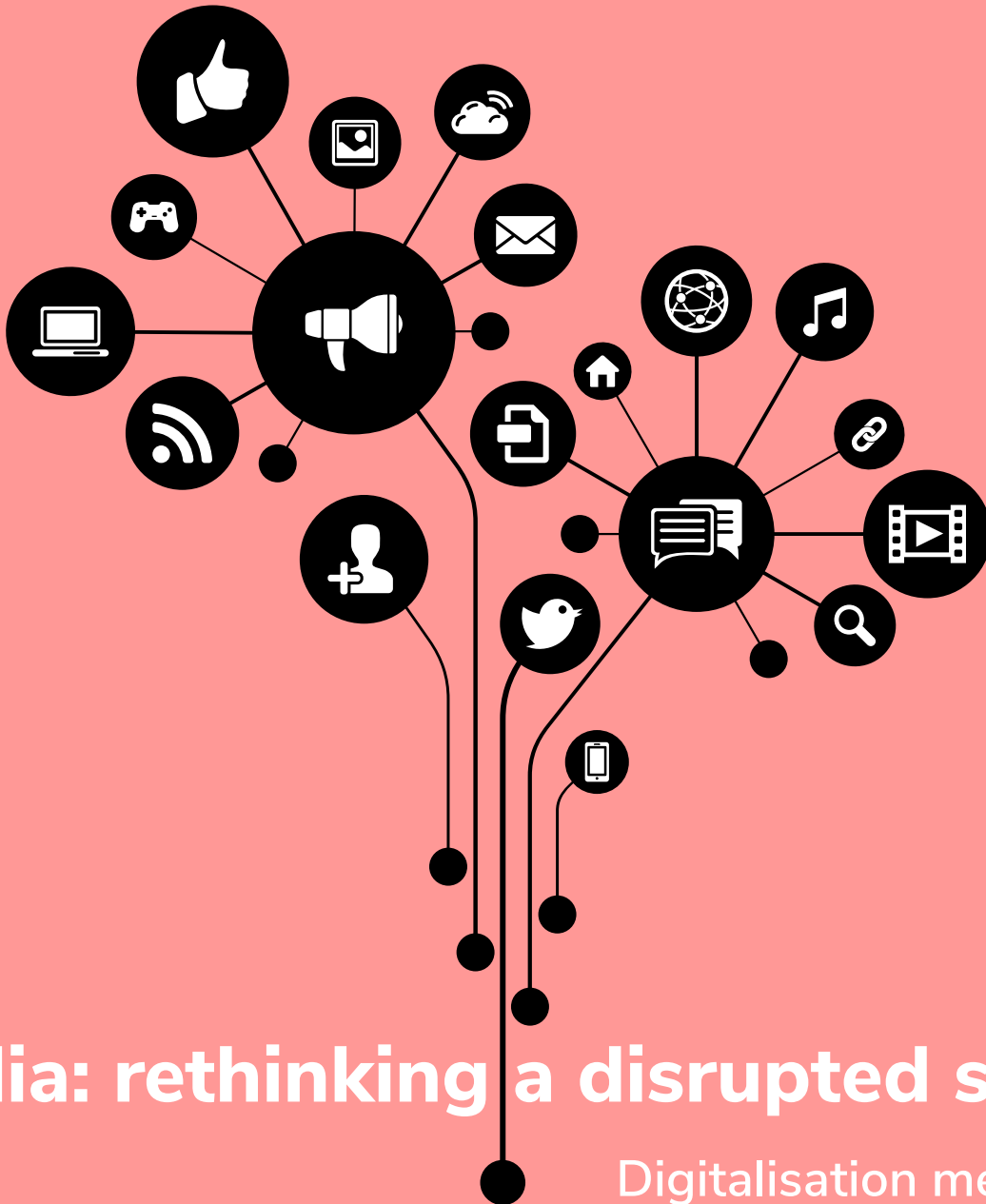




Global
Corporate
Venturing



Media: rethinking a disrupted sector

Digitalisation means it is in flux and corporates are cautious about investing

April's monthly data

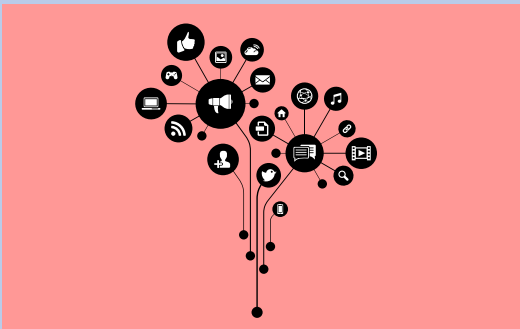
How Evox could be the latest successful Oxford health spinout

Using human brains for artificial intelligence

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The media sector has been one of the most highly disrupted by technology. But the disruption wrought by digitalisation is not yet complete.

Media organisations have to juggle swift technological change, a move to subscription-based models and increasing personalisation of content. It is a tough challenge and though people turned to media in the pandemic, investors remain cautious about the sector.



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“A move away from a commitment once entered into will most certainly result in a branding as an unreliable investor”

**Patrick Flesner and
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“The brain is 1,000 times faster using 25 watts of power – equivalent to a lightbulb – because humans know five things rather than record every detail. This is the sparsity model and a big opportunity”

Zaid Khan

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79 New highs in April

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- Triple the number of exits versus same month last year
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Deals in April



Mawsonia has been awarded a Queen's Awards for Enterprise: International Trade.

They are the most prestigious business awards in the country and winning businesses are able to use the Queen's Awards Emblem for the next five years.

Global Corporate Venturing

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Editorial

Cutting through the noise

- > Connected world has potential to fight any challenge
- > But this virtual world is still vulnerable to risks
- > Being prepared is sensible



By James Mawson
Editor-in-chief

First, some company news: Mawsonia has won a Queen's Award for International Trade.

Our submission weighed heavily on the fantastic work the team developing Global Corporate Venturing, Global University Venturing and Global Impact Venturing has been doing over the past few years to connect innovation capital sources and drive innovation forward on the global stage.

But, ultimately, the award reflects the support, insights and talent of the global innovation community and the members of the Leadership Society and Global

Innovation Venturing so thank you for the past 11 years and for building a brighter future.

The innovation ecosystem we find ourselves in arguably has its roots with Charles Babbage, a University of Cambridge mathematician, perhaps best-known as the inventor of computers. His work, however, also led to the creation of the Penny Post, where (eventually) a letter could be sent anywhere in the British Empire for one penny.

The Penny Post, therefore, predates Metcalfe's Law, which postulates the value of a network is proportional to the square of the number of users it connects.

Joseph Schumpeter’s ideas of creative destruction had innovation at its core. Ideas rather than accumulation of capital drive long-term growth, as the Economist noted in its review of the new book, *The Power of Creative Destruction* by Philippe Aghion, Celine Antonin and Simon Brunel. Advances in one area lead to more ideas across multiple industries.

Bring both Metcalfe and Schumpeter’s ideas together thanks to a boom in internet connectivity and computing power along with abundant, almost limitless, capital and the potential to tackle almost any challenge beckons. This could be useful given US energy secretary

Jennifer Granholm last month said fighting climate change was “our generation’s moonshot”.

Billions of people are increasingly connected through video conferencing, and mixed and virtual reality.

Artificial intelligence (see the special report for the Global AI Council) is turbocharging creativity through the development of more insights, which in turn can be used to write software code drawn from more data, sound and images.

The media sector, which we analyse this month, shows many of the patterns first in this information and communication technology revolution.

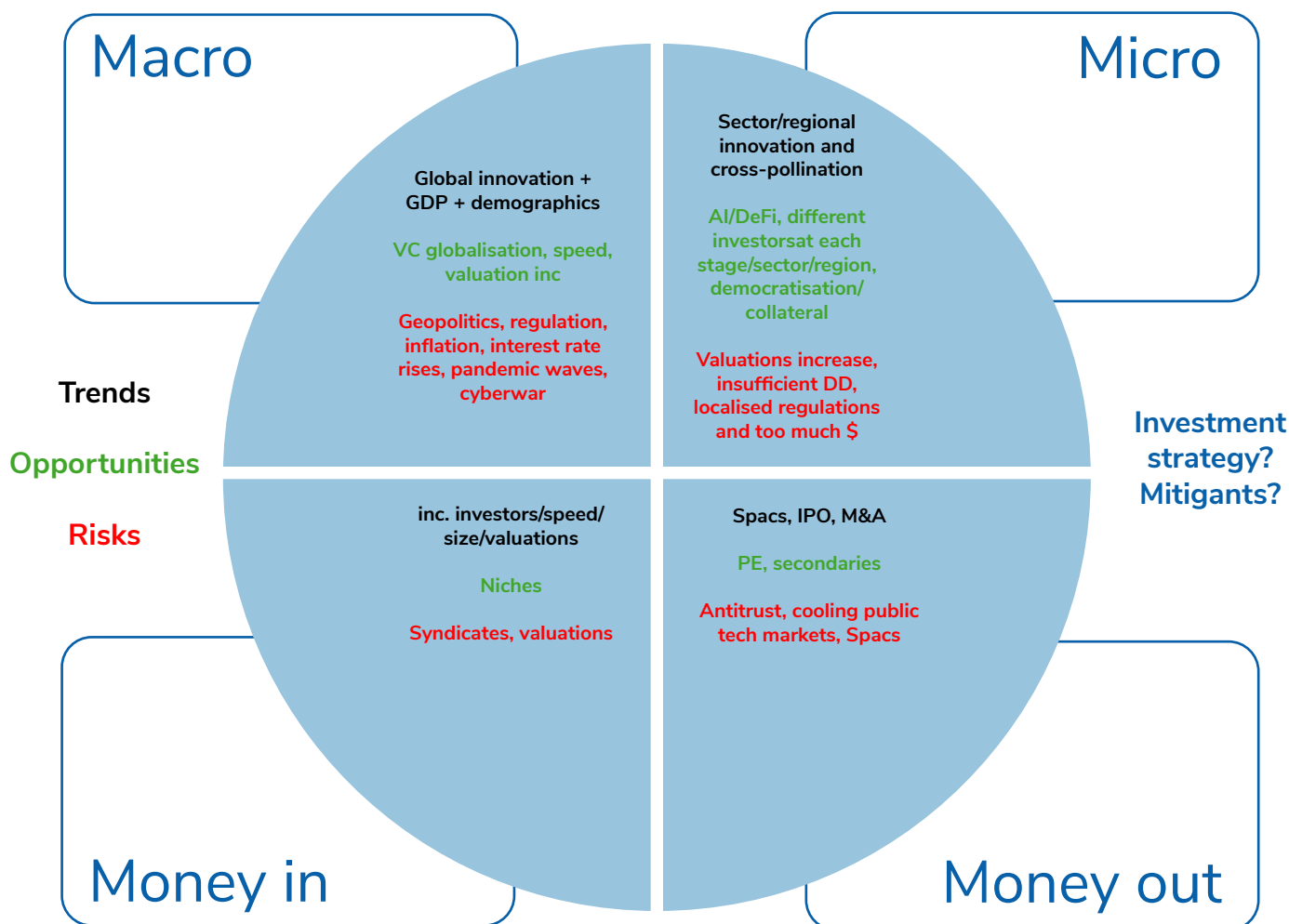
But the venture industry is also grappling with the challenges of creative destruction.

In the GCV webinar analysing the first-quarter data, Alex McCracken, managing director for corporate partnerships at SVB in the UK, said the industry was grappling with a “barbell” pattern.

Money is moving faster into deals at ever-greater amounts per round to offer a lower cost of capital to entrepreneurs scaling up. On the other end are entrepreneurs seeking more value-added investors, able to bring more than just money to support the startup.

In the middle are the traditional venture investors identified by

The 4Ms of tech investment



Source: SVB and GCV

investor Everett Randle as being in the dead zone.

Ultimately for a bank such as SVB, or any venture investor keeping track on the trends, opportunities and risks at the macro and micro stages as well as the money flowing in and out is a multifaceted issue.

Probably the clearest indication of the bubble conditions for innovation capital has been the growth of special purpose acquisition companies (Spacs) in the past year. As Girish Nadkarni, president of Total Carbon Neutrality Ventures, in the follow-up roundtable for Earth Day on April 22 said: "Five of my portfolio companies have merged with Spacs and five others are in negotiation. This has given a three to four-times return on the fund. I pray to Spac gods every day [they will favour my companies] and say thank you."

But the gods can turn away as regulators close in on Spacs or other parts of the financial services world, such as the curtailing by authorities of China-based Alibaba and its Ant Group affiliate.

McCracken's long list of risks, including regulation, geopolitics, inflation and interest rates, the markets and exits conditions, AI, pandemics and syndicate partners, had one over-riding concern: cyber.

Whether caused by governments, criminals or mis-step, cyber-attacks or warfare could prove the equivalent of a viral pandemic in affecting people and economies.

The past year's outbreak of the covid-19 disease has infected millions of people and caused economies around the world to shrink. It has also accelerated the digitalisation and interconnectedness online of people and businesses.

It is a virtual world still surprisingly vulnerable at points, just as people are. Few venture portfolios were prepared for a wholesale shutdown of parts of the economy due to covid-19 despite the regular warnings and modelling for pandemics. Creative minds, however, have created economic opportunities and the interconnectedness and innovation from decades of prior research have enabled at least parts of the world to bounce back.

