



FOUNDERS
FORUM
GROUP

CEO FORECAST 2023

The Trends Shaping
the Future of Tech

In partnership with

salesforce

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Ali Parsa
Babylon Health



Tessa Clarke
Olio



Chip Paucek
2U

Cover (left to right):
Poppy Gustafsson (Darktrace),
Kathleen Breitman (Tezos)
Markus Villig (Bolt).

Design: [Znine.uk](https://znine.uk)

INTRODUCTION

Green shoots of opportunity are emerging across the tech landscape. While founders continue to battle recession, inflation, and a tricky investment environment, as we look forward in 2023, there’s every reason to be positive.

Climate tech investment is already bucking the trend of the broader VC market, there are new breakthroughs in quantum tech, and groundbreaking research into longevity could help extend our lives.

So what’s next? In our Founders Forum CEO Forecast 2023, 10 founder-CEOs from 10 different industries predict which trends will shape their industries in the year ahead.

From agtech to web3, our trailblazing CEOs have raised over \$5.5b between them. They’ve navigated IPO troubles, broken into new markets, and achieved widespread success. But it’s only those who have walked the same entrepreneurial path who truly understand the founder’s story.

Through a series of interviews with top tech CEOs, we lift the veil on the role of the founder-CEO and reveal how these tech visionaries have shaped their companies in response to evolving industry trends.

We’ve diced the text up into digestible chunks, but everything you read below reflects the real thoughts and opinions of our founder-CEOs. Plus, our founder-CEOs nominate the tech startups that should be on your radar this year.

Read on to discover the trends shaping the future of tech in 2023.

A MESSAGE FROM OUR PARTNER

Brigid Charmant
SVP of UK Small and Medium Business at Salesforce



Brigid Charmant leads a large team of account executives and leaders at Salesforce, working closely with startup, scaleup, and growth businesses across the UK.

“We’re about to see a profound shift in business models, and the industries that adapt and adopt fastest are likely to reap the rewards.”

What are the Major Trends that will Impact Businesses and Founders in 2023?

AI has been ever-present in the news and for good reason. We’re about to see a profound shift in business models, and the industries that adapt and adopt fastest are likely to reap the rewards.

Customers will have never been more informed; developers will have access to workarounds and walkthroughs like never before; marketers will be able to tap into insights from literally any online source in an instant. How you store and leverage this speed and breadth of information will hugely impact bottom lines and customer sentiment.

What Should Founders be Thinking About in the Year Ahead?

Using digital to drive efficiencies, productivity and laying the foundation to scale.

We’ve seen that the tight labour market means that retaining staff and managing staff through difficult times are now key issues for founders. But three in four SMB founders say that they’re feeling (cautiously) optimistic about the future.¹

Digital platforms and services could be the reason. The latest solutions offer a way to maximise their resources by minimising admin, and reducing time-to-value and time-to-market.

Look at consolidating and streamlining your digital resources – methods like automation that can reduce IT costs and improve staff productivity are like gold dust in this economic climate.

How will Startups Interact with Customers?

Data is absolutely key and fundamental. Unfortunately, we’ve seen that only two in five businesses currently collect and connect their business data in one place.² As information becomes easier to find, the things your customers value are likely to change. You need to keep up with this evolution by collecting and acting on customer data to deliver value.

Sales and Marketing teams are going to need to pay more attention than ever to prospects’ preferences and desires, while continuously exploring new and better ways to deliver value. Honing customer data will continue to be the key to finding groundbreaking solutions.

What do Leaders and Employees Need to Learn about Putting the Customer First?

Digital upskilling needs to be a key focus for startups. Developing staff into digital natives – who are willing to experiment, fail, iterate, and innovate – will give startups a huge edge against the competition.

Additionally, customers expect to interact with and buy from brands across every available channel, that means your employees need to be comfortable engaging meaningfully with your customers there, too.

Taking Customer Experiences to new Heights in 2023

If the initial years of this decade have taught me anything, it’s that we can’t be sure of what the future holds. As a founder, you may feel more vulnerable than most to the present and future events swirling around us.

But while the uncertainty is real, the core focus has never changed; stay obsessed with delivering customer value. Develop and empower your teams, and find the digital solutions that work for you.

[Read the latest IDC report](#), sponsored by Salesforce, to see how C-Suite can remain agile and respond to constant change

¹ SMB EMEA Research, December 2022, Jigsaw Research

² SMB EMEA Research, December 2022, Jigsaw Research

AGTECH & FOODTECH

David Rosenberg, AeroFarms

“The potential of automation in agriculture is huge and vertical farming takes advantage of that.”



“New Innovations Will Feed VC Appetite for Food and AgTech.”

There’s now greater awareness of investment opportunities in the food and agtech space and regulation is picking up pace. In November 2022, Upside Foods got [FDA approval](#) for its lab-grown chicken meat, clearing the way for new alternative food startups. This will help persuade more investors to back innovative startups that are more capital intensive and scale slower than your average SaaS company.

Still, funding production systems that can cost tens of millions of dollars based on newer technologies, whether a vertical farm or a new precision fermentation system to produce protein, remains a challenge. Debt funding asks for history and proof points that a brand new product doesn’t have, while equity is expensive. Public-private partnerships could help bring solutions to market more quickly and accelerate innovation cycles.

