



# Tech stories

Celebrating the UK's tech successes



# Introduction

Despite the havoc that Covid-19 has caused to the world's economies this year, it's hugely encouraging to see so many of the UK's tech businesses continuing to thrive.



In fact, not only has the tech sector shown remarkable resilience in the face of the pandemic, many of our tech pioneers have experienced even faster

growth as companies and consumers have adapted to new ways of doing things.

For this report, we've talked to a 'magnificent seven' UK-based tech businesses about their growth journeys, some of the challenges they've faced along the way, and their expectations for the future.

These game-changing companies are genuine disrupters – delivering technology solutions that make people's lives easier, and the world a better place.

They are stories of people who aren't afraid to challenge the status quo, who are driven by a crystal clear purpose and a belief that anything is possible. They all have an unrelenting focus on the customer, and are continually responding to their needs. Their success lies in their passion for solving real-life problems.

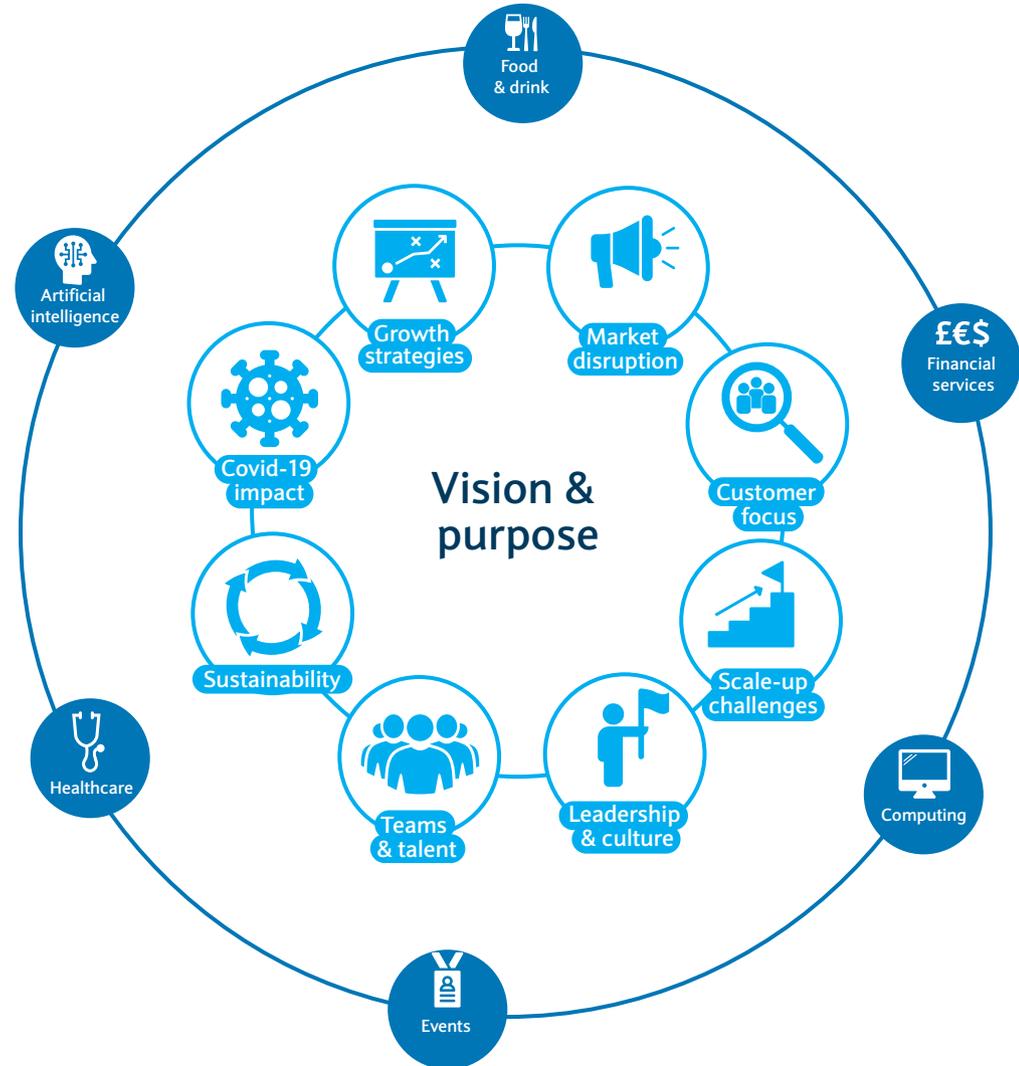
Another common theme among these business, across diverse industry sectors – healthcare, financial services, hospitality, events and AI – is that they strive to promote a culture of empowerment, giving talented people the freedom to do their best work.

Of course, the road to success is never entirely smooth and these businesses have faced tough challenges along the way – recruiting and retaining the best people, resistance to tech adoption, and adapting rapidly to changing circumstances, to name just a few.

Tech stories is about businesses that have the drive and ambition to lead the UK economic recovery in a post-Covid world. It's been heartening to hear how upbeat these trailblazing businesses are about the future of the UK tech sector. It's testament to their ingenuity and their unerring ability to tap into the current and future trends shaping the world.

We hope that you find these stories inspiring and insightful.

**Ian Bain**  
Industry Director



# Explore our tech stories



**Gousto's** meal-in-a-box home deliveries are proving a recipe for success. →



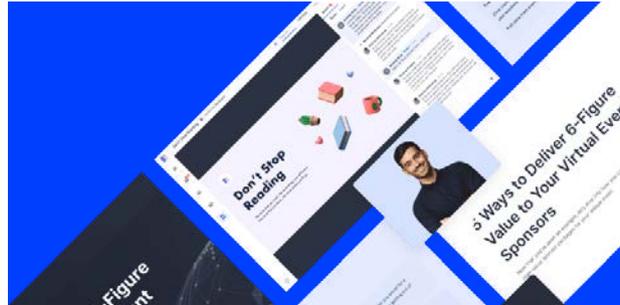
Meet two disrupters shaking up the car insurance market: **Cuvva** and **By Miles**. →



**Creo Medical's** surgical procedures are revolutionising cancer treatments. →



**Raspberry Pi's** \$35 computers are taking the world of computing by storm. →



**Hopin's** vision is to make events accessible to everyone, everywhere. →



**Graphcore** is enabling AI researchers to innovate in new ways. →



# gousto



## Delivering 0% food waste through tech



**Jim Buckle**, Gousto's chief financial officer, talks about meeting the challenges of the company's rapid growth and the clarity of its vision and purpose.

### In a nutshell:

Gousto provides 'meals in a box' with easy-to-follow recipe cards and pre-measured ingredients.

### Light bulb moment:

Founder Timo Boldt's mission has always been to eliminate food waste by giving people precise ingredients for cooking really tasty food easily at home.

### Growth trajectory:

Gousto started out distributing meal boxes from Timo's kitchen in 2012. The company now delivers 5 million meals to customers each month, up from 2.5 million meals in January 2020, becoming a four-factory operation.

“We often talk about ourselves as a data company that loves food.”



## Recipe for success

While sustainability-focused meal-kit company Gousto had become increasingly popular in recent years among both busy professionals and families, Covid-19 and the lockdown has, unsurprisingly, resulted in an exponential increase in demand as people have avoided supermarkets.

“You don’t have to think about what you’re going to eat, or about going to the shops – we do it all for you,” says CFO Jim Buckle.

Jim attributes the company’s growth to three key drivers: technology, purpose and people.

The team has always over-invested in technology in order to create a market-leading proposition.

Jim explains: “This doesn’t mean we want to expand beyond food, but that we want to use data and technology to deliver food to our customers in the best possible way.” This includes offering the most choice in the market with over 50 recipes that change weekly, and the most convenient delivery options at the best value.

Gousto’s very clear sense of purpose – to be the UK’s most loved way to eat dinner while reducing food waste – is something that everyone in the business believes in. The company’s culture is based on three core values: dream – nothing is impossible; deliver – it’s really important to get things done; and care – working together effectively as a team.

“Timo is an inspirational leader. He encourages the team to think big and believe the unbelievable,” says Jim.

The focus on caring has been particularly important during lockdown, with a lot of thought and effort going into maintaining team spirit remotely and protecting the operational and factory staff.

## People focus

Explaining the company’s focus on people, Jim says the leadership team’s most important role is to nurture in-house talent and hire great people. Although recruiting enough of those people to keep up with the company’s growth has been one of its biggest challenges, Jim thinks this is getting easier now that it’s a better known consumer brand. “More and more prospective employees are existing customers who love the service so much they want to be part of it.”

“We also really value diversity and our location in London has been great for that. Our factory is located in Spalding, Lincolnshire, because it’s a county built around the food industry with a great workforce. In fact, we’re opening a second factory in Spalding before the end of 2020. We’re seen as an attractive employer in Lincolnshire and we’re really keen to play our part in the community.”



## The Covid factor: keeping up with demand

While Gousto had become increasingly popular in recent years among both busy professionals and families, Covid-19 and the lockdown has, unsurprisingly, resulted in an exponential increase in demand as people have avoided supermarkets.

