibility to consumers

Birch Selsdon is a co-working hotel concept offeing a membership programme unlocking access to the entire estate and its additional perks, UK



Lab Insight:

Marta Indeka, foresight analyst

'The membership model is incredibly versatile, and businesses are only beginning to untap its potential. For consumers, this translates into flexibility, convenience and a sought-after sense of belonging that comes with being part of a curated community of members sharing similar interests and lifestyles'

Marram
Montauk Membership

Luxury beachfront hotel **Marram** in Montauk, New York, has launched its inaugural summer membership programme to change how people spend their summer in The Hamptons. The scheme is designed to entice guests to treat the hotel as their part-time summer home.

The £14,260 ($18,000, €16,430) programme, which runs from June to August, will allow guests and their plus-ones to stay at least three times over the summer, including during peak periods, provided there is availability. Room upgrades, early check-in and late check-out are all part of the programme and subject to availability. Guests are simply required to make their reservation 14 days in advance. Marram's membership offers a great option for East Coast residents who frequent The Hamptons but don't want the logistical or financial hassle of purchasing or renting a full home.

: What's next The number of membership homes, residences and resorts will grow in the coming years as consumers look for flexibility to work, travel and explore new destinations without being hampered by logistics





Left: **Marram**, Montauk, US; Above: **Vivrelle**

Vivrelle and Four Seasons
Membership Closet

Vivrelle is a members' club offering access to a closet of designer accessories and it has developed a new partnership with **Four Seasons Hotel Houston** and **Four Seasons Private Residences Los Angeles**. Guests will receive complimentary access to Vivrelle's collection of designer products from luxury brands including **Prada**, **Gucci** and **Dior**. Four Seasons Private Residences home-owners will have exclusive access too.

Clients can also swap styles during their stay or borrow from a more extensive collection by signing up on Vivrelle's website. As part of the partnership, Vivrelle members will receive exclusive rates at the Four Seasons Hotel Houston.

: What's next There will be more collaborations between luxury membership businesses and esteemed brands in the hospitality and retail sectors that enable consumers to experience the brands through multiple touchpoints

Futures 100 Innovator
33, members' NFT collection

33 is an anonymous founder of a marketplace of phygital collectibles – both non-fungible tokens (NFTs) and real items that can be shipped to buyers' doors, linking people's virtual purchases to their lived realities. The store contains a combination of member-exclusive and limited-edition collectibles ranging from digital fashion and lifestyle products to cross-platform membership tokens and rare collaborative collectibles

Six Senses Place
Never-ending Retreats

Six Senses, luxury operator of hotels, resorts and spas, is set to add clubs under its new brand, **Six Senses Place**. The membership service will give travellers access to clubs worldwide and will enable them to continue enjoying the Six Senses eco-system long after they've left its traditional properties. The brand plans to open a Six Senses Place in major global cities with a focus on wellness, which it recognises as its key offering to the kind of clientele who have become increasingly health-conscious post-pandemic.

: What's next Both established and newcomer hospitality brands will explore membership models as they not only offer multiple touchpoints for clients to extend their holiday experience but also an additional revenue stream

Six Senses, Vana

Thought-starter:

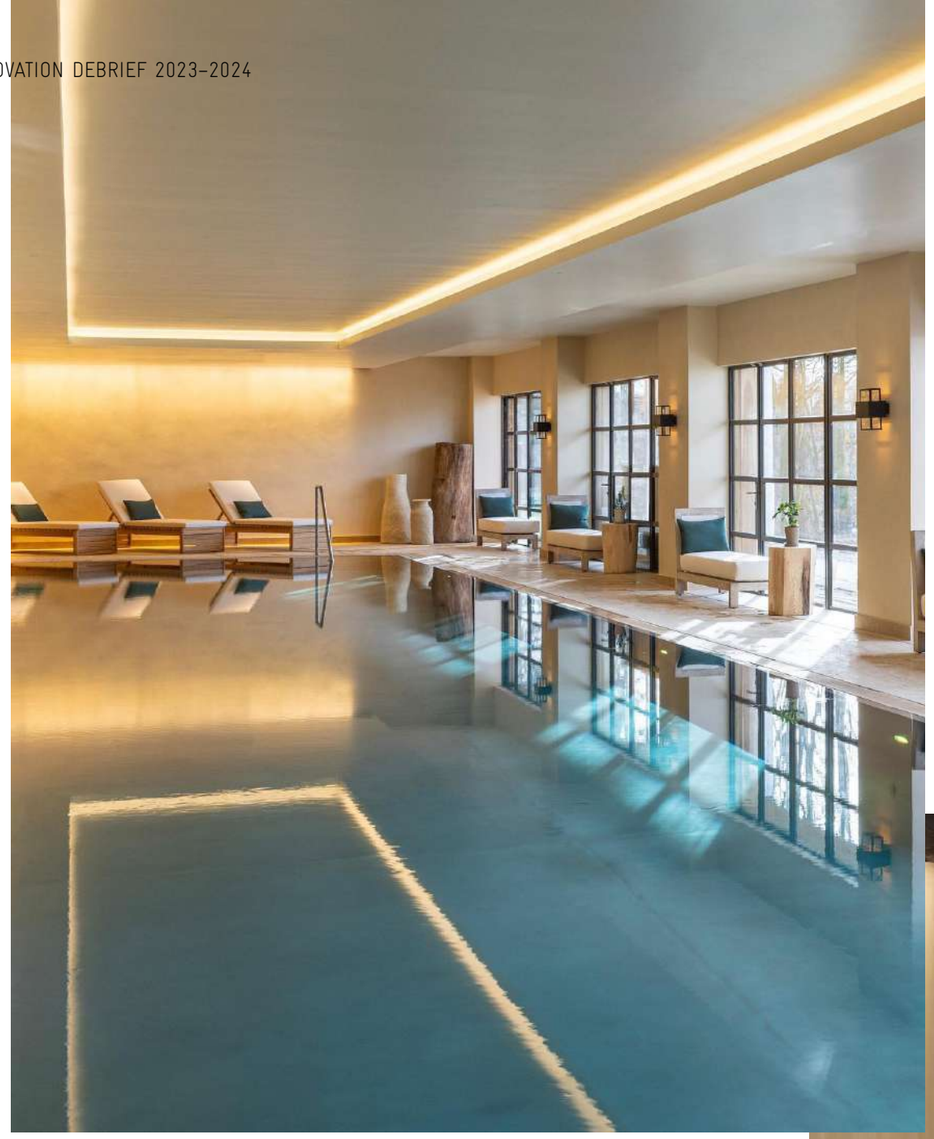
The rise of **Bleisure** and remote working lifestyles has increased the demand for home-style communities in travel and hospitality sectors. How can you as a business mimic a home environment while also offering luxury and convenience?

