## SOME OF THE SMES ADDED IN 2023 TO THE GIBSON INDEX..

Helsing AI Ltd
<a href="https://helsing.ai">https://helsing.ai</a>
Nick Elliott CB MBE - UK Chair
<a href="mailto:nick.elliot@helsing.ai">nick.elliot@helsing.ai</a>
27 Mortimer Street
London
W1T 3BL

In July 2023 defence AI specialist Helsing now has 220 employees spread across four offices, in London, Paris, Berlin, and Munich – announced it will invest £100m in London. Spotify founder Daniel Ek invested \$109m into Helsing in 2021, the same year the company launched, many Spotify users expressed outrage that their subscription dollars were being used to fund the arms industry. Torsten Reil and Gundbert Scherf are co-CEOs. But that was before Russia's full-scale invasion of Ukraine in February 2022, which has prompted a recalibration of public attitudes toward defense. Germany is just one country Helsing claims military contracts with, along with the French and British. Since the Russian invasion of Ukraine, the company has also signed partnership deals with some of Europe's most established defense contractors, such as Rheinmetall and Saab, to integrate AI into existing weapons systems. Torsten Reil describes Helsing as "quite involved" in the war in Ukraine, although he declines to share details about what the company is doing there, saying only that staff regularly travel back and forth. Helsing's three founders speak about Russia's invasion of Crimea in 2014 as a wake-up call that the whole of Europe needed to be ready to respond to Russian aggression. "I became increasingly concerned that we are falling behind the key technologies in our open societies," Reil says. That feeling grew as he watched, in 2018, Google employees protest against a deal with the Pentagon, in which Google would have helped the military use AI to analyze drone footage. More than 4,000 staff signed a letter arguing it was morally and ethically irresponsible for Google to aid military surveillance, and its potentially lethal outcomes. In response, Google said it wouldn't renew the contract.

"I just didn't understand the logic of it," Reil says. "If we want to live in open and free societies, be who we want to be and say what we want to say, we need to be able to protect them. We can't take them for granted." He worried that if Big Tech, with all its resources, were dissuaded from working with the defense industry, then the West would inevitably fall behind.

Defence-tech company Helsing AI said its flagship system absorbs huge amounts of data generated by the sensors (electro-optical, infrared, sonar) and weapons systems (fighter jets, drones, helicopters) used in modern warfare.

Algorithms then distil that information into a video-game-style visualization to show how events are unfolding in real time on the battlefield. Helsing is not the first company to try to build an operating system for war.

Military types have been advocating for the idea since the 1990s. But traditional defense firms have struggled to deliver, creating an opportunity for tech companies to step in. California-based Anduril, the company launched by Oculus cofounder Palmer Luckey, has developed software that connects multiple military systems. Palantir, headquartered in Colorado, has been using the war in Ukraine to release details about its own military AI. But Helsing is the only visible European startup making this type of software.

Experts say what's notable about the company is the way it maps the electromagnetic spectrum, the invisible space where different machines send electronic signals between one another to communicate.

Torsten Reil, 49, is one of the company's two CEOs. With a background in gaming—he previously founded development studio NaturalMotion—Reil is preoccupied with the user experience and making the platform intuitive for its military clientele. Then there's co-CEO Gundbert Scherf, 41, a former special adviser to Germany's military of defense, who talks fluently about how European militaries work and what he feels they need to do to modernize. In-house AI expert and chief product officer, 31-year-old Niklas Köhler, the youngest of the three. Köhler was using machine learning to solve medical problems when he started to be approached by figures in the defense sector—prompting him to change direction.

"Applications like detecting drones are, in terms of methods, not so dissimilar from how you would find cancer in large CT scans," he says.

In modern warfare, every second counts. And the Helsing founders say their software can give Western militaries an information edge. Its system, they claim, will help soldiers make faster, better-informed decisions and will be accessible on a variety of devices, so soldiers in frontline trenches can see the same information as commanders in control centers. "Now, all of this is done manually: phone calls, reading things, drawing stuff on maps," says Köhler. "Understanding how many systems are there, what they are doing, what is their intent—this is an AI problem."

Nick Elliott CB MBE is the UK Chair of Helsing, a new type of security and artificial intelligence company. Earlier, Nick led major delivery organisations in government, defence and infrastructure, most recently as Director General of the UK Vaccine Taskforce.

During a career as a British Army officer, he commanded a bomb disposal squadron and a combat engineer regiment serving on operations worldwide, and later was the Commercial Director and Deputy CEO of Defence Equipment & Support.

Nick is also a non-executive director with the global programme management consultancy Turner & Townsend and has previously served as a non-executive director on the Board of the Submarine Delivery Agency, the Nuclear Decommissioning Authority, and as a Council Member of the Rail Supply Group. He is a military reservist in the Staff Corps, a reserve unit of business leaders who provide specialist advice to the Armed Forces.

Cybake Ltd - RedBlack Software https://cybake.com
Jane Tyler - entrepreneur
01904 622 888
info@cybake.com
Kings House
12 King Street
York
Yorkshire

In 2023 York-based software company Cybake cooked up 25 years in business. Cybake was founded by tech entrepreneur Jane Tyler in 1998, originally as RedBlack Software

In June 1998, RedBlack Software shipped its first copies of Cybake, which was designed to help bakeries manage their businesses, to new customers.

Slowly but surely its popularity amongst British and then Irish bakeries rose over the years. In the UK, for example, notable adopters of Cybake included M&S's bakery department and Britain's second-biggest retail baker, Cooplands.

In 2018, RedBlack Software released a completely new cloud-based version of Cybake, which paved the way for international expansion. In 2020, the company opened an office in Philadelphia in the United States.

In 2021, RedBlack Software changed its name to Cybake in order to reflect the success of its flagship offering, and, in 2022, it opened an office in Melbourne, Australia.

Cybake quickly gained traction amongst commercial bakers in both countries and now the software is used by just shy of 300 bakeries around the world.

The company employs around 40 people, the majority of which enjoyed a quarter-century party in York. This included the cutting of a specially commissioned cake emblazoned with the '25 years of Cybake' logo the business has adopted across its social media channels to mark the occasion.

Jane Tyler, founder and managing director of Cybake, said: "Of the last twenty-five years, the last five have probably been the most significant. We do all our software development inhouse and our team built up a huge amount of bakery-specific knowledge over the years. "The cloud version of Cybake allowed that expertise to shine though to its fullest, with results that speak for themselves. We have doubled our customer base since its launch, and we will announce Cybake's availability in new countries very soon.

"None of this would be possible, though, without our customers' faith, investment, and enthusiasm over the past 25 years. My biggest wish is that Cybake continues to repay that faith for many decades to come."

Cybake added it has a reputation for friendly and reliable customer support, plus a deep understanding of retail and wholesale bakery, and expertise in cutting-edge systems and technology. Now, bakers of all types and sizes in the UK, Ireland, the USA, and Australia rely on Cybake® bakery software to control their businesses, cut admin, improve efficiency, and increase sales.

Alexander Goodall – electric motors
<a href="https://mapp.ac.uk/team/alex-goodall">https://mapp.ac.uk/team/alex-goodall</a>
Alexander Goodall – research engineer
0114 222 5998
adgoodall1@sheffield.ac.uk
Department of Materials Science and Engineering
Sheffield University
Mappin St
Sheffield
South Yorkshire
S1 3JD

In 2023 Sheffield University researchers, working with collaborators at the University of Wisconsin-Madison, developed a lighter, more efficient 3D printed electric motor. Using metal PBF 3D printing technology, it may pave the way for future electric motors to increase their power using less material. Demand for electric motors is rapidly growing and these innovations are crucial to pioneering the next phases of transportation electrification, for example for airplanes, where batteries will need to be lighter and motors will need to be more energy efficient.

The prototype uses a higher-percentage silicon electrical steel that reduces energy losses, was designed as part of a collaboration between Alexander Goodall, a doctoral student in the Department of Materials Science and Engineering; UW-Madison post-doctoral research assistant FNU Nishanth and their advisers, Professor Iain Todd and Eric Severson. The prototype design consists of a stator, a circular-shaped object with prongs that wires can be wrapped around to create a magnetic field. The biggest design difference between the prototype and traditional stators can be seen in the prongs themselves, as they feature an intricate design of thin geometric lines meant to reduce energy loss.

Alex is a PhD student supervised by Prof. Iain Todd and Prof. Dan Allwood. His work is investigating the use of additive manufacturing and advanced powder processing to manufacture electric machines and their components, focusing on reduction and control of eddy currents in soft magnetic cores.

Alex completed his masters in mechanical engineering at the University of Nottingham in 2015 and has since worked in the automotive industry for Jaguar Land Rover, Triumph motorcycles and Royal Enfield. Alex joined the Department of Materials Science and Engineering at the University of Sheffield in 2019.

The collaboration was initiated by Alexander when he met Nishanth at a conference in 2020 and realized they had what the other needed to realize this project: Sheffield had access to the printing technology to make UW-Madison's knowledge in creating unconventional motors a reality.