Being prepared for other shocks seems sensible. As Nobel Prize-winning economist Daniel Kahnemann writes in his latest co-authored book, *Noise*, out this month, spotting bias is just part of the battle. The other part is trying to understand how decisions can be made better and focus on the most important ideas generated out of information and that takes planning and critical analysis.

News

JGC jumps into corporate venturing vehicle

- > Tuya teams with Hillhouse for \$400m fund
- > Dentsu dedicates capital to second vehicle
- > Lockheed Martin finds Main Sequence for \$194m fund

By James Mawson, Robert Lavine, Thierry Heles,
Liwen-Edison Fu and Jordan Williams

Japan-headquartered infrastructure group JGC Holdings and its engineering subsidiary, JGC Corporation, have earmarked ¥10bn (\$92m) for open innovation investments, half of which will go to a new corporate venturing arm.

JGC Mirai Innovation Fund is set to operate for 10 years and will be managed by venture capital firm Global Brain. It will target developers of carbon neutrality, sustainable infrastructure, lifestyle improvement and smart industry technologies and products, in Japan and internationally.

Founded in 1928 as Japan Gasoline, JGC initially

manufactured petroleum products. It has pivoted its focus to engineering services and diversified its business to cover construction, nuclear power, renewable energy, pharmaceuticals and healthcare globally.

Assurant Ventures achieves \$100m of investments

Assurant Ventures, the corporate venture capital (CVC) arm of US-headquartered insurance firm Assurant, revealed last month it has now invested \$100m since it was formed in 2015.

First known as Assurant Growth Investing, Assurant Ventures provides funding for companies

developing technologies focused on insurance as well as the consumer connectivity, automotive and housing sectors.

The unit has backed more than 20 companies, three of which – online automotive marketplace Cazoo, smart home technology producer SmartRent and real estate technology provider Doma – have agreed reverse takeovers in the past two months at valuations exceeding \$2bn.

Tuya teams with Hillhouse for \$400m fund

China-headquartered internet-of-things (IoT) technology producer Tuya has formed a \$400m strategic investment fund with hedge fund manager Hillhouse Capital, DealStreetAsia reported.

Tuya is the creator of an IoT technology platform which enables businesses to access hardware development tools, cloud services and smart business development software to build their connected services.

The company floated in the United States in a March \$915m initial public offering in which affiliates of Hillhouse Capital had expressed interest in buying \$100m of shares.

Dentsu dedicates capital to second fund

Dentsu Ventures, a corporate venturing subsidiary of Japan-listed advertising agency Dentsu, has launched a second vehicle, Dentsu Ventures Fund II, with ¥10bn (\$92.2m) of capital.

The vehicle is expected to deploy the cash until 2031 and will target companies at seed to late stage. It counts Dentsu Group, its Dentsu Innovation Partners subsidiary and VC consultancy and

startup accelerator operator Prime Partners as partners.

The unit formed Dentsu Ventures Global Fund I in 2015 and its overall capital under management stands at roughly \$185m. The first fund focused on global deals, particularly in the United States, while the latest iteration will increase Dentsu Ventures' commitment to its home country.

Lockheed Martin finds Main Sequence for \$194m fund

Australia-based VC firm Main Sequence Ventures has secured A\$250m (\$194m) of capital commitments for its second fund from investors including aerospace and defence manufacturer Lockheed Martin.

The fund's other limited partners include Singaporean state-

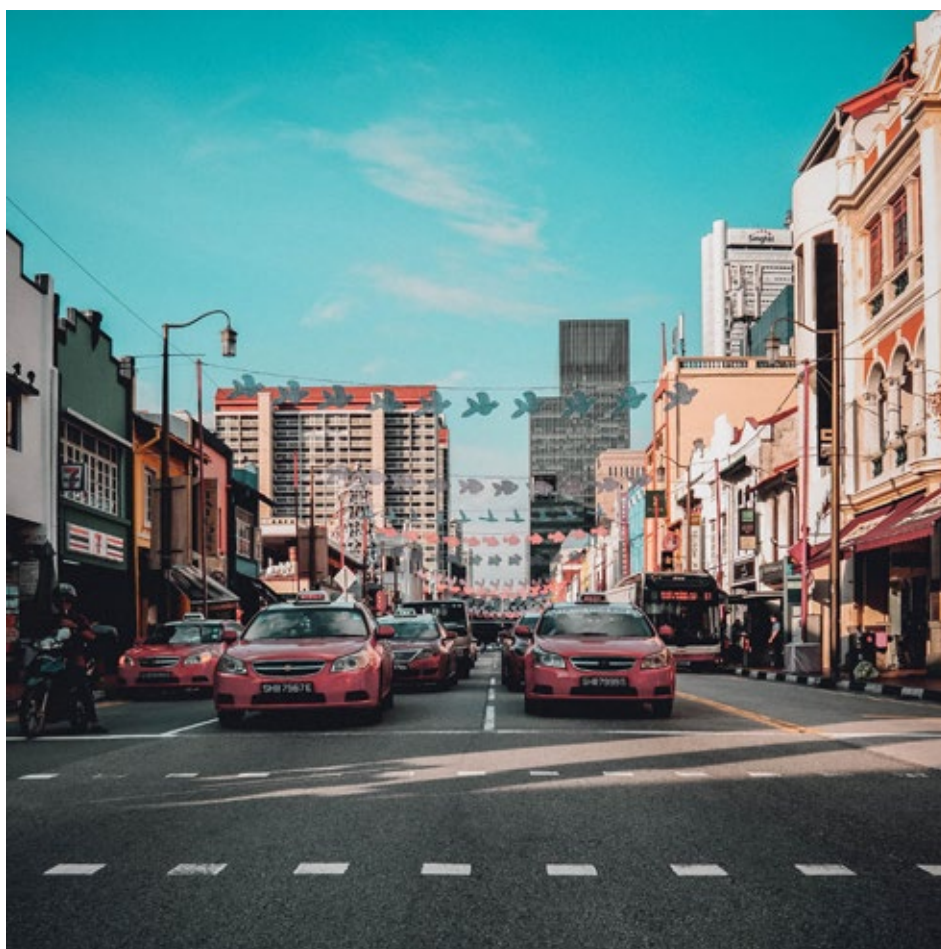
owned investment firm Temasek, superannuation fund HostPlus, VC firm Horizons Ventures and unspecified family offices and individual investors represented by Morgan Stanley Wealth Management and Mutual Trust.

Main Sequence was founded in 2017 to manage Csiro Innovation Fund 1, an investment vehicle established by research institute Commonwealth Scientific Research Organisation (Csiro) and the Australian federal government.

The firm will use the new fund to invest in technology companies operating in sectors such as food, healthcare, space and industrial productivity technology.

Saint-Gobain gravitates to Richland Capital

Advanced materials producer



Singapore's sovereign wealth fund, Temasek, invested in Main Sequence's second fund

Saint-Gobain has committed an undisclosed amount to China-based investment firm Richland Capital's third VC fund, DealStreetAsia reported last month.

Founded in 2011, Richland invests across technology sectors including advanced materials, advanced manufacturing equipment, semiconductors, artificial intelligence (AI) and 5G networks.

The firm is targeting up to RMB800m (\$123m) for the close of Richland Capital Fund III, which it expects to take place by the end of June 2021.

The vehicle's first close, in August 2020, was backed by Solvay Ventures, the investment arm of chemicals producer Solvay, as well as Nipsea, which invests on behalf of paint producer Nippon Paint, and Redbud, a fund-of-funds formed by Tsinghua Asset Management, part of Tsinghua University.

Valuence vaults into corporate venturing

Japan-headquartered luxury item resale service Valuence has formed a CVC subsidiary, Valuence Ventures.

Founded in 2011, Valuence buys second-hand luxury goods such as watches, bags, antique items and jewellery through 76 retail stores across its home country, Hong Kong and Indonesia. The company holds online auctions to resell them.

The size of Valuence Ventures' fund has not been disclosed but it said it will partner and invest in companies working on technologies and novel business models in fields it is looking to explore, including artificial intelligence, car dealership, real estate, overseas expansion and app development.



Credit: Laurent Kronental/Saint-Gobain

Saint-Gobain's tower in La Défense, Paris

Dynamk raises \$65m first fund

Dynamk Capital, a US-based VC firm, has raised \$65m for its debut fund from limited partners including drugs maker Pfizer, and healthcare-focused JSR Group and Lonza.

The final close for the Dynamk Life Sciences Fund targets investments in the enabling tools, technologies and services for biopharma companies' discovery, development and manufacturing needs.

Microsoft moves into \$175m Congruent Ventures fund

US-based VC firm Congruent Ventures has raised \$175m for an early-stage climate technology fund from limited partners including software producer Microsoft, Bloomberg reported.

The firm had targeted \$125m for the close but surpassed it with commitments from Microsoft's Climate Innovation Fund and VC firm Prelude Ventures.

Founded in 2017, Congruent typically invests in technology companies that are addressing sustainability issues across sectors such as energy transition, mobility,

agriculture and sustainable production.

Congruent has tapped the fund to complete seven investments in portfolio companies including Parallel Systems, the developer of an autonomous, electric freight transportation system.

Hawke Media hooks up investment vehicle

Hawke Ventures, the CVC subsidiary of US-based digital marketing agency Hawke Media, has closed its first vehicle at \$5.6m, TechCrunch reported.

The fund counts 51 angel investors among its limited partners, including Michael Brown, Jake Kassan, Xavier Kochhar, Jeff Nicholson, Holly Peete, Rodney Peete, Jon Vein and Jill Zarin.

Hawke Ventures focuses on advertising and marketing technology developers. Managing partner Drew Leahy told TechCrunch the fund will provide between \$100,000 and \$250,000 per deal, with the possibility of follow-on funding.

100+ Accelerator gets further corporate support

Belgium-headquartered Anheuser-Busch InBev's US-based open innovation arm, 100+ Accelerator, has secured commitments from fellow beverage producer The Coca-Cola Company and consumer goods manufacturers Colgate-Palmolive and Unilever for a supply chain-themed programme.

Formed in 2018, 100+ Accelerator targets developers of innovative technologies across supply chain management, focusing on water and agricultural sustainability, circular economy and climate action. Its portfolio includes 36



Google for Startups is backing black-owned businesses in Brazil

startups from 16 countries which then raised over \$200m altogether, it said.

The latest initiative will involve the four corporate founding partners identifying disruptive opportunities in global supply chains, and funding and supporting entrepreneurs with proof-of-concept schemes through their respective networks.

Razer arranges \$50m for sustainable investments

US-headquartered gaming accessory producer Razer has launched a \$50m investment vehicle that will invest in sustainable product and environmental technology developers.

Razer Green Fund's capital will be deployed through the company's corporate venturing unit, zVentures, and it will concentrate on areas such as renewable energy, carbon and plastic management, with an eye on its youthful customer base.

The vehicle's first investment is in The Nurturing Co, a Singapore-based producer of sustainable

consumer brands including Bambooloo, which offers toilet paper made from bamboo pulp.

Google increases Black Founders Fund participants

Internet technology provider Google's entrepreneur community, Google for Startups, has announced eight new participants for the Brazilian contingent of its Black Founders Fund, Globo has reported.

The initiative launched in September 2020 with the aim of supplying seed capital to about 30 Brazil-based companies led by black entrepreneurs. Google will not take an equity stake in the companies it capitalises through the programme, which will continue to accept applications until March 2022.

The R\$5m (\$945,000) fund is focused on technology-oriented companies with the "potential and the promise of impacting Brazilian lives".

TrustSwap tries out incubator

TrustSwap, a Canada-based operator of a decentralised finance

ecosystem, has launched an incubator aimed at blockchain startups and announced its first participant.

Founded in July 2020, TrustSwap provides a range of digital asset services including an online marketplace for non-fungible tokens, cryptocurrency minting services and a crypto-enabled VC investment platform.

The incubator will provide consultation services for startups in areas including token distribution, business development, networking and creative direction.

Meiji makes accelerator arrangements

Japan-based food conglomerate Meiji Group has partnered open innovation group 01Booster to form a startup accelerator scheme called Meiji Accelerator.

Founded in 1916, Meiji makes and sells confectionery, dairy products and over-the-counter drugs. It is unrelated to namesakes such as Meiji Yasuda Life Insurance and Meiji University.

The programme is set to launch in May, and will focus on the

open innovation initiatives laid out in Meiji's 2026 Vision. It will target entrepreneurs working on innovative products and business models that can be combined with the group's assets and value chains.

Brightlands starts fourth fund

Brightlands Venture Partners, a Netherlands-based VC firm, held the first closing of its fourth fund at €45m (\$m) including corporate commitments from DSM and Rabo.

Alongside chemicals company DSM and bank Rabo as LPs in BVP Fund IV are the Dutch province of Limburg and its regional development agency, LIOF. The Netherlands Enterprise Agency (RVO) has committed €10m for investments in the renewable chemistry space.

Brightlands will invest in cleantech and health startups and scaleups in the Netherlands, Belgium and North Rhine-Westphalia.