For now, founders in the space need to align with long-term, patient capital. Those who choose the wrong investor with short-term aims will come under pressure to change their business models – and that’s where problems occur.

“More Crops Will Be Grown on Vertical Farms.”

In the US, more than 2,000 vertical farms grow crops in stacked layers, carefully monitored by IoT-connected devices that optimise efficiency and boost plant growth. Vertical farming won’t eliminate field farming, but its cost structure – and crucially, the cost-efficiency of LED lights – is trending in a way that means more crops will be grown on vertical farms.

Due to erosion and pollution, the world has lost a third of its farmland in the past 40 years. Vertical farming’s controlled environment reduces the amount of land, water, energy – and the need for soil, fertilisers, and pesticides – required to grow food.

AeroFarms has invested in finding the precise spectrum of light needed to best optimise photosynthesis and maximise yields. It also tracks every plant it grows, so for each growing tray it can tell where each seed originates from, bringing food traceability to a new level.

“More Tasks are Going to be Performed by Robots.”

The market for agricultural robots is [expected](#) to grow from \$7b to \$99b by 2030. From crop monitoring drones to autonomous tractors, more tasks globally are being performed by robots on farms.

Implementing IoT-connected robotics across large-scale outdoor farms is still a challenge. It’s hard for a robot to harvest berries from bushes that vary in size. In vertical farming, with everything contained and controlled in one facility, it’s easier to ensure uniformity and implement robotics across the growing process.

“We Have to Accept Nuclear as Part of the Energy Mix.”

Health-conscious consumers are driving an emerging market for alternative foods. More people know what it takes to produce different foods and how to get the same nutritional benefits from alternative sources. Crickets, for example, are a great source of protein and highly efficient at creating biomass.

Foodtech companies are combining yeast and proteins in a lab to create the same proteins you can find in egg whites, without the animals. When done at scale, companies creating lab-grown meat will have a far lower cost of production than traditional meat producers. As these companies grow, food is going to become more abundant.

INSIDE AEROFARMS



Founded: **2004**

Country: **USA**

Stage: **Pre-IPO**

Total Funding Raised: **\$256m**

David Rosenberg’s [AeroFarms](#) last year opened the world’s largest indoor vertical farm of its kind in Danville, Virginia. The 14-layer facility can grow up to 390 times more than a field farm using up to 95% less water.

From the start, David knew he wanted to integrate more robotics into his vertical farms. He first focused on AI solutions for growing, before realising he needed a systems-based approach, taking into account the whole farming process – from seeding to harvesting and packaging.

Fortunately, the tech already existed. David took solutions used in warehouse automation and hired people to customise and integrate them into vertical farming. With lower labour and operating costs, he’s now focused on expansion.

AeroFarms recently expanded nationally with Whole Foods Market to support its growth in the US and announced plans to build a new commercial indoor vertical farm in Qatar. David cancelled plans to go public via a SPAC merger in 2021 after the market changed, but says he would still consider an IPO in the future.

CLIMATE TECH

Tessa Clarke, Olio

“The capital coming into the climate sector is the bright spot in the tech ecosystem.”



“Investment in ClimateTech Will Continue to Increase.”

More than a [quarter](#) of VC money in 2022 was invested into climate tech, representing over \$70b. While the broader VC market slows, investments in climate tech will continue to increase.

Today, there are 44,000 climate tech companies and 160 unicorns. While there’s lots of VC activity at Seed stage and a big wall of capital coming in at later stages too – mostly for SaaS-style carbon accounting startups – there is still a gap in Series B/C investment.

Regulation could be an enormous catalyst for change. In 2022, multiple countries released consultations to make it mandatory for businesses to measure and publicly report their food waste. We’re at an inflection point and founders should be excited about climate regulation and the opportunities it will unlock.

“Carbon Credit Revenues Could be a Game Changer.”

Most companies made net zero pledges years ago. Now, they’re having to follow through on them. As companies move from measuring their carbon emissions to mitigating them, demand for carbon credits, and companies operating in the field, is increasing.

Carbon credit rating agencies are springing up, like [BeZero Carbon](#), which raised \$50m in its Series B in November 2022, and [Sylvera](#), which raised \$32m in its Series A. There are also many carbon project selection and management marketplaces emerging, like [Abatable](#), [Ceezer](#), and [Patch](#).

We’ll also see more varied carbon offset projects, from carbon-negative building materials, to tech that enables planes to optimise the altitude they fly at to reduce emissions, to food fed to cattle to reduce their methane emissions.

Every major corporate is going to have a carbon credit strategy – that’s the next easiest thing for VC investors to tap into and the revenues climate tech companies can make from carbon credits could help scale innovation in the space.

“The Circular Economy is Coming into the Mainstream.”

The concept of the circular economy has been championed for at least a decade by organisations like the [Ellen MacArthur Foundation](#). Now, thanks to reuse marketplaces like Depop and Vinted, it’s taking centre stage.

Large retailers, like John Lewis and IKEA, are also starting to experiment with rental rather than sales models. That presents a fantastic opportunity for founders who can build the tech these organisations need to shift their business models.

“Human Behaviour is Going to Change.”

The energy crisis has placed a renewed focus on renewables. Solar and wind power companies have been up the innovation curve and are now mostly focused on improving efficiencies in operations, manufacturing, and deployment. [Eco Wave Power](#) recently announced plans to build the world’s largest wave power plant.