Alexander Goodall at the University of Sheffield came up with the concept, and designed, developed and manufactured the stator, whilst researchers at the University of Wisconsin completed comprehensive testing, showing an improvement in torque density.

When the printed prototype was tested in October 2022, it was found that it was giving more torque than they thought was possible with less material. "When you have 30% lower mass, you would expect that your torque would also be lower ... but that wasn't the case," Nishanth said. "So, this shows that you know you're actually going to net torque density improvement in this machine and if we can further improve this, (making a more efficient 3D printed electric motor) would be a game changer."

Traditional methods of creating stators in electric motors use a lamination process, where sheets of electrical steel are stamped out. What you get as a result is a stator stacked with laminations with tiny but visible ridge lines on the top of the prongs.

That method, though easily replicated, tends to rely on using an electrical steel alloy with 3% silicon in it, which lends to higher rates of energy loss and less efficiency. An electrical steel alloy made with 6.5% silicon, recommended by the US Department of Energy, reduces energy losses but is more brittle and is less likely to withstand the traditional lamination process.

But with 3D printing, there's no need for tons of pressure to be exerted during rolling and the machine can print the delicate pattern on the small 10-kilowatt prototype stator within 20 hours. While that wouldn't be enough energy to run an electric vehicle, the model could be easily scaled up to reach 40 kilowatts and still printed faster on an industrial printer. Alexander said: "This project has shown the large potential that additive manufacturing has for electrical machines, with lightweight, efficient structures that have never before been possible using any other manufacturing technique. It was a pleasure to work with the team at WEMPEC (an internationally renowned power electronics research and electric machines research group located at UW-Madison) to turn this idea into a reality."

FOD Mobility Group Ltd - Fleetondemand <a href="https://www.fodmobilitygroup.com">www.fodmobilitygroup.com</a>
Andrew Cope - chair 0330 123 1089 enquiries@fodmobilitygroup.com
Head Office 3rd Floor, The Waterfront Building Salts Mill Road Shipley
West Yorkshire
BD17 7EZ

In 2023 Andrew Cope was emerging as one of the UK's more active tech investors. In 2023 techfirm FOD Mobility Group featured in the Financial Times' FT 1000 ranking of the fastest-growing European companies for the third consecutive year. This achievement demonstrates how the business has thrived despite the challenges faced by the travel and automotive industries in recent years.

Between 2018 to 2021 FOD Mobility Group achieved a growth rate of 406.7% and a compound annual growth rate (CAGR) of 71.8%, putting the company in the top 12.5% of European companies who have ranked for a third year in a row.

The UK remains the third most represented country in Europe on this list after Germany and Italy with 154 companies featured, including 32 in the IT and Software industries. Justin Whitston, founder and CEO of FOD Mobility Group, said, "We're incredibly proud to be featured in the FT 1000 Europe ranking alongside many other cutting-edge and innovative companies across various industries."

Andrew was a founder member of Zenith Provecta in 1989, when he joined as Fleet Sales Executive. He progressed through the ranks to Sales and Marketing Manager and then Director, until his promotion to Managing Director in 1998. Andrew guided the company through four MBOs so has extensive experience of private equity and venture capital. He led the acquisition of Provecta Car Plan in May 2008 and the partnership with Morgan Stanley in 2011. Andrew was involved with, and for a long time responsible for, the growth of Zenith to a turnover of over £600m. Andrew left Zenith in 2014 and then became executive chairman of FMG Group, a vehicle claims management and vehicle recovery business which he took from £22m turnover in 2014 and 350 employees to a company which in 2015 hit sales of £100m and a workforce of 290.

In 2023 Andrew invested over £1m in Gilbanks Ltd, a company based in Leeds, which develops top quality offices, assuming the role of chairman of the property company. Cope is a prolific investor with interests that span property, technology and the automotive sectors.

Fleetondemand is led by founder and CEO Justin Whitston who previously founded and built Nexus Vehicle Rental alongside several technology systems over the last 20 years. Justin was voted one of the UK's most ambitious leaders by Lloyds Development Capital (LDC), and Fleetondemand continues to achieve recognition through industry awards for its market-leading technology and service

Oxford University Developments Ltd https://oud.co.uk
Anna Strongman - CEO
01865 346 995
anna.strongman@oud.co.uk
Suite B, 6 Worcester St
Oxford
Oxfordshire
OX1 2BX

In July 2023 CEO of Oxford University Developments says 'flexible real estate is key to fostering innovation' – as it covers much more of the county under new concrete – at great profit.

Oxford University Development (OUD), a joint venture between Legal & General and Oxford University, said Anna Strongman, CEO. OUD is bringing forward seven research and residential development sites in Oxford, a city at the beating heart of Britain's knowledge economy. The joint venture between L&G and the university, which is backed by £4 billion

of investment capital from L&G, focuses on four key areas: the academic estate, residential homes, infrastructure, and commercial innovation space.

OUD is initiating some of the most productive changes to the city of Oxford in recent memory, including the Begbroke Science Park and The Life and Mind Building (LaMB), the latter holding precedence as Oxford University's largest ever building project to date. Enabled by £200 million of investment from L&G, LaMB will deliver 268,000 sq ft of research space and academic facilities. Future developments include other academic, residential and innovation spaces in Oxford city centre.

Begbroke Science Park, on the other hand, entails 2000 homes, two to three new schools, 1.5 million sq ft of new lab space alongside transport links, parks, and a large amount of public realm.

Strongman joined OUD after a more than decade-long stint at Argent, where she led on Coal Drops Yard in King's Cross – a development that is now held up as a prime example of public realm done well. "I realised through my work at King's Cross that public realm in itself is a civic amenity," she claims, modestly.

A primary goal of OUD is to bring forward its developments in a way that facilitates innovation, flexibility, and open-mindedness. Strongman argues that these values should be built into the DNA of its projects.

Strongman discusses the challenges and opportunities that come with bringing so many different development sites to Oxford, navigating the push and pull of the city's different needs and demands.

"Oxford is a multifaceted city, a market town, innovation hub, university, and a site of picturesque and historical beauty", Anna Strongman insists that speaking directly to locals and being respectful of such disparate and often contending worldviews is key to securing a productive future for the city.

"We've got to talk to the local community about actually addressing housing affordability, creating the innovation ecosystem to enable people to solve massive global issues like climate change, cancer and energy sources," she says.

"The scientists at Oxford are trying to address these massive issues we all face and we've got to somehow talk about those to the local community in terms of what matters to people." Oxford's importance to the UK's economy is well understood, but the city's need for appropriate real estate is discussed far less often.

OUD exists to maintain and enhance Oxford University's research and educational objectives as well as to support the wider Oxford community and economy through a targeted development programme.

Working in with Oxford City Council, Cherwell District Council, Oxfordshire County Council and other stakeholders brings with it not only a great insight into the needs of the community, but also collaboration.

"Given OUD's long-term outlook, ESG has been a primary consideration," she claims. "How do you deliver high levels of biodiversity whilst ensuring that your open space delivers as much amenity as possible?" she asks rhetorically. "That comes down to practical things – can you let the dogs run around in the field that's meant to have all the skylarks in it?" Whilst Strongman's role as OUD's CEO certainly comes with its challenges, the rewards are manifold. Projects like those driven by OUD will further propel the productivity of the Oxford-Cambridge Arc, ultimately setting the foundations that will transform the UK economy and, as a result, deliver much-needed economic growth.

Anschutz Sports Holdings Ltd www.theo2.co.uk John Langford – AEG Europe COO

## 020 8463 2000

john.langford@aegeurope.com Anschutz Entertainment Group Inc The O2, Peninsula Square London SE10 0DX

The Anschutz Entertainment Group, also known as AEG Worldwide, is an American global sporting and music entertainment presenter and a subsidiary of The Anschutz Corporation. It is the world's largest owner of sports teams and sports events. In the UK it owns and runs the huge O2 Arena, in Peninsula Square, London SE10 0DX, first opened in 2007, and still one of Europe's most active entertainment venues.

In June 2022 the O2 Arena had its busiest ever month, hosting 25 shows, including 10 concerts by Queen + Adam Lambert. It has more than 220 event days a year for the 80,000 sq ft white tent-structure that encompasses it.

Recent events include Bon Jovi performing on the roof, Led Zeppelin's triumphant return, Prince's 21-night stint in 2007, as well as regular big sporting events such as the ATP World Tour Finals, London Olympics and NBA Basketball. In 2020 it was the venue for an NHS Covid training facility for 44 days.

The Laver Cup is held in September – a very hot ticket; as is Europe's largest Country to Country music festival, now over three days, alongside a long-running Canadian comedy festival, Just For Laughs. Billy Joel has performed 100 times at the venue. Afrobeat is a recent show innovation.

AEG has a lease for the Dome for 999 years. Mr Langford said "It was game changing. It completely changed the way tours were booked in Europe because any arena tour coming through Europe anchors itself first at the O2. It was a whole new level not seen outside the USA. It made London the greatest live music market in the world."

