

Introduction

Welcome to the 37th edition of my innovation newsletter, The Big Reveal. You can also watch or listen on YouTube here.

If you missed my keynote on The Future of Connection at ISE London, you can check it out here. Also, here is a link to my latest podcast episode diving into XR & the Future of Inclusivity.

Excited to announce I'm hosting the T-30 track at World Summit AI in Amsterdam 13-14th October, all about climate change, energy, future of food, and the intersection of technology. I'll also be at InfoShare in Gdansk, Poland delivering a keynote on 'Risk, Reward & Reality: Technology & our Future' on 15th Oct.

Planning to attend <u>CES 2022</u> in Las Vegas, so stay tuned for my annual CES Virtual Attendance offering.

Thanks! Amelia www.ameliakallman.com



01 Luxexcel

Luxexcel's Vision Platform 7 makes it possible to create prescription smart eyewear on-demand. Technology-agnostic, it integrates objects such as waveguides, holographic optical elements, and liquid crystal foils during the 3D printing process, making it easy for businesses to customise XR headsets with prescription lenses. With more than 75% of the adult population requiring prescription lenses, technology companies will now be able to accelerate their AR eyewear projects and give designers more flexibility.

<u>Article.</u>



02 **EMG**

Facebook Reality Labs (FRL) have announced they are focusing on electromyography (EMG) devices as a means for faster communication in XR. When you decide to move your hands and fingers, your brain sends signals down your arm via motor neurons, which informs them to move in specific ways to perform actions like tapping or swiping. EMG can pick up and decode those signals at the wrist and translate them into digital commands for a device. While still a ways from market, they could look similar to this tactile bracelet, Tasbi, from FRL.



Article.

03 WCS

Norway's Wind Catching Systems (WCS) has debuted floating wind turbines. Rising 1,000 feet, the windcatcher grids are integrated with multiple smaller turbines arranged over a floating platform that is moored to the ocean floor. They claim that this renewable energy source can generate five times the annual energy of the world's biggest single turbines and can be used to power as many as 80,000 homes. If scaled, this innovation could reduce the costs of wind energy to be competitive with traditional grid-supplied electricity.



04 Tactile Internet

Dr Zhanwei Hou, a researcher at the University of Sydney's Centre for IoT and Telecommunications, is developing a low-latency communication method which he hopes will one day allow users to experience touch over the internet. To use the Tactile Internet, a user would wear a highly sensitive glove or other type of device, which can render the sense of touch, and transfer sensation to the user. Tactile communication will be at the heart of 6G technology and "industry 5.0," both based on next-gen technologies aimed to improve interactions and collaboration between humans and machines.



05 OVR

Olfactory Virtual Reality (OVR) are architects of scent. Their platform makes it possible to build the sense of smell, or olfaction, into virtual reality. It includes a hardware attachment for head-mounted displays, software, and scentware. The technology can control nano-particles of scent down to the millisecond without any lingering odor. The aroma is there the moment it should be, gone the next. The scents directly communicate with the limbic system to stimulate memory and emotion.



Website.

06 Rokid Air

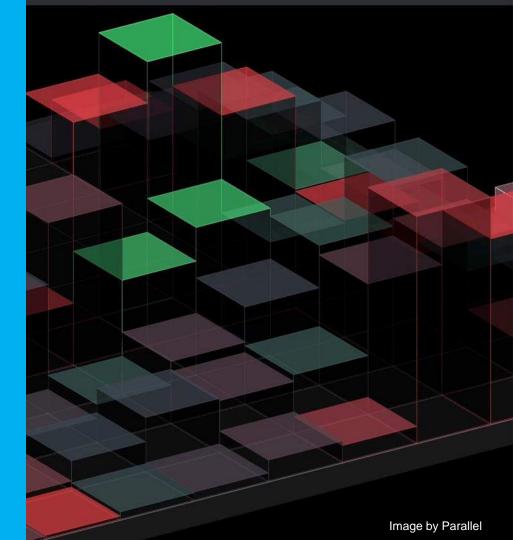
Rokid Air are consumer AR glasses that weigh less than 90g and cost less than \$500. The 4K display provides a 120° virtual screen, built-in voice control, mic, speaker, and adjustable focus that allows nearsighted people to use the headset without glasses or contact lenses. It tethers into a smartphone so you can use apps, play games, and watch movies on the big virtual screen. Because of the cable, there is no battery in the glasses, keeping the weight low. Rokid met their goal of raising \$20,000 on Kickstarter in under an hour, offering headsets to early investors for \$319. Opportunities still available at \$359. They will ship in November.



07 Innerspace

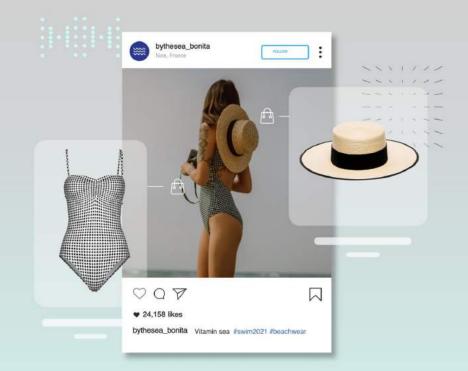
Just as web analytics have helped businesses optimise engagement, emotion analytics provide new dimensions of insights for the XR era and spatial web. Innerspace is a platform by Emteq Labs and innovation consultancy, Parallel, that uses a visual approach to analysing emotional data pertaining to personality traits, behaviour, interactions, and stress responses. Sensors in head-mounted displays combine with machine-learning to translate emotions into valuable data for actionable insights.

Website.



08 Social Shopper

Global fashion tech company, Streamoid, has launched a new Al solution for fashion retailers that turns user generated content (UGC) into shoppable galleries automatically. In addition to galleries, it offers tools including smart product tagging, automated UGC consent management, widgets, campaign management and deep analytics. It also provides a 360 report of what's working and what's not by tracking visits, interactions, product clicks, transactions, and revenue via social media.



Social Shopper

Turn your Instagram feed into shoppable assets

AmeliaKallman Image by Streamoid

09 Sidekick.ai

Sidekick is the world's first holographic AI educational assistant. A reaction to concerns of social isolation, fear, and stunted learning as a result of the pandemic, Crazies & Co's Sidekick.ai is a smart, funny, and emotional holographic AI friend and personal tutor. Sidekicks allows kids and parents to create their own custom AI characters from the ground up while learning about AI and other STEM studies. Each is adaptable to preferences, learns from behavior, and includes airtight privacy.



Website.

10 Olympics Robot

At the Olympics, a robot stole the show during a basketball game between the U.S. and France. The 7-foot tall robot by Toyota scored perfect 3-pointer and half-court shots. It uses sensors on the chest and a camera positioned around the nose to judge the distance of a shot and basket angle, while the motorised arms and knees flex to make the shot. It is predicted it will take another two decades before a robot has the running and dunking skills needed to play a full game.

Article.



Thank you

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