Jim believes the experience of cooking a tasty meal from scratch at home has replaced eating out for many. Convenience is also an important factor: “Churning out original meals every day, month after month, can be a chore. Our recipe boxes provide so much variety, so all the hard work is done for you.”



## Key challenges

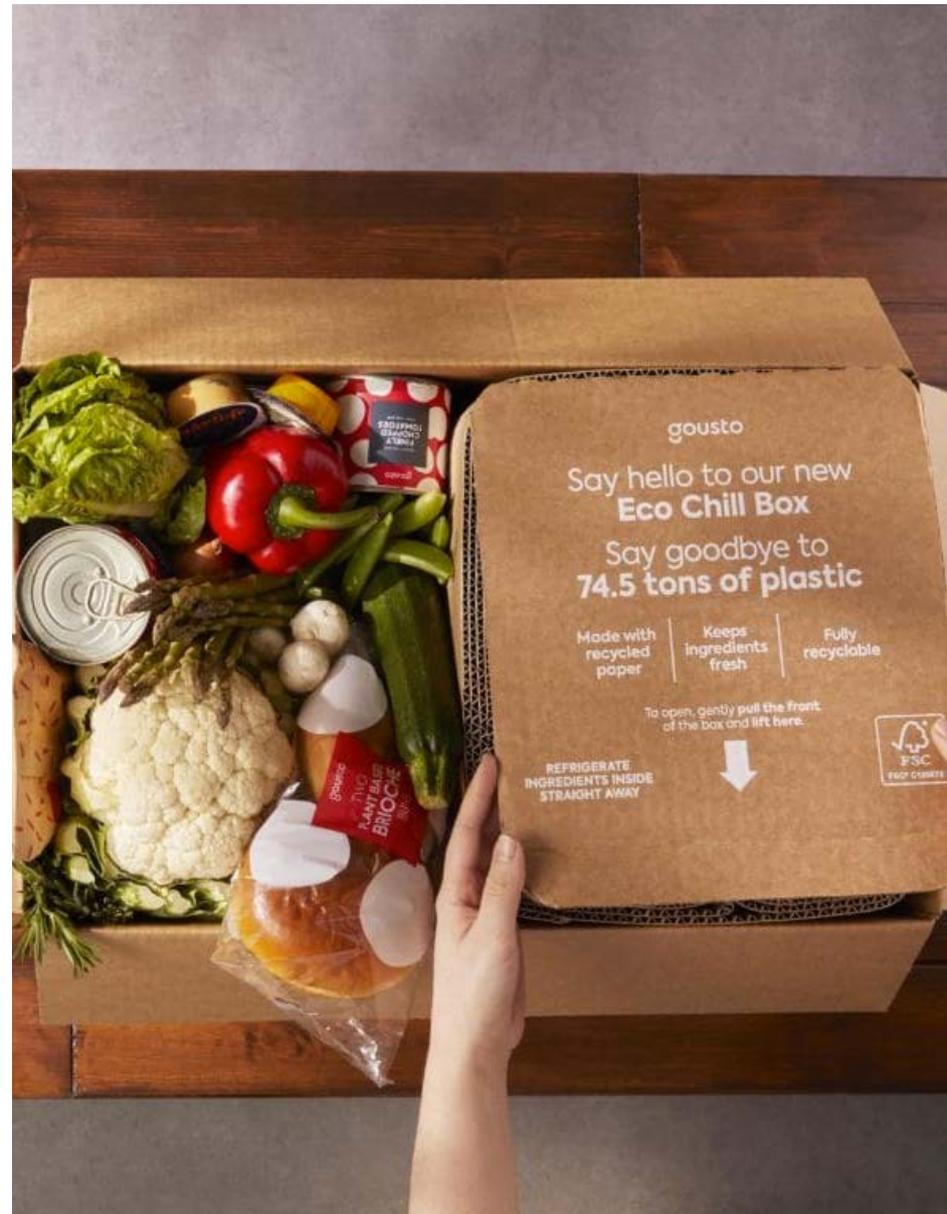
The recent spike in demand comes with its own set of challenges. The team has had to work hard to keep their operational staff safe, and to manage capacity.

The business has evolved from packing boxes in a kitchen, to having a small distribution centre, and then a bigger factory. However, with Gousto growing 100% year-on-year, the factory is now operating at close to full capacity. The business is bringing three more factories onboard at multiple locations, but of course this creates additional complexities.

“We now need to get ahead of the curve – the more forward thinking we are the better,” says Jim. “We try to structure ourselves so that we’re not only thinking about the day-to-day, but also what could happen in six months’ time.”

Gousto’s ambitious plan is to triple its capacity over the next two years. To achieve this, it needs to at least double the size of the team, up to 2,000 people. It also continues to invest heavily in technology to ensure it provides customers with the best possible experience.

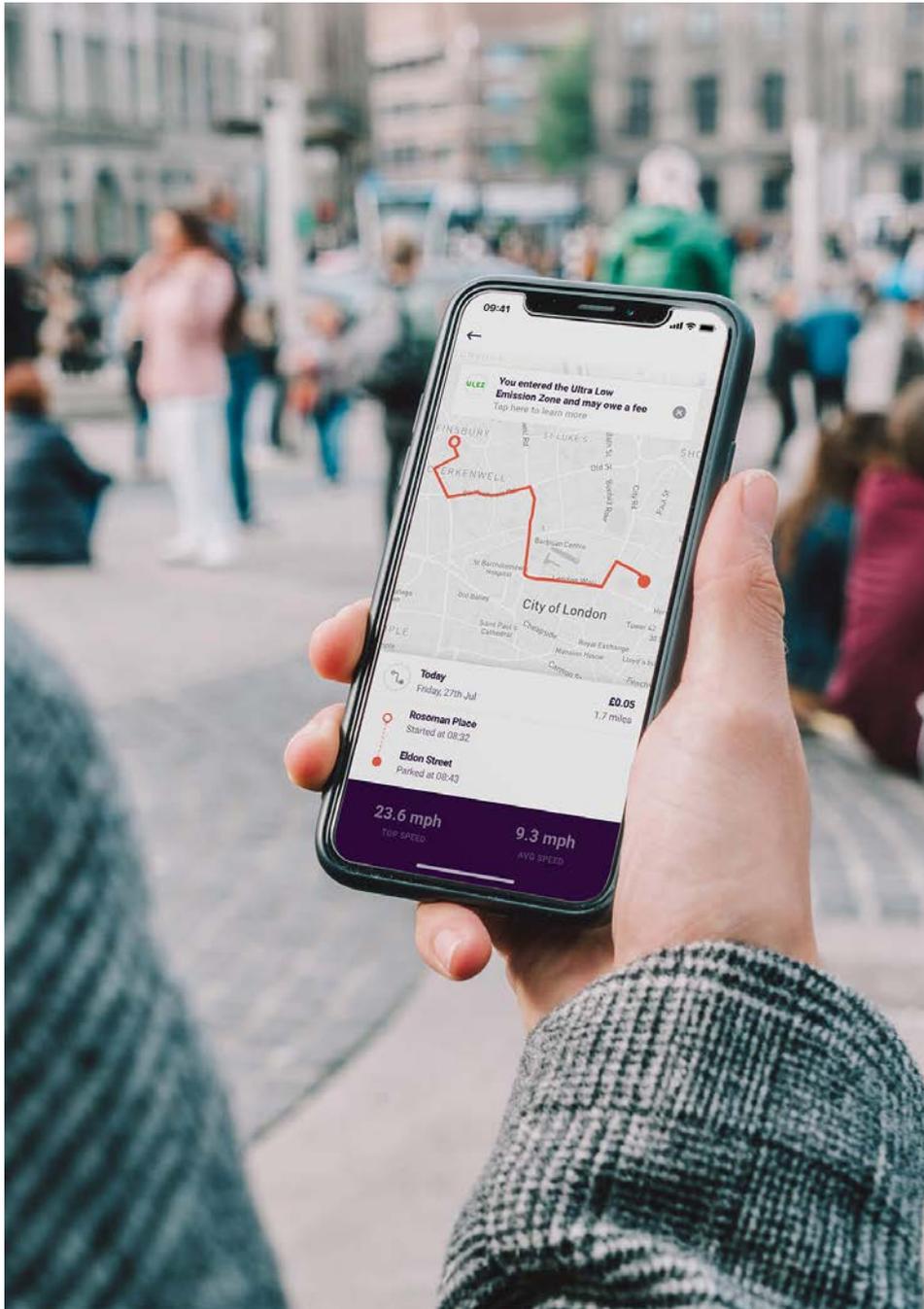
The company is also well-positioned to build on a number of key macro trends, including the acceleration in people’s willingness to shop online, an increased focus on health and, most importantly, sustainability.



## Greener tech:

Minimising food waste has been a core part of the Gousto mission since day one, so sustainability is at the heart of everything it does. The business uses AI forecasting to predict order quantities, meaning no surplus food is ordered in.