The venue signed a deal with O2 Telecoms, to ensure the input of high end digital connectivity in the venue, and also an innovative pre-sales ticket initiative, worth £6m a year in rights deal. A high density wi-fi network enables 15,000 visitors live stream content to social media. Paul Samuels, O2 partnerships director, said a rights deal with a venue such as the O2 had never been attempted before in the UK.

O2 customers have a reward scheme for tickets with AEG, giving them an exclusive 48-hour window to buy tickets for shows – now being bought at a rate of 1 million a year.

During one performer's six shows the caterer there, Levy UK & Ireland, led by Jonathan Davies, removed beef burgers from the menu. The caterer has moved to 100% seasonal sourcing of its ingredients. It is working with Klimato 'to calculate, communicate and report the climate impact of the food available for fans at the O2 Arena'.

Intuitive Learning Ltd t/a Cognito Learning https://cognitolearning.co.uk
Jonny Jerome and Mike Routledge
0113 345 6957
hello@cognitolearning.co.uk
The Leeming Building
Vicar Lane
Leeds
South Yorkshire
LS2 7JF

In 2023 fleet and leasing industry entrepreneur Andrew Cope made a six-figure investment in the technology firm.

It uses artificial intelligence (AI) to increase knowledge retention and improve skills for companies. The investment will enable Intuitive Learning to scale-up nationwide across product development and sales coverage.

The Harrogate-based firm is led by Jonny Jerome, Mike Routledge and Evan Ritchie. Jerome and Routledge have built and sold technology companies before and Ritchie previously headed up IT teams for both Zenith Vehicles and FMG.

Cope said: "Jonny, Mike and Evan are veterans of the fleet industry who bring a keen eye to using the latest technology to solve business problems. The training and skills sector is ripe for disruption with large HR budgets often thrown at complex compliance issues with very little tracking around engagement and understanding."

The company has launched its Cognito platform into the automotive sector and already counts large dealer groups and fleet operators amongst its customers.

Jerome, commercial director at Intuitive Learning, said: "Andrew brings an unrivalled knowledge of the automotive sector and a keen understanding of the power of technology to transform a business.

"People learn in different ways and live pressured lives that mean they often fail to complete or truly comprehend training delivered in the workplace. As a result, large sums are wasted on training without any true measurement of its impact, and companies suffer from poorly trained staff and are left open to critical compliance issues."

Cognito uses digital technology with AI that allows users to learn when and where they want on a device of their choice. Users of Cognito, it says, see improvements in engagement and an average 38% higher knowledge attainment. The system can replace traditional learning management platforms or work in tandem with them to boost results.

Ultra Safe Nuclear Corporation UK Ltd

www.usnc.com

David Marlow - director

david.marlow@usnc.com

2 Sidmouth Close

Windle

St Helens

Merseyside

**WA10 6BW** 

In July 2023 the UK Dept for Energy Security awarded Ultra Safe Nuclear Corporation UK (USNC) a grant of £22.5m to support high-temperature gas-cooled reactor technology. The award, which was announced alongside the launch of Great British Nuclear on Tuesday, is a matching funds grant through the UK's Advanced Modular Reactor Research, Development and Demonstration programme. The application was submitted by a joint team of USNC and Jacobs, which will support the front-end engineering design programme as a leading subcontractor.

The UK department is seeking to accelerate commercial technology readiness in the advanced nuclear market to support deployment by 2050 - with the aim being for a USNC demonstrator high-temperature gas-cooled reactor by the early 2030s.

Francesco Venneri, CEO of Ultra Safe Nuclear, said: "This is an important next step for deploying Micro-Modular Reactor (MMR) nuclear batteries in the UK and across Europe. The UK has long and unique experience with gas reactor technology the MMR builds on and this is the right team to demonstrate the design's versatility to meet the world's market need." "This high-temperature reactor has the potential to assist the world's energy transition and take nuclear power into a new era," said Jacobs Energy, Security & Technology Senior Vice President Karen Wiemelt. Jacobs will support the front-end engineering design programme as

a leading subcontractor, including reactor analysis, refuelling system, primary and secondary systems, safety systems, associated testing facilities, human factors, safety case and security, licensing and regulation, overall system integration and preparation for delivery of the demonstrator model.

USNC says the MMR is well suited to the UK programme's objectives "including secure, zero-carbon hydrogen production, sustainable aviation fuel (SAF), process heat, and electric power. The MMR will work at various power levels by simply changing the way it is operated. At higher power, fuel is consumed faster, much like a battery".

Earlier this year, USNC UK added a number of personnel from the shelved U-Battery project to its team. USNC's main product is a Micro-Modular Reactor, with its UK operation seeking to develop an advanced Micro-Modular Reactor design.

MMR-III is a "high power version ... capable of producing 750°C heat and specifically designed to be utilised in multi-unit 'nuclear battery packs' at industrial sites ... setting it apart from other designs, the use of proprietary Fully Ceramic Micro-encapsulated fuel, helium coolant and the large heat storage unit will deliver unmatched safety, simplicity and flexibility of use, while ensuring the heat generation and heat utilisation systems remain clean in all circumstances, eliminating the nuclear contamination risk for industrial production facilities".

FluoRok Ltd
www.fluorok.com
Prof Veronique Gouverneur and Gabriele Pupo – co-founders
01865 283 700
info@fluorok.com
Begbroke Science Park
Begbroke Hill
Woodstock Road
Begbroke
Oxfordshire
OX5 1PF

In 2023 chemists from Oxford University have led an international team in developing a biomimetic method for creating fluorochemicals without the use of hazardous hydrogen fluoride (HF) gas.

The Oxford chemists worked alongside colleagues at University College London, and Colorado State University to develop the technique, as well as Oxford spin-out FluoRok, created to commercialise the work.

CEO Gabriele Pupo did extensive postdoctoral work at the University of Oxford with Prof Veronique Gouverneur. For many years he focused on developing novel, safe and cost-effective fluorinating technologies using alkali metal fluorides while also building strong relationships with numerous chemical industries. In 2022, he co-founded Fluorok. Hailed as a significant breakthrough decades in the making, the research could help transform the global fluorochemicals market, which was estimated at \$21.4m in 2018. Applications for fluorochemicals include everything from polymers and agrochemicals to pharmaceuticals and the lithium-ion batteries.

Traditionally fluorochemicals have been derived from HF, which is produced by reacting a crystalline mineral called fluorspar (CaF2) with sulfuric acid under harsh conditions. The Oxford-led team was inspired by the natural biomineralization process that forms teeth and bones, making fluorochemicals directly from CaF2 and bypassing the production of the toxic HF gas. The work is detailed in Science.

"The direct use of CaF2 for fluorination is a holy grail in the field, and a solution to this problem has been sought for decades," said lead author Professor Véronique Gouverneur FRS, from Oxford's Department of Chemistry, who conceived and led this study. "The transition to sustainable methods for the manufacturing of chemicals, with reduced or no detrimental impact on the environment, is today a high-priority goal that can be accelerated with ambitious programs and a total re-think of current manufacturing processes. This study represents an important step in this direction because the method developed in Oxford has the potential to be implemented anywhere in academia and industry, minimise carbon emissions e.g. by shortening supply chains, and offer increased reliability in light of the fragility of global supply chains."

In the novel method, solid-state CaF2 is activated by a biomineralization-inspired process, which mimics the way that calcium phosphate minerals form biologically in teeth and bones. The team ground CaF2 with powdered potassium phosphate salt in a ball-mill machine for several hours, using a process that has evolved from the traditional way that spices are ground with a pestle and mortar.

The resulting powdered product, called Fluoromix, enabled the synthesis of over 50 different fluorochemicals directly from CaF2, with up to 98 per cent yield. According to the researchers, the method has the potential to streamline the current fluorochemical supply chain and reduce energy requirements, lowering the carbon footprint of the industry. "Mechanochemical activation of CaF2 with a phosphate salt was an exciting invention because this seemingly simple process represents a highly effective solution to a complex problem; however, big questions on how this reaction worked remained," said co-lead author, Calum Patel, also from Oxford's Department of Chemistry.

"Collaboration was key to answering these questions and advancing our understanding of this new, unexplored area of fluorine chemistry. Successful solutions to big challenges come from multidisciplinary approaches and expertise, I think the work really captures the importance of that."

Voice-Swap.ai Ltd www.voice-swap.ai Nico Pellerin - producer nico@voice-swap.ai 2nd Floor 168 Shoreditch High Street London E1 6RA

In 2023 DJ-producer DJ Fresh, real name Dan Stein, co-launched his latest venture, Voice-Swap.ai Ltd. This software, created by artists for artists, aims to revolutionise the world of vocal artificial intelligence (AI). In an industry plagued by concerns over the unauthorised use of artists' voices through AI, DJ Fresh and co-founder Nico Pellerin have taken a proactive approach to provide a unique solution.

Voice-Swap.ai Ltd combines the power of artificial intelligence with the human voice to offer unprecedented possibilities in song creation. Unlike other platforms that have faced controversies surrounding copyright infringement, Voice-Swap.ai stands out by prioritising artists' rights and fair compensation for their vocal contributions.