Whether we like it or not, nuclear is going to have to be part of the energy mix. As a sector, nuclear is still early in its innovation curve and ripe for disruption and new ideas.

INSIDE OLIO



Founded: **2015**
Country: **UK**
Stage: **Series B**
Total Funding Raised: **\$53m**

Tessa Clarke’s [Olio](#) fights food waste by connecting neighbours with each other and local businesses to share surplus food. The food sharing app has over six million users across 62 countries.

Over a year ago, Olio started working with [Verra](#) on a methodology to certify projects that extend the lifecycle of food. Using this methodology, Olio will seek certification for the carbon emissions it diverts when ensuring that food gets eaten by humans instead of being sent to waste streams.

Issuing carbon credits will unlock a new revenue stream for Olio. Verra, which sets the world’s leading standards for climate action and sustainable development, will publish the methodology early this year.

Tessa says climate tech founders need to develop their impact and commercial potential in lockstep. For Olio, she says the opportunity to tap into carbon credits and open a new, scalable revenue stream could be transformative.

CYBER SECURITY

Poppy Gustafsson, Darktrace

“Cyber security has to deal with uncertainty. Whether it’s quantum or web3, we need to constantly evolve as businesses benefit from embracing the latest tech.”



“We’re Moving from Reactive to Proactive Cyber Security.”

When organisations first suffered cyber attacks, alarm bells rang and human security teams scrambled into action. The next wave of cyber security tech allowed firms to identify breaches, react quickly, and free up human resources. Now, self-learning AI is helping organisations spot where they could be potentially vulnerable and predict future attacks.

We’re shifting to a proactive cyber security culture – and this needs to happen on a global scale. Cybercrime has no borders, so we need a tech Nato – an international cyber task force – to promote collaboration, share intelligence, and build a proactive, global cyber defence.

We have wonderful cyber assets, like the UK’s National Cyber Security Centre, but they lack the teeth to force organisations to act on cyber threats. Businesses have to be made more accountable, and governments can play a role in that.

“Hackers are Automating their Attacks.”

There were over **255 million** phishing attacks in 2022 – a more than 60% increase on the previous year – with fraudulent messages from seemingly trustworthy sources tricking people into revealing sensitive information.

Identity remains at the core of these attacks. Uber suffered a major security breach when an attacker disguised as Uber IT made repeated multi-factor authentication requests. Voice-enabled phishing is already happening, with cybercriminals cloning the voices of CEOs to extract money from organisations, and deepfake videos will be next.

For now, however, hackers are mostly using AI for automation; scanning databases, testing lists of stolen passwords, and sending out increasingly sophisticated, personalised phishing email campaigns.

“Hacktivism is on the Rise.”

We’re seeing a new wave of cyber attacks that aren’t about making money, but designed to raise awareness of political or social issues, cause disruption, and change people’s perspectives.

Russia’s invasion of Ukraine saw hacktivism on a large scale as the Ukrainian government mobilised volunteers from the country’s hacker community to attack Russia’s military systems.

When such cyber attacks happen, cybercrime capabilities are developed. Future ransomware used by criminal gangs will have its origins in state-sponsored attacks happening today.

“There’s a Whole Business Community on the Dark Web.”

After Colonial Pipeline suffered the largest cyberattack on oil infrastructure in US history, its attackers took a novel course of action; they apologised. Like any traditional company might react to a misstep, DarkSide **issued** a public statement of regret.

Many of the aspects of businesses that we’re used to – marketing, PR, even CSR – are reflected by groups operating on the dark web. Hackers are offering ransomware as a service; cryptojacking, where hackers break into computers to mine cryptocurrency, is commonplace; and cybercriminals are hacking into organisations indiscriminately then selling access, creating an entire dark web business ecosystem.

INSIDE DARKTRACE

Founded: **2013**

Country: **UK**

Stage: **Publicly traded on LSE**

Total Funding Raised: **\$230m**



Poppy Gustafsson’s **Darktrace** launched its **PREVENT** product in August 2022 to deliver the proactive cyber security capabilities organisations need to pre-empt future attacks. Three months later, it saw the longest list of customer opt-ins for any product launch in its history.

No CISO in the world would design their company’s IT systems the way they’re currently designed. For Poppy, cyber security is about dealing with the imperfect and having the technology that can tolerate uncertainty and change.

Plus, she says, cyber security is done best when AI and humans work hand in hand. Darktrace developed its **Cyber AI Analyst** to act as an interface between the two, articulating the cause of a cyber threat and recommending a course of action in language even a non-cyber specialist can understand.

EDTECH

Chip Paucek, 2U

“You can’t have the change we need in the world of education without private enterprise.”



“Learning on Digital Platforms will Increase.”

Online learning platform, edX, scaled from 115,000 learners in 2012 to over 40 million in 2022. We’re seeing the dawn of a new era for edtech and global education activity and commerce done on digital platforms is set to boom.

While the history of online education was mostly about access, that’s now table stakes and we’re shifting focus to outcomes and the ROI of online certificates or degrees.

“We’ll See a Significant Increase in Affordable Alternative Credentials.”

Employers are less interested in university degrees than they were a decade ago. They’re looking for proof of a skill; not the degree itself. While the degree market will continue to be important, shorter-form credentials are helping people upskill, succeed in their jobs, and increase their viability for new employers.