Doral starts cleantech CVC

Doral, a newly-listed, Israel-based solar energy group, has set up a NIS50m (\$15.3m) CVC fund.

The Doral Renewable Energy Resources Group, which builds,

develops and operates renewables energy and earned 32% on its previous investment in Phinergy, founded Doral Energy-Tech Ventures to invest the allocated capital during its first year.

Doral Energy-Tech Ventures will back early-stage solar, wind, biogas, storage, managing infrastructure and waste treatment startups.

Credem starts corporate venturing unit

Credem, an Italy-listed bank majority-owned by the Maramotti family, has launched a CVC programme.

The unit, Credemtel, has a few million euros invested in seed and early-stage fintech, supply chain, and cybersecurity startups.

Piergiorgio Grossi, Credem's chief innovation officer since the end of 2018, said: "Corporate venture capital was born as an important but natural transition point in the group's open innovation process. We started attending the startup world for an exchange of experiences and for inspiration.

"We then moved on to participate in scouting, acceleration and incubation programmes with those with important skills on the topic until starting to work with startups on various innovation projects. It therefore came naturally to think of the opportunity, in some cases, to participate in the company by investing in the startup itself."

The Maramotti family found the Max Mara fashion brand.

Nubank sets up black-focused fund

Nubank, a Brazil-based bank, has launched a CVC fund targeting black entrepreneurs.



Rabobank is investing in Brightlands' fund

Nubank's R\$1m (\$190,000) Semente Preta fund will invest in Brazilian afro-descendente founders' seed rounds.

Separately, MaC Venture Capital, a US-based seed-stage VC firm majority-owned by black investors, has raised \$103m for its debut fund including corporate commitments.

The fund's LPs include retailer Foot Locker, investment bank Goldman Sachs, Bank of America, VC firm Greenspring Associates, Howard University, MacArthur Foundation, the University of Michigan, the State of Michigan Retirement System, and Mitch and Freada Kapor.

Aegon spins off Transamerica Ventures

Netherlands-based insurer Aegon spun off its Transamerica Ventures corporate venturing portfolio in a secondaries deal with Montana Capital Partners, a Switzerland-based private equity firm.

Founded in 2013 with Georg Schwegler's hire, Transamerica's corporate venture portfolio consists of nearly 20 financial and insurance technology companies mainly active in the US. The deal is structured as a spinout of the previous management team of Transamerica Ventures who will continue to manage the underlying assets and the partnerships with Aegon/Transamerica in a new VC firm, Highscale Ventures.

MCP invested through its MCP Opportunity Secondary Program IV in a fund entity called HighScale Ventures Fund I.

Hackers/Founders plans listed fund

Hackers/Founders (H/F), a network organisation for technology

founders, plans to float a \$200m investment fund on the London Stock Exchange.

Founded in 2008 by Jonathan and Laura Nelson, H/F has 350,000 technology founders attending 5,000 events in 200 cities and provides advice to companies.

It has set up HACKFund Global FinTech to be a publicly traded fund and the corporate venturing unit targeting financial services-focused investments of between \$100,000 and \$20m in companies growing by more than 50% per year.

WOCstar finds its Motley Fool

Motley Fool Ventures, the corporate venturing unit of media group Motley Fool, has committed to WOCstar Fund, a US-based VC fund targeting women of colour.

Other limited partners include angel investors Jacki Zehner, Nathalie Molina Niño, Valerie Mosley, Dalila Wilson-Scott, Leanne Huebner, Tilcia Toledo and Jill Karp.

Gayle Jennings O'Byrne and Pialy Aditya are co-founders of WOCstar. Jennings-O'Byrne said: "We are builder capitalists at heart who love building alongside dynamic founders and our WOCstar family of investors, co-investors, global allies, public and private partners."

Helsinn sets up second cancer fund

Helsinn Group, a Switzerland-based cancer company, has set up its second CVC fund targeting €100m (\$120m).

Its 3B Future Health Fund II is incorporated in Luxembourg where the anchor investors will be the Helsinn Group and the Braglia family, which founded and runs Helsinn.

The fund will invest in US and European-based, early-stage entrepreneurs in oncology and rare diseases therapeutics and follows the 3B Future Health Fund I, formerly known as Helsinn Investment Fund.



WOCstar founders (from left): Gayle Jennings O'Byrne and Pialy Aditya

Mastercard commits to Fearless Fund

US-listed credit card provider Mastercard has committed an undisclosed amount to Fearless Fund, a VC fund investing in women of colour-led startups.

Fearless Fund targets startups in consumer packaged goods, food and beverage, beauty, fashion, and technology sectors.

Michael Froman, president of strategic growth at Mastercard, said: "We are investing in Fearless Fund and partnering to bring innovative programs to market to help Black women founders get access to the capital and resources they need to achieve their full potential."

Samsung Engineering commits to hydrogen

Samsung Engineering, part of the South Korea-listed conglomerate Samsung, said it would invest about KRW30bn (\$27m) in its CVC fund targeting hydrogen and carbon neutral technologies.

Samsung Venture Investment, the local CVC unit for the group, will manage the Samsung Engineering

New Technology Business Investment Association (SVIC Number 51). This is the first time Samsung Engineering has invested in its CVC fund, which manages other business unit money from electronics to industrials.

Samsung Engineering is planning to actively develop blue hydrogen, carbon capture and plastic recycling technology and wants the CVC portfolio companies to help.

Samurai Incubate Africa closes fund

Japan-based VC firm Samurai Incubate Africa has reportedly raised ¥2bn (\$18m) for its second Africa-focused fund from 54 corporate and individual LPs, including auto parts maker Toyota Tsusho.

Toyota Tsusho manages the Mobility 54 CVC fund, which committed to Samurai Incubate Africa, according to news provider Ventureburn.

The VC has broadened its focus to startups in Egypt as well as Kenya, South Africa and Nigeria. Its existing portfolio of 26 includes Eden Life, Evolve Credit, Shyft

Power Solutions, FMG, Oneport, and Pricepally.

Tengelmann veterans set up Cusp Capital

Christian Winter, a GCV Powerlist 2016 award winner and head of Tengelmann Ventures, the Europe-focused corporate venturing unit of the Germany-based retailer, has set up Cusp Capital as an independent VC firm.

Alongside former Tengelmann colleagues Jan Sessenhausen, Helmut Klawitter and Wilken Engelbracht, Winter and Cusp Capital have raised €300m (\$361m), according to news provider TechCrunch.

Its LPs reportedly include institutional investors, such as the European Investment Fund, KfW Capital, RAG Stiftung, and NRW. BANK, alongside family offices and entrepreneurs. Cusp Capital will back early-stage young tech companies across Europe with a focus on sustainability and widening access to financing for lower-income consumers.

Pureos hits final close at \$205m

Pureos Bioventures, a Switzerland-based VC firm backed by undisclosed strategic investors in life sciences, has extended the size of its first fund to \$205m.

BB Pureos Bioventures will target a portfolio of 17 to 20 pre-clinical and clinical-stage companies in Europe developing novel biological drugs and emerging modalities such as nucleic acid, cell and gene therapies.

Its initial investments include Lava Therapeutics (floated on Nasdaq stock exchange in March), Alentis Therapeutics, AM-Pharma,



A Toyota fund committed to Samurai Incubate Africa

Araris, Corlieve Therapeutics, Eyevensys, Imcheck Therapeutics, Lava Therapeutics, NovaGo Therapeutics, River Renal and Vico Therapeutics.

UTokyoIPC augments AOI 1 capital to \$222m

Corporates Daikin, Hakuholdo, Mitsubishi Estate and Fuyo General Lease have helped University of Tokyo's Innovation Platform (UTokyoIPC) subsidiary expand its carve out vehicle, Open Innovation Promotion Fund I, to ¥24bn (\$222m).

The fund is set to reach final close in late June and operate until 2035. University of Tokyo committed to its \$26.1m first close in May, alongside Mitsubishi UFJ Bank and Sumitomo Mitsui Banking Corporation.

Fellow financial services firm SBI

Group took part in the latest close, as did air conditioning equipment manufacturer Daikin, marketing group Hakuholdo, property developer Mitsubishi Estate, leasing service Fuyo General Lease and the government-backed Development Bank of Japan.

Open Acceleration to accept applications

Japan-headquartered robotics technology developer RPA Holdings' corporate venturing arm, Open Ventures, has partnered sister company Segment, which owns digital advertising platform Presco, to form an accelerator.

Open Acceleration will focus on online advertising and data technology startups, which will gain access to the Presco marketing tool and RPA's robotics know-how. Open Ventures will

also provide equity funding for the selected participants.

Open Ventures was formed in July 2020 and concentrates on pre-seed and seed-stage developers of automation, artificial intelligence, internet-of-things and regional revitalisation technologies.

La Mobilière sets up Lightbird Ventures

Mobilière, Switzerland's oldest private insurance company, has set up Lightbird Ventures as an independent VC fund managed by Marcau Partners.

Thomas Meier, former investment manager at Redalpine Venture Partners, joined Marcau Partners in September as a partner and will be responsible for building up the Lightbird Ventures team with Benjamin Solenthaler, one of



Insurer La Mobilière has sent up a corporate venturing fund

the three co-founders of Marcau Partners.

Solenthaler, David Hug and Thomas Kaiser founded Marcau Partners in 2018 and its other corporate venture-as-a-service clients include Ringier Digital Ventures and SIX Fintech Ventures.

Zoom rushes to create \$100m Apps Fund

US-headquartered video communication platform developer Zoom has launched a \$100m investment fund to support the ecosystem around its products.

Zoom Apps Fund will supply capital for developers of software or hardware products that can enhance how users of the app meet, communicate and collaborate through the platform.

Portfolio companies will receive between \$250,000 and \$2.5m for a first investment in addition to assistance from the corporate in getting their products to market. It will focus on seed and series A-stage deals but can invest later.

CyberAgent spies third domestic fund

Japan-headquartered internet group CyberAgent's corporate venturing unit, CyberAgent Capital (CAC), has formed a ¥6bn (\$55.5m) third Japan-focused vehicle dubbed CA Startups Internet Fund 3.

Formed in 2006 as CyberAgent Ventures, CAC operates in 10 cities across eight countries including Japan, China and South Korea as well as various Southeast Asian markets such as Indonesia and Vietnam.

The latest iteration follows CA Startups Internet Funds 1 and 2, which were equipped with \$30.4m

and \$49.3m of capital respectively, as well as the \$19m CA Jaic China Internet Fund II, the \$5m CA Korea Fund I and the \$20.1m Southeast Asia-focused CA Asia Internet Fund I.



Zoom will supply capital for complementary apps

FWD goes forward with Alpha Startups

FWD Start-Up Studio, a subsidiary of Hong Kong-headquartered insurer FWD Insurance, has partnered Malaysia-based early-stage VC firm 1337 Ventures to form a pre-accelerator scheme dubbed Alpha Startups.

The four-week programme is set to take place twice a year, with the first cohort scheduled for May 2021. It is accepting applications from AI, machine learning, cloud computing, blockchain and data-powered financial and insurance

technology developers based in Malaysia.

FWD and 1337 Ventures will invest about \$36,500 in each of the top two teams and provide roughly \$29,500 in credits for cloud infrastructure, recruitment, marketing and payments.

National Grid entrusts NGP with another \$150m

UK-headquartered energy utility National Grid has committed an additional \$150m to its corporate venturing arm, National Grid Partners (NGP).

NGP was launched in 2018 with \$250m in capital, \$227m of which has been invested to build a portfolio of approximately 25 companies including conversational speech software provider Uniphore, which raised \$140m last month, and Dragos, the cybersecurity technology producer that secured \$110m in December 2020.

The two newest companies in the portfolio, US-based spatial intelligence software developer Pathr and US-based container cybersecurity technology provider AccuKnox, have received a total of \$7.5m from the unit.

9Unicorns flies to \$40m third close

India-based investment firm Venture Catalysts' accelerator subsidiary, 9Unicorns, has reached a \$40m third close for its first fund, with LPs including food producer Haldiram's, the Economic Times reported.

Financial services firm Indian Bank and Chona Family Office also contributed to the fund, Haldiram's having already backed a second close announced in February.

The fund's capital now stands

at \$70m according to ET, and it expects to reach a final close later this year. It will back about 150 local seed-stage companies developing software-as-a-service, financial, insurance, healthcare and deep technologies, having invested in about 40 startups since the first close.

Corporates acknowledge Now vehicle

Japan-based VC firm Now has formed a second fund with backing from corporate LPs.

Founder Foundry 2 has set a ¥10bn (\$91.8m) target for the vehicle, which is set to run for 10 years, and will back developers of technologies in areas including enterprise software, digitalisation, social media, direct-to-consumer, blockchain, e-commerce, sustainability and augmented and virtual reality.

Internet company GMO, digital media group Gree and marketing firm Vector all contributed to the vehicle, as did financial services firms Shinsei Bank, Fukuoka Financial Group and Tokai Tokyo Financial Holdings, the last two through FFG Venture Business Partners and Tokai Tokyo Investment respectively.

Brokerages Matsui Securities and SMBC Nikko Securities, asset manager K&P Asset Management and individual investors Yoshiyuki Kaneko and Tsuyoshi Kubota filled out the list.