For those who have been following DJ Fresh's career, his impact on the music scene is undeniable. Producing hits like "Gold Dust," "Louder," and "Hot Right Now," he has left an indelible mark on the mainstream. Moreover, DJ Fresh's label, Breakbeat Kaos, played a crucial role in launching the careers of prominent acts such as Pendulum, Chase and Status, Sigma, and Nero. His extensive experience in nurturing talent and understanding the pulse of

music enthusiasts, combined with his tech expertise as a Stability AI consultant and engineering manager, makes him the perfect visionary for Voice-Swap.

In an era where AI's growth has raised concerns about its ethical implications, Voice-Swap.ai emerges as a beacon of responsible AI usage. By safeguarding artists' unique identities and ensuring fair compensation for their contributions, this software sets a new benchmark for ethical practices. Voice-Swap.ai allows artists to harness the power of AI responsibly, ethically, and most importantly, for their benefit.

To get a taste of Voice-Swap.ai in action, interested individuals can access all the necessary information and assets through the official link provided. The website includes a demo video showcasing the software's capabilities. DJ Fresh has also taken to Twitter, inviting fans to join the conversation by sharing their thoughts and providing further feedback. With over 200 sign-ups already, it's clear that Voice-Swap.ai has sparked considerable interest within the music community.

Lane Motorsport Ltd

www.lanemotorsport.com

Peter Costin - development manager
01403 790 661

motorsport@fclane.com
Slinfold Lodge
Stane Street
Slinfold
West Sussex
RH13 0RN

In July 2023 Lane Motorsport continues to fuel the aspirations of the next generation of motorsport engineers as they gear up for the highly anticipated Formula Student UK 2023. Lane Motorsport has been supporting LUMotorsport in its efforts to design a single-seat racing car for a number of years. Peter Costin, Business Development Manager for Lane Motorsport, says, "Lane Electronics is a family-run electrical connector distributor established for nearly 60 years and it is part of our ethos to support both our local community as well as the next generation of home-grown engineers.

"Sharing our expertise with the universities competing in FSUK provides the race teams with support while providing us with insights as to the future of motorsport."

In addition to FSUK, these student-designed and built racing cars may also be entered into similar races around Europe for international competitions. Now running with their own successful design of accumulator, LUMotorsport has also secured entry to FSCzech in August 2023.

Backed by industry and high-profile engineers such as Ross Brawn OBE, Formula Student challenges enterprising and innovative young engineers to grow their skills by developing, building, and running a single-seater race car.

Over 130 university teams from more than 30 countries across the world will be bringing their vehicles to Silverstone, all built entirely by students who are hoping to go on to design, build or race cars of the future.

FSUK is Europe's most established educational engineering competition celebrating its 25th anniversary in 2023 and is a testing ground for the next generation of world-class engineers.

The Uniform Room Ltd www.theuniformroom.co.uk Jordan Crumpton - co-owner and director 01384 936120 jordan@theuniformroom.co.uk 9b Narrowboat Way Blackbrook Business Park Dudley West Midlands DY2 0XQ

In July 2023 Black Country-based personalised workwear and uniform company was eyeing growth and a six-figure investment programme after signing up for new headquarters. The Uniform Room agreed a five-year lease for Building 1, Bay 1 at Multipark Pensnett with commercial property and investment company LCP, part of M Core, which owns and manages the estate.

The move involves the family-owned and run business increasing its operational and back-office space to 5,300 sq ft – more than doubling its existing space at its current Cradley Heath home.

The move will enable The Uniform Room, which counts the BBC, Coca-Cola and the NHS among its customers, to install new machinery to meet customer demand. It is also looking to increase staff numbers and is investing a total of £100,000 in the move.

Jordan Crumpton, co-owner and director, said: "We have been going through a strong period of growth and need to expand our premises so we can add new embroidery machines to keep up with the demand.

"The new space will give us the space we need now and is flexible enough for us to add a mezzanine in the future, when we need it, to take the total space to over 9,000 sq ft." Fit-out, which includes creating additional office space, is underway now, with an anticipated move in date of the end of August. Crumpton plans to add to the complement of eight staff immediately – with a marketing executive and sales person – and employ further production staff early next year, with the aim of having a roll call of 14 employees.

Sportfive Ltd www.sportfive.co.uk Tim Birt - UK CFO 020 7632 9000 tim.birt@sportfive.co.uk 5 Southampton St London WC2E 7HA

In 2023 this sports marketing business became the first company to commit to office space at a major regeneration project in Greater Manchester.

Tim Birt, UK CFO and executive vice president of operations at Sportfive, added: "We're incredibly excited to be relocating our office to Foundation in Altrincham and have been impressed with the vision for the scheme and the wider plans for the Stamford Quarter. "This provides us with the opportunity to create a modern and sustainable workplace for the benefit of our employees which will support the continued growth of Sportfive." Build A Rocket is an Esports agency and part of Sportfive. They provide the strategic launching pad to skyrocket companies from all over the world towards esports - consulting, strategies, authentic content or marketing campaigns.

Combining ambition, knowledge, precision and technical expertise, we create effective work for the world's most influential brands, and progress the world of esports. They understand your regional market – its team of consultants are across Europe, North America and Asia Pacific.

Sportfive has been based at 40 Water Lane since signing a 10-year deal with Orbit Developments in 2015 to occupy 6,016 sq ft of space. The deal comes after Lane7 was named as the first leisure operator to be confirmed at Foundation. The brand will be taking over the 12,640 sq ft lower ground floor.

Pentagram Design Ltd
<a href="https://www.pentagram.com">www.pentagram.com</a>
Jody Hudson-Powell and Angus Hyland - directors 020 7229 3477
jody@pentagram.com
11 Needham Road

London

W11 2RP

Design agency Pentagram London is sited in a former dairy on Needham Road, a leafy lane off Westbourne Grove in Notting Hill.

In 2023 the Natural History Museum has begun the roll out of a new look, with a newly developed logo, colour palette and brand assets as the museum approaches its 150th birthday. Agencies Pentagram and Nomad worked with the museum's in-house team on a brand strategy developed by agency Heavenly.

The logo has been designed to unite the Museum's sites, South Kensington, Tring and the new scientific facility which will be located at the University of Reading's Thames Valley Science Park.

London's Natural History Museum is a preeminent global research center for natural history and the life sciences. It now has a collection totaling more than 80 million objects, including specimens collected by Charles Darwin, an impressive number of dinosaur skeletons, and the largest specimens of blue whales ever displayed.

The new strategy was developed by Heavenly, which was then interpreted by branding studio Nomad and Marina Willer's team at design consultancy Pentagram. Together they chose to dial up the advocacy aspect of the organisation, in a bid to create and empower a broad community of climate activists.

Pentagram said the museum "needed a symbol that made reference to our planet and the universal connection between everything in nature.

It continued: "...the Museum has to reassert its position as a leading scientific voice in the discussions on the future of our planet and climate emergency.

"In this new phase the Museum needs an identity to activate engagement with both existing and new audiences in everything that it does. From research to entertainment, education and activism."

The new look, which replaces a logo introduced in 2017, is currently being rolled out in parts of the museum's website and social media presence, and includes a new circular logo and bright colours palette.

HEL Performance Products Ltd www.helperformance.com Simon Lane and Chris Porter 01392 811 601 moto@helperformance.com Unit 4 Lower Trelake Business Park Tedburn Rd Whitestone Exeter Devon EX4 2HF

HEL Performance is the only UK company of its kind to design and manufacture its entire range of mainline stainless steel high-performance brake lines.

HEL Performance's market distinction was, and remains, simple: our brake line products have never competed directly with reusable ones. Our system – the first fully swaged brake line in the UK market – uses only stainless steel and titanium. We've always shunned mild steel or aluminium, as they invariably corrode. Sure, stainless steel fittings cost more to manufacture, and to buy. But for us, cost has never, and will never, be more important than quality. Or safety.

Since we introduced our swaged system, our competitors have followed suit because it makes so much more sense. This is great for the market, and merely qualifies our leadership in bringing tamper-evident, safer, permanently attached brake line fittings to the fore. HEL Performance was also the first in the industry to apply a PVC cover during hose manufacture to protect vehicle paintwork. Until then, covers were typically applied by heat-shrink, which not only meant a substandard finish, but also made it almost impossible to colour-match future lines accurately. Such a move meant significant investment and vastly expanded stock holding, but it secured the highest quality finish in the marketplace – and the reputation that comes with it.

It also launched a full automotive brake line application list. As with our motorcycle range, our automotive lines only use stainless steel fittings directly swaged on PVC-covered brake lines, available in 15 colours. Meanwhile, we're working with one of the world's largest motorcycle brake disc, caliper and master cylinder manufacturers to allow them to offer their customers a complete system.

Its most popular product with over 750,000 hose and stainless steel fitting combinations are custom brake and clutch lines. They provide race-winning braking products, service and support for riders and drivers all over the world. Whether it's on the racetrack or the road, our pioneering stainless steel brake line kits have changed the market and continue to set new standards. As well as sharing the success of world motorsport champions, we strongly believe in nurturing the next generation of winners.