The Club by Bamford
Countryside Cryotherapy

From the founder of the UK's **Daylesford** farms, **The Club by Bamford** is a health complex boasting a next-level wellness line-up, from a medical concierge service to red light therapy rooms. The space is intended for wealthy wellness fiends who wish to indulge in a 360-degree wellbeing experience combining health, relaxation and fitness.

The membership, which can cost up to £15,000 ($18,000, €17,000) a year, gives access to a profusion of amenities and niche services and treatments, including cryotherapy chambers, ice plunges, outdoor fitness clubs and a medical concierge service to provide on-site, science-led wellness services. Members are offered a doctor-led full body and blood analysis, IV drips and intramuscular boosters.

: What's next This super-luxe members' club signals that the future of wellness will be focused on creating exclusive longevity clinics that combine tailor-made services with top-of-the-line amenities



The Other House
Extension Homes

UK-based **The Other House** is a residents' club that is between a hotel, serviced apartment and private home rental. It combines consumers' demand for hotel-style service with their need for a sense of belonging and placemaking. The Other House doubles as a private members' club so members can come home to a space that has a renewed sense of familiarity, ownership and engagement.

Guests are welcome to stay for one night or one year, and the experience is entirely customisable with a high range of services including full-time staff on hand to help with everything from ordering groceries to assisting with luggage storage.

'I realised that our tenants were looking to combine their sense of place and home-making with access to a hotel-style service,' says founder Naomi Heaton. 'You could say it's the 'hotelisation' of a residential offer. On the other hand, we could see that while the hotel market often excelled at providing service, it fell down on placemaking and a sense of belonging.'

: What's next As consumers fully adapt to a **Bleisure** lifestyle, more brands will look to emulate similar concepts that offer guests the freedom, style and flexibility to run a home away from home



Above: **The Club by Bamford**, UK;
Right: **The Other House**, UK

> 'I realised that our tenants were looking to combine their sense of place and home-making with access to hotel-style service'
>
> *Naomi Heaton, founder, The Other House*

Urban Re-planning

Degrading quality of life in big urban cities due to pollution, overcrowding and poor sanitation is creating citizen demand for a more receptive built environment and **Equilibrium Cities**. As a consequence, architectural, urban planning and design firms are taking note and delivering more collaborative solutions to make everyday spaces more habitable, harmonious and nature-friendly. Against these shifts, urban planning itself is becoming citizen-friendly, open and more environmentally savvy and solutions-focused



Gaudism.AI is a digital studio using AI to create ethereal spaces to facilitate mental clarity and slow the pace of modern existence

Lab Insight:

Emily Rhodes, creative foresight analyst

'It is important when discussing sustainability to not merely acknowledge the climate crisis. Planners should also be integrating human sustainability into urban environments. With populations ageing globally and a growing rental crisis, homes are becoming increasingly intergenerational, and cities need to adapt to their changing communities'

MVRDV
Reworked Waterways

The town of Huwei in Taiwan is home to 70,000 inhabitants and it will have its waterway network entirely redesigned to promote deeper connections between citizens and nature. The proposal, developed by Dutch firm **MVRDV**, is set not only to build flood resilience, but also to improve the quantity and quality of the town's water.

The new infrastructure will capture and store water in harmony with nature, urban life and the river's flow. The proposal also includes improved networks and cultural amenities to boost economic and cultural activity – essentially redesigning the town's life to focus on leisure spaces and cultural places.

'Our design offers accessibility to riparian leisure spaces and cultural places, generating a more meaningful connection between people and nature... a wonderful resilience,' says MVRDV's founding partner Winy Maas.

: What's next Overcrowded cities lacking significant social and communal spaces will increasingly look to underutilised and utilitarian spaces ripe for rehabilitation in order to create urban pockets that residents can use for leisure, sport and entertainment – but which also involve crucial environmental regeneration



MVRDV, Taiwan



Snøhetta, Hong Kong

Snøhetta
Residential Calm

Pavilia Farm is an urban farm in a residential development in Tai Wai, Hong Kong, intended to be a serene sanctuary in the bustling city. Designed and completed in 2022 by Norwegian architecture studio **Snøhetta**, the 'green lung' farm is surrounded by clubhouses that offer residents of one of the world's busiest metropolises the type of urban balance that many urbanites crave.

The design of the clubhouse, the **Tea House**, is centred on water, with an exterior waterfall created for its calming sound and an indoor swimming pool. There is also the **Farm House**, a communal kitchen and dining space where residents are encouraged to share produce grown on the farm. The large open dining area helps foster connection through food, letting residents interact daily and feel like a community.

: What's next Urban residential buildings will be expected to offer home-owners an escape from the hustle and bustle of city life. More innovations like Snøhetta's will combine community, green spaces and a distraction from urban life



WASP, Italy

WASP
Decentralised Living

Italian 3D printing specialist **WASP** is launching a new housing eco-system, Itaca, comprising a selection of technical solutions and eco-conscious materials that work cooperatively to create a circular micro-economy.

While the first house is yet to be built on a plot of land near Bologna, the proposed model will accommodate up to four people, and enable them to live without electricity, water and gas connections. The alternative system utilises a photovoltaic solar system for energy, geothermal HVAC for cooling in summer or heating in winter, and is capable of harvesting rain water for irrigation and drinking water.