2U’s boot camps enable students to quickly start tech careers by completing intensive tech training programmes in four to six months. Someone who’s never coded before can become a coder at the end of a short, online program. In a 2021 Gallup report, the average boot camp graduate surveyed saw their salaries increase by a median of \$11k one year after completing their program.

“Public-Private Partnerships will Become More Common.”

The edtech market is huge and there are emerging players in India and Latin America. But there are still relatively few very large edtech companies. Education remains a local, personal, heavily regulated, and inherently controversial industry – and for-profit education has its critics.

But for education to thrive, higher education institutions and the private sector need to come together and we will see more companies working with universities to help them scale. It’s a tricky market, but it’s also a great opportunity for entrepreneurs who want to tackle big problems.

“Extended Reality is Part of the Future of EdTech.”

There will be more use cases for augmented reality, and then virtual reality, as the cost of the tech comes down. edX launched two AR courses with Meta last year, where participants learn to build in the metaverse, and 2U is exploring using AR in future online programs.

Gamification is another tech trend impacting education, but it’s not just about kids playing Minecraft. Duolingo is the perfect example of a company that harnesses gamification for adults in language training.

Plus, AI will soon impact every aspect of how we think about learning and the business behind it. STEM skills are hot right now and if you major in a STEM discipline it’s easy to find a job. Over time, as AI gets better at writing code, the basics of critical thinking will become more important.

INSIDE 2U

Founded: **2008**

Country: **USA**

Stage: **Publicly traded on Nasdaq**

Total Funding Raised: **\$1.1bm**



Chip Paucek’s 2U provides over 46 million learners with access to world-class education in partnership with more than 230 colleges, universities, and companies. In 2021, it acquired edX for \$800m and transformed into a platform business.

For 2U, the acquisition opens access to a free-to-degree pipeline of learners who move from edX’s free online courses to its paid programmes. Because edX’s pool of learners is so big, 2U’s programmes don’t need to spend as many marketing dollars to attract new students.

The potential is huge but the timing was tricky – Chip didn’t expect the world to fall apart after 2U bought edX. He says the partnership will show its strength and when public markets rebound they’ll do so faster and more furiously than people expect.

His advice for founders considering an acquisition? Integration is harder than you think; make sure you underpromise and overdeliver.

FINTECH

Stefano Vaccino, Yapily

“Free capital coming into fintech injected steroids into the ecosystem, but now we need to reset and build the foundations for long-term, sustainable businesses.”

“Banks will Become Bigger FinTech Players.”

High interest rates mean traditional banks are sitting on a goldmine. The likes of HSBC and JPMorgan will spend more on fintech innovation this year, digitising their user journeys and experiences by investing internally, partnering with tech firms, or by acquisition.

Most digital banks aren't profitable yet and rely on VC investment. Their growth will slow and valuations will fall. The acquisition of a digital bank by an incumbent, which might have seemed crazy last year, could now make sense.

“Open Banking is Entering the Mainstream.”

Demand for account-to-account payments, merchants cutting costs, and a greater focus on financial wellbeing are fueling the rise of open banking.

Open banking is about stripping down barriers to innovation in the banking industry, using open APIs that enable third-party developers to build apps and services that can boost financial inclusion, transparency, and give people more control over their data.

It's also the nervous system that allows embedded finance – the integration of financial services into nonfinancial businesses – to flourish. Consumers are using embedded finance solutions every day, across apps like Uber and Spotify, and in payments, borrowing, and insurance.

Investors are increasingly backing these B2B solutions over consumer fintech. Founders that can sell their solutions to a big bank or insurer, with huge distribution power, have a strong chance of success.

“FTX Collapse Doesn't Mean the End for Crypto.”

Crypto has been growing at an unsustainable level for a long time and some correction was expected. We've already seen other bankruptcies after FTX and there will be a ripple effect. But the FTX collapse was an example of management of a company gone wrong; it wasn't a reflection of crypto or blockchain being the wrong tech.

“We Need to Make Carbon Offsetting Part of the Payment Journey.”

Whether it's booking a flight or paying for food, being able to offset the pollution we create when we purchase a product or service will increasingly become part of our payment journey. This will boost resources available for fighting climate change.

There are already startups in this space. [Lune](#) helps companies neutralise their carbon emissions by integrating emissions calculations and carbon removal into the customer experience.



INSIDE YAPILY:

Founded: **2017**
Country: **UK**
Stage: **Series B**
Total Funding Raised: **\$69m**



Stefano Vaccino's [Yapily](#) is Europe's leading open banking infrastructure platform, connecting its customers to thousands of banks across 19 countries through its open banking API.