Its mobile Race Lab features at the Isle of Man TT, the NW200, and the World Superbike and British Superbike Championships every year, supporting our growing portfolio of sponsored winners with a fast-expanding range of high-performance braking technologies.

HEL's ancestor, Hose-Equip, was established in 1985 as an authorised Aeroquip distributor, and soon made a name for itself the Industrial, Marine and Hydraulic market, based on a friendly and collaborative approach to quality and service. Hose-Equip quickly became an authorised MOD contractor and ISO9000 quality-assured.

Eku Energy Ltd www.ekuenergy.com Sandra Grauers Nilsson - chief executive s.grausersnilsson@ekuenergy.com Ropemaker Place 28 Ropemaker St London EC2Y 9HD

In 2023 energy storage developer Eku Energy is due to commence construction shortly on two new battery storage projects in the UK.

Together the two projects in Basildon, Essex and Loudwater, Buckinghamshire have an installed capacity of 130 megawatt hour (MWh) and will provide vital flexibility to support

the UK electricity system, enable more renewable generation and advance the UK's clean energy transition.

Construction is due to commence at both sites in fourth quarter 2023 and they are expected to be commercially operational by the end of 2024.

Since its launch in November 2022 Eku Energy has expanded rapidly and now has 1.2GWh of battery storage in delivery, with operations in Australia, Italy, Japan, Taiwan and the UK. The company has placed an order with NHOA Group to supply two stand-alone battery energy storage systems for Basildon and Loudwater.

The deal between Eku Energy and NHOA also includes a long-term service agreement regarding the batteries' operational maintenance.

Eku Energy chief executive Sandra Grauers Nilsson said: "Battery storage is essential to the decarbonisation of electricity systems globally and Eku Energy is focused on delivering safe, secure and reliable solutions at scale and pace.

"We are delighted to have partnered with NHOA Energy on these two new battery storage projects as we continue to expand our global battery storage portfolio."

Eku Energy already has a 40MW/40MWh battery in Maldon, Essex, in construction and recently announced a partnership with Renera Energy to develop 1GW of battery storage in Italy.

The company was initially established by Macquarie's Green Investment Group and is now jointly owned by a Macquarie Asset Management managed fund and British Columbia Investment Management Corporation.

GSS Architecture LLP https://gssarchitecture.com Jonathan Hunter - partner 01133 231 295 jdh@gotch.co.uk 35 Headlands Kettering Northamptonshire NN15 7ES

In July 2023 the Leeds base becomes practice's second studio in Yorkshire

GSS Architecture has announced the opening of a Leeds studio, which will be the practice's second Yorkshire office and its sixth overall.

The company, which has its headquarters in Kettering, Northamptonshire, opened a studio in Harrogate around 13 years ago. Last year it opened a "collaboration hub" in Leeds and has now cemented its presence with a permanent studio on Park Row in the city.

GSS partner Jonathan Hunter said the practice had developed strong working relationships with clients and consultants in the Yorkshire region over the past decade.

It has been 100 years since 'the man who built Kettering', John Alfred Gotch, was elected president of the Royal Institute of British Architects (RIBA) president: the first provincial architect to be appointed president since the formation of the Institute in 1834.

John Alfred Gotch founded his own architecture practice in 1879 and was then joined by Charles Saunders in 1887 and Henry Surridge in 1899, to create Gotch, Saunders and Surridge, now known as GSSArchitecture, a national architecture practice that has been operating for an impressive 144 years in 2023.

In an extraordinary 9-year period following World War I, Gotch and Saunders designed and built over 140 branches for the Midland Bank (now HSBC). Their crowning achievement was the construction of the Bank's headquarters in Poultry, London, which includes input from Sir

Edwin Lutyens. After a four-year renovation period, the building reopened in 2018 as a 5-star hotel and the Ned restaurant.

With an impressive portfolio of work behind him, Gotch was also involved with 49 school-building projects between 1891 and 1937, the majority situated in Northamptonshire and the adjoining county of Bedfordshire.

In 2018, a Kettering Civic Society memorial plaque was unveiled at the HSBC Bank in Kettering, which is one of 142 branches he designed for the former Midland Bank, which commemorates Gotch's contribution to the town.

With an impressive legacy, GSSArchitecture now operates with six offices nationally and over 70 team members who create innovative and sustainable design solutions across all sectors, including residential, education, commercial, healthcare, sports, and leisure.

Vantastec Ltd
www.vantastec.co.uk
Colin Smith and Gareth Edwards - directors
01443 811 630
colin.smith@vantastec.co.uk
Unit 6c Coopers Terrace
Ystrad Mynach
Caerphilly
Gwent
Wales
CF82 7EP

In 2023 the UK's leading fridge van, temperature controlled vehicle and conversion specialist, Vantastec, became majority employee-owned as it focuses on further expansion. Funding for the employee acquisition of the Ystrad Mynach-based was provided by the Development Bank of Wales with 38 employees forming an employee ownership trust (EOT) that has taken a 51% stake in the business that was first set-up by directors Colin Smith and Gareth Edwards in 2006. Vantastec was advised by GS Verde. The value of the deal has not been disclosed.

Operating throughout the UK, Vantastec specialise in refrigerated van conversions but is expanding rapidly with a range of catering vans including bespoke vehicles for meals on wheels. As the only provider in Wales, Vantastec works with all major manufacturers and is increasingly selling electric vehicles to a client base that includes both the private and public sectors.

Director Mr Edwards said: "Colin and I saw a gap in the market and have since developed Vantastec to become the UK's leading provider of temperature controlled vehicles. We pride ourselves on our quality, building vans that stand the test of time.

"Our team has been central to our success so we were keen to ensure that they have the opportunity to share in our future growth. The employee ownership Trust model is a great way to retain staff, develop skills and ensure accountability for quality as we grow. It was the Development Bank that helped us in the early days of setting up the business and it is now thanks to their support that we're able to look to the future knowing that we're all a part of the Vantastec family."

Gilbanks Ltd <a href="https://gilbanks.com">https://gilbanks.com</a>
Alex Duckett - MD 0113 819 7300 alex.duckett@gilbanks.com

1 Park Row Leeds LS1 5HN

In 2023 serviced office provider Gilbanks created bases in Leeds and Manchester with the latest technology and class-leading service.

It launched its Manchester operation in March and is now more than 90% let. In 2023 serviced office provider Gilbanks boosted its expansion plans with the appointment of Ben Jaffray as finance director. He has joined from Manchester-based property group, Bruntwood, where he was a head of finance.

Ben will join the board and help the management team to accelerate its growth plans. The move follows serial entrepreneur Andrew Cope's investment and appointment as chairman. Ben Jaffray said: "Gilbanks is an innovative company in the office market. It has redefined professional workspace for tenants by building thriving business communities where teams can optimise their productivity. For landlords, they have a flexible model that can help to unlock value in traditional office spaces."

Gilbanks, a high-end workspace provider, is accelerating its expansion plans following investment from entrepreneur Andrew Cope. The seven-figure funding from Mr Cope will enable further development opportunities across the UK and Europe. He will also assume the role of chairman of the property company.

Gilbanks established a niche in the market by offering professional firms a premium working environment with high service levels and building strong business communities through regular networking. It is led by property expert Alex Duckett, who worked at Savills and Knight Frank before building his own business. Andrew Cope is a prolific investor with interests that span property, technology and the automotive sectors.

The 22,000 sq ft serviced office is located at 11 York Street. The Grade-A building in the central business district has already attracted tenants such as Rolls Royce and Avison Young. The building is operated by Aviva Investors, the global asset management business of Aviva plc. Leeds-based, Gilbanks works with large corporates to help them take a more creative approach to utilise their large city centre offices and unlock their value.

Alex Duckett, managing director of Gilbanks, said: "Ben brings a wealth of experience to his new role. We continue to attract great talent to the team, who are essential to the accelerated growth plans that we have in place for the coming years."

MSE International Freight Ltd www.mseinternationalfreight.com 020 3488 5210 maks@mseinternationalfreight.com 1 Coldbath Square London EC1R 5HL

Mse International Freight can offer simplified customs clearance and help with UK customs charges.

Customs clearance is an essential process in international trade, and it can be a daunting task for businesses. If you're looking to import or export goods, it's important to understand customs clearance and how it can impact your business.

At MSE International Freight, we specialize in customs clearance services to help businesses navigate the complexities of international trade. Our experienced team of customs brokers can help you streamline your customs clearance process, saving you time and money.

With facilities located in, close to the M25 East & M25 West close to London Heathrow Airport, MSE have both forklift & crane offload available, whether its pallets, machinery, or bulky material that needs trans shipping.

HeroTech8 Ltd
www.herotech8.com
Edward Anastassaco
01908 952 988
sales@herotech8.com
Unit 1 Medway Court
Wharley End
Cranfield
Bedfordshire
MK43 0FQ

In 2023 it was part of the 'Intelligent Drones for Port and Highways Technology project'. The Bedford-based startup HeroTech8 produces the 'drone-in-a-box'. It was alongside Cambridge University computer vision spinout RoboK, BT, and infrastructure developer Kier. The group will build and test the use of drones to carry out missions to monitor and control critical national infrastructure such as highways and ports.