The company hopes the project will be ‘a solution to the social, energy, climate and mass migration crisis’, and uses space as inspiration for its resilient architecture. ‘Getting a place as harsh as the Moon to be inhabited is hard to imagine, but science says it can be done. Why don’t we apply the same technologies here on Earth, to get even the most extreme environments to be hospitable?’ asks Massimo Moretti, founder of WASP.

: What’s next Decentralised housing models can provide food, energy and economic independence while maintaining environmental balance. Architectural firms and city planners will adopt similar models to help mitigate the pressures of the climate crisis

Futures 100 Innovator

Tayshan Hayden-Smith, founder, Grow2Know

West Londoner Tayshan Hayden-Smith grew up close to Grenfell Tower, where in 2017 a devastating fire killed 72 residents. Hayden-Smith left his burgeoning career scoring goals for a football club in Europe and returned home, spending his time cleaning a public garden with other residents. Finding solace and purpose in the garden, and spotting a need for more inclusive community gardens, he founded **Grow2Know**, a grassroots non-profit organisation that reclaims green spaces in cities and reconnects people with nature



Unism, Poland

Unism
Factory Futures

Warsaw-based architecture studio **Unism** has envisaged a new forward-thinking proposition for factory design: a below-ground facility concealed by a grass rooftop that blends into the rural environment.

Developed for the pet food company **EcoPet**, the subterranean factory plan is adapted to fit the surrounding landscape, drawing on biomimicry principles. While all production and storage functions are located below ground, the upper levels will be open to the public, and will include a visitor's centre, a research centre and workspaces for the company's office staff.

'Unlike a typical large-scale industrial development,' the studio said in a statement, 'the EcoPet factory aims to stay symbiotic with nature by blending its form with the local landscape. We hope it will become a blueprint for similar projects in the area.' With this project, Unism hopes to be a model for the factories of tomorrow and inspire further initiatives making industrial areas more respectful of rural landscapes, but also engaging local communities by becoming open-door spaces.

: What's next The shifting nature of industry work due to increasing robotisation changes the landscape for manufacturing. We predict the industrial units of tomorrow will be intelligently designed to prioritise worker conditions while reducing environmental impact

London could become unliveable in 10 years without urgent planning reform

Source: LandSec



Urban Room, Folkestone

Thought-starter:

The future of our cities needs to be inherently integrated with nature and sustainable practices – with a focus on creating egalitarian communities. How can businesses collaborate with urban designers, city planning commissions and local communities to create townships that cater for all?

Urban Rooms Network
Citizen Empowerment

Urban Rooms is a UK-based network that helps find physical space where people can come together to help create a future for their local area. It focuses on the shared built environment – streets, neighbourhoods and public spaces – and welcomes everyone, especially those from under-represented communities, to make decisions about the future of their own cities.

Through creative activity and fresh thinking, these 'on-site' locations facilitate future-planning and future-proofing by fostering meaningful connections between people and place.

: What's next Decades of poor urban planning and the milieu of problems that arise with it are pushing neighbourhood communities to get more involved in local decision-making processes. The future of urban planning will revolve around community integration and active participation

AI Positivity

Artificial intelligence has changed from being a futuristic concept to a tangible network of platforms and services with real impact on industries across sectors. Despite AI-induced fear-mongering, a new wave of AI-powered platforms are providing solutions that can help consumers mitigate the stress of mundane daily tasks and find more personalised solutions across sectors such as agriculture, healthcare and more



Portrait of a Man by **Isaac Udogwu**, a Nigerian-American Web3 artist focusing on different modes of Black liberation, US

Lab Insight:

Savannah Scott, art director

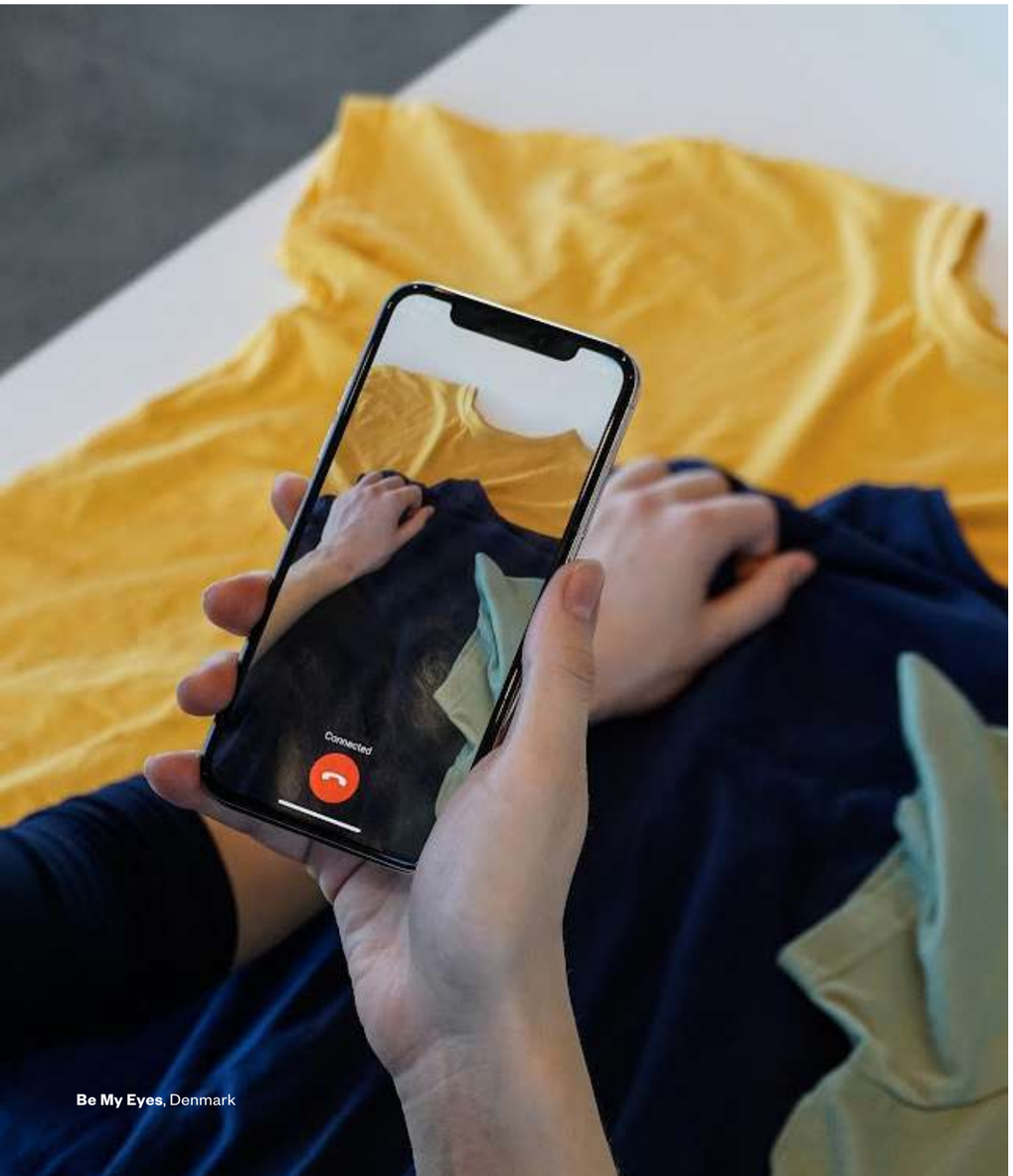
'Let's not view AI as a competitor but as a collaborator. AI is a tool, a new screwdriver, a new hammer, a new spanner, a new piece of kit added to humanity's ever-expanding tech toolbox. We should embrace its potential to make us more productive, more connected and equitable human beings'