Amazon shows Indian ambitions with \$250m fund

US-headquartered e-commerce and cloud computing group Amazon has launched a \$250m fund that will invest in India-based companies, the Economic Times reported.

Amazon Smbhav Venture Fund will target developers of technology that can help small and medium-sized businesses in industries such as agriculture or healthcare digitalise their technology and launch and manage online businesses.

The vehicle will back farming data technology and anti-waste system developers in the agriculture industry as well as agricultural credit and insurance providers. Telemedicine, digital diagnostics and AI-focused treatments will be the focus for its healthcare deals.

Energy Transition Ventures refuels with corporate backing

US-based VC firm Energy Transition Ventures (ETV) has publicly launched its first vehicle, which is anchored by conglomerate GS Group's corporate venturing arm, GS Futures, and GS Energy, its energy technology unit.

ETV is targeting \$75m for the fund and intends to raise additional capital from new investors, having reached an initial close in February and made its first investment the following month.

The vehicle will target North America-based early-stage developers of technologies in areas including clean energy, distributed generation, electrification, sustainable mobility and resource optimisation.

Corporates help Remiges close \$95m fund

US-headquartered VC firm Remiges Ventures has closed its second fund at \$95m with contributions from investors including pharmaceutical groups EA Pharma, Senju Pharmaceutical and Taiho Pharmaceutical.

Remiges BioPharma Fund II's LPs also include healthcare-focused investment firm 1Globe Capital.

Taiho committed up to \$30m for the fund in 2019. It provided the same amount for Remiges' first vehicle five years earlier, investing alongside peer Sumitomo Dainippon Pharma, and the fund closed at \$80m in 2017.

Remiges Ventures focuses on innovative pharmaceutical technologies and medical devices developed by Japanese universities.



Amazon will invest in India-based companies

Phoenix Group lands on corporate venturing fund

UK-headquartered insurance provider Phoenix Group has formed a CVC vehicle dubbed Phoenix Venture Capital Partners, putting up an initial capital allocation of more than £100m (\$137m).

Asset manager Aberdeen Standard Investments will help run the fund, which will target local startups adhering to its environmental, social and governance (ESG) criteria in areas including clean energy, financial and health technologies in a bid to boost employment opportunities in the UK.

Founded in 1857, Phoenix Group runs multiple insurance, savings and retirement services through subsidiaries such as Phoenix Life, Phoenix Wealth and Standard Life.

RO Group rolls out investment arm

Diversified UK-based, family-owned group RO Group has launched an investment arm focused on technology companies operating in its core sectors.

RO Capital Partners will focus on the property, financial and clean technology sectors. The unit is set to invest up to £250,000 (\$340,000) in early-stage companies and has the capacity to provide follow-on funding and long-term capital.

Established in 1932, RO Group owns a number of property development and financial services companies in the United Kingdom.

Xiaomi unveils plans for innovation research fund

China-based consumer electronics producer Xiaomi will set up a technology-focused innovation research fund based at the Institute



RO Group, based in the UK, has launched an investment arm

for AI Industry Research at Tsinghua University, Xiaomi Today reported.

Founded in 2010, Xiaomi produces smartphones and smart devices that are connected to an IoT technology ecosystem. It claims to be the fourth largest smartphone brand in the world.

The company announced it would launch the Xiaomi Artificial Intelligence Innovation Research Fund at a donation ceremony for Tsinghua University last month.

Axa accelerates to \$295m close for second growth vehicle

Axa Venture Partners (AVP), a CVC subsidiary of France-based insurer Axa, has reached a €250m (\$295m) first close for its latest growth equity vehicle, AVP Growth Fund II.

Formed in 2015 as Axa Strategic Ventures and renamed three years later, AVP has \$1bn under management. It invests in seed and early-stage startups through its AVP Early Stage Fund II while

growth equity investments are conducted with AVP Capital's Growth Funds.

AVP Growth Fund II will target deals from early to late growth stage in areas such as enterprise software, financial, insurance, consumer and digital healthcare technologies, and Axa intends to close it at \$590m later this year.

TDK to deploy \$150m through second fund

TDK Ventures, the corporate venturing capital subsidiary of Japan-based electronics producer TDK, closed its sophomore fund at \$150m last month.

The unit intends to tap its second fund to build a portfolio of 50 early-stage companies over the next three years.

The fund will focus on sectors including clean technology, advanced materials, industrial, robotics, energy, autonomous vehicles, electric vehicles and

health technology. TDK Ventures typically invests between \$250,000 and \$5m in each round.

NGK kicks off \$100m corporate venturing fund

Japan-listed spark plug producer NGK has partnered US-based VC firm Pegasus Tech Ventures to form a \$100m CVC fund.

The vehicle will target developers of smart health, decentralised utility and mobility technologies in the United States, Europe, Israel and Asia. NGK has also entered into a strategic agreement with Pegasus in areas including business creation and mergers and acquisitions.

NGK was founded in 1936 and manufactures ceramic products through its NTK Technical Ceramics subsidiary, as well as spark plugs.

Sawari Ventures secures Misr as LP

Egypt-headquartered VC firm Sawari Ventures closed its latest fund at EGP1.09bn (\$69.6m) with

commitments from LPs including insurer Misr Insurance Group.

Sawari Ventures backs developers of information communication technology, cleantech and hardware as well as education, healthcare and financial technologies. The capital from the latest fund will be deployed solely in its home country.

Misr joined Kuwait Investment Authority's Ekuity Holding vehicle and financial services firms National Bank of Egypt, Banque Misr, Banque du Caire and Suez Canal Bank in the vehicle's EGP440m second close.

European Investment Bank, CDC, Proparco, Dutch Good Growth Fund and Sango Capital had been among the LPs that supplied the earlier EGP650m.

Cisco allocates capital to Algebra Ventures fund

Egypt-headquartered VC firm Algebra Ventures has launched its



TDK Ventures has closed its second fund

\$90m second fund with backing from limited partners including networking technology provider Cisco, according to TechCrunch.

European Commission, European Bank for Reconstruction and Development, Egyptian-American Enterprise Fund and International Finance Corporation are also among the LPs, as are undisclosed private family offices.

Algebra Ventures has not disclosed how much it has raised but it expects to reach a first close in the third quarter of 2021. It closed its first fund at \$54m.

Corporates help plant capital in The Seed

Japan-based VC firm The Seed's second fund has reached a ¥600m (\$5.5m) first close featuring commitments from investors including advertising agency Daiko Advertising and online gifting platform Giftee.

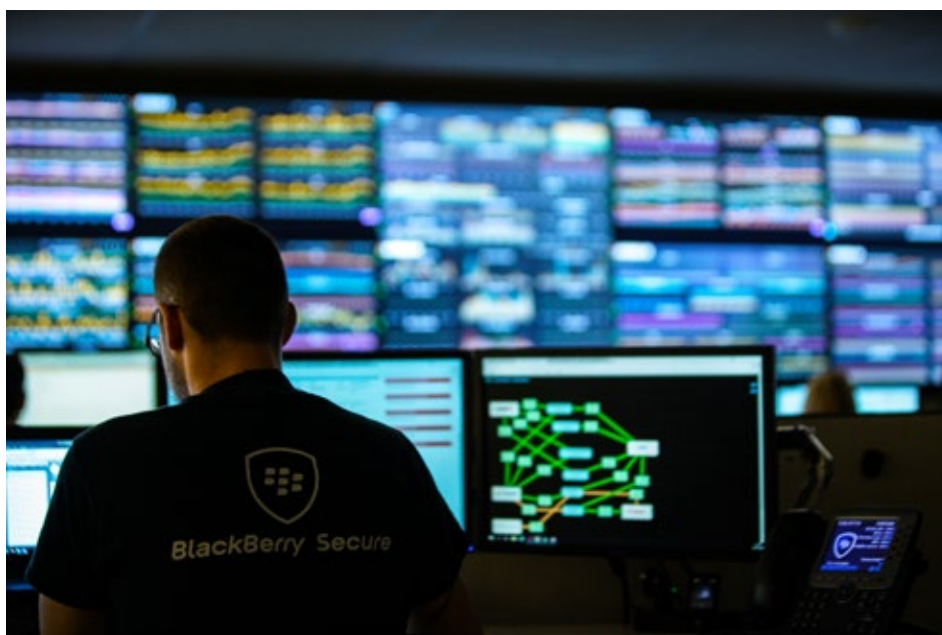
TheSeedCapital2's first batch of LPs also featured private investors including Tommy Tomishima, Ryōsuke Matsumoto, Shinsuke Usami and Kazutaka Muraguchi.

The seed-stage vehicle has a target of up to \$13.7m for its close and is set to operate for 10 years, targeting entrepreneurs based in Tokyo, Osaka and Kyoto.

Asahi Kasei creates second accelerator

Japan-based chemicals and materials supplier Asahi Kasei and its housing business, Asahi Kasei Homes, have partnered open innovation group 01Booster to form a startup accelerator.

Life Co-Lab will focus on developers of technologies and services related to lifestyle, smart cities and homes. The application



BlackBerry (Network Operations centre in Waterloo, Canada, pictured) has set up a CVC fund

window will close on June 18, ahead of a pitch event in August.

The four-month programme will begin in September with a demo day scheduled for December. Participants will have access to Asahi Kasei Group's research equipment, industry know-how and a network of more than 40,000 global employees.

Merlin magics up investment unit

US-based cybersecurity provider Merlin Cyber has developed its corporate venturing unit to help startups tap public funding.

Merlin Ventures said its growth programme would provide up to \$5m in funding for series A or B-stage cybersecurity software-as-a-service startups. Merlin will also help the companies access public procurement funding through its FedRAMP certification accelerator.

Seth Spergel has been managing partner of Merlin Ventures since 2018 after working at In-Q-Tel. He said: "It can take up to two years and \$2m for a company to become FedRAMP certified. With our

programme, we take companies there in a fraction of the time and at a fraction of the cost."

BlackBerry sets up \$50m fund

BlackBerry, a US- and Canada-listed communications services provider, has set up a \$50m corporate venturing fund.

The BlackBerry IVY Innovation Fund will target startups useful to data-driven automotive ecosystem providers. Announced in December 2020 as part of a multi-year, global agreement with Amazon Web Services, BlackBerry IVY is an intelligent vehicle data platform.

The fund will provide portfolio companies with cash and access to BlackBerry's customers as well as up to \$100,000 in AWS credits.

Qingsong Fund brings in \$153m

China-based VC firm Qingsong Fund has raised RMB1bn (\$153m) to close its fourth renminbi-denominated fund, which was backed by publishing firm Time Publishing and Media, DealStreetAsia reported.

The fund's other limited partners include the Chinese-state managed Qianhai Inno-Tech Investment fund as well as undisclosed corporate backers, government-backed funds, funds of funds, family offices and individual investors.

Qingsong was founded in 2012 and focuses on areas such as education, consumer brands and technology. It manages six renminbi-denominated investment funds and has roughly \$460m of assets under management.

Line Ventures and YJ Capital join forces

Line Ventures and YJ Capital, the corporate venturing subsidiaries of messaging platform developer Line and internet company Yahoo Japan,

have merged with ¥30bn (\$271m) of capital.

Japan-headquartered Yahoo Japan and Line, the messaging platform formed by South Korea-headquartered internet group Naver, closed the merger earlier this month. The new entity will operate as Z Holdings, a publicly-listed holding company backed by Naver and telecommunications firm SoftBank.

The CVC vehicle, Z Venture Capital, will invest in developers of technology related to Z Holdings' group businesses, such as consumer services, e-commerce, healthcare, cybersecurity, financial technology and enterprise software.

Fujitsu finds cash for corporate venturing fund

Japan-headquartered electronics producer Fujitsu has launched a CVC vehicle called Fujitsu Ventures Fund with ¥10bn (\$90.3m) in capital.

Fujitsu Ventures Fund will back developers of innovative technology which can inform the digital transformation of its parent company, and will invest across the United States, Europe, Israel and its home country.

The corporate formed CVC funds in 2006, 2010 and 2015, the last of which was equipped with \$42m in cash and was established the same year as its Fujitsu Accelerator subsidiary.

People

Lynch and Skoberne join GV

- > Cai leaves SoftBank for B Capital
- > Ishimwe promoted at Intel Capital
- > Sobajima leaves KDDI to set up firm

By James Mawson, Robert Lavine, Thierry Heles,
Liwen-Edison Fu and Jordan Williams

GV, a corporate venturing arm of US-based internet technology group Alphabet, has hired Daniel Lynch as an executive venture partner and appointed Mojca Skoberne to an entrepreneur-in-residence position.

Lynch is serving as chairman of five biopharmaceutical companies: Xilio Therapeutics, SpringWorks Therapeutics, Blueprint Medicines, Translate Bio and BlueBirdBio, having previously held similar positions at peers including Surface Oncology, Bind Therapeutics and Nimbus Discovery.

Skoberne was a senior vice-president for gene therapy

developer Repertoire Immune Medicines, where she offered her expertise in immunology, cancer and infectious diseases. At GV, she will mentor entrepreneurs building immunotherapy-themed companies.

Nice leaves Nationwide for StoicLane

Jake Nice, principal at Nationwide Ventures, the corporate venturing unit of US-based insurer Nationwide, has left to help set up StoicLane, an investment holding company for finance, insurance, and real estate businesses.

Nice is executive vice-president of strategy and corporate

development at StoicLane, which has serial fintech founder Al Goldstein as chairman and chief executive.

Nice had worked with Goldstein at Avant, an online lending platform, before Nationwide recruited him for its ventures unit in March 2018.

Cai leaves SoftBank for B Capital

Daisy Cai, former partner at Japan-based internet and telecoms group SoftBank's



Vision Fund, has joined venture capital firm B Capital Group to open its China office.

In April 2020, Cai accepted a partner position at the Vision Fund. In 2018, Cai was a founding partner at Gaocheng Capital, a growth-stage private equity firm backed by hedge fund manager Hillhouse Capital. She joined managing partner for China-based internet company Baidu in 2015 as managing partner, working on early-stage fund Baidu Ventures and late-stage vehicle Baidu Capital.

Ishimwe promoted at Intel Capital

Josiane Ishimwe, an analyst at Intel Capital, the corporate venturing unit of US-listed chip and data company Intel, has been promoted to investment manager.



Ishimwe originally worked as an intern at Intel Capital in its 2017 programme as part of a diversity initiative for the next generation of venture capitalists.

At the time she was majoring in chemical engineering at Howard University with a minor in computer science. She joined Intel the following year as an analyst.

Sobajima leaves KDDI to set up firm

Kenyu Sobajima, senior director of investments at Japan-based telecoms operator KDDI and its Open Innovation Fund, has left to set up Tomorrow Access.



Sobajima, a GCV Emerging Leaders 2021 award winner, had worked at KDDI for 25 years and for its corporate venturing unit since 2014. Following his relocation from Japan to the US in 2015, his deals included Swift Navigation, Mojo Vision, Secret Double Octopus, Mad Street Den, Allganize, Jibo, August Home, Monohm, Ossia, Pogoseat, Issuu, Edmodo and VentureBeat.

KDDI Open Innovation Fund is a corporate venture capital (CVC) vehicle for Japan-headquartered telecommunications firm KDDI that is jointly run by venture capital firm Global Brain (GB).

Graves leaves Tin Shed for Bass Pro

Phil Graves, managing partner at Tin Shed Ventures, the \$79m corporate venturing unit of US-based outdoor clothing retailer Patagonia, and a GCV Powerlist 2020 award winner, has joined fishing company Bass Pro Shops as chief sustainability officer.



Graves originally founded Patagonia's corporate impact venturing fund \$20 Million & Change in 2013, when it won GCV's fund of the year, before changing the fund's name to Tin Shed Ventures in 2016.

At Tin Shed, his portfolio companies included Mango Materials, which uses waste methane to produce biodegradable polymers that are converted into products such as polyester replacements for textiles and packaging for cosmetics, and Bureo, which turns used fishing nets into Patagonia products.

Vazquez joins Amazon's \$2bn Climate Pledge Fund

Adiari Vazquez has joined US-listed online retailer Amazon's sustainability-focused corporate venturing unit as an investment manager.



At Amazon's \$2bn Climate Pledge Fund, Adiari said in her LinkedIn profile she was "investing to bend Amazon's carbon emissions curve" at the company's \$2bn Climate Pledge Fund.

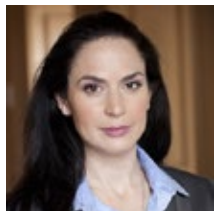
She had spent a year as a UK-based associate at Next47, a corporate venture capital vehicle owned by Germany-headquartered industrial equipment and appliance producer Siemens, before leaving in 2020 to set up Braver Ventures.

Vazquez was a Portugal-based investment manager at Caixa Capital, the corporate venturing fund operated by financial services firm Caixa Geral de Depósitos, for more than three years, having

joined in late 2015, and oversaw early-stage deals in smart energy and materials.

Blackstone hires Oron for Israel expansion

Blackstone, a New York-listed alternative investments manager, has hired Yifat Oron as a senior managing director and head of the firm's new office in Tel Aviv, Israel.



Prior to joining Blackstone, Oron was the CEO of LeumiTech, a subsidiary of Bank Leumi, and, earlier, a partner at Vertex Venture Capital, an Israel-based venture fund subsidiary of Singapore state-backed Temasek.

She will lead Blackstone's growth and tech investments in Israel. Blackstone recently held the final

close of its oversubscribed, first \$4.5bn growth equity fund.

Foy goes forth to UTA Ventures

US-based talent manager United Talent Agency (UTA) has hired Clinton Foy as a venture capital partner for its corporate venturing arm, UTA Ventures.



UTA Ventures incubates and backs companies developing media and entertainment technology products. Foy will help unit head Sam Wick conduct equity investments and build fund strategies.

The move comes after nearly eight years as a managing director and venture partner at venture capital firm Crosscut Ventures from 2013, where Foy invested in a score of entertainment and gaming

technology companies including Streamlabs, Immortals and PlayVS.

Blake Byers exits GV

Blake Byers has stepped down as a general partner at GV, a corporate venturing arm of US-headquartered internet and technology group Alphabet, to launch what appears to be his own firm, Axios reported.



Byers has listed Byers Capital in the experience section of his LinkedIn profile with the title "Going Solo".

Byers Capital will invest evenly between technology and biotech companies at series A and B stage, and opportunistically in growth equity deals, according to Axios's sources. GV confirmed other investors at the firm would take some of Byers' board seats.

Analyses

- > Drones and robotics at all-time high last year
- > Deals in oncology are surging
- > Artificial intelligence space is following others to high valuations

By Robert Lavine and Kaloyan Andonov

Lilium to lift up on \$3.3bn reverse merger

Vertical take-off and landing jet developer Lilium went public by joining forces with a Nasdaq-listed special purpose acquisition company.

The Germany-headquartered company, which counts internet group Tencent among its backers, agreed to a reverse takeover with Qell Acquisition Corporation. The deal values the merged company at \$3.3 billion pro forma. It will take the spot on the Nasdaq Capital Market acquired by Qell in a \$330m initial public offering in October.

According to Forbes, the startup will raise nearly \$830m with the transaction, including a total of

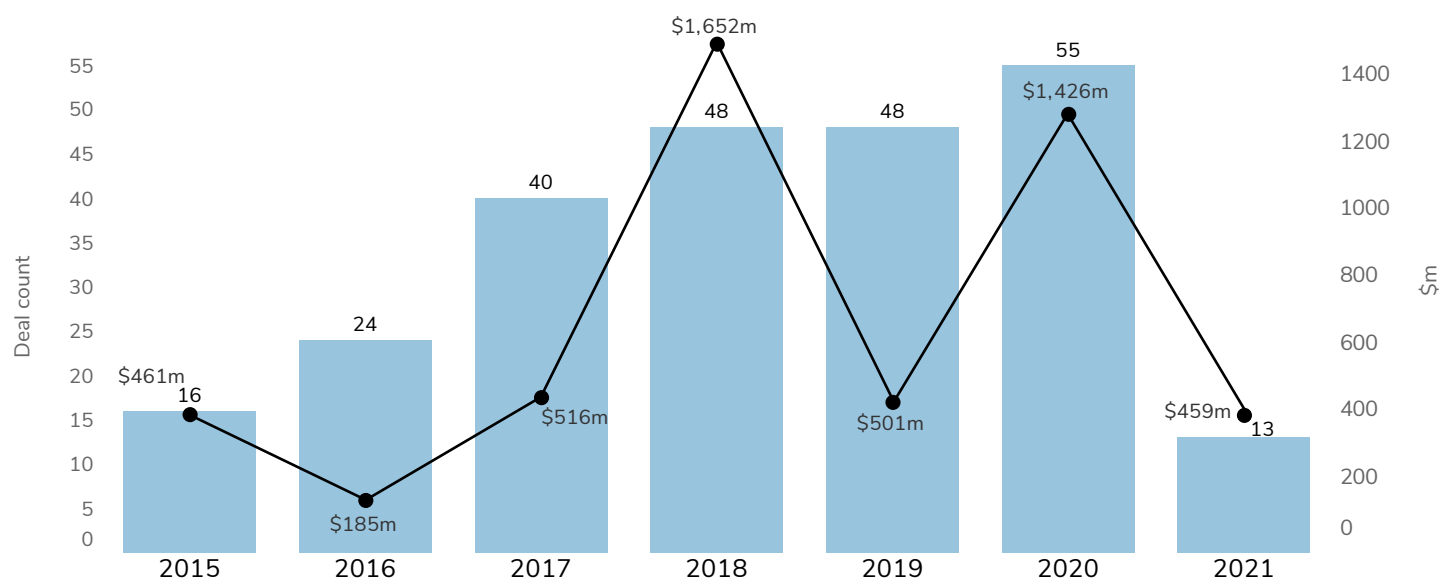
\$380m from the Spac as well as an additional \$450m in private investments in public equity. For the latter, Tencent, data analytics service provider Palantir and Spain-based construction firm Ferrovial joined forces with Baillie Gifford, LGT and its Lightrock subsidiary, Atomico, FII Institute, funds and accounts managed by BlackRock and private funds affiliated with Pimco to supply \$450m in financing.

Launched in 2015 as a spinout of Technical University of Munich's commercialisation arm, Unternehmertum, Lilium develops five and seven-seater electric vertical take-off and landing jets

which are being developed for use as urban airborne taxi and logistics service. The proceeds from the reverse merger will support the completion of Lilium's German manufacturing facilities, the launch of production jets and certification activities for the technology. A commercial launch of Lilium's jet is expected to take place in 2024.

The company is part of the broader drones and robotics space, which has been given much attention by corporate investors over the past decade. The number of corporate-backed deals in that space reached an all-time high at 55 last year, while total estimated capital in those rounds amounted to \$1.43bn.

Corporate-backed deals in drones and robotics



Source: GCV Analytics

Data as of March 30

Ikena goes public

US-based cancer therapy developer Ikena Oncology, which counts pharmaceutical firm Bristol Myers Squibb among its backers, closed its IPO at almost \$144m. It issued more than 7.81 million shares priced at \$16 each, which doubled to \$32 by the end of the first day of trading. The price has fallen back to roughly \$18 since, giving it a market capitalisation of around \$655m.

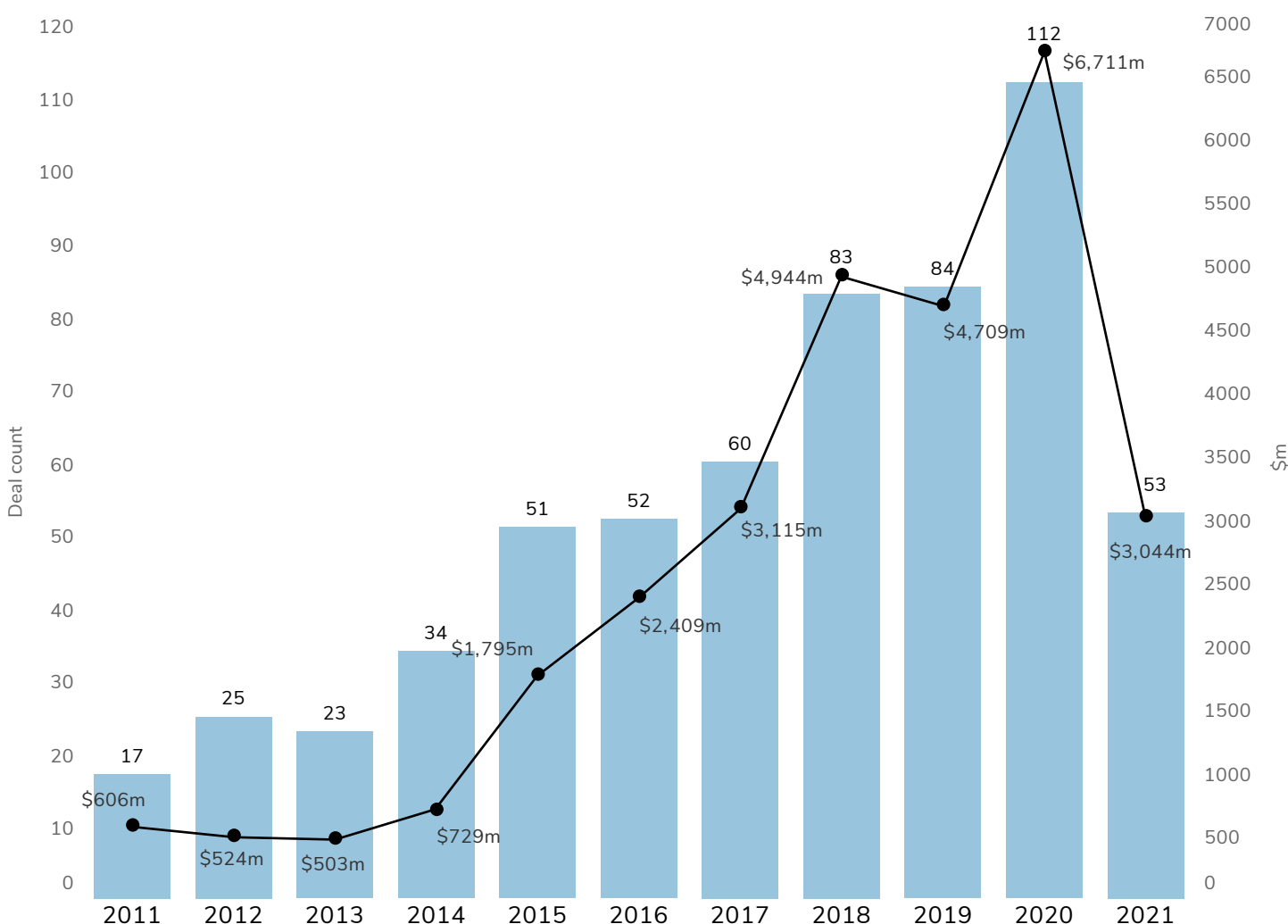
Founded in 2016, Ikena is developing cancer treatments designed to target key signalling

pathways that drive the formation and spread of cancerous cells. Its biomarker-driven cancer drugs are focused on a target in the KRAS signalling pathway, which is connected to KRAS mutations. It claims these are present in some 30% of cancers, particularly in pancreatic, lung and colorectal cancer. Proceeds from the IPO will support phase 1 or 1b clinical trials for four drug candidates.

The company is part of the larger cancer treatment and oncology space, which has received a lot of

attention from corporate venture investors. The number of rounds in emerging businesses reached an all-time high at 112 by the end of last year, having grown from a mere 17 in 2011. The total estimated capital committed in such rounds rose as well, hitting \$6.71bn – up over 10 times from the estimated \$606m in 2011. Just during the first three months of 2021, we have already tracked 53 deals in the oncology space, worth an estimated \$3.04bn. This growth may well translate into further exits in public markets in the near future.

Corporate-backed deals in oncology



Source: GCV Analytics

Data as of April 8

Groq computes a \$300m series C

US-based advanced computing technology provider Groq raised a \$300m series C round, which featured venturing subsidiaries of electronics manufacturer TDK and algorithmic trading firm XTX Markets – TDK Ventures and XTX Ventures.

Hedge fund manager Tiger Global Management and investment firm D1 Capital Partners co-led the round, which reportedly valued the company at over \$1bn. The fresh funding will be used to support the growth of its business, recruiting talent and product development. The company said

it had raised a total of \$367m in venture funding. TDK Ventures provided capital in a round of undisclosed size in August.

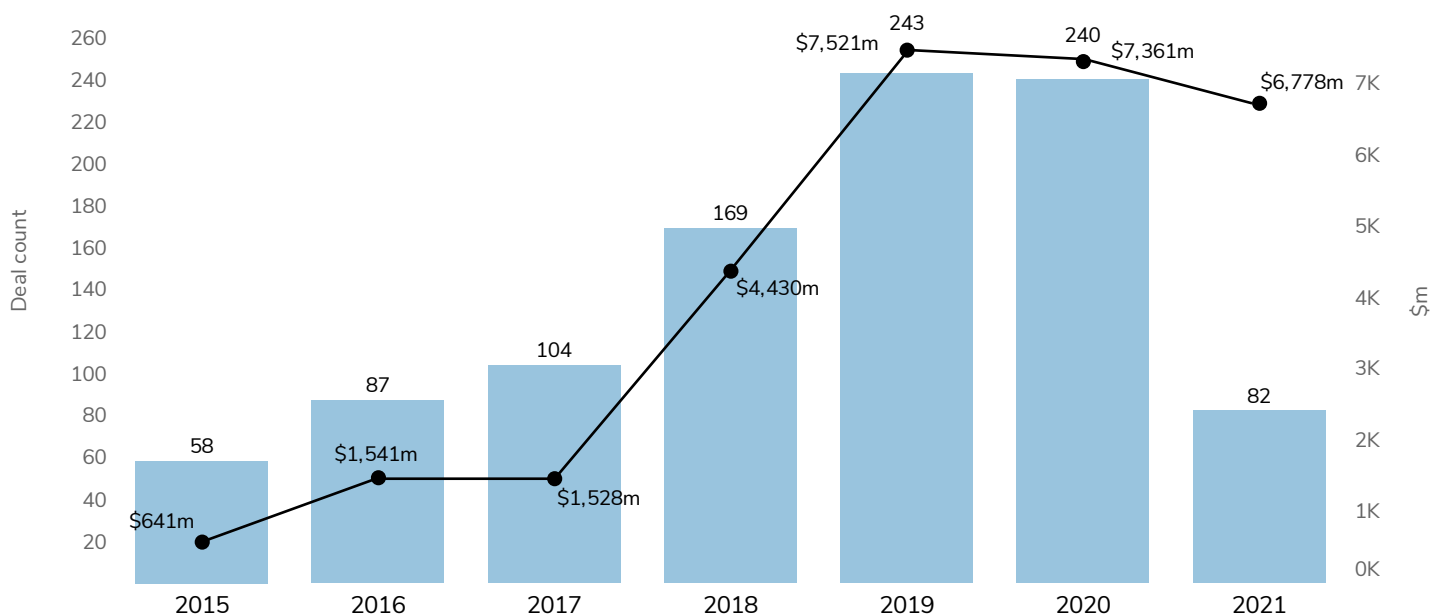
Founded in 2016, Groq develops hardware for use in advanced computing, AI and machine learning (ML) applications. It claims its hardware is capable of powerful computation with 50% less energy than its nearest competitor, reducing the user’s carbon footprint.

The company is part of the broader AI and ML tech space, which has seen much growth in corporate-

backed deals in the past few years. The corporate venture investor’ interest in this space has been sustained at high levels throughout 2019 and 2020, not only in terms of number of deals but also in total estimated capital committed in those rounds.

For the first three and a half months of 2021, we have already tracked 82 deals, worth an estimated \$6.78bn, clearly suggesting a surge in valuations as the one we have witnessed in nearly all sectors since the beginning of the year.

Corporate-backed deals in artificial intelligence and machine learning



Source: GCV Analytics

Data as of April 15



Comment

Structuring a CVC: ensure long-term commitment

- > Industry players will fear the corporate will pull out
- > The CVC should be autonomous to avoid this
- > It should be in sole charge of the funds committed

By Patrick Flesner
Partner, LeadX Capital Partners
[LinkedIn](#)

Stephan Bank
Partner, SMP
[LinkedIn](#)

Many executives that want to initiate corporate venturing activities already struggle answering the question how to set up a CVC organisation for success. The six guiding principles described in this series of articles are supposed to help answer this question.

Guiding Principle 4: Ensure long-term commitment

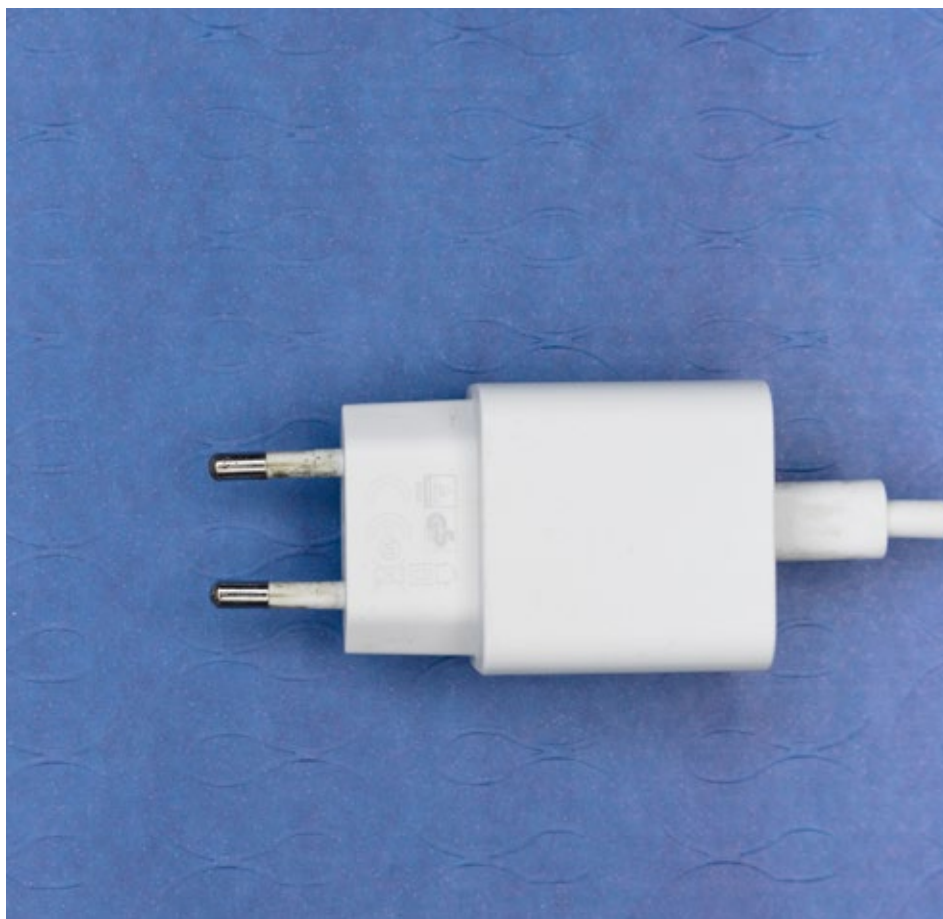
When dealing with corporate venture capital (CVC) units, traditional industry players often wonder whether the corporation can – at any time – pull the plug on the CVC unit's activities. The answer to this question often

has significant repercussions on the CVC unit's reputation in the market, its success in competing for the most attractive startups and, eventually, its performance. If the CVC is not set up for the long run, it is bound to fail from the start.

We believe that it is imperative for a successful CVC unit to be able to demonstrate that it can materialise on its (often unspoken) promise of deep pockets, its intention to leverage the corporate assets and that the CVC's commitment is of a long-term nature, irrespective of a potential reshuffle of the corporation's management board and its appetite for conducting venture investments.

As is the case with investment and divestment decisions, the structure of the CVC unit should, therefore, ensure autonomy in utilising the entire volume of the funds dedicated by the corporation. In essence, this also means that once the decision is taken by the corporation to commit certain funds to the CVC unit over a certain period of time, this decision should be binding and, in principle, irreversible.

Apart from the fact that a move away from a commitment once entered into will most certainly result in a branding as an unreliable investor (which in itself should prove a robust deterrent), this goal can be achieved by introducing safeguards in the CVC unit's governing documentation. The CVC unit's management team may have a say in changes to the CVC unit's strategy which directly relate to a reduction of the corporation's commitment. Such decisions may either require the approval of the CVC unit's key persons or of the management team's vehicle, which is part of the CVC unit's structure.



“A move away from a commitment once entered into will most certainly result in a branding as an unreliable investor”

Patrick Flesner and Stephan Bank

Sector report

Media disruption continues through the pandemic

- > Deal count and dollars y-o-y largely flat
- > Exit count up slightly but dollar value down
- > Cautious move upwards in funding initiatives

By Kaloyan Andonov
Analyst

Media is among the most disrupted sectors in the past several decades by the mass adoption of new technology. Newspapers, magazines and books have largely gone digital, while subscription streaming services have practically replaced DVDs and even television channels. Big tech companies like Google and Facebook dominate digital advertising which has replaced Madison Avenue.

The paradigm shift is due to a blend of internet-connected electronic gadgets catering to consumers' convenience and consumers themselves turning into content creators and providers. The impact of the pandemic and the nearly worldwide lockdown has varied.

The World Economic Forum (WEF) deems the pandemic's

The GCV Analytics definition of the media sector encompasses audio and video content, games, gaming and esports, social media networks and instant messaging services, print and online publishing, sports entertainment and gambling, virtual and augmented reality content and other media products and services.

impact to be mixed, while the sector's near-term prospects for consumption and expenditure are patchy: "Accenture forecasts that the global GDP contribution of the communications, media and platforms sectors, which include traditional and digital-native media companies, will see a compound

annual growth rate (CAGR) of 8% from 2019 to 2022, compared to a 0.5% CAGR across all industries. Despite this relatively strong anticipated growth, the industry is not insulated from the economic fallout of the covid-19 pandemic. Monthly global household expenditure on media and entertainment in 2022 is predicted to be 30-40% less compared to 2019, while global advertising spending for 2020 is expected to decrease 8.1% from 2019 levels." This paints a challenging picture.

One of the key implications of this, according to the WEF, is a consolidation of direct-to-consumer platforms and premium niches. It forecasts "economic pressures and content supply shortages will result in eventual consolidation with mid-market players most at risk". Implications the WEF also identified include: demanding consumer expectations, which will generate new "must-haves" in the end-to-end user experience; increasing challenges for content monetisation due to competition between professional and "amateur" content creators; and the necessity of ad-based and commerce models to evolve into something like a subscription-based business model. It also foresees more regulation, related primarily to data privacy, antitrust and misinformation issues, but contends that regulatory hurdles is not likely to hold back disruptive forces.

A report entitled "Perspectives from the Global Entertainment & Media Outlook 2020–2024" by auditing and consulting firm PwC comes to similar conclusions: "Entertainment and media companies have to meet consumers where they are – and in 2020 that means predominantly at home and predominantly online.

Jeffrey Li, managing partner, Tencent Investment

For the past decade, Zhaohui "Jeffrey" Li has been a managing partner at Tencent Investment and a general manager at Tencent M&A, subsidiaries of the largest internet, entertainment and gaming company dominating China's artificial intelligence, enterprise, automotive and security industries.

Tencent Investment has made more than 800 investments encompassing consumer, education, financial, gaming and social media technologies.

Li said in a WeChat statement last year: "In the post-covid-19 era, consumer psychology and behaviour will see great change."

He added in April 2020 that the pandemic was different from the 1997 Asian financial turmoil and the 2008 global financial crisis. "The current market is

still relatively stable, and the global economic liquidity is still within a reasonable range."



In the post-pandemic era, China's economic growth drivers are expected to shift from an export-oriented model to a domestic-demand approach, stimulating the overall upgrade of the industrial chain. Chinese consumer brands have become an important trend driving economic growth.

"Digital transformation will become a new trend in all walks of life," Li continued, "enterprise services would be a new focus. In the US, to-business investments account for half of VC and PE deals; while in China, they are only a small portion compared with to-consumer ones."

Companies simultaneously have to prepare to meet them where they will be four years from now. What will be required in 2024 to build and maintain direct-to-consumer relationships, to have enough differentiation or scale to compete, and to invest in the right technologies while building trust? Increasingly, companies will have to focus on mastering the intricacies of consumer experience. Providers have to continually figure out ways to delight consumers so they are willing to pay for the delivery of content and services, and must create differentiated experiences if they are to increase subscription charges over time."

Advertising used to be dubbed the life-blood of the media industry

and it still occupies a central and connecting role with other sectors. However, it has not remained unscathed by disruption, with the rise of digital advertising and marketing. Alphabet and Facebook have overtaken Madison Avenue and account for nearly 60% of the market share of digital advertisement revenues, according to various estimates.

When the pandemic broke out, short-term prospects for advertising were not enviable, as during a downturn companies' marketing budgets tend to get reduced. However, some expected that digital advertising (that is Alphabet and Facebook) would be considerably less affected, as digital ads are considered to

be more effective in reaching a target audience. Indeed, the two big tech companies have so far been reporting higher and higher earnings. Increasing returns to scale has been a benefit not only for Western digital behemoths like Alphabet and Facebook, though. China-based internet conglomerate Tencent also enjoyed enviable returns and its stock became the seventh largest company by market capitalisation in the world. It is therefore reasonable to expect we will continue to see corporate interest in adtech businesses.

In the medium term virtual and augmented reality (VR and AR) content and tech is an area with much potential. 5G connectivity is expected to boost further adoption of VR and AR. According to the latest report by Market Research Future, the global VR market could reach \$101.2bn by 2027, implying a CAGR of 37.4%. The report notes the use of VR across sectors like education, life sciences and gaming. It also points out that the pandemic has given it a boost: "Virtual reality had provided customers an escape through realistic games and immersive experiences. Some companies are capitalising on the pandemic for offering virtual tours of places at cost-effective prices. Integration of VR into mixed reality is likely to be lucrative for VR developers in the coming years. Emergence of startups and constant funding for developing feasible applications of VR are likely to continue despite the pandemic."

The broader gaming space is has seen a lot of growth, in the short and long run, driven mostly by mobile gaming over the past decade. According to the most recent report by consulting firm Mordor Intelligence, the global gaming market was estimated

Annabelle Long, founding and managing partner, Bertelsmann Asia Investments

Yu "Annabelle" Long is the founding and managing partner for Bertelsmann Asia Investments (BAI), the China-based corporate venturing arm for Germany-headquartered media group Bertelsmann.

Bertelsmann chairman and chief executive Thomas Rabe said: "Through [strategic] investments, we ensure the transfer of knowledge both about digital trends that support our transformation and about promising markets. Our investment fund BAI, in particular, is very successful."

Having made more than 160 investments over the past decade since Long founded BAI in 2008, the group now manages more than \$3bn. Long has led the team to more than 10 initial public offerings and some 20 unicorns.

at \$162bn last year and forecast to reach \$295.6bn by 2026 at a CAGR of 10.5%. The report identifies cloud gaming as major driver for disruption and is increasingly seen as a serious competitor to traditional gaming. It points as example how this trend has made video game majors such as Sega, Ubisoft, Epic Games, Atari, Warner Bros and Disney Interactive studio strike partnerships with cloud gaming providers like Onlive to distribute their games.

Within gaming, esports have become an inseparable part of the industry. Multiplayer video-game competitions have invigorated the

Long is chief executive of the Bertelsmann China corporate centre and on the company's



group management committee, which advises the executive board on corporate strategy and development. She was presented the group-level Bertelsmann Entrepreneur Award and Bertelsmann Financial Performance Award for her outstanding contribution.

Long said: "BAI is one of the best-known and most successful funds in the Chinese investment scene at this point. We are pleased that, with such a small team, we have been able to make a sizeable contribution to a global media corporation like Bertelsmann.

"There is probably no other company at Bertelsmann that generates such a high profit per capita as the nine-member BAI team – and we are proud of that."

bottom lines of game publishers and marketers. According to the Mordor Intelligence report: "Esports are witnessing substantial market demand in the current market scenario and are thus driving the overall gaming industry across the globe. Riot Games with League of Legends and Defense of the Ancients 2 are two of the notable examples of influential actors in the esports business. South Korea is considered the country of origin of esports. Even though the US overtook South Korea in terms of revenues in the esports business, it still hosts one of the biggest tournaments in the world."

Key sub-sectors

Social media

Netherlands-listed technology investor Prosus, which was formed out of the corporate venturing assets collected by South Africa-listed media group Naspers, has sold 2% of China-based gaming and social media group Tencent for \$14.7bn.

This is the world's largest-ever block trade – 191.89 million shares for HK\$114.1bn – but leaves Prosus still holding 28.9% of Tencent, according to newswire Reuters.

The block trade, the usually private, single trade of a large amount of securities, surpassed the previous record set in 2018 when Naspers also sold 2% of Tencent for \$9.8bn, Refinitiv data showed. Its remaining stake is worth about \$200bn, from an original \$31m corporate venturing deal struck 20 years ago.

Bob van Dijk, chief executive at Prosus, said: “The proceeds of the sale will increase our financial flexibility, enabling us to invest in the significant growth potential we

see across the group, as well as in our own stock.”

Prosus, which also invests in online food delivery platforms, classified marketplaces and digital payments businesses, has built up its war-chest for new and existing investments given the rapid scaling up of the later stage innovation capital ecosystem.

Global venture capital investments hit \$125bn in the first quarter, the first time the figure has surpassed \$100bn in a quarter, according to data published by Crunchbase, even though deal volumes held relatively stable.

The opportunity for social network or “platform economy” companies to dominate across sectors or verticals remains, especially as Tencent peer Alibaba’s share price rose in early April after it was able to have the term written into law.

This is particularly the case as finance becomes embedded into media. As James Thorne, a venture capital reporter at PitchBook,

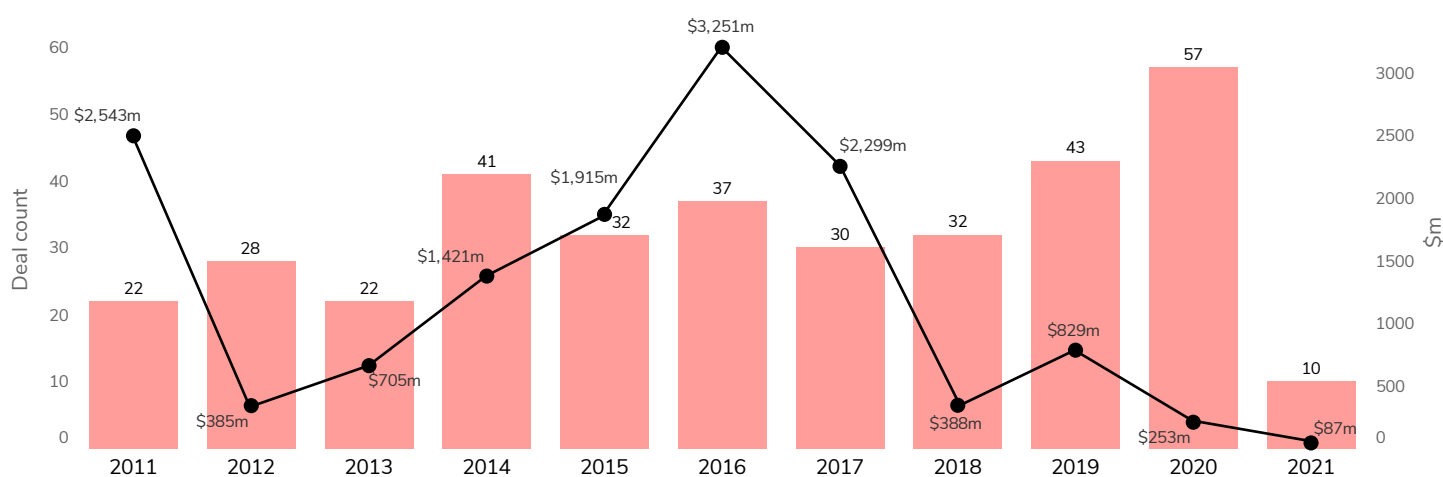
noted, Angela Strange, general partner at VC firm Andreessen Horowitz (A16Z), made the case in 2019 that most people would be working in financial services soon, even if we do not change jobs, as finance becomes embedded into software.

At that point, media and content becomes the differentiator, which is why A16Z calls itself a media company that monetises through venture capital.

In his annual letter, Jamie Dimon, chief executive at investment bank JPMorgan Chase, said: “Fintech’s ability to merge social media, use data smartly and integrate with other platforms rapidly (often without the disadvantages of being an actual bank) will help these companies win significant market share.

And this helps explain why even in a world where media advertising is dominated by Facebook and Google that there remains so much attention and focus on social media and networks.

Corporate-backed deals in social media, networks and instant messaging



Source: GCV Analytics

Data as of March 30 2021

Sports and gambling

Things are heating up in Italy’s media landscape as a microcosm of wider changes in the sports and gaming ecosystem. The country’s main phone operator, TIM, has returned as a “long-term investor in venture capital” through the anchor commitment to a €100m UV T-Growth fund managed independently by United Ventures, while Nerio Alessandri, founder and executive chairman of Italy-listed fitness equipment supplier Technogym, has launched Wellness Venture.

UV T-Growth, managed by Fabio Pirovano and Damiano Coletti, targets a wide swathe of digital innovation, including gaming. Similarly, Wellness is targeting

digital projects in general but in particular in sports and fitness. A spokesman added it was “a joint venture between Technogym and TGH (majority Technogym shareholder) which aims at developing innovative technologies and business models in wellness, not necessarily by acquisition.”

There are plenty of opportunities in sports and gaming in the digital age. Online gambling and advertising, electronic as well as physical sports and gaming and unbundling of viewers from cable or television packages are coalescing to create plenty of disruption.

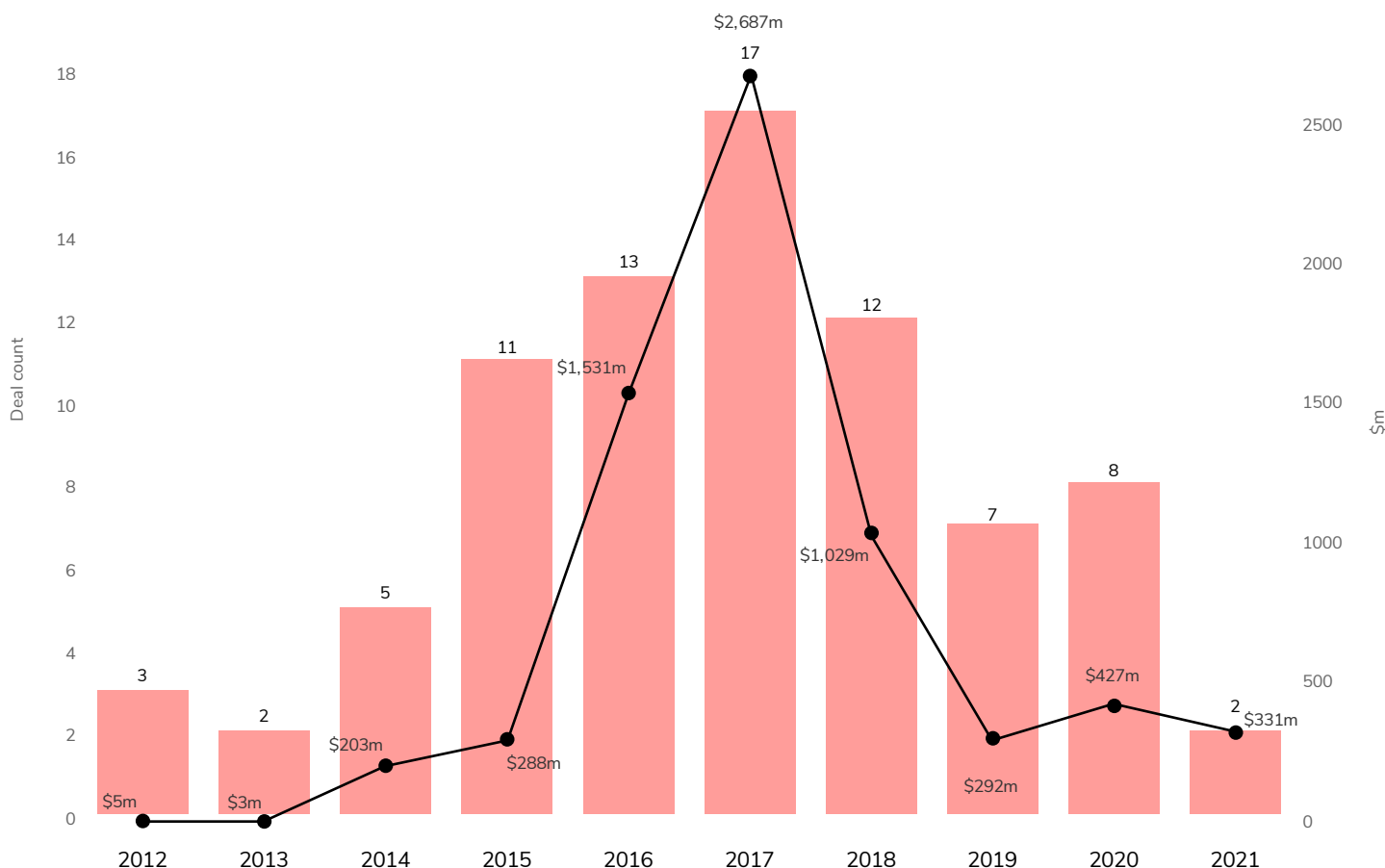
The latest is Amazon, which acquired Twitch for in-game streaming and chats, paying \$11bn for exclusive rights to stream

Thursday night National Football League games on its Prime service.

These are now dozens of VC funds targeting games, which is a far bigger market than films. Most recently, the Games Fund has raised \$50m for a game-focused venture capital fund to invest in early-stage games in both Europe and the US, according to VentureBeat.

Maria Kochmola and Ilya Eremeev started the fund having both worked at Russia-listed internet group Mail.ru’s My.Games division, which started a game fund called MGVC, VentureBeat said. Kochmola was the investment director at MGVC since its inception in 2017, and she led more than 35 investments with six exits.

Corporate backed deals in sports and gambling



Source: GCV Analytics

Data as of March 30

Audio and video

Twitch viewership doubled during lockdown to more than 6 billion hours. As well as seeing zombie battles or car chases as people played computer games – the traditional market for Twitchers – they tuned in watch people sit in front of their webcams and talk.

Video game live streaming may be the future of entertainment but, three years ago, Twitch spun off the talk-only feature into “Just Chatting” and once the coronavirus pandemic struck, the category exploded, according to Quartz. And audio more broadly has reaped the benefits.

Audio-only startup Clubhouse said it had raised yet another, undisclosed-size round of funding in mid-April. The Information reported Clubhouse reached a \$4bn valuation three months after a round valuing it at \$1bn.

It came even as larger social media players look to copy its model. Social network Facebook said it would allow users to post short-form audio clips called “soundbites”, host live audio rooms (as Clubhouse does), and discover podcasts through the Facebook platform, while tech company Apple has unveiled a subscription podcast service and audio

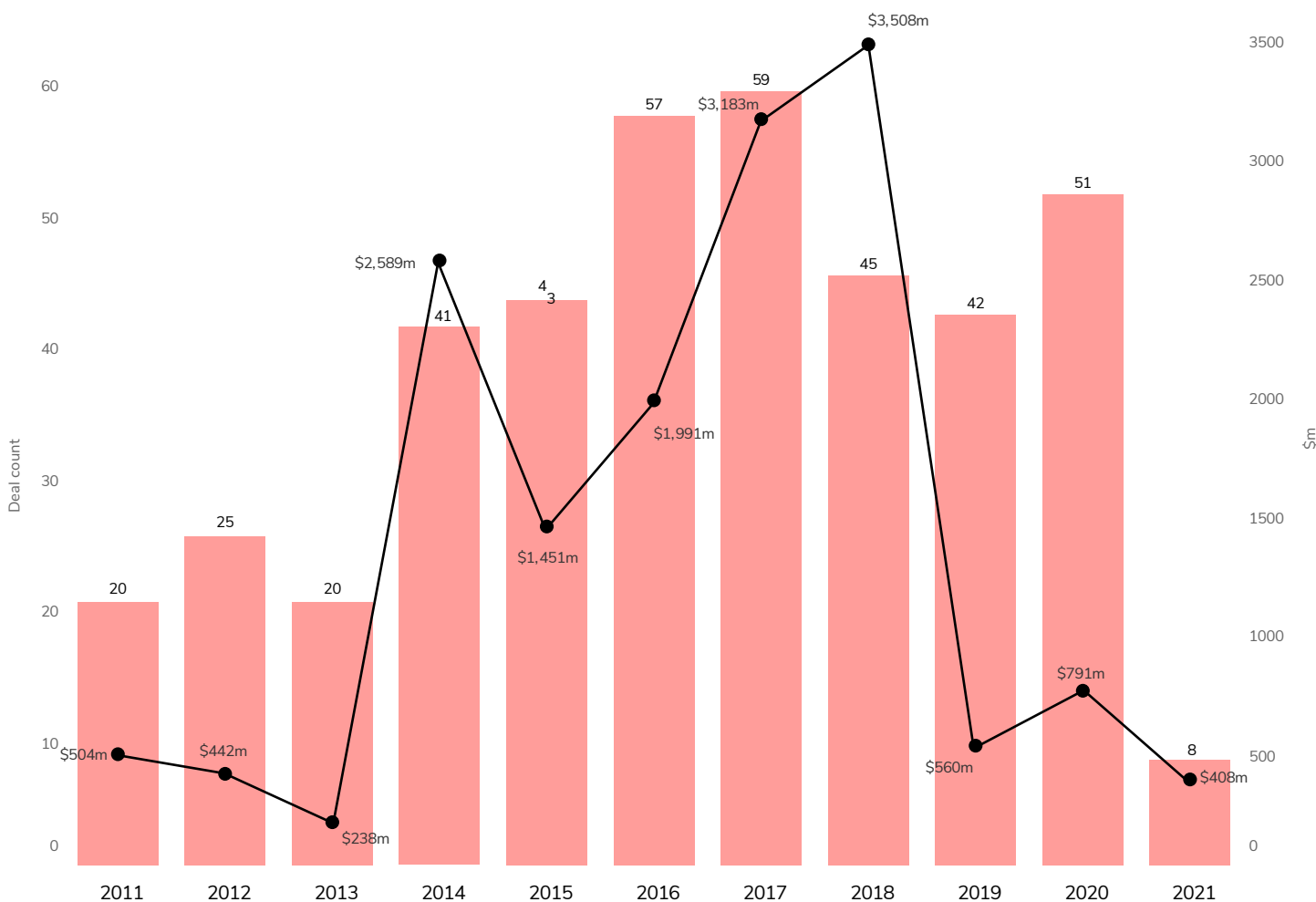
streaming service Spotify is set to announce one.

But while there is excitement around audio and chat, the heavy content creation has been in video, despite the implosion at short-form content creator Quibi in October after raising \$1.75bn in the previous two years.

Other content companies, such as Patreon and Masterclass, have also raised big rounds. But the potential comes when the content drives a marketplace that forms around it.

Come for the cat video or chat and stay to buy something has long been the strategy for media.

Corporate-based deals in audio and video content



Source: GCV Analytics

Data as of March 30



Apple's AirTag keeps track of things

Virtual and augmented reality

Apple has introduced AirTag, “a small and elegantly designed accessory that helps keep track of and find the items that matter most with Apple’s Find My app”.

AirTags also go beyond being a helpful way to find your keys or wallet by being potentially an important link into the metaverse – the symbiotic joining of physical and virtual worlds.

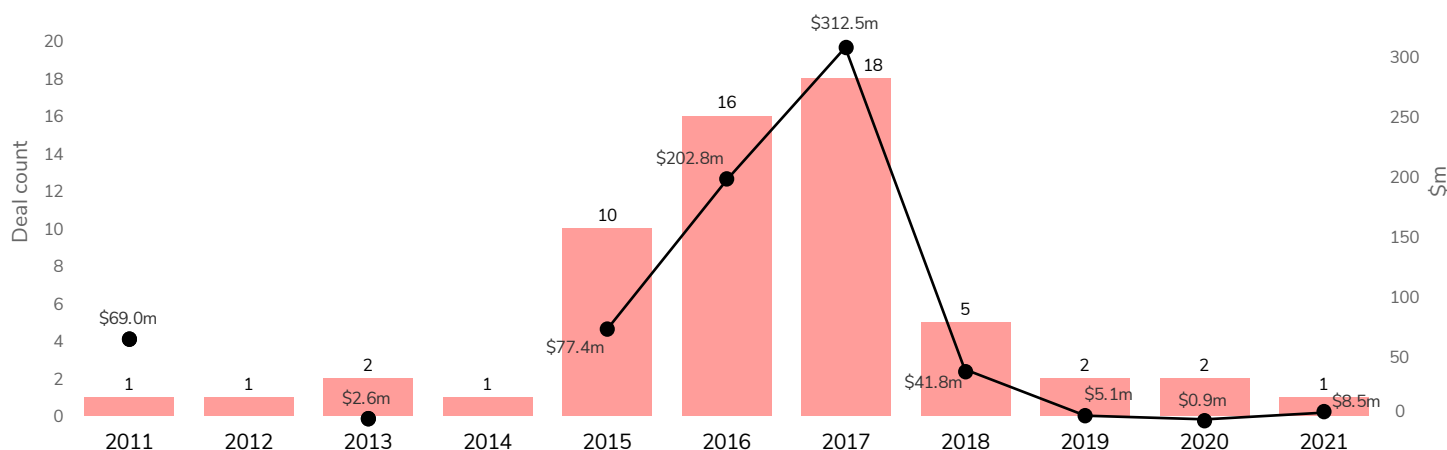
Once you can connect people and things in the physical world beyond images taken from satellites then it becomes easier to create the equivalent of digital twins in the virtual one.

Mixed, augmented or virtual reality is already here as the industry moves from the trough of disillusionment after years of earlier hype. Surgeons have been using the Microsoft HoloLens in operating

theatres since 2018, while cyclists can use Raptor, a combination of a cycling computer and an AR system.

And the deals are starting to flow again. Holoride, a two-year-old, mixed reality in-vehicle media platform spinoff from car maker Audi last week raised €10m in its series A round led by Sweden-based software development company Terranet.

Corporate-backed deals in virtual and augmented reality



Source: GCV Analytics

Data as of March 31

Digital marketing and adtech

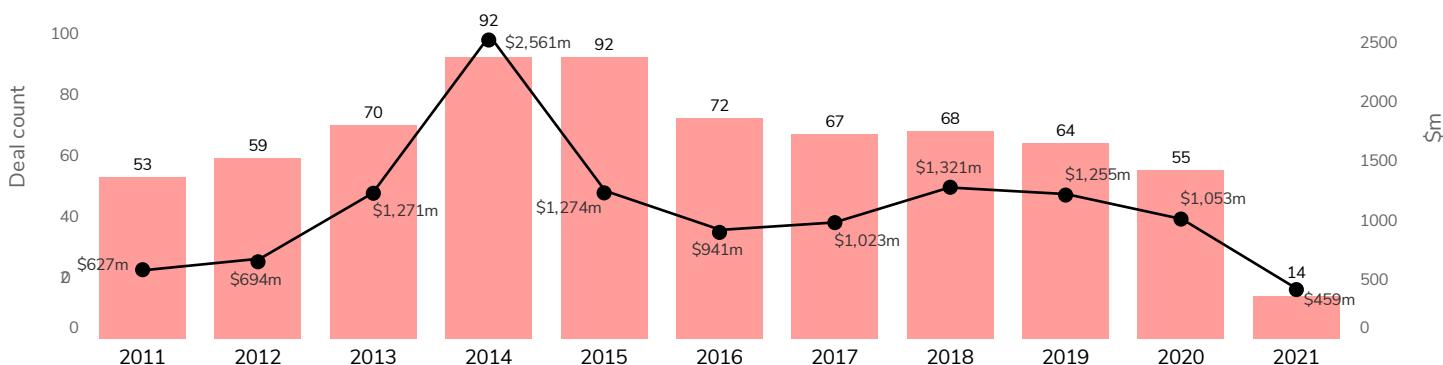
US-based customer experience software provider ActiveCampaign received \$240m in series C financing from a host of investors including quantitative trading firm Susquehanna International Group, which committed capital via its Susquehanna Growth Equity subsidiary. Other backers of the round were hedge fund manager Tiger Global Management, which led the round, investment firm Dragoneer and growth equity firm Silversmith Capital Partners. The round valued ActiveCampaign above \$3bn. The proceeds will be used for product development, international growth and expansion of the company’s partner ecosystem initiatives.

Founded in 2003, ActiveCampaign has developed a customer experience automation platform, using machine learning technology to automate customer experience on behalf of businesses. It combines email marketing and marketing automation tools with customer relationship management software, enabling personalised marketing to be delivered across a variety of channels including email, social media, messaging and chat. The platform counts some 145,