The Washington Post recently covered the Innovate UK 'FutureFlight Project Skyway', working to enable drones can become central to people and transport goods connect, and deliver services in the UK.

To support round-the-clock automated drone operations their system enables industries to automatically deploy, recover and recharge drones without requiring human interaction to fly. The revolutionary technology allows mass adoption and access to aerial inspection and monitoring capabilities, without the need for onsite pilots or teams. The systems can be accessed anywhere in the world by the users and can provide immediate live feed data at the touch of a button. By leveraging advances in IOT technologies, the entire operation of the remote access drone can be completed through cloud services and secure servers. The company now has customers using the system across industries such as border control, airport security, defence services, construction and facility management, as well as police and

The Furniture Recycling Group (TFRG) www.tfrgroup.co.uk
Nick Oettinger - CEO
01254 205 155
hello@tfrgroup.co.uk
Victoria Works
Bonsall Street
Blackburn
Lancashire
BB2 4DD

emergency services.

In 2023 The Furniture Recycling Group (TFRG) launched a new automated mattress recycling service that will allow lightly-used mattresses to be sanitised and resold. 167,000 tonnes of mattresses are sent to landfill every year in the UK. 8.17% of UK Mattresses are diverted from landfill by TFR Group.

Mattress recycling is a time-consuming and expensive process, with most made from a combination of low-value products – like cotton, foam and springs – that have to be carefully separated and sorted before being recycled individually.

As a result, landfill is often seen as the 'cheapest, quickest and easiest' option for waste mattress disposal, regardless of the condition they're in.

In the Purpose Built Student Accommodation (PBSA) sector alone, a high annual mattress replacement rate contributes 1,000 tonnes of waste a year – equivalent to the weight of 481 cars or 504 hippos. TFRG are working to address these forms of mattress waste through collection and recycling deals, and have recently partnered with St Andrews University to help divert its bedding waste away from landfill.

But not all mattresses are disposed of anywhere near the end of their lifecycle, some are exchanged or returned under guarantee to manufacturers and retailers and have to be sent to landfill essentially new – with research from Diver suggesting that more than 200 brand new mattresses are being sent to landfill every day, or 73,000 each year.

It's these lightly used mattresses TFRG is targeting with its new 'sanitisation for rejuvenation' service. The process uses bespoke machinery developed by TFRG to sanitise mattresses that have been exchanged under a night-comfort guarantee or that have been returned to their provider. TFRG claims that the technology can 'rejuvenate' the mattresses to 'nearly new condition'.

Once they have been cleaned, the mattresses are then sorted, collected and returned to the manufacturer or retailer to be sold. Mattresses collected by TFRG that are in poor condition or at end of life (EoL), will not be rejuvenated, and instead will be recycled in the traditional manner.

TFRG have stated that the industry response to this process has been 'highly encouraging', and that some retailers who traditionally have not sold refurbished mattresses have already signed on to the rejuvenation service.

Nick Oettinger, CEO of TFRG, said: "The launch of our rejuvenation service represents a pivotal moment in the recycling and waste management industry.

"We're not only offering a solution for a more sustainable future, but also changing the narrative around what we perceive as 'waste'. By rejuvenating lightly used mattresses, we are turning the tide on landfill waste, making strides towards a circular economy, and setting new standards for product responsibility."

TFRG also provides a recycling service for mattresses closer to EoL, and, as mentioned above, has partnered with St Andrews to help divert the 6.2 tonnes of waste mattresses and bedding materials it produces annually in its student halls. The partnership has already seen the transformation of over 2,000 mattresses, duvets and pillows into sustainable products after being recycled by TFRG.

Rothschild & Co, Global Advisory www.rothschildandco.com Kim Nicholson 020 7280 5422 kim.nicholson@rothschildandco.com 6th Floor, Vintners Place 68 Upper Thames Street London EC4V 3BJ

Rothschild & Co is a family-controlled and independent group and has been at the centre of the world's financial markets for over 200 years.

In 2023 Rothschild & Co's Global Advisory business signed the Ukraine Business Compact, a statement of international business support for Ukraine's recovery.

The Compact invites signatories to commit their support to Ukraine's reconstruction and, when the time is right, to engage in trade and investment, peer-to-peer expertise knowledge sharing, pro bono work and key business activities.

The aim of the Compact is to help enable Ukraine to modernise, build a resilient and agile economy and emerge from the current conflict as a strong and prosperous state. It attended the Ukraine Recovery Conference being held in London on 21-22 June 2023.

Global Advisory, a division of the Rothschild & Co group, designs and executes strategic M&A and financing solutions, providing impartial, expert advice to large and mid-sized corporations, private equity, families and entrepreneurs, and governments.

Through its unrivalled network of 1,400 industry and financing specialists in over 40 countries, Rothschild & Co's Global Advisory business combines the breadth of its advisory offering with a high volume of transactions to achieve a unique understanding and perspective into markets and participants worldwide.

With a team of c.4,200 talented financial services specialists on the ground in over 40 countries, Rothschild & Co's integrated global network of trusted professionals provide indepth market intelligence and effective long-term solutions for clients in global advisory, wealth & asset management, and merchant banking.

Ant Networks Ltd t/a SentryPeer https://sentrypeer.com
SentryPeer
Gavin Henry
07930 323 266
ghenry@senrtypeer.com
12a Carden Place
Aberdeen
Scotland
AB10 1UR

In 2023 this platform supported by Deutsche Telekom Security GmbH was launched by Gavin Henry, founder of SentryPeer.

He has spent the last 12 years building and scaling his previous company, SureVoIP, an award-winning Internet Telephone Service Provider, which was acquired in July 2021. SentryPeer is designed to help detect compromised VoIP accounts. These credentials could have been gathered from desk phones, softphones, PBXs and WebRTC services for example. It works by your system always sending an API call for each phone call (or IP address) you want to check.

They then send users back a response with the results of our analysis. You can use this information to block the phone call, or take other action. SentryPeer launched to help prevent VoIP cyberattacks and fraudulent phone calls.

SentryPeer offers a unique way for internet telephony service providers, cybersecurity specialists, and telecom resellers to help prevent VOIP fraud by detecting early attempts. Gavin Henry said "I created SentryPeer based on my own experience of running a VoIP based company, to address the need for having an early warning system for VoIP fraud. It was also very important to allow users to own their data to avoid lock in. That's why SentryPeer is an open source platform, so you can always participate and validate that what we say is actually what we are doing."

Dr. Stefan Pütz. SVP Technical Security, Deutsche Telekom Security and CISO at Deutsche Telekom Group said "We noticed Gavin's impressive work and are happy to support innovative trends protecting customers from fraudsters."

Features and benefits of SentryPeer include detect compromised VoIP accounts in real time before you lose money or customer confidence; learn customer traffic patterns and detect anomalies, and check caller IDs and phone numbers in real time against Ofcom's Do Not Originate List.

Gardner Leader LLP
www.gardner-leader.co.uk
Derek Rodgers - partner
020 3709 9370
derek.rodgers@gardner-leader.co.uk
25 Central St
Southampton Buildings
London
WC2A 1AL

In 2023 Gardner Leader appointed a new marketing manager, foreign-born Gina Tray. Having worked in Vienna, Berlin and London, she has held positions at Austrian law firm Wolf Theiss and KCD Luxury Marketing, PR and Communications, where she worked alongside brands such as Vogue, Netflix and Meta. Her appointment comes as the firm continues its path of sustainable growth, which has seen its workforce grow to more than 180 members of staff.

Tray said: "While my partner and I have been lucky to travel the world during our careers, we also have roots in Berkshire which is why joining Gardner Leader really does feel like coming back home.

"Gardner Leader has undergone an exciting period of growth over the last few years, strengthening its team, and increasing its presence across the region, from London to Swindon and into Oxfordshire.

Managing partner Derek Rodgers added: "It's fantastic to have someone of Gina's calibre and expertise joining the firm. As our presence continues to grow across Berkshire, Wiltshire, Oxfordshire and London, it's important to us that our customers across the region understand Gardner Leader's values and our expertise: that we are a firm they can trust to deliver peace of mind, which understands their priorities and delivers practical, exceptional value legal solutions."

Reach ATS Ltd https://reach-ats.com Richard Astbury - marketing director 01527 574 408 richard.astbury@reach-ats.com Registered Address 20-22 Wenlock Rd London Greater London N1 7GU.

Reach ATS helps HR teams put the human back into HR by improving and streamlining workflows, automating the recruitment process from job boards to onboarding. Founded in 2011, Reach's applicant tracking software platform is an end-to-end recruitment solution for companies hiring at volume. Using decades of expertise from staff who've worked in recruitment themselves, the software supports hiring for companies across the UK such as Bellway, Bloor Homes, Riverford Organic Farmers, St John's Ambulance and Triumph.