Be My Eyes
Virtual Visual Assistant

Danish mobile app **Be My Eyes** has joined forces with **OpenAI** to create **Virtual Volunteer**, an artificial intelligence assistant for blind and visually impaired users worldwide. The original app connects people with sight impairments with a team of volunteers who can be their eyes by accessing the user's phone camera view and speaking to them directly.

Virtual Volunteer features a powerful image-to-text generator with users feeding the software a picture and instantly receiving results from a friendly chat box. Virtual Volunteer has shown promising results; the assistant can identify a plant, read a map and translate a label, among other things.

: What's next More businesses will turn to AI to offer cost-effective solutions, especially where it can partner with human employees to make their work more streamlined and effective



Be My Eyes, Denmark



SentiV, France

SentiV/Meropy
Robotic Farmers

French agritech start-up **Meropy** has developed **SentiV,** a scouting robot designed to monitor crops. The lightweight spider-shaped robot is equipped with two 12-megapixel cameras that allow it to get close enough to photograph the top and bottom of plant foliage and provide details the human eye might miss.

Programmed to move autonomously through fields, SentiV can cover up to 50 acres of land in one day. Powered by a series of AI algorithms, the robot detects biological threats, determines the hydration and nutritional needs of plants, collects data and assesses the field to optimise farming practices. The robot's width, height and mode of motion are adjustable, allowing it to adapt to growing crops and harvests without causing damage. SentiV won an innovation award at CES 2023.

: What's next The agricultural industry will increasingly turn to AI-powered robot assistants that can help improve the quality of life for farmers by saving fieldwork time and keeping them on top of environmental preservation and crop profitability

Fit:Match
Accurate Assessments

Lingerie brand **Savage x Fenty** has partnered with digital twin platform **Fit:Match** and **Intel** to launch an AI- and AR-powered fitting room experience. **Fit Xperience** scans shoppers in the fitting room using Intel's RealSense technology, which then generates an anonymous avatar based on a shopper's exact body shape. The shopper's body is then compared to the bodies in Fit:Match's database and an AI assist from Intel OpenVINO recommends the best-fitting Savage X styles for the shopper.

This combination of technologies tackles the fit challenge that has long plagued brands and consumers by using body shape data rather than standard measurements. The immersive shopping experience is quick, safe and private; the entire process takes less than 30 seconds, and no videos or pictures of shoppers are taken or stored.

: What's next As fashion brands tackle the environmental and cost-inefficient problem of clothing returns, accuracy in the fitting room offers a solution. Fashion retailers will invest heavily into AI technology to ensure consumers are provided with the exact product, size and colour they are looking for

Thought-starter:

Adoption of artificial intelligence can provide businesses with cost-effective solutions to mitigate the workload of tedious tasks. Have you thought about the implications of employing AI to improve employee productivity and wellbeing? Have you considered how your workforce can be enhanced by machine learning capabilities?

Fit:Match by Savage x Fenty



Resellfridges: The Wedding, UK

Joy
Assembling Innovators

Joy, a US-based wedding planning platform, has launched an OpenAI-powered tool that helps the soon-to-be-betrothed write everything from their vows and readings to their best person's speeches and toasts.

Users must provide the tool with a few basic details about the kind of vows they want and the highlights it should include. Then they choose the writing style they would like for the vows. The tool can sound like William Shakespeare, a therapist, a TikToker or even a pessimistic ex.

The tool is not limited to vows as it can produce all sorts of wedding-related content for those getting married and for guests. It can create wedding toasts, speeches, invitations and gift registry notes.

: What's next Joy's AI wedding vow writer has larger implications for writers, copywriters and social media managers who can utilise AI. We will see a shift in the types of roles that businesses need with a growing demand for AI coders and prompt specialists

Luma
Next-gen Healthcare

Inspired by fertility-tracking apps, London's multi-disciplinary design agency **Morrama** and its research arm **Morrama Labs** just launched **Luma**, a smartwatch app that collects data from women going through the menopause. The company will use the information to tailor the balance of ingredients in its 'magic compound' before 3D-printing it into a monthly batch of pills and shipping the treatment out in sustainable packaging.

Luma tracks physical changes in temperature, heart rate, stress and sleep levels to help assess whether the user has had a particularly tough day. According to founder Jo Barnard: 'This data capture helps build a much broader picture of the menopause journey and will help brands identify patterns that can help unlock new ways of managing menopause.'