More recently, the company has been focusing on how to make its operations and packaging more sustainable. “We’ve cut our use of plastic by half over the past 18 months, and we’ve pledged to make all of our own packaging recyclable, reusable or compostable by 2022,” Jim explains. “We like to set ourselves really challenging targets and figure out afterwards how to achieve them.”



## By Miles.

£\$

# Changing an industry, mile by mile



**James Blackham**, co-founder and CEO of By Miles, talks about the team's journey to create a fairer kind of car insurance, discussing some of the challenges they've encountered along the way, and explains what they're hoping to do next.

### In a nutshell:

By Miles uses real-time data to allow customers to pay insurance for the miles they actually drive (and not the miles they don't).

### Lighbulb moment:

James Blackham and Callum Rimmer founded By Miles in 2017. The business was started when the co-founders realised that traditional car insurance wasn't meeting the needs of today's drivers. "It's heavily unloved by customers, and most people don't really understand or trust it," says James.

### Growth trajectory:

Founded in 2017, By Miles has already seen over 60 million miles insured on its pay-by-mile policies.

"We're creating fairer products and making car insurance better for people and the planet at the same time."

By Miles’ business model reflects the rapid shift in the way cars are used. Co-founders James Blackman and Callum Rimmer’s vision is to “build car insurance that enables the future of mobility.”

With people driving less for environmental reasons, and more people likely to share cars or use car clubs, James and Callum decided they wanted to create a car insurance product that better flexes to fit with these customers’ needs. The By Miles model also reflects the move towards electric cars, the rise in Internet-connected cars and the inevitable increase in autonomous driving.

**Driven by customer focus**

James attributes the company’s growth to its strong customer focus, and a value proposition that makes sense to customers.

By Miles’ typical customers are motorists who drive under the UK average – around 7,500 miles a year, or 150 miles a week. These customers tend to feel that traditional car insurance is unfair, because even though they drive less, they still have to pay the same premiums.

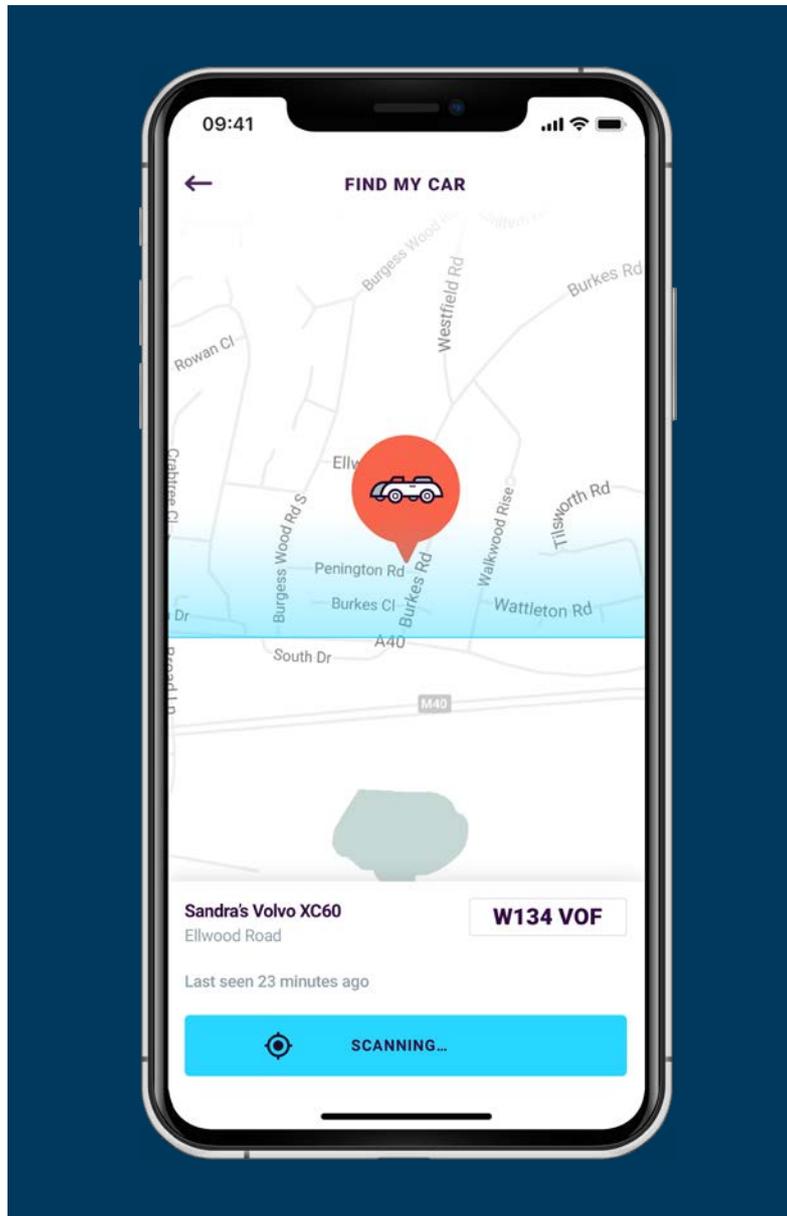
“Our members appreciate that we’re offering a fairer service and a user-friendly app that makes owning a car easier,” James says. And the stats back this up – By Miles is one of the top-

ranked annual car insurance providers on Trustpilot, and was voted Best Car Insurance Provider by UK drivers at the Insurance Choice Awards 2019 (and they’re finalists for the award this year, hoping to win it for a second time in 2020).



**The Covid factor: massive growth**

Unsurprisingly, the company saw a massive increase in members during lockdown, as many people realised they were still paying the same amount for car insurance even though they weren’t driving. In effect, James explains, lockdown helped demonstrate the value of the By Miles proposition to a whole new customer segment.



### Passing the test

James and Callum’s initial knowledge of the car insurance space was negligible and they’ve had a steep learning curve to get to where they are today. “We knew about big data and technology, and about finance,” James says. “But car insurance? We just knew that it needed to change.”

The duo had to quickly get to grips with complex systems and processes, understand the data and pricing analyses, and of course get authorised and regulated by the FCA and other industry bodies.

They also faced the challenge of creating partnerships with the big established insurance companies. Because By Miles is an insurance intermediary, not an insurance company, it needs relationships with insurance partners to provide cover. And, as a new company trying to do something completely different, this was no easy feat. “We soon realised it was going to take a while, and we had to be able to demonstrate our expertise for other insurers to partner with us.”

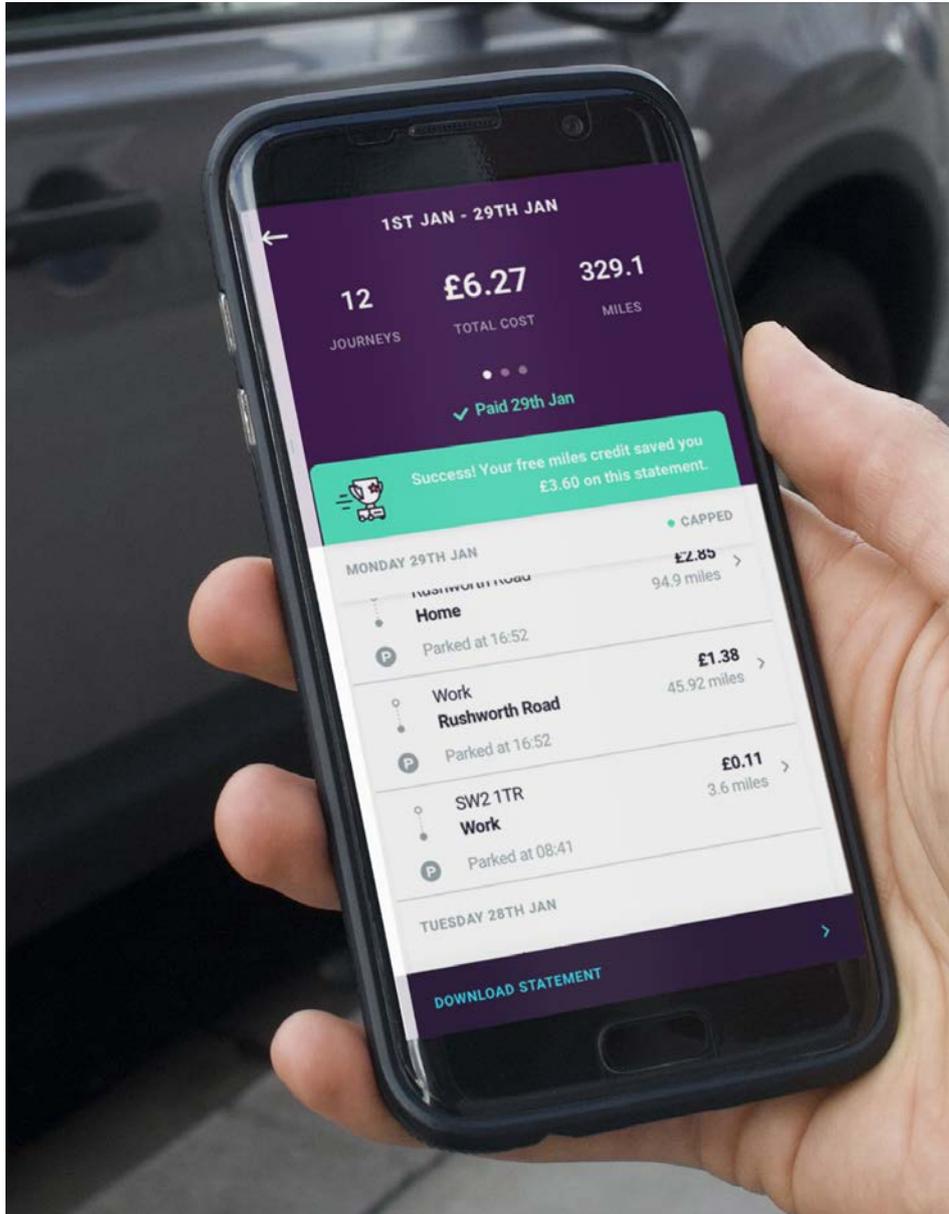


### Greener tech: reducing emissions one mile at a time

Encouraging sustainable and environmentally-friendly driving habits are a key part of the By Miles ethos. This is reflected in its electric-first car insurance policy, along with a petition it launched calling on the Government to introduce a pay-per-mile car tax to help reduce emissions and congestion.

Indeed, the very nature of the business model promotes sustainable driving: if you drive less, you pay less, encouraging members to consider alternative modes of transport instead of defaulting to their cars.

Feedback from customers has also shown that the data provided through the By Miles’ mobile app can help them to make sustainable decisions that they might previously would have put off, such as making the switch to an electric car.



### Technical challenge

Creating the business was also technically challenging – building a brand new product that works seamlessly behind the scenes to remove all the complexity of real-time insurance, both for members and insurance companies.

James says the key to achieving this is a strong team, but admits that attracting the right technical talent can be difficult, although being part of a company that is reinventing car insurance is a big part of the appeal: “We’re taking something customers dislike and turning it into something they love, and that’s an exciting challenge for the team.”

### Building the right culture

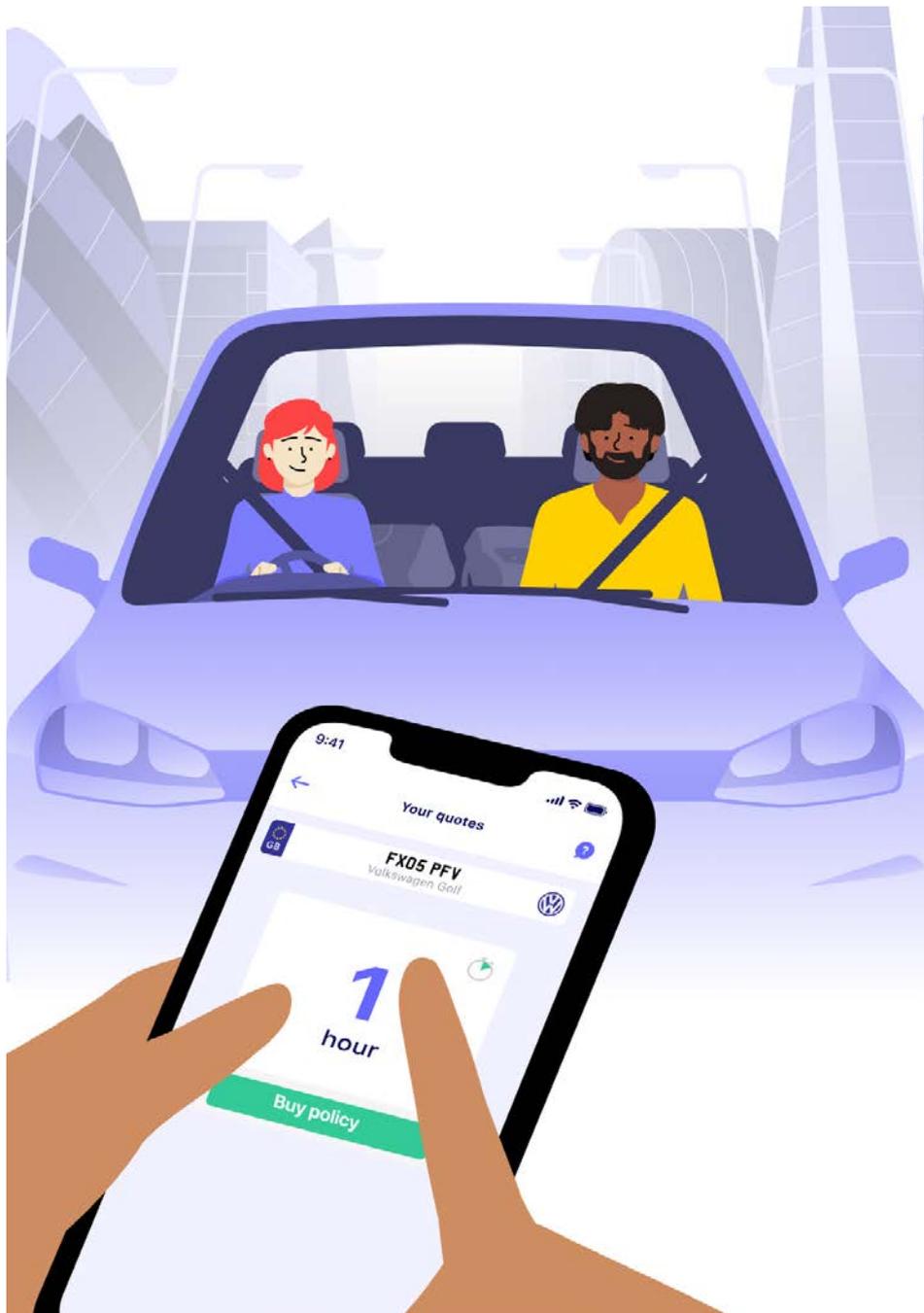
The start-up’s culture and values – fairness, ambition and growth – are continuously instilled throughout the business. For James as CEO, this means talking about them a lot, particularly when explaining key business decisions. Potential employees are also screened against the company’s values early in the recruitment process, and those values play an important part in reward and recognition.

### An open road

Looking ahead, James says it’s all about growth – By Miles is still small compared to the UK car insurance market. “We’ve got a lot of work to do to educate people about our product and get them used to the concept.”

By Miles has launched the world’s first ‘connected car’ insurance policy (which uses data directly from a car’s mileometer sent to the Cloud, without the need for any additional hardware or software to be installed) and has other exciting plans to further innovate the car insurance space. This includes being the first insurance provider to be regulated under the open banking regulations.

“The really exciting thing for me is that we’re still innovating and challenging the norm, in the face of a huge industry that hasn’t changed for over 30 years,” says James.



# A customer-focused journey



**Loren Gould**, marketing director at Cuvva, talks about challenging the status quo of the insurance industry and creating a completely customer-focused culture.

## In a nutshell:

Cuvva provides flexible motor insurance products, allowing customers to purchase an hour, day or month's worth of insurance in a matter of minutes.

## Light bulb moment:

Founder Freddy Macnamara wanted to lend his car to colleagues, but discovered it was extremely difficult to insure additional drivers for short periods of time.

## Growth trajectory:

Cuvva started selling policies in 2016 from Freddy's living room and has since sold over two million policies to 400,000 customers, selling around 5% of the monthly motor insurance policies sold in the UK.

“We’re giving control back to the customer – and our products make sense to people.”

### Bold mission

Cuvva's marketing director Loren Gould says the app-based insurance start-up is on a mission "to make insurance radically better."

"Traditional insurance is product-driven – customers are forced to fit around products rather than the other way round. We want to make insurance customer-centric and user friendly," says Loren.

Most motor insurance companies make it difficult for people from multiple households to share cars, and you have to go through the same lengthy process regardless of whether you want an annual policy or a day's worth of insurance.

Cuvva makes it refreshingly easy and affordable for customers to get insured for as little as an hour, and there's no need to ring a call centre – it's a quick, hassle-free process all managed through the Cuvva app.

They've also recently launched a long-term product that works on a rolling month-to-month-basis and is designed to compete with traditional annual insurance policies.

### Challenging the status quo

Building this offering was no easy feat. It was only during the product development phase that the team realised the extent of the challenge they'd set themselves. "Insurance is sold in a very specific way. If you try to deviate from that it becomes incredibly difficult and financially unviable, mainly due to the number of different intermediaries involved," Loren says.

To overcome this, Freddy and the team developed the product from scratch in order to be the only link between the customer and the underwriter.

### Unwavering focus

Cuvva's success is grounded in putting the customer at the centre of everything the business does. Cuvva has a strong user research team that works tirelessly to understand its customers' insurance needs.

Loren explains that understanding its customers is so central to the company's ethos that everyone undertakes two hours of customer research and two hours of customer support every month, regardless of their role.

The insurer also provides unrivalled customer support: customers can contact the team 24/7, 365 days a year using the in-app live chat function. They aim to respond within a minute.

### Transparent culture

The leadership team has spent a lot of time and effort building a culture based on honesty and transparency, and Cuvva's 90-strong team are all passionate about solving the insurance problem. However, Loren admits that hiring talent is always a challenge, particularly when it comes to finding people with the right technical skills.

The Cuvva team works hard to engage with customers and help them understand what they're buying to help overcome complexity and customer apathy. They strive to make insurance fair, flexible and easy to buy. For example, they condense policy documents as much as possible and break down the technical language. "We try to make it very clear what you are and aren't covered for," Loren says.



### The Covid factor: changing lanes

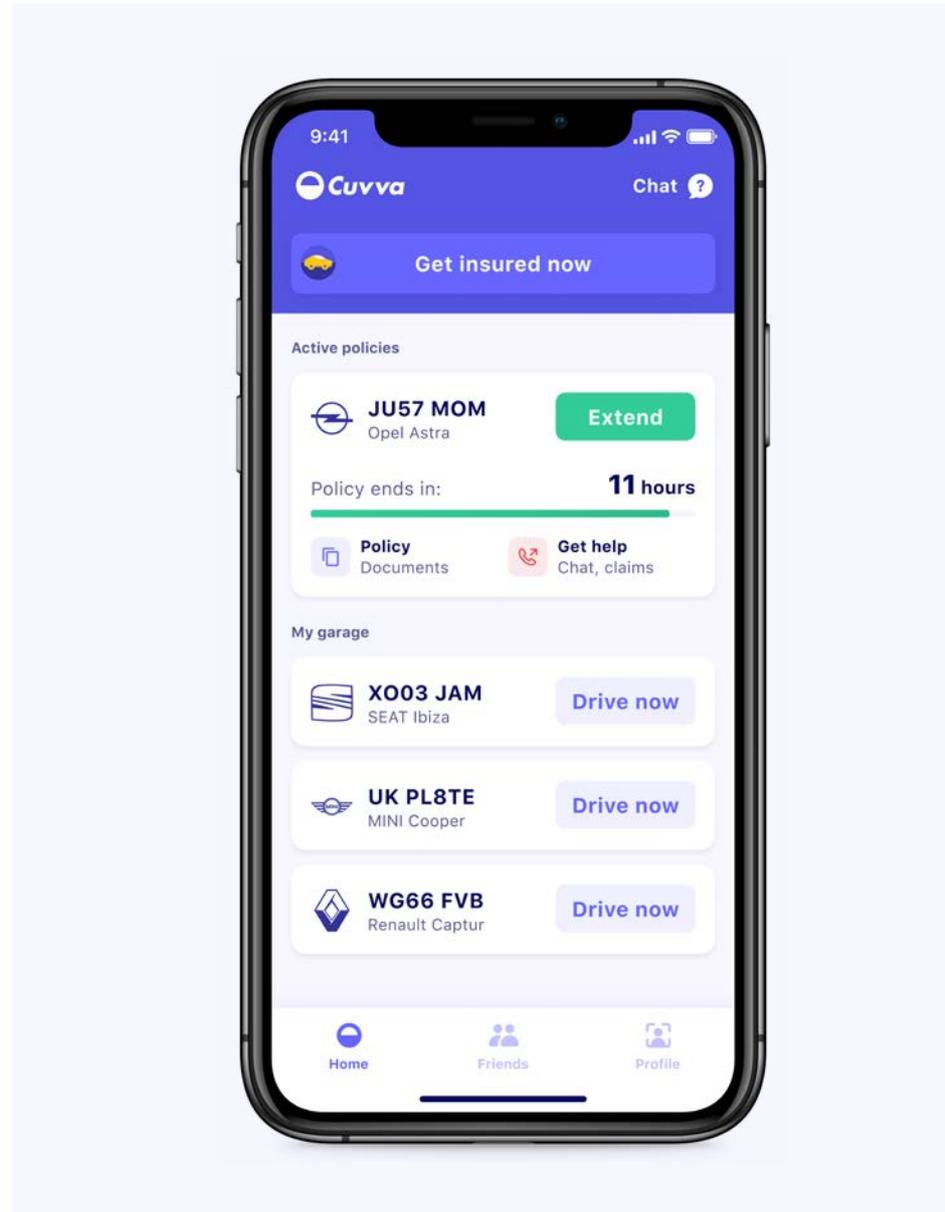
Loren says the business initially took a bit of a hit at the start of lockdown: "Fewer people were mobile." However, things started to improve from May onwards, with a noticeable uplift in short-term insurance sales. Cuvva has experienced some of its highest sales since inception in recent months and a dramatic increase in interest for the new rolling monthly product.

The team believes the pandemic has adjusted people's lifestyles and habits. People are finding new ways to get around safely, encouraging them to consider more flexible insurance options. "They're now less inclined to commit to an annual policy because of the current uncertainty."

### The road ahead

For the next 18-24 months, Cuvva plans to continue scaling up and improving its motor insurance products, including the new month-to-month option. “We want to be able to offer products based on our customers’ true behaviours instead of what a questionnaire says.”

“We’ll continue to push for wider change in the insurance industry that is centred around UK drivers’ best interests,” Loren explains.



Scale-up challenges

### Helping hands

Cuvva had to overcome many challenges as a young start-up, but was fortunate enough to have a few helping hands. Cuvva was recruited into the Barclays Techstars Accelerator programme, which “went a long way to helping us take the next step. They helped us develop key relationships and supported us with free office space when we first moved to London,” says Loren. The company also went through the FCA’s Sandbox programme for start-ups, which was hugely influential in helping Cuvva to gain regulatory approval.



“We’re changing how surgery is done, and providing better outcomes for patients.”



# Groundbreaking surgical procedures



**Richard Rees**, Creo Medical’s chief financial officer, talks about using advanced energy to treat cancer in a minimally invasive way, developing plasma technology that could help fight Covid-19, and building relationships with the global healthcare industry.

## In a nutshell:

Creo Medical develops minimally-invasive surgical endoscopy technology that is revolutionising bowel and other cancer treatments as an alternative to keyhole surgery, as well as researching cool plasma technology for sterilisation.

## Light bulb moment:

Founder and CTO Chris Hancock, a professor in microwave engineering, was trekking in the Himalayas when he came up with the idea of using high frequency microwave energy to treat cancers.

## Growth trajectory:

Founded in 2003, Creo initially raised £13m to develop its products pre-IPO. The business floated on AIM in December 2016 with a market capitalisation of £61.3m, has raised a further £120m and now has a stock market valuation of over £270m.



### Better outcomes

Creo's CFO Richard Rees says the company is on a mission to "bring minimally invasive surgery into today's world, help save time and lives, and provide patients with a better standard of care."

It's an approach that's already revolutionising cancer surgery. The standard keyhole procedure for bowel cancer usually involves a three or four hour surgery under anaesthetic and a three-day hospital stay. It's also associated with a significant level of risk – not to mention the possible loss of bowel function.

In comparison, Richard explains, procedures using Creo's Speedboat Inject device powered by its CROMA Advanced Energy technology don't require general anaesthetic: patients can be treated under mild sedation, be in and out of hospital within hours, and have better clinical outcomes.

Creo's disruptive technology allows surgeons to use bipolar radiofrequency to cut and remove early stage cancerous lesions within the colon without damaging large areas of surrounding tissue, and then heat and seal the area using microwave energy.

"Surgeons can complete more procedures in a day – thereby cutting waiting times for operations and increasing life expectancy," Richard says.

"Using our technology, initial health economic data has demonstrated that the NHS can save approximately £5,000 per procedure." Creo is looking to capitalise on this health economic benefit by making this data available to the National Institute for Health and Care Excellence (NICE) in respect of its Speedboat Submucosal Dissection procedure.

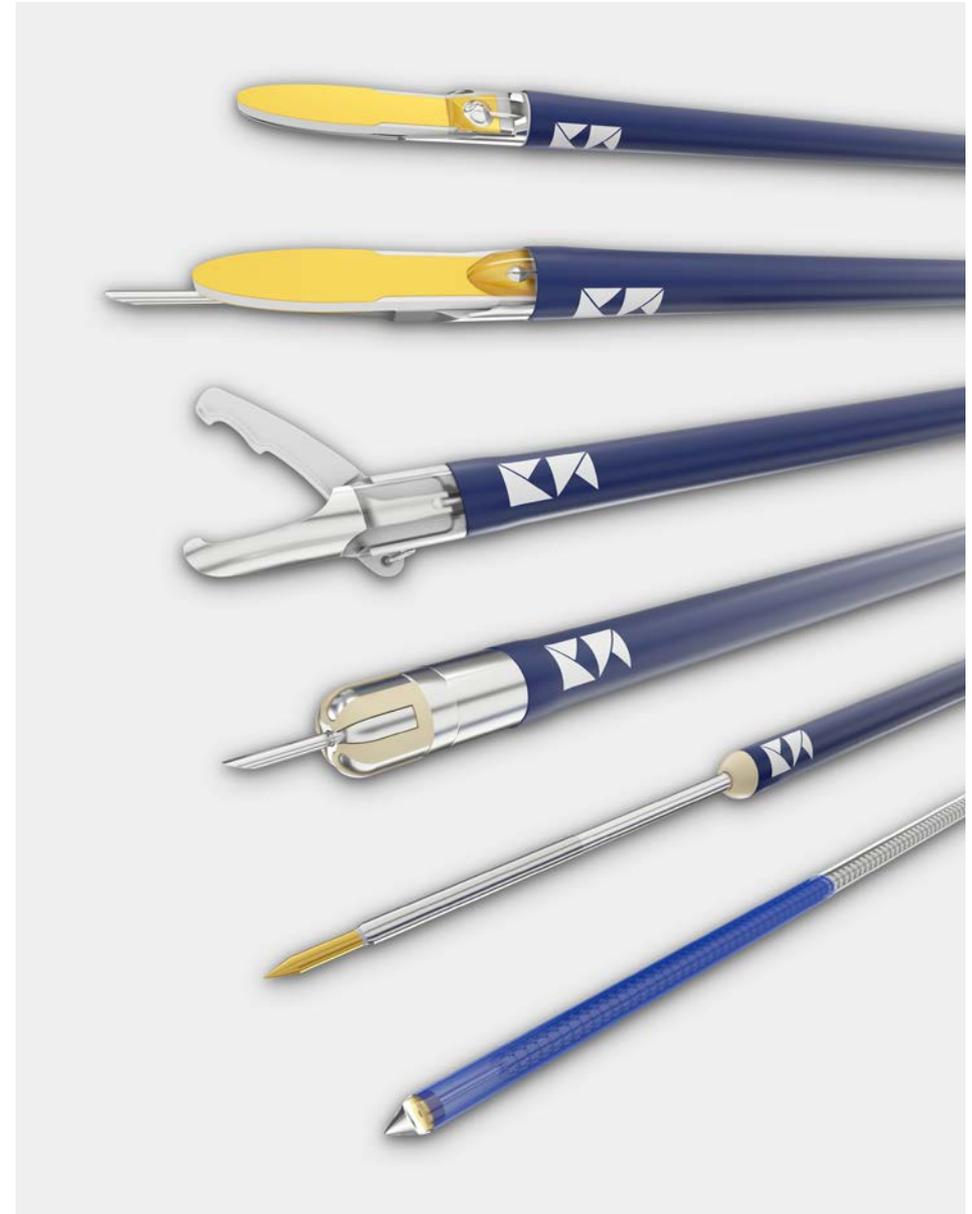
### Building trust

Having treated its first patient with one of its innovative surgical devices in 2017, one of Creo's biggest challenges has been the speed of adoption of the new technology because "people can be both drivers and blockers of growth."

Richard explains that the structure of the NHS and the established approach that surgeons are familiar with can make it difficult to introduce change within the system. Conversely, doctors in the US tend to be quicker to adopt new technology – particularly if it can increase their daily case loads, and earning potential.

"To facilitate adoption, we start by building relationships with key opinion leaders and senior industry players," Richard says.

A lot of work goes into getting Creo products out there, training people to use the technology, and getting journal write-ups.





### Breaking the mould

From a founding team of just two, the business has grown to over 175 people. Creo recently acquired a medical devices business with operations in Spain, France, Germany and the UK and they believe the business has the potential to grow to around 250 people globally within the next nine months.

“We’re an innovation-led company,” Richard says. “We believe that anything is possible with the right approach.”

With a team consisting of highly experienced engineers and creatives, the company strives to build a culture of empowerment. “We hire people who like to think differently and who want to break the mould.”

To recruit and retain the right people, Richard says the company believes in “paying them well, treating them well, and rewarding success.”

### Championing local

Creo is headquartered in Wales, where the Development Bank of Wales and angel investors funded much of their initial development.

“The UK is a good place to be in terms of innovation and expertise – the ability and skills of engineers here is incredible,” Richard says. “The R&D tax credits and patent box regime are also hugely beneficial.” However, he thinks that the UK should be doing more to champion the many world-leading British-based businesses.

Creo is growing rapidly and is in the process of launching its products on a global scale. The company has recently opened an office in the US, and has plans for further offices in various countries in Asia.

### A healthier future

Although Covid-19 has been dominating the medical space, cancers and other illnesses haven’t disappeared. “We have to be able to deal with Covid while still providing the other necessary and routine screening services and procedures.”

The future medical landscape will include minimally-invasive surgery and robotic surgery – and Creo has an important role to play in this.

“Provided people continue to change the way they think, and use the new technologies available, both the healthcare industry and people’s health will reap many benefits.”



### The Covid factor: stopping the spread

At the start of 2020, Creo was expanding fast. However, the spread of Covid-19 understandably shifted the medical world’s focus. Although the pandemic resulted in a slowdown in uptake of Creo’s clinical training programme for its flagship cancer surgery product Speedboat Inject, it gave the company the opportunity to focus on R&D. “We finished developing five additional devices,” Richard says. “These are now all CE marked and ready for first ‘in man’ use.”

With Covid-19 pressure now beginning to ease and hospitals once again focusing on procedures for other illnesses, hospitals are looking for solutions to cut their waiting lists and manage their case loads – Creo is well placed to support this.

“The pandemic has also been a catalyst for us to further develop our early work on cool plasma technology,” Richard explains. Creo’s plasma technology has been shown to kill 99.99% of bacteria such as MRSA, C. difficile, E-Coli and initial tests suggests it is effective in killing the Covid-19 virus.

Creo has now received a £2m loan from Cardiff Capital Region to continue developing this technology to help fight the spread of Covid-19.



# Creating a word-of-mouth sensation



**Eben Upton**, creator of the \$35 Raspberry Pi computer, talks about the organisation's mission to get people interested in programming, the lessons they've learnt along the way, and their plans for the future.

## In a nutshell:

Raspberry Pi is a range of affordable, compact and powerful single-board computers designed to help people of all ages explore the world of programming.

## Light bulb moment:

Eben Upton and some friends came up with the idea of building a small, affordable piece of programmable hardware as a way to get young people interested in coding back in 2008.

## Growth trajectory:

Launched in 2012, Raspberry Pis are now the third bestselling computer in history after the PC and Mac, with over 35 million sold.

“We’ve developed an affordable, category-defining product without compromising our original mission to solve a social problem.”



Raspberry Pi is having a really strong year, with June 2020 being its best month ever for sales. That success is partly due to the impact of Covid-19, and partly because of the release of its first fully fledged desktop computer, the Raspberry Pi 4.

Founder Eben Upton reflects on the origins of the Raspberry Pi concept when he first got involved in getting young people interested in coding: “We were worried people weren’t excited about computers anymore,” he explains.

Today, it’s not just kids and computer hobbyists who use Raspberry Pis – these little computers can be found in all sorts of industries and businesses, and even on the International Space Station.

While Eben describes the organisation’s culture as that of a high tech engineering company, the structure is rather different to what you might expect for a tech business. The ‘top co’ is a registered charity, the Raspberry Pi Foundation, and is responsible for educational activities, while Raspberry Pi (Trading) Ltd is responsible for engineering and trading. “We were trying to solve a social problem, so setting up a charity made sense.”

### Secrets of success

Raspberry Pi now has an approved reseller programme in around 50 countries, with the UK, North America and Germany being its core markets. The team has put a huge amount of effort into ensuring availability and regulating prices, and managing the customer experience across resellers. “If you have a good experience you’ll tell your friends or buy more for yourself,” Eben says.

Indeed, Eben regards word of mouth as one of the greatest drivers of Raspberry Pi’s growth, but it’s taken a lot of time and effort to make it work. He and his wife spent nine months nurturing their community before launching the first product – which was time well spent, as they sold 100,000 units on the first day and one million units in the first year.

“We were lucky because we had a great product, and we launched into a completely empty market,” Eben explains. “We’ve since built a business model and team that allow us to stay ahead.”



### The Covid factor: affordable computing for a crisis

The new Raspberry Pi 4 has been instrumental in helping both consumers and businesses through the lockdown. For example, some families suddenly needed to have enough affordable computers for everyone to be able to work or learn from home. One NHS Trust even bought Raspberry Pis for their non-clinical staff when they weren’t able to source any laptops.

The Foundation, which produces a lot of online content for the community, has also seen an uplift in the use of their app and content this year, with lots of people using lockdown to improve their skills and study from home.

Eben has found it particularly satisfying to be able to help during the pandemic, including supplying Raspberry Pis to help run ventilators, and using useful supply chain connections to source masks and PPE.



### Trusting the experts

Raspberry Pi has also had its fair share of growing pains along the way. As a charity, it hasn't been able to raise capital in the same way as other start-ups. And as a licensing company, it has had to constantly market itself to licensees and articulate the scale of the opportunity.

"Discovering that people are naturally terrible at most things they haven't done before" has been another learning point for Eben and his team. "We're really good at electronics and designing software, and sometimes that means we think we'll be awesome at everything." For example, Eben confesses the team wasted a year trying to identify a good plastics partner without knowing much about plastics. "Through trial and error we now know a lot about plastics, but we've also learned to rely on people who know more than us."

### Building the right team

Raspberry Pi's head office location in Cambridge gives it access to people with a range of excellent business and technical skills, as well as strong connections with the University.

Its products are built in South Wales "because that's where electronics are built", while the plastic components are made in the West Midlands. "If you need to make plastics, go to where the car manufacturers are," says Eben. "They care more about plastic quality than anyone else on the planet."

The leadership team strives to create an environment in which everyone has the opportunity to do their best work and places a lot of emphasis on stability: "We don't change what we're doing very fast because we know how annoying it can be, particularly for engineers, when a business changes course every few months."

### Looking ahead

Eben says the plan is to keep improving their hardware and polishing their software, while staying in the defining \$35 price envelope. And, even though Raspberry Pi is promoting programming, they know that people don't want hard-to-use machines, so they'll continue to work on providing a great user experience.

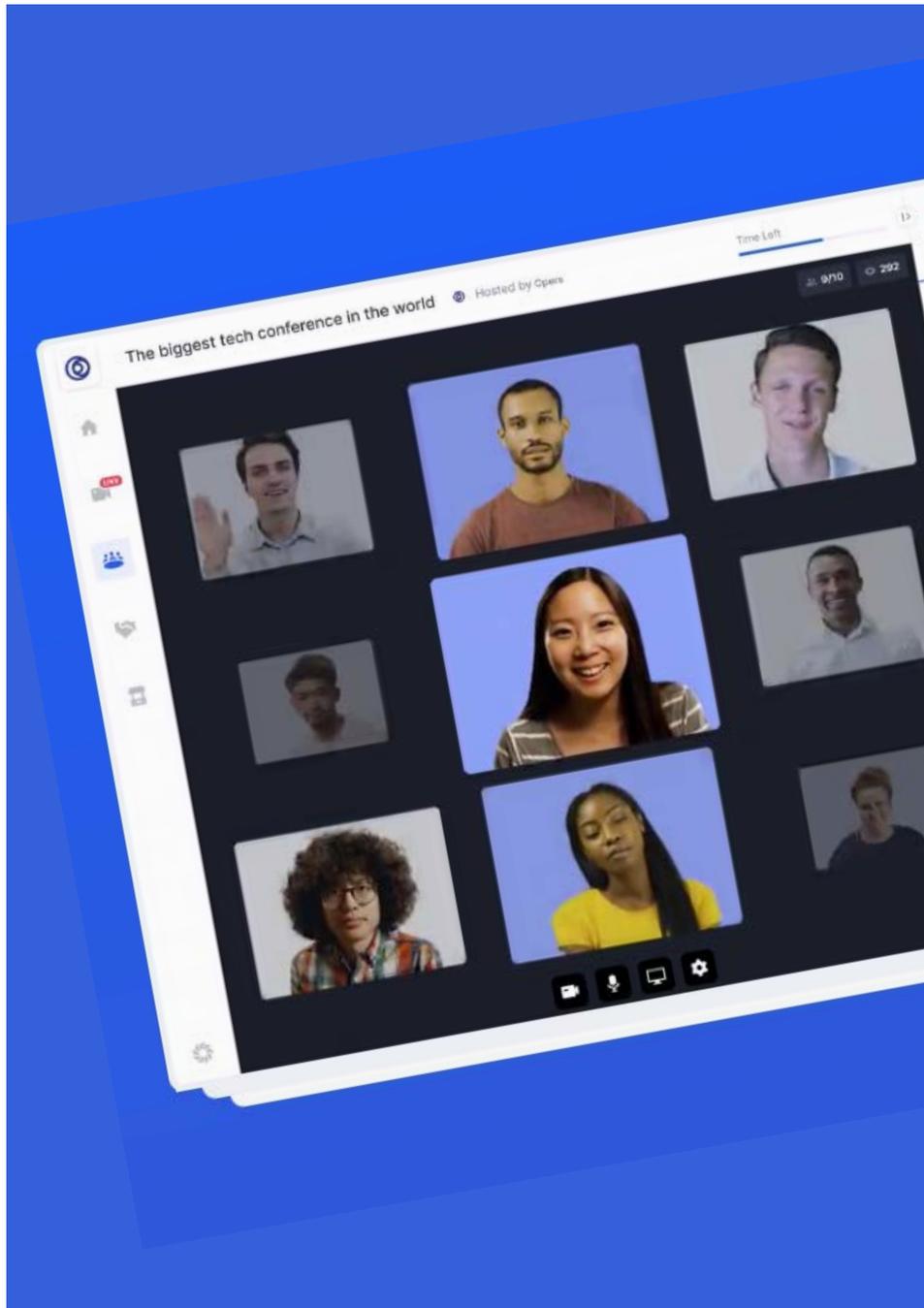
On the charitable side, while the Foundation has made good progress in increasing the numbers of young people who go on to study computer science and coding, there are still lots of opportunities within the UK and globally to have an impact. Potential avenues to explore include thinking about how to reach more of the developing world, and focusing more on adults.



### Greener tech: small and sustainable

"If you make things that are small and use less power, you're already making an environmental contribution," says Eben.

The Raspberry Pi community cares deeply about sustainability, and are quick to let the team know when they get things wrong. As such, they're always looking to improve and find alternatives to single use plastic. The team is also making some big decisions around sustainability that may add complexity to their operations, but will go a long way to reducing their environmental impact.



# Shooting for the stars



Hopin's CEO, **Johnny Boufarhat**, talks about the online event platform's stratospheric rise, and what it's like to rapidly build a product and team in a time of unprecedented change.

## In a nutshell:

Hopin is an online events platform that lets people create engaging virtual events for up to 100,000 attendees.

## Light bulb moment:

Founder and CEO Johnny Boufarhat decided to build a virtual solution after a protracted illness left him housebound for years and unable to meet and network with people at events.

## Growth trajectory:

Founded in mid-2019, Hopin has grown from six people in January 2020 to a team of over 150, and has millions of users worldwide.

“It’s the future of community engagement.”



Hopin creates virtual venues designed to replicate the in-person event experience, while removing the physical barriers of travel, venues, weather, parking, and so on.

The Hopin team believes its platform and others like it are not only the future of virtual events but of events in general. While in-person events and conferences will return at some point post-pandemic, Johnny believes they will incorporate an added virtual component.

“More companies want to be safety conscious, accessibility conscious and sustainable – offering a virtual version of their in-person events helps them do that,” he explains.

### Exponential growth

In many ways, the timing of Hopin’s launch in mid-2019 couldn’t have been better. “We were one of the first to bring innovation to the virtual event space when the world was looking for different ways to connect,” says Johnny.

While Johnny and Hopin’s headquarters are in London, much of the team works entirely remotely and is spread across 26 countries. The business has worked closely with recruiters to look for top talent from around the world to keep up with demand, and is still looking to fill dozens of roles.

Hopin has already run virtual events for major brands such as Adobe, Unilever and Slack, going from one person running the code to a sophisticated

secure enterprise solution within a matter of months. They’re now working on infrastructure that will enable them to accommodate one million concurrent users at any one event. “It’s like being on a rocket ship,” Johnny enthuses.

### Customer focus and unique design approach

Hopin is a product-driven business with an unwavering customer focus. Johnny attributes a lot of its success to working closely with customers to understand their needs and developing the start-up’s roadmap: “We listen to our customers and roll-out lots of the features they request. That builds great rapport.”

Hopin is designed as a modular virtual venue with a nimble and quick build structure, allowing the team to push out new features every week.

The platform has also adopted a horizontal design approach, rather than the vertical one favoured by most start-ups. When Johnny first conceptualised Hopin, he wanted it to work for all types of events and all types of customers. This has allowed the team to scale faster and gain a market-leading advantage over other online platforms.

Word-of-mouth has also been an important driver of growth. Users enjoy the virtual experience to such a degree that 17% become organisers on the platform. “The platform is basically its own marketing engine.”

But the team has had to work hard to show the event industry the value of sponsoring virtual events and how to attract the same level of sponsors as for physical events. Johnny believes there should be no difference, with Hopin organisers already seeing millions from sponsor revenue, including from \$50,000 sponsorship packages.

### Ambitious vision

Hopin’s long-term vision is to create an all-inclusive events marketplace. “We want it to be a place where people can list events and search events, and see what’s happening now or what’s popular; where you can browse content, discover and attend live online experiences, and meet and interact with others – all at the click of a button.”

Johnny concludes by saying that API integrations are just around the corner. “We want Hopin to be a virtual venue that plugs into existing marketing stacks and technology flows. We’re open-minded about what that should look like, but want it to be customisable and modular to fit any situation and any customer.”



### The Covid factor: breaking through

One of the biggest pre-lockdown challenges for Hopin was convincing people that a virtual event can be an addition or an alternative to a physical event, and doesn’t have to compromise the quality of the experience.

Lockdown has largely removed that obstacle. The challenge now is demonstrating that virtual events can go way beyond webinars, and offer something completely new and different in the virtual events space. “Virtual events can be a complete experience,” Johnny says. “You can accomplish the same goals of a physical event with a platform like Hopin.”

“By enabling artificial intelligence and machine learning, we’re building a business that has a positive effect on the world.”



**GRAPHCORE**



# Accelerating intelligence through technology



Chief financial officer **Nick Bishop** talks about Graphcore’s vision to help create a world where technology enhances human potential and improves lives, and the hard work involved in making that happen.

## In a nutshell:

Graphcore designs Intelligence Processing Units (IPUs) and software that help accelerate artificial intelligence applications. The company’s tools enable AI researchers to innovate in new ways, driving the next advances in machine intelligence.

## Light bulb moment:

The idea for Graphcore first came about in 2012, when the founders realised that the computing technology available at the time wasn’t designed to handle the future potential of AI.

## Growth trajectory:

Graphcore has raised approximately \$480 million in funding since its official inception in 2016 and is currently valued at \$1.95 billion. The business has doubled in size over the last year and now has around 500 people spread across offices in the UK, US, Europe, China and Taiwan.



After selling their successful semiconductor companies in 2012, co-founders Nigel Toon and Simon Knowles started from a blank sheet to build Graphcore's Intelligent Processing Unit (IPU). Made up of a processor and accompanying system, the IPU is designed to excel at machine learning and accelerate artificial intelligence (AI).

CFO Nick Bishop says that their vision is to create tools that enable further advances in AI: "People are already using our technology to accelerate the pace of discovery in many fields, including health care, scientific research, finance and cloud computing."

### Secrets of success

Nick says there is no single key factor behind Graphcore's rapid growth. While "having the right idea at the right time" has allowed them to take advantage of the exponential growth of the AI industry, hiring smart, enthusiastic people is also key to the company's success.

"We have a lot of experience driving the business forward, including several veterans of highly successful microprocessor startups."

The company's culture is based on the founders' philosophy of empowerment. As such, they put a lot of effort into hiring great people – and then allowing them to get on with what they're good at. "Our team is energised by the

promise of AI, and we work hard to create an environment in which they can freely exchange ideas," Nick says.

### External support

Having initially struggled to secure funding for their business concept, Nigel and Simon were eventually able to find investors who shared their vision and could see Graphcore's potential. Since then, the AI space has boomed and Graphcore has demonstrated its value to a number of top-tier investors.

"We have some really experienced venture capital backers who have helped companies such as Airbnb, Netflix, and Google grow from tiny startups to massive businesses," Nick says. "We really value their experience and insights."

Furthermore, a number of Graphcore's advisers are world-leading AI experts, who provide the team with invaluable support.

### International reach

Graphcore has recently expanded its international presence to support its customers and supply chain across the world, but its headquarters are, and will continue to be, in Bristol. Nick says the area is known for having an excellent pool of talent and knowledge, which dates back to the founding of Inmos, the 1970s British microprocessor success story.

Aside from ready access to lots of talented, experienced people, a UK base provides the company with many benefits, including the R&D tax credit regime, which Nick says has been "incredibly beneficial" and the patent box scheme, which he believes could play an important role in the future.

As most of Graphcore's supply chain is in Asia, and a lot of its customers are in Asia and the US, Nick says they'll be keeping a close eye on East/West dynamics, as well as closely following the Brexit negotiations, as this may affect their ability to recruit top talent from Europe, although "we're less impacted by this than many other companies".



### The Covid factor: accelerating trends

Nick expects Covid-19 to accelerate many of the pre-pandemic trends that necessitate Graphcore technology, notably the offline-to-online migration, a greater focus on automation, and reliance on useful insights from big data. And, of course, the need to accelerate drug discovery and medical diagnosis.

"Our technology benefits from those trends, so the pandemic is accelerating what we're trying to achieve."

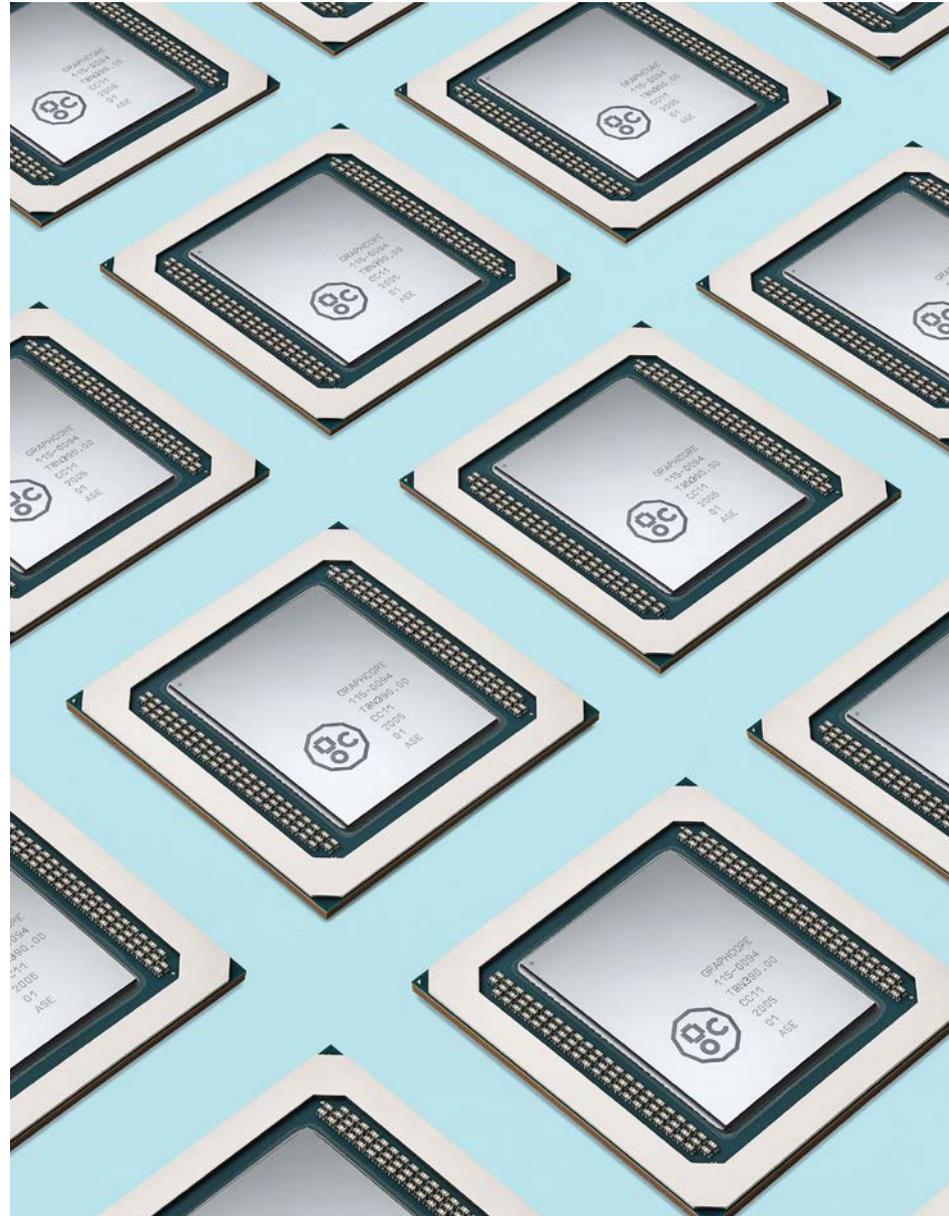


### Limitless possibilities

Although people often think of the computing field as rapidly evolving, Nick says that it also has a certain amount of inertia, particularly when it comes to moving to new technology platforms. But he believes a major shift is currently taking place, thanks to the evolution of AI.

As AI models get more sophisticated, Graphcore is focused on ensuring that innovators, developers and partners understand their technology and its capabilities.

“One of our primary challenges is helping people to think beyond what they can do within current models – it’s about the limitless potential of the technology and what they might be able to do with future models.”



Sustainability

### Greener tech: enabling efficient computing

A key aspect of Graphcore’s technology is its efficiency compared to other models in the space, which typically use a lot of power and produce a lot of heat. “By helping to scale up the world’s machine learning capability, we’re helping to minimise the resources currently consumed within the AI field.”

# Key takeaways for game-changing tech businesses

Our tech success stories serve as a reminder that, even in times of great uncertainty, those businesses that focus on the key success factors highlighted in this report are more likely to thrive and grow.

Are you clearly articulating your company's vision and purpose, both internally and externally?

Do you bring your business mission to life through your culture and values?

Are you continually engaging with your customers, listening to what they have to say, and adapting your solutions to meet their needs?

Do you have the right approach to attracting and retaining the best people for your business?

How do you encourage creativity and innovation, to enable your team to do their best work?

Can your technology be used to help solve environmental and social challenges?

Do you have clear plans and strategies in place to manage your future growth?

Do you need to pivot your business model to respond to changing circumstances?

## For further information:



Ian Bain  
Industry Director  
Technology, Media and  
Telecoms Barclays Corporate  
Banking

[ian.bain@barclays.com](mailto:ian.bain@barclays.com)

[in ian-bain-01919332/](https://www.linkedin.com/in/ian-bain-01919332/)

[barclayscorporate.com](http://barclayscorporate.com)

[@BarclaysCorp](https://twitter.com/BarclaysCorp)

[in Barclays Corporate Banking](https://www.linkedin.com/company/barclays-corporate-banking/)

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