In July 2023 recruitment software specialists Reach ATS have unveiled a new look website, the first step in a larger campaign to highlight the human side of their recruitment technology. The well-respected applicant tracking software (ATS) company, based in Bromsgrove, is known for its people-centric approach. With a reputation for excellent customer support and keen eye for how their technology can free up HR professionals to focus on 'people, not process,' the new Reach website is as intuitive, and people focused as its recruitment platform software.

Reach, a fully customisable, end-to-end HR recruitment solution, is used by organisations across the UK such as Bloor Homes and Triumph to streamline their recruitment process. Richard Astbury, Marketing Manager for Reach, said: "Our website is our shop window. We've grown and developed considerably over the last few years and wanted to ensure that our website offered the same intuitive journey our clients have when they use our applicant tracking system.

Sweethaven Computers Ltd www.sweethaven.co.uk Paul and Melissa Rambridge - directors 01737 247090 melissa@sweethaven.co.uk Sweethaven House Trehaven Parade Woodhatch Rd Reigate Surrey RH2 7LL

In 2023 Duke Royalty made a follow-on investment of £2.8m into its existing royalty partner to fund its latest acquisition of a managed IT services firm, Sweethaven Computers. The financial services company's investment will facilitate InTec Business Solutions' acquisition of Sweethaven Computers. The investment is also for the settlement of deferred consideration in relation to a previous acquisition. In 2023 CEO Melissa Rambridge was nominated for CRN Woman of the Year, Entrepreneur of the Year and Role Model of the Year

InTec, based in Manchester, is an investment holding company created to execute a buy and build strategy of synergistic companies within the IT managed services sector in the UK and Ireland.

Established in 1977, Surrey-based Sweethaven provides managed IT services to SMEs with a primary focus on securing long term relationships and contracts within the education sector. The financing increases Duke's total investment into InTec to £23.9m. The investment terms will remain in line with Duke's previous follow-on investment into InTec, including the normal 6 per cent annual adjustment factor.

Neil Johnson, chief executive of Duke Royalty, said: "The acquisition of Sweethaven marks an exciting step forward for InTec, as it bolsters the company's existing education-focused offering and expands our scale and credibility within the public education sector.

"There is a strong cultural fit between InTec and Sweethaven, and we look forward to seeing the positive impact that this new addition will have within the wider group."

Duke Royalty is a provider of alternative capital services to a diversified range of profitable and long-established businesses in Europe and North America.

Zelt Technology Ltd https://zelt.app

Christopher Priebe – CEO 07378 878 181 hello@zelt.app 14a Lowndes St London SW1X 9EX

In 2023 Zelt, a provider of a people operations platform, raised £2.5m in seed funding. Zelt serves One Trading and Mumsnet, among other customers.

The round was co-led by Episode 1 Ventures and Village Global, with participation from Charlie Songhurst, Mandeep Singh, Felix Leuschner and Daniel Hegarty. The company intends to use the funds to continue to expand operations and its development efforts. Founded in 2021 by Christopher Priebe, CEO, Zelt provides a platform that enables small and medium sized businesses to manage and automate payroll, benefits and financial activities. Zelt makes pay, benefits, software, hardware, time off and reviews available in a single place. Users can automate the work in their day-to-day operations, saving time onboarding and offboarding, entering employee information easily, buying and shipping laptops, creating accounts in work apps, and more. They can also get real-time insights into their workforce, headcount costs, device fleet security and tool stack to make informed decisions. Adriana Restrepo, the former COO at Revolut, came across Zelt when she was looking for a solution to support her in quickly setting up a fast growing team. While building their team in the UK and EU, Adriana was looking for a solution that would enable them to equip their international team with high-performance laptops, simplify the process of gathering employment information, manage UK payroll and handle app management in one place. Zelt was also the solution to renting and delivering laptops for the remote team in the EU providing a diverse range of devices to choose from as well as the flexibility to request specific device models.

Now a client of Revolut, Zelt sends regular reports that flag accounts which are not associated with active employees, to minimise the risk of unauthorised access. Additionally, existing computers and those purchased elsewhere can be easily uploaded to Zelt and enrolled in less than 30 seconds.

Thingtrax Ltd
https://thingtrax.com
Paul Reader – CEO
0800 987 5340
paul.reader@thingtrax.com
Centurion House
London Road
Staines-upon-Thames
Middlesex

**TW18 4AX** 

In 2023 Thingtrax, a provider of a SaaS-based manufacturing performance platform, raised £4.3m in Pre-Series A funding.

The round was led by Concentric, Superseed and Puma Private Equity, with participation from Haatch, Portfolio Ventures, Vinci Venture Capital and Charlie Songhurst. The company intends to use the funds to support its growth through developing strategic partnerships, scaling the team and expanding its customer base in Europe and the US. Founded in 2015 by Aman Gupta, a seasoned professional in solution architecture, agile methodologies, and business analysis, along with Imran Shafqat, a specialist in enterprise software development and led by CEO Paul Reader, Thingtrax provides an IoT SaaS solution

that enables manufacturing businesses to improve efficiency and reduce costs through one integrated platform, using cloud computing, robotics, industrial Internet of things (IIoT), artificial intelligence (AI), and computer vision. Integrating with over 300 devices and protocols, it captures and analyses manufacturing operations data in real-time to drive productivity and process improvement throughout manufacturing operations.

South West Upholstery Ltd https://swupholstery.co.uk Ryan Ball - director 0117 370 2745 ryan@swupholstery.co.uk Unit 7, Novers Hill Trading Estate Bedminster Bristol Avon BS3 5OY

In July 2023 Bristol-based Southwest Upholstery agreed a £862,000 loan from Lloyds Bank allowing it to expand operations.

The company, which repairs, recovers, and manufactures seating and employs 25 people, has seen demand lift up by 30% as summer trading picks up for its key hospitality and leisure customers. The finding package from the bank has meant it can buy a CNC machine and increase total operating space by 75%.

The business expects to increase turnover to £4.5 million this year from £3.5 million in 2022. Ryan Ball, director at Southwest Upholstery, said: "Upholstery isn't always at the forefront of innovation so it's crucial we introduce the changes needed to secure the next generation of craftsmanship. Like all businesses, we have peaks and dips in demand so it's vital we adapt quickly to provide a reliable service for customers.

"The support provided by Lloyds Bank has allowed us to lay down foundations that will fuel the business' growth for the next five to ten years. It will also inject a new lease of life into our manufacturing process through state-of-the-art technology that will help us provide a continued quality product to our customers."

John Howell, relationship manager at Lloyds Bank, added: "Manufacturers have been at the forefront of a variety of economic challenges throughout the last two years. So, it's encouraging to see a business like South West Upholstery making moves to futureproof and streamline its operations while taking advantage of seasonal uplift in demand." Southwest Upholstery also received separate funding to invest in green credentials by installing 40 solar panels on its headquarters roof in Bristol. The 14KW capacity panels will have the power to service 60% of the business' energy demand.

Flexion Energy UK Storage Ltd www.flexionenergy.com Dan Taylor and Hassen Bali - founders sales@flexionenergy.com 27 Old Gloucester St London WC1N 3AX

Founded in 2020 it has had one funding round, with funds totalling £150m. Flexion Energy has raised £150m from a single funding round from GLIL Infrastructure in July 2022. GLIL Infrastructure is a £2.5b infrastructure fund. An energy storage

infrastructure specialist, Flexion Energy builds, owns and runs large-scale energy storage facilities and batteries in the UK.

This allows for energy created by solar and wind, which can be volatile due to relying on weather conditions, to be stored for when the demand in the UK requires it. Energy storage is a key need for moving towards the UK's net zero 2050 commitments.

Flexion aims to build 1GW of storage over the next five years, with peak demand in the UK at 61.9GW. Its latest grid battery facility will be built in Fraserburgh in Scotland, with a capacity of 50MW of electricity. It will store energy produced at nearby solar and wind farms, ready to release it to the grid as needed.

In 2023 Flexion Energy applied to Aberdeenshire Council for permission to construct the development at Hillhead of Phingask to the west of the town. Its new grid battery facility will hold up to 50MW of electricity – a new energy storage facility to the west of Fraserburgh. The temporary facility will be in operation for up to 40 years and is expected to "bridge the gap" between supply and demand in the energy network. The site will have batteries, transformers and power conversion systems along with a switch and control room. Energy generated from nearby wind and solar farms will be stored at the site and released to the grid when required. Agents Stantec said the facility would use "intelligent" battery software and control systems to decide when to release energy back or store it for release at times of peak demand. It argued the systems would "keep costs down and electricity flowing".

Stylib Ltd https://stylib.com Noam Naveh – CEO 07988 364 641 hello@stylib.com 46 The Reddings London NW7 4JR

In 2023 Stylib, an 'AI-powered' product discovery platform for architects, raised £1.5m in Pre-Seed funding.

The round was led by Foundamental, with participation from AEC/O software provider Nemetschek Group and Redstone Built World Strategy. The company intends to use the funds to accelerate its product development and UK operation.