: What's next AI-powered data capture and analysis will help offload the pressure on healthcare services around the globe. We can expect AI diagnosis, patient monitoring and personalised treatment



Luma, UK

Futures 100 Innovator
Tilly Talbot

Tilly Talbot is a designer powered entirely by artificial intelligence who was unveiled at Milan Design Week by Australian firm **Studio Snoop**. Talbot, a digital figure with an AI watermark on her cheek, has been programmed with Studio Snoop's core values and works as an 'innovation designer' with human members of the team to conceive design objects. Talbot can challenge workers on everything from raw materials to sustainability practices

Online Safety

Fragmented regulations around data protection, privacy issues and consumer privacy rights are pushing consumers to assess the state of their personal online presence – and that of their children. This has resulted in consumers shifting to alternative platforms that circumvent the data capture technologies of big tech giants and replace them with more decentralised alternatives that focus on community, and the proliferation of open-source code so businesses can develop large networks of safety for their customers

Station



Lab Insight:

Dan Hastings-Narayanin, deputy foresight editor

'Consumers now fear having their data sold to the highest bidder, being subject to hate online with close to no means to report it to authorities, and seeing their digital footprint used as inspiration by AI and deepfake creators simultaneously. The human quest for a safe space will undoubtedly begin a new digital chapter in the next decade as big tech may no longer be too big to fail'

Footprint
Safe Sharenting

Footprint is a new American mobile application for parents to create a digital timeline of their child's life as they grow. Developed by **Nolte Media** with artist and baseball coach Nate Fish, the app is designed for sharenting (parents sharing pictures, videos and information about their kids on social media platforms).

Unlike other social media platforms, however, Footprint doesn't allow content to be viewed publicly. Once a parent has created an account, they can invite trusted friends and family members to access and share content, but it is not possible to like or comment on posts. As their children age, the Footprint app allows parents to pass the account on to their kids – making them the owner of the digital content.

: What's next Brands will focus on building narratives that offer transparency about CRM and data retention to offer parents a sense of security around tech and social platforms – while also focusing on the future rights and concerns of Gen Beta





Left: Kidfluencer Starterkit by **Doortje Smithuijsen** and Joep van Osch, Dutch Design Week, The Netherlands ; Above: Photography by **Maltchique, Damn Good Advice Production**, US

Bumble
Open-source Operations

Dating app behemoth **Bumble** has taken another step towards making online spaces safer by making its **Private Detector** tool available as open-source code. Cyberflashing, the act of sending non-consensual nude images, is plaguing online dating; it was reportedly experienced by 76% of young women in the UK in 2020 (source: UCL professor Jessica Ringrose).

In recent years, Bumble has campaigned for cyberflashing to become a criminal offence both in the US and in the UK, and created a proprietary tool in 2019, Private Detector, to tackle the issue. The AI-powered system blurs pictures where nudity is detected, giving the user the possibility to either view it or delete it, effectively ruling out unsolicited pictures.

Bumble has now made Private Detector widely available on **GitHub**, allowing any company to integrate the tool into its platform. With that move, Bumble hopes to encourage the wider tech community to join it in combatting harassment online.

'Open-sourcing this feature is about remaining firm in our conviction that everyone deserves healthy relationships, respectful interactions and kind connections online,' says Rachel Haas, Bumble's vice-president of member safety.

: What's next More brands will turn to transparency and collaboration on issues pivotal to consumers, such as digital safety, to develop more nuanced and advanced features as part of a mutually beneficial partnership

Jumbo
Accessible Privacy

Consumers thinking about simple and affordable ways to manage their digital privacy can now use the privacy assistance app **Jumbo** for free. Launched in 2019, it has torn down its paywall – which saw its growth stagnate – and rebranded with a new model. Now, Jumbo will be sold as a tool to businesses but remain free to individual consumers.

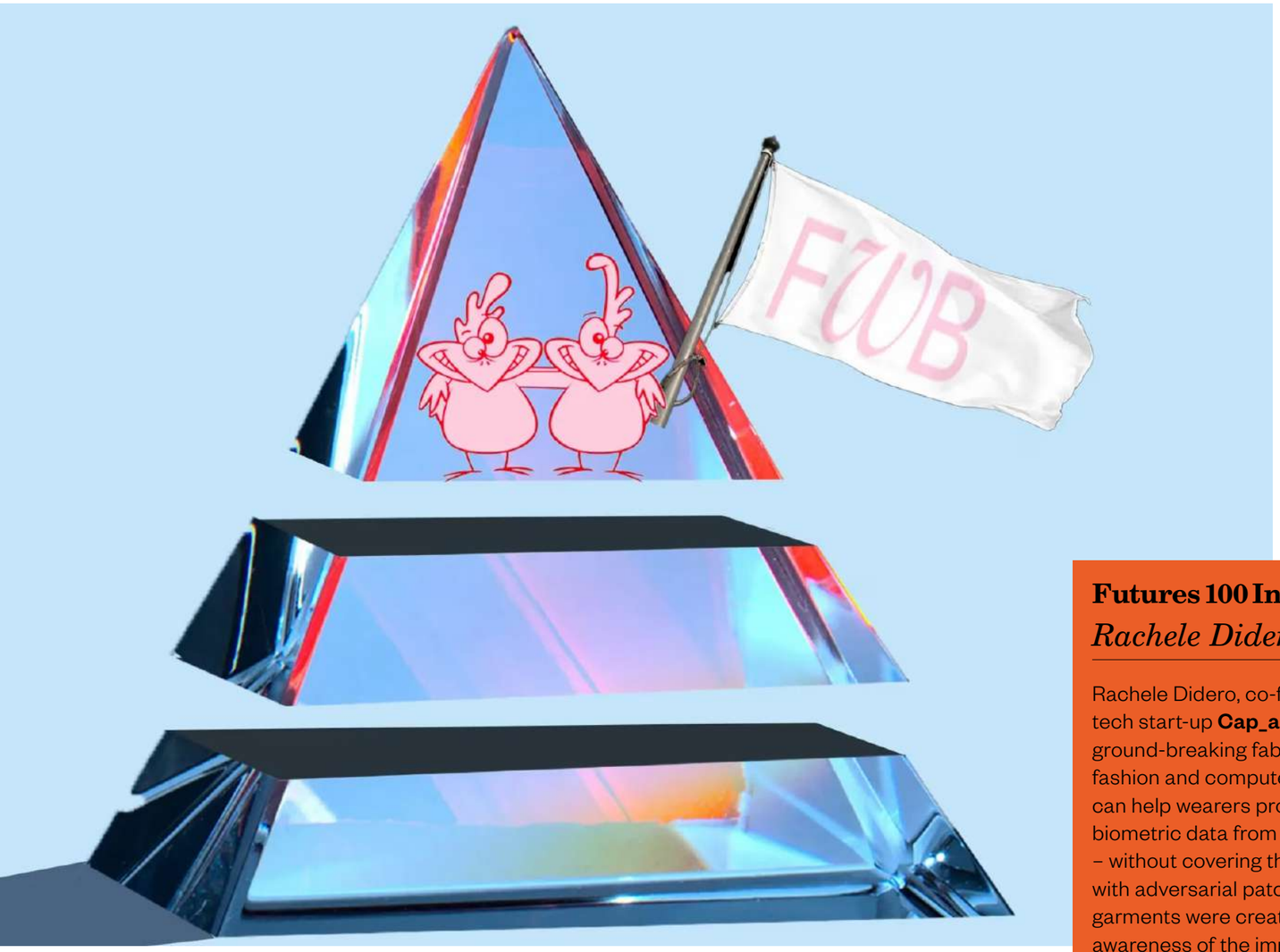
The Jumbo app works by scanning and monitoring a user's online activity, including email addresses, social media accounts and **Google** search histories, and periodically tidying it up. It also navigates privacy menus and secures users' settings across digital platforms. Because user privacy is Jumbo's primary consideration, the app doesn't collect data, show ads or hack APIs, and anything it takes offline it stores in a local storage area called the Vault on a user's phone.

: What's next As consumers demand more effective ways to manage their privacy across multiple platforms, be prepared for the rapid growth of the charge-for-'privtech' sector that derives its profits from shielding and vaulting our data rather than harvesting it

Photography by **Maltchique**, **Damn Good Advice Production**, US

Thought-starter:

Consumers are increasingly vigilant about their online impressions and are taking active measures to ensure their data remains secure. As a business, have you found effective forms of communicating privacy information to them? Can you do away with complex jargon to create an environment of comfort and trust within your consumer community?





Above: Image by **Yunha Lee**, **Friends with Benefits**; Right: Photography by **Polina Tankilevitch**

Friends With Benefits
Decentralised Friendships

Friends With Benefits (FWB), a decentralised autonomous organisation (DAO) that uses Web3 tools to foster culture and creative agency, has unveiled **Welcome Home**, a new kind of social networking app run by 'friends' – aka token owners – with no ads or algorithms in sight.

Welcome Home was designed to be a private social media platform to expand its reach beyond events and **Discord** presence. Instead, it is designed as a space that belongs to a community who can then convene, collaborate and govern as they wish. The app is one of the first social media platforms owned and operated by a DAO.

'What happens when a community owns its own social network? What this app doesn't have is dark patterns, mind-game algorithms and the need to juice your followers,' explains Mike Bodge, head of product at FWB.

: What's next More consumers will shift towards platforms operated as DAOs as consumers become increasingly frustrated by technocrats imposing invasive policies, instead wishing to be involved in operational decisions themselves

Futures 100 Innovator
Rachele Didero, Cap_able

Rachele Didero, co-founder of fashion tech start-up **Cap_able**, patented a ground-breaking fabric combining fashion and computer science that can help wearers protect their facial biometric data from being harvested – without covering their faces. Woven with adversarial patches, her knitted garments were created to raise awareness of the improper use of facial recognition technology and to warn of the potential dangers of unchecked tech advances

Mastodon
Community-designed Servers

The aftermath of Elon Musk's **Twitter** acquisition was the exodus of over one million Twitter users who found themselves at the mercy of an unreliable technocrat. Unwilling to give him control of their data – and disillusioned with the state of social media apps in general – many users fled to new servers such as **Mastodon**.

The open-source software for running self-hosted social services allows for micro-blogging features like Twitter, but is decentralised with various servers. Different servers, which can disconnect from the main timeline, cater for different interests such as gaming, fandoms or advocacy, for example, creating a community-designed space that centres on the interests of users first.

: What's next While Mastodon's main barrier to growth is a more complex onboarding when compared to Twitter, what it does do is show how social media spaces are becoming smaller and more community-driven, as consumers become increasingly mistrustful of larger platforms and are seeking out like-minded people, discussions and topics

Space Tourism

Space exploration, a once seemingly impossible mission for anyone outside of **NASA**, is now not only within reach but set to open for commercial tourism. As various businesses and start-ups are now focused on ensuring a safe journey into the upper atmosphere and space itself, other brands can start exploring the potential opportunities that will come with this new sector: food and drink, tourism, advertising. This arena will be a fruitful one for the kind of inventions, innovations and intelligent design that will affect other sectors

Lab Insight:

Fiona Harkin, foresight editor

'Whether folly or a hardcore dedication to pushing the boundaries of human invention, the commercial space industry will bring about a new era of inspiration and invention. It will also be boosted by a renewed, nationalistic space race involving new players [note China's 2030 goal for lunar landings]. But what it will have the potential to do is alter human perspectives, just as satellites brought us a new view – and understanding – of our planet'

Universe Edge, What If? by **Six N Five**

Virgin Galactic
Sub-orbital Wonder

Virgin Galactic, founded by British entrepreneur Richard Branson, successfully completed its fifth test flight to sub-orbital space on 25 May, keeping the company on track to start commercial operations in June 2023. As has often been said, for years this has been months away.

The current operational vehicles can carry two pilots and six passengers who experience a few minutes of weightlessness and are able to see the Earth against the blackness of space before gliding back home for a runway landing.

: What's next Virgin Galactic's timeline to launch commercial space travel marks the official commencement of space tourism, although the frequency with which it can send passengers into sub-orbit will be the proof of its business model – and with it the opportunity for innovation in space fashion, food and drink, and design

Richard and Sam Branson celebrate after **Virgin Galactic**'s first space flight, US





Zaphalto, France

Futures 100 Innovator
NASA Deep Space Food Challenge

As NASA prepares to send astronauts further into the solar system than ever before, the agency requires innovative food and drink products that offer nutrition, taste and practicality. Its **Deep Space Food Challenge** calls on solvers from around the world to develop novel technologies that can help feed astronauts on long-term space missions. One winner is **Air Company**, which uses CO2 produced by astronauts and combines it with water and electricity to produce alcohol that can then be transformed into yeast

Zephalto
Otherworld Dining

French low-carbon balloon travel company **Zephalto** is launching an out-of-this-world dining experience in 2025 that will transport people up in a capsule attached to a balloon for lunch in the stratosphere. Zephalto will float up to six people at a time to 15.5 miles above the surface of the Earth from where guests can enjoy the curvature of the Earth without the gravity-free experience.

In addition, guests will enjoy a three-hour meal created by French chefs and guided wine tastings from an onboard sommelier. Zephalto's balloons will be equipped with wifi, so passengers can also live-stream the whole experience if they wish.

'We choose [15.5 miles] high because it's the altitude where you are in the darkness of space, with 98% of the atmosphere below you,' says Vincent Farret d'Astiès, founder of Zephalto. 'So you can enjoy the curvature of the Earth in the blue line. You're in the darkness of space, but without the zero gravity experience.'

: What's next As space travel enters the mainstream, brands will need to look at how they can differentiate themselves from competitors. Expect to see many air travel brands increasing their service offerings to create a more elevated journey

Space Perspective
Floating Into Space

American company **Space Perspective** is the world's only carbon-neutral spaceship that has been designing the perfect trip for tourists yearning to explore the outer edges of Earth's atmosphere. Its large hydrogen balloons have high windows, soft seats and subdued lighting – a stark comparison with competitors' capsules. Other functions include a bar, functioning wifi and spectacular views, even from the toilets. Seatbelts only need to be fastened for the first 15 and last few minutes of the journey. Space Perspective has also acquired a ship that it has converted into the world's first marine spaceport.

: What's next The next frontier of space travel includes comfortable amenities and luxury service to make the journey feel less sanitary and instead more closely resemble a holiday

Thought-starter:

The advent of commercial space tourism creates new opportunities for branding and marketing. How can brands affiliate themselves with stratospheric exploration? What advertising avenues can you pursue to grab the attention of passengers? For space tourism companies, how can revenue models be implemented for advertising space without compromising on the quality of travel?

Space Perspective, US

Iwaya Giken
Budget Spacescape

Japanese start-up **Iwaya Giken** aims to make space trips less exclusive by launching commercial space balloon flights at a much lower price. The company has been working on the project for a decade and has developed an airtight, two-seater glass balloon that can rise to an altitude of 25km (16 miles) – from where travellers can view the curvature of the Earth.

Technically speaking, travellers won't be in outer space but in the middle of the stratosphere. It is a higher vantage point than where jet planes currently fly, and passengers will have an unobstructed view of outer space. The start-up aims to bring the price down eventually to thousands of dollars per trip, making it one of the most affordable space travel opportunities, as Swiss investment bank **UBS** reports that the space tourism industry could be worth £2.4bn ($3bn, €2.8bn) within a decade.

: What's next A major setback for consumers curious about space exploration remains the high price point so start-ups and businesses will start exploring ways to offer similar experiences for non-billionaire budgets

Iwaya Giken, Japan





Maison Mumm

Maison Mumm
Intergalactic Bubbly

Designer Octave de Gaulle has created a champagne bottle that can be opened and drunk in space for French brand **Maison Mumm**. The **Mumm Cordon Rouge Stellar champagne** is a glass bottle wrapped in an aeronautical-grade aluminium shell designed specifically for enjoyment in space travel.

The high-tech bottle has been designed to tackle space-specific challenges including how champagne behaves in zero-gravity while still adhering to regulations set by **Champagne AOC**, which states that the bottle has to be stored and transported in glass and corked with a traditional 'mushroom' cork.

: What's next Private space travel allows for more experiential tourism, which will result in more brands redesigning their products to suit zero-gravity eco-systems while maintaining a high standard of quality and enjoyment

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Waste Re-invented



supplant.com
Supplant produces its signature flour from both wheat grains and stalks, upcycling an abundantly available resource and adopting a zero-waste policy

samsung.com
Samsung has worked with Patagonia to develop a breakthrough laundry technology that captures the microplastics released by clothing before the end of the wash cycle

mill.com
American start-up Mill has developed a new waste bin that dehydrates food waste, eliminating its odour, incentivising consumers to elevate their composting processes

aizome.co.jp
Aizome, the textile manufacturer, has developed the world's first skincare range made from the waste water collected at its dyeing factory

eclo.farm
Belgian organic grower Eclo rescues unsold loaves of bread from bio-supermarkets, repurposing them as a base to grow mushrooms, creating an entirely regenerated food lifecycle

Cultivated Cuisines



wildtypefoods.com
San Francisco's Wildtype has developed the world's first lab-cultivated, sushi-grade salmon that offers high nutritional value without compromising on taste or texture

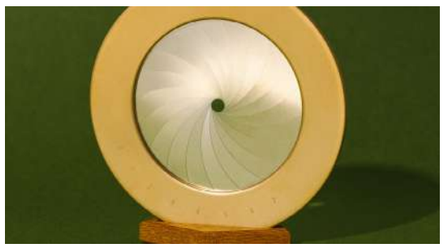
steakholderfoods.com
Steakholder Foods has combined advanced biology with its proprietary 3D bioprinting technology to create fresh-to-market bio-synth steaks

magicvalley.com.au
Australia-based Magic Valley aims to challenge our reliance on intensive animal farming by developing healthy, cruelty-free, lab-grown lamb and pork products

upsidefoods.com
Upside is the world's first lab-cultivated synthetic chicken producer certified as safe for consumption by the US Food and Drug Administration (FDA)

nextnature.net
Landless Food is re-imagining humanity's food system by recreating our culinary memories through microalgae to offer a variety of metabolically manipulated tastes

Longevity Products



loewe.com
Spanish luxury house Loewe's ReCraft store in Osaka, Japan, repairs and restores leather handbags, extending the life of its products to mitigate the impact of fashion dumping

nokia.com
Nokia has launched its first affordable, DIY repairable smartphone, allowing consumers to replace the battery, screen and charging port themselves

makerscabinet.com
Makers Cabinet was founded with a mission to create unconventional stationery tools that can last a lifetime, replacing low-cost products that end up in landfill

dline.com
Danish design brand D Line prioritises the longevity of its products, and its new warranty programme, Re-handled, ensures 100 years of product use

coach.com
American luxury fashion house Coach had opened a pop-up store in London offering customers repairs, customisations, monogramming services and leather care

Advanced Audiences



jemsforall.com
Canadian condom brand Jems' new campaign aims to provoke uncomfortable but necessary conversations about sexual health among senior audiences

marthastewart.com
TV personality and entrepreneur Martha Stewart has adorned the cover of Sports Illustrated at age 81, making her the publication's oldest cover star

becks.de
Beck's Brewery has launched a limited-edition beer for older drinkers that has been reformulated with stronger, bitter notes for advanced taste buds

travel.saga.co.uk
Saga Holidays' new television commercial pokes fun at the tropes presented about older people, debunking generational myths and stereotypes

@grandma_droniak
Grandma Droniak's 9.7m TikTok followers turn to her account for sage wisdom and humorous content, showing that age is just a number

Tech-enabled Inclusivity



papara.com
Turkish bank Papara has launched the world's first debit card for the visually impaired. Its voice card is linked to a smartphone app, making it accessible to use

vogue.co.uk
British Vogue released its first braille edition of its magazine in May 2023, increasing its access for blind and partially sighted people by also offering audio formats

loreal.com
L'Oréal has developed a smart beauty tool, Hapta, designed to help people with limited hand and arm mobility to apply make-up precisely

sony.co.uk
Sony's new access controller is designed to enhance the gaming experience for players with disabilities and is customisable to different requirements

hikiapp.com
Dating app Hiki was founded as the first ever mobile app designed to help adults with autism to date and meet new friends, filling a crucial gap in the market

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Next-level Memberships



marrammontauk.com
Montauk-based Marram hotel's membership-based model flips conventional ideas of hotels and holiday homes, offering regular Hamptonites an alternative summer home

vivrelle.com
Vivrelle and Four Seasons' collaboration offers luxury hotel guests the opportunity to access Vivrelle's exclusive, members-only closet of designer accessories during their stay

sixsenses.com
Six Senses Place is the new membership service from luxury hotel operator Six Senses that offers travellers access to wellness-focused clubs around the world

bamfordclub.com
From the founders of Daylesford farms, The Club by Bamford is a new health complex in the UK boasting a next-level wellness line-up created for wealthy wellness fiends

otherhouse.com
The Other House is a residents' club that sits between a hotel, serviced apartment and a private home rental, providing a sense of home for consumers on the go

Urban Re-planning



mvrdv.com
Dutch firm MVRDV has proposed a redesign of the waterway network in Huwei, Taiwan, to promote a deeper connection between its 70,000 citizens and nature

snohetta.com
Architectural studio Snøhetta designed Pavilia Farm, a residential development in Hong Kong that offers a 'green lung' respite in a bustling city

3dwasp.com
Italian 3D printing specialist WASP is launching a new housing eco-system, Itaca, built from a selection of eco-conscious materials and technical solutions

unism.eu
Unism is a Warsaw-based architecture studio that has envisaged a new, forward-thinking proposition for factory design: below-ground facilities

urbanroomsnetwork.org
Urban Rooms is a UK-based network that helps find physical space for people to come together and develop ideas to create a better future for their localities

AI Positivity



bemyeyes.com
Be My Eyes is a Danish mobile app that uses AI to offer visually impaired people virtual assistance through a team of volunteers given access to the user's phone camera

meropy.com
Meropy is a French agritech start-up that has developed SentiV, a scouting robot designed to monitor crops

fitmatch.ai
Digital twin platform Fit:Match has launched an AI- and AR-powered fitting room experience that scans shoppers and generates anonymous avatars based on their exact body shape

withjoy.com
Joy is a wedding planning platform that has launched an OpenAI-powered tool that helps couples, their friends and families write vows, speeches and toasts

morrama.com
Luma is a next-gen smartwatch from design agency Morrama that collects data from women undergoing menopause and uses that information to 3D-print a tailor-made pill

Online Safety



footprintfamily.app
Footprint is a US-based mobile app for parents to create a digital timeline of their child's life as they grow that doesn't allow content to be viewed publicly

bumble.com
Bumble is a dating app that has made its Private Detector tool available as open-source code in order to help make online spaces safer

withjumbo.com
Jumbo is a privacy app that works by scanning and monitoring a user's online activity, including email addresses and social media, and periodically tidying it up

fwb.help
Friends With Benefits is a decentralised autonomous organisation (DAO) that has launched Welcome Home, a new social networking app run by token owners with no ads or algorithms

mastodon.social
Mastodon is open-source software that allows the running of self-hosted social services for micro-blogging, but remains decentralised with all of its servers

Space Tourism



virgingalactic.com
Virgin Galactic has completed its fifth test flight to sub-orbital space and the company is on track to start commercial operations in 2023

zephalto.com
French low-carbon balloon travel company Zephalto is launching an outer-space dining experience that will offer guests a three-hour meal 15.5 miles above the Earth's surface

spaceperspective.com
Space Perspective is the world's only carbon-neutral spaceship that is designing a trip to outer space in large hydrogen balloons complete with luxury furnishings

iwaya.biz
Japanese start-up Iwaya Giken is on a mission to make space travel more affordable and less exclusive by launching commercial space balloons at a much lower price

mumm.com
A champagne bottle designed to be opened and drunk in space is French brand Maison Mumm's current calling. The aeronautical-grade aluminium shell is designed specifically for enjoyment in space

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