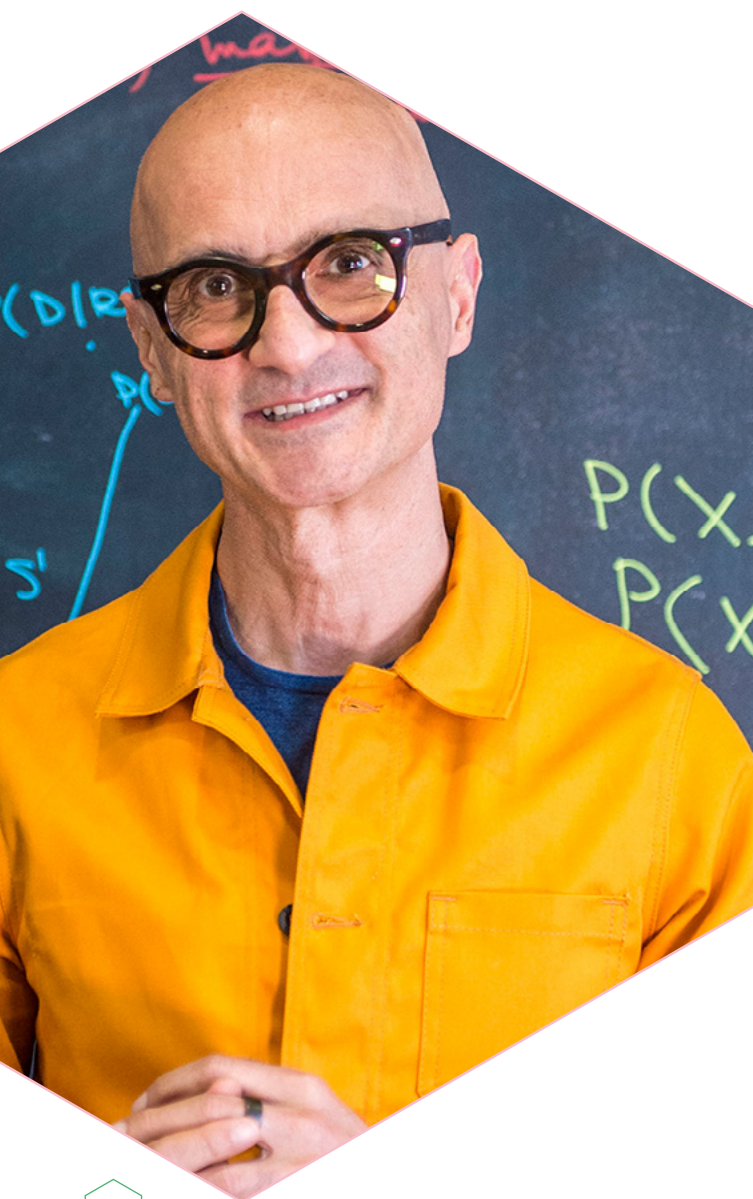
For Stefano, open banking and financial wellbeing go hand in hand. A [Yapily report](#) found almost nine in 10 people and three quarters of businesses in the UK used money-saving or money-management products in 2022 to help tackle the cost of living crisis – and many of those are powered by open banking.

For fintech founders, Stefano's advice is to walk before you can run. No major fintech firm became a success overnight. We need to be more patient and understand that building consequential businesses takes time. 2021 was a year of growth; 2022 was about readjustment; 2023 will be about focusing on profitability.

HEALTH TECH

Ali Parsa, Babylon Health

“We’re moving into a new sector – from physical to digital, sick care to healthcare, fee-for-service to value-based care – and that requires a fundamental rethinking of how healthcare works.”



“We’re Moving from Sick Care to Healthcare...”

The automotive industry has shifted from hardware to software – there are so many sensors in cars now that we spot problems ahead of time and fix them before we break down. The same shift is happening in healthcare.

From episodic to continuous; doctor-centric to data-centric; the focus is increasingly on keeping people healthy rather than just treating them when they’re sick.

Digitalisation is driving this new preventative healthcare model and every bit of tech matters. From VR and predictive analytics to AI in drug discovery, telemedicine, and smart pills, we’re going to see an acceleration of healthtech like never before.

“... And the Whole Business Model for Healthcare Needs to Change.”

As the industry changes, business models are changing too. Currently, we only pay for ‘sick care’ and doctors only get paid when we’re sick.

We’ll now see a move from this fee-for-service model to value-based care, which centres on promoting patient health, care delivery, and patient engagement.



“Investors Betting Against Digital are Making a Mistake.”

Still, as share prices fall, appetite for innovation in healthcare is waning. Some investors and companies are moving away from investing in digital health and back into physical infrastructure – and some organisations are paying a fortune to build brick and mortar care facilities.

This is the worst long-term best investors and companies can make. Think of Amazon: when the internet bubble burst, Amazon’s share price fell by 90%. A few years later, physical retail stores failed, Amazon’s share price went vertical, and the company never looked back.

The old fashioned healthcare approach will fail; the longer-term macro trend will be the move to a more efficient, digital model of delivery.

“The Next Big Fortunes Will be Made in Biology.”

The global synthetic biology market is expected to grow to \$37.8b by 2028 as scientists engineer natural biological systems to create new biological devices with new abilities.

We’ve already seen genetic manipulation in the development of covid vaccines. Going forward, we’ll see more startups harnessing the natural world to solve problems in medicine. Those who participate in biology today will create the huge companies of the future.

INSIDE BABYLON HEALTH



Founded: **2013**

Country: **UK**

Stage: **Publicly traded on NYSE**

Total Funding Raised: **\$1.1b**

Ali Parsa took Babylon Health public in 2021 via a \$4.2b SPAC deal, but a year on from its stock market debut, Babylon’s share price had dropped by 90%. When you go public, you’re taking a company into a market where there’s supply and demand. Ali’s mistake, he says, was taking his supply of stock public when demand for growth stock had dissipated.

Founders need tenacity in tough times, he says, to stick to their beliefs and their vision for where they want to be. He’s since readjusted Babylon’s cost base and growth plans, but isn’t deviating on his mission to make quality healthcare accessible and affordable on a global scale.

Babylon’s digital healthcare app offers always-on care, covering 24 million people across four continents – and revenues in 2022 were up on the previous year. Like Amazon, Ali says, when you’re riding a long-term trend, your stock price will recover.

LONGEVITY

James Peyer, Cambrian Bio

“We can make a pill to prevent Alzheimer’s, cancer, and diabetes at the same time.”



“Longevity Drugs are Making the Jump from Mice to Humans.”

Longevity isn’t about making people live forever; it’s about extending healthspan and lifespan together, and switching from reactive to proactive medicine, so a smaller proportion of our lives are spent sick.

We’ve already extended the lifespan of mice. Now, we’re focused on making multi-disease preventative medicines that stop the effects of ageing in humans. Can we make a pill that prevents Alzheimer’s, cancer, diabetes, bone and muscle disease at the same time? The answer is probably yes. These medicines can trigger our bodies to mimic the effects of exercise or fasting, reducing the molecular damage done to our cells as we age.

We’ll see preventative medicine trials in the second half of the 2020s and we can expect to have these kinds of drugs approved in the 2030s.

“The Private Sector will Drive Progress.”

There’s no regulatory hurdle for preventative medicine and frameworks for approving new drugs that already exist. Statins, which lower cholesterol and reduce the risk of heart attacks, have been through these studies before.

We’re seeing lots of innovation in gene editing, changing DNA, turning genes on or off, rejuvenating blood cells, and researching stem cells, which do not age. But most research is targeted at rare diseases and drugs coming out are expensive.

It takes five years to go from publishing a breakthrough in a scientific journal to having a drug ready for human testing. If you want to build a commercially viable preventative medicine, the best thing you can do is make it as safe and costly as an aspirin.



“While Investment in BioTech is Trending Downwards, Longevity is on the Up.”

While US biotech funding decreased by over 38.6% in 2022, global investment in longevity startups is expected to grow to \$600b by 2025. VCs, including Apollo Health, Life Extension Ventures, and Maximon, are raising large, longevity-focused funds.

At the same time, hype-based funding is going to wash out of the system. Between 2018 and 2021, biotech companies with no shot of ever developing real preventative medicine put the word, ‘longevity’, in a pitch deck and were able to raise more money. Now, only those companies with the best science and teams will thrive through the downturn and emerge stronger for it.

INSIDE CAMBRIAN BIO

Founded: **2019**

Country: **US**

Stage: **Series C**

Total Funding Raised: **\$160m**



Running trials for longevity drugs costs hundreds of millions of dollars. Investors want to know drugs are safe, effective, and they’re not going to lose a load of money if a trial fails.

James Peyer’s Cambrian Bio solves this problem by developing interventions that treat specific diseases with shorter clinical trials first, before deploying them as preventative medicines to improve overall quality of life as we age.

Once you’ve got the IP for a drug that treats a disease within the existing \$1.4t pharma industry, the investment thesis for backing further longevity research to prevent multiple diseases at once – transforming this drug from a \$10m into a \$100m product – starts to make sense.

In this way, James plans to help investors unlock a multi-trillion dollar preventative medicine industry that doesn’t exist yet – and that, he says, is what makes the space so exciting.

MOBILITY

Markus Villig, Bolt

“In 20 years, most cities are going to ban private cars.”



“Existing Players are Best Positioned to Win in the New Generation of Mobility Services.”

When Bolt started out in 2013, mobility and on-demand delivery companies were raising billions and everybody was giving out free food and free rides. Now, these services have become part of our daily lives. Ridehailing and food delivery will reach some level of stability this year.

For ridehailing in particular, we’re expecting supply and demand to reach equilibrium in lots of markets. This will reverse the trend we saw coming out of the pandemic, where demand was growing so fast that supply couldn’t catch up and, as a result, prices were going up and arrival times were really bad.

The global shared mobility market is expected to reach over [\\$945b](#) by 2030, while the online food delivery market will reach [\\$223.7b](#) by 2027. Up-and-coming urban mobility services – like e-scooters and same-day grocery deliveries – are driving this growth.

The winners in these sectors are still to emerge, but existing players that have already proven themselves to be strong in delivery and ridehailing are best positioned to come out on top.

“Entrepreneurs Need to Conserve the Capital They Have.”

The ‘move fast and break things’ era of tech is over. Capital is harder to get, but that also means funding has become more rational – companies need to compete on their merits to get funding, rather than telling a great story or landing a great headline.

This is reflected in the mobility sector where VC investment is stalling. While mobility tech startups [raised](#) \$5.5b in VC funding in the third quarter of 2022, that represented a 79% drop on the previous year and was 60% below the five year average.

Founders must focus on being cost efficient and conserving the capital they have. You can’t be ‘growth at all costs’ anymore and hope the next round of investors are going to bail you out.

Bolt started by bootstrapping ten years ago, which forged a strong DNA of frugality across the founding team. During the pandemic, Bolt was the only mobility company that didn’t lay off a single employee.

“Cities Already Realise Private Cars Need to be Reduced.”

[One in five](#) young car owners in the UK think owning a car is wasteful and should be discouraged by governments.

With changing perceptions, rising petrol prices, carbon emissions and their impact on climate change, more cities are going to introduce legislation and initiatives to reduce, if not outright ban, private cars.

If we look at our urban landscapes today, the vast majority of space is dedicated to cars, roads and parking spaces. When you move away from that, you can compress a city, reduce noise pollution, create more natural spaces – and everyone wins



INSIDE BOLT

Founded: **2013**

Country: **Estonia**

Stage: **Series F**

Total Funding Raised: **\$2b**



Markus Villig co-founded [Bolt](#) as a 19-year old high school student in Estonia. He borrowed €5,000 from his parents to build the first version of his app. Today, Bolt boasts over 100 million users across the globe.

In the first six years, Markus and his team focused on building the technology and operations behind their ridehailing service in a small set of European countries. Over the next four years, Bolt added four new verticals – food delivery, grocery delivery, e-scooters, and car sharing – and expanded to 45 countries across Europe and Africa.

Bolt’s top talent, who honed their skills in the ridehailing side of the business, now operate like mini CEOs, running Bolt’s different verticals in different markets semi-autonomously.

This base of talent gives players like Bolt the edge in the market, Markus says, as the company fights to accelerate the transition from private cars to shared mobility. Bolt has close to 2.5 million drivers, but Markus doesn’t own a driving licence – and has no plans to get one.

QUANTUM

Jeremy O'Brien, PsiQuantum

“The only thing that’s interesting in quantum is large-scale, one million qubit, error-corrected quantum computing – and that’s coming sooner than people think.”



“You Need a One Million Qubit Quantum Computer to do Anything Useful.”

The world of quantum computing is turning on its axis. For years, scientists have fought for quantum supremacy, with small, noisy systems battling over incremental increases in computing power.

Now, people are waking up to the fact that you need a one million qubit quantum computer to ensure fault tolerance and error correction, and unleash quantum’s potential – any hope to the contrary is unwarranted and diminishing by the day.

The scaling challenges are more about systems engineering than quantum itself. You need extremely low temperatures for most quantum computers to operate and wiring up a one million qubit machine is no mean feat. The breakthroughs in quantum will come from solving those scaling challenges: manufacturability, cooling power, controlled electronics, and connectivity.

“We’ll See World-Changing Applications of Quantum by 2030.”

The ability of quantum computers to simulate chemistry – and thereby design new molecules and materials – will be transformative for the climate in the next decade. From making better battery cells to designing new pharmaceuticals, these discoveries become possible overnight with quantum.

To produce ammonia – used for producing fertilisers, synthetic fibres, plastics, and pharmaceuticals – we combine nitrogen with hydrogen in a factory using huge amounts of energy and natural gas in a process invented in 1910.

Microbes in the soil run that same process in ambient conditions, using water rather than gas. With a quantum computer, we could simulate the process to understand how it works and then replicate it to create a cheaper and more environmentally-friendly solution.

“Access is Going to be Limited and Companies Need to Ready Themselves.”

Even when we achieve quantum at scale, companies can’t take access for granted. That’s going to create an interesting dynamic where suddenly we’ll have the technology able to answer questions with huge value across industries, but not every company – or country – will be able to leverage it.

Companies need to build partnerships with full stack quantum computing firms and hire specialists to prepare for quantum tech.

INSIDE PsiQuantum



Founded: **2016**

Country: **US**

Stage: **Series D**

Total Funding Raised: **\$665m**

Jeremy O’Brien’s PsiQuantum is building the world’s first utility-scale, error-corrected quantum computer. Jeremy’s goal has been the same from the start: to reach one million qubits of computing power.

PsiQuantum leverages tools from the multi-billion dollar semiconductor industry to manufacture the components of quantum computers at room temperature and at scale. In a physics lab, progress is slow and incremental. In the semiconductor industry, it’s normal to design a prototype and go from one to 100,000 products in a year.

Jeremy says he and his team were once seen as lunatic fanatics on the fringes of quantum tech. Now, building a business focused exclusively on the engineering challenges of large-scale quantum tech is paying off and PsiQuantum is manufacturing quantum chips on the production lines of global semiconductor foundries.

WEB3

Kathleen Breitman, Tezos

“FTX evaporated billions from the crypto market. VC funding will dry up for the next five years and we’re going to shift to hacker culture.”



INSIDE TEZOS:

Founded: **2014**
ICO: **\$232m**
Transactions: **143m+ (2022)**



When Kathleen Breitman started the open-source blockchain, [Tezos](#), her budget was \$600k. Now, the network’s patron, Tezos Foundation, has \$1b. Even today, she’s got an early founder mindset; ditch the losers, double down on the winners, and if something’s not working, get rid of it and find something that does.

Tezos’ on-chain governance model means anyone who owns its cryptocurrency, Tez (XTZ), can vote on the network’s future. Kathleen describes her role as the janitor; she only steps in when a mess needs clearing up. To innovate quickly in a decentralised ecosystem, you need good communication, collaboration across different groups, and some leadership within them.

When usage increased ten-fold in 2021, Tezos was able to reduce, rather than increase, its transaction fees – its dynamic community of engineers anticipated the problem, threw solutions at it, and released upgrades that resulted in better UX.

Now, Kathleen is working with UK accelerator, [Entrepreneurs First](#), and looking to markets like India, Japan, and South Korea, to attract more young talent. She’s aiming for one million transactions per second and, she says, Tezos is one year away from achieving it.

“Funding for Crypto is Going to Dry Up, But it’s Still the Future.”

Forget the crypto winter; it’s a K-T extinction. There’s been a massive bottoming out in the market and billions of dollars have disappeared from the crypto ecosystem.

What’s bad is that’s killed a lot of momentum. FTX attracted well-funded projects to it, but when it turned out to be a house of cards, they had their treasuries exposed and that made VCs look bad.

What’s good is now we have to actually build something useful to get venture funding. We’re going to get more hacker culture and sustainable business models that aren’t predicated on trying to get that 10x return on venture dollars.

“Crazy NFT Speculation is Over and Organic Communities are Emerging.”

Justin Bieber paid \$1.3m for a Bored Ape NFT in January 2022. By the end of the year, it was worth \$70k. Meanwhile, trading volume on the NFT marketplace, OpenSea, fell by 94% in 2022. How can it now justify its \$13b valuation to investors?

Companies that made a lot of cash in the 2021 cycle will have to pivot and make good on value for VCs. They’re not going to be able to make small tweaks; they’ll need to rethink everything from the ground-up, and that will create new opportunities.

We’re now converging on what actually offers value and organic communities are emerging on different platforms. For the first time, artists can issue tokens that represent ownership of the art they create, force scarcity by using blockchain, and create the asset on the chain. After art, gaming is the next big industry that’s going to be disrupted.

“Scalability is the Biggest Issue Preventing Blockchain from Going Mainstream.”

Some web3 staples struggle to fly in the real world. DAOs are a terrible idea for corporations, because you need secrecy to enact any strategy. The metaverse is still not well defined – mostly it’s been a way for people to fundraise for specious gaming ideas that would otherwise get the can. In crypto, regulation is a barrier to mass adoption.

Still, today’s web3 projects are good prototyping for more impactful applications. Web3 has the potential to replicate financial services at a lower ticket price. In weather insurance, people and small businesses could have full transparency on how pricing is calculated and could purchase insurance on the blockchain.

But to unlock the use cases that people fantasise about – gaming, social media, and building a new Twitter – the blockchain tech that underpins web3 needs to scale. Bitcoin processes seven transactions per second; we need to get to one million.

STARTUPS TO WATCH IN 2023

Aspire Food Group

Aspire Food Group is a pioneer in insect agriculture and operates the world’s largest, fully-automated insect production facility.

Founded: **2013**
Founder/s: **Gabe Mott & Mohammed Ashour**
Country: **US**
Stage: **Series C**
Total Funding Raised: **\$100m+**

Nominated by David Rosenberg, AeroFarms



BioAge

BioAge is a clinical-stage biotechnology company that is mapping human ageing to develop a pipeline of therapies that treat disease and extend healthspan.

Founded: **2015**
Founder/s: **Eric Morgen & Kristen Fortney**
Country: **US**
Stage: **Series C**
Total Funding Raised: **\$127m**

Nominated by James Peyer, Cambrian Bio



Climate X

Climate X provides insights into the risks and financial impacts of extreme weather events linked to climate change.

Founded: **2020**
Founder/s: **Kamil Kluza & Lukky Ahmed**
Country: **UK**
Stage: **Seed**
Total Funding Raised: **£5.2m**

Nominated by Tessa Clarke, Olio



Immersive Labs

Immersive Labs delivers hands-on cybersecurity training and simulations to measure and improve cybersecurity skills across businesses.

Founded: **2017**
Founder/s: **James Hadley**
Country: **UK**
Stage: **Series C**
Total Funding Raised: **\$189m**

Nominated by Poppy Gustafsson, Darktrace



DNS

DNS is a platform to discover and collect the next generation of artwork and music in web3.

Founded: **2021**
Founder/s: **Catman, Geo52Rey & Shokunin**
Country: **US**
Stage: **Seed**
Total Funding Raised: **\$2m**

Nominated by Kathleen Breitman, Tezos



Phasecraft

Phasecraft is developing the fundamental quantum theory and software to enable quantum computers to tackle the world’s biggest problems.

Founded: **2019**
Founder/s: **Ashley Montanaro, John Morton & Toby Cubitt**
Country: **UK**
Stage: **Seed**
Total Funding Raised: **£7m**

Nominated by Jeremy O’Brien, PsiQuantum



Pro Athlete Community

Pro Athlete Community delivers tailored executive education, experiences, and a luminary network to empower professional athletes in relentlessly pursuing what’s next.

Founded: **2022**
Founder/s: **Kaleb Thornhill**
Country: **US**
Stage: **Pre-Seed**

Nominated by Chip Paucek, 2U



The EVERY Company

The EVERY Company makes real animal protein without the animals, starting with chicken-less egg proteins.

Founded: **2015**
Founder/s: **Arturo Elizondo & David Anchel**
Country: **US**
Stage: **Series C**
Total Funding Raised: **\$235m**

Nominated by David Rosenberg, AeroFarms



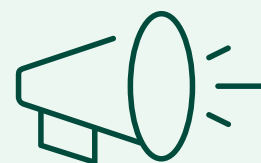
Yonder

Yonder is a lifestyle credit card with rewards that you can apply for without a UK credit score.

Founded: **2020**
Founder/s: **Harry Jell, Theso Jivajirajah, Tim Chong**
Country: **UK**
Stage: **Seed**
Total Funding Raised: **£25.9m**

Nominated by Stefano Vaccino, Yapily

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