Founded by Noam Naveh (CEO) and Fabio Galicia (CTO), Stylib provides a platform for design professionals to search, review and specify architectural materials. Working with product suppliers and their designer customers, the startup is developing tools and technologies that leverage AI & architecture domain-knowledge to promote efficient specification journeys.

The company's proprietary machine vision tools allow designers to use their own inspiration images to search for relevant products from trade suppliers. It is then coupled with its product database, which helps specifiers to further narrow down their search using technical filters that include information like sustainability criteria, fire rating, slip resistance and more. To complement its search technology, Stylib is developing tools such as digital moodboards and personalised material libraries, that help designers to manage their architectural materials' knowledge base.

For instance, customers can integrate Stylib's product discovery technology into their own websites using its API and widget solutions. Suppliers can manage their catalog database using the platform's vertical Product Information System (PIM), which enriches their data using machine learning and has been designed to suit the needs of architectural product

suppliers and manufacturers. They also benefit from search insights which inform them what the latest trends are based on analysis of user searches.

AXS Europe Ltd www.axs.com Paul Newman – director 020 3481 5506 supportuk@axs.com 7th Floor West, Cottons Centre 47/49 Tooley Street London SE1 2QN

Paul joined the AXS team in August 2014 following eight years overseeing ticketing operations at the O2 Arena.

AXS launched in the US in 2010 and went live at the O2 Arena in 2012. AXS, part owned by AEG, is now fully owned since 2019. It launched its digital ticket and re-sale in the UK – the O2 gets our most cutting edge technology before anyone else in the UK, said Mr Newman. It enables customers who purchase tickets from AXS or other agents to instantly receive and access their tickets through the O2's venue app, built by Realife Tech, squeezing out ticket touts due to tickets having QR codes that refresh every 59 seconds, closing a loophole for screenshooting digital tickets. Buyers can re-sell their tickets at face value with a cap of 10% above the original price paid.

Newman said "If you can organise ticketing at the O2 Arena you can do it for any venue anywhere. It's so complex: with the suites and the VIP Club and varying levels of premium that they have."

Carter Manufacturing Ltd
www.carterbearings.co.uk
Karl Brundell - MD
01865 821 720
sales@carterbearings.co.uk
Unit 7, Isis Court
Wyndyke Furlong
Abingdon
Oxfordshire
OX14 1DZ

It manufactures specialist environment bearings for the space and aerospace industries. These include bearings that are miniature, thin section, spherical plain, hybrid, and LNG, LOX and LN2 compatible. Services include bearing tooling, install/remove, swage and proof test, torque test and custom kitting.

In 2020 Carter became an approved supplier for the European Satellite Agency (ESA), using years of experience in the manufacture of products and tools for the aerospace industry to provide hybrid rocket propulsion bearings.

Alpha Crew Ltd www.alphacrew.co.uk George Saladze - founder 020 8801 1630 info@alphacrew.co.uk 35 Millmead Ind Estate Mill Mead Road London N17 9QU

Alpha Crew provide event crew ranging from day shift labourers to skilled technicians, security, and more.

It has served the Barbican, Sadlers Wells Westfield, The Old Vic, Grosvenor House Hotel, and The Brewery. For the Rolling Stones exhibition at the Saatchi Gallery in west London in 2022 a dozen Alpha Crew carefully moved and installed the 500 exhibits over 20 days. Founded by George Saladze, Georgia-born, who came to the UK 20 years ago, Alpha Crew is now one of the best event companies in the UK. He said workers can learn to master a whole range of skills on the job: carpentry, sound and audio equipment installation, and machinery operation. He said "It's a niche industry but what you'll do day to day is vast ranging." Alexander the Great is his hero.

Cube Modular Ltd www.cubemodular.co.uk Brandon Weston - MD 01905 955 814 theteam@cubemodular.co.uk Unit 1, St Modwen Park Norton Rd Broomhall Kempsey Worcestershire WR5 2QR

It supplies temporary accommodation units which can be folded down and stacked for easy transport to event sites, greatly reducing the number of trucks needed to move them. These are sent to the Royal International Air Tattoo, Isle of Man TT Races, Major League Baseball World Tour – London Series 2023, The Derby Festival 2023, European Blind Football League.

Cube Modular is part of Cube International, a group of integrated companies bringing unique, forward-thinking and game-changing concepts to the sports event, sports retail and modular building industries. Glastonbury had 200 units, and Cornwall's Boardmasters took 99, while FormulaE at ExCel had 109 building units.

The firm offers 'event hotels' with two ensuite bedrooms, a pop-up ticket office which can be stacked into 40 units on a single truck. Its flagship product, the Continest building system, with units only being 2ft tall when folded down. Five units high can be stacked on a truck. For the FormulaE event only 14 trucks were used in total – ie 41 trucks holding traditional modules were taken off the road.

Latest product is a Snoozy pod: which can comfortably sleep two people, with a ticket office option soon to be released. A new demountable, stackable sleeping pod called the Maverick is next. It is making its first appearance at the Big Festival.

The Cube group works with some of the world's most iconic brands and events and is widely respected for delivering outstanding solutions, experiences, and results.

Innovative and creative, with authenticity, collaboration and partnership at its core, the Cube team is at the forefront of redefining how events, brands and businesses connect and engage with their spectators, fans and visitors.

Rajinder joined the firm at the start of 2023 as Cube's Account Manager for UK Live Events and Festivals. Maddie is Cube's Sales Operations Lead and works closely with each member

of the team on their music, festival and event accounts. Krista joined Cube in Feb 2022. Her passion for, and experience, in pop ups, events, festivals (Wilderness is her fave).

Tom Brown Wholesale Ltd https://tombrownwholesale.co.uk Tom Brown – founder 020 8852 2200 enquiries@tombrownwholesale.co.uk Unit 30 Chiltonian Industrial Estate Manor Lane London SE12 0TX

It is a family run business which was started way back in 1975 by Tom Brown.

Over the last 44 years it is offering 'wonderful service, attention to detail and reliability'. With a staff of 22, Tom Brown Wholesale, a trade florist and plant dealer, selling directly to trade florist customers from its warehouse in the traditional way and also online, across the UK. They have a plant specialist, ex-manageress of a chain of florists, sundries specialist and an ex-corporate florist all under one roof. You can order flowers and plants from all over the globe, not just Dutch.

It manages the product range and order volumes, speeding its pick and pack orders on time while ensuring flower quality is maintained and maximised on the florist display. Many florists have bought from Tom Brown for 50 years.

In 2023 Tom Brown used supply chain data capture specialist BEC (System Integration) Ltd's eSmart Voice solution to improve picking operations and speed up delivery timescales. Their systems deliver increased profitability and quality with a rapid return on investment. Operating across a range of vertical markets and diverse ERP systems.

The management team encompasses decades of experience in seamlessly integrating data capture solutions to various business hosts including IFS, Infor Cloudsuite & M3, Oracle, Microsoft Dynamics AX and SAP.

BEC (System Integration) Ltd

www.becsi.co.uk

Andrew Briggs - technical director

01254 688 088

info@becsi.co.uk

Blakewater House

Phoenix Park

Blakewater Road

Blackburn

Lancashire

BB1 5RW

It is a leading supply chain data capture specialist, offering the company's eSmart Voice solution to improve picking operations and speed up delivery timescales.

Their systems deliver increased profitability and quality with a rapid return on investment. Operating across a range of vertical markets and diverse ERP systems, our solutions are tried and tested by a broad blue chip client base.

The management team encompasses decades of experience in seamlessly integrating data capture solutions to various business hosts including IFS, Infor Cloudsuite & M3, Oracle, Microsoft Dynamics AX and SAP.

One customer in 2023 is Tom Brown Wholesale, a trade florist and plant dealer, selling directly to trade florist customers from its warehouse in the traditional way and also online, across the UK.

It manages the product range and order volumes, speeding its pick and pack orders on time while ensuring flower quality is maintained and maximised on the florist display. Many florists have bought from Tom Brown for 50 years.

Brandsafe Ltd – part of IWS Group www.brandsafeprotection.com Susy Keating - MD 01525 850 222 sales@brandsafeprotection.com Unit 4 IO Centre Fingle Drive Stonebridge Milton Keynes Buckinghamshire MK13 0AT

Brandsafe make industrial workplaces much safer with engineered barriers, and more. Its team of technical experts are pioneers in superior performance, high-visibility, sustainable impact protection for distribution centres, warehouses, manufacturing and production facilities.

Usually sites have multi-faceted vehicular operations – HGVs, reach trucks, forklift trucks and pallet trucks, as well as pedestrian traffic.

Clients include the M&S Distribution Centre, Bradford, The Clipper Group Warehouse, Northampton, with column & post protection, bollards & delineators, flexible delineator accessories, loading bay protection, speed bumps & wheel stops, ev charging point protection, and racking protection.

Brandsafe work with architects, main contractors and end clients – adopting a consultative role to deliver the best possible solution for each project. Its personalised approach, innovative product design and quick implementation has earned us an industry-leading reputation across the UK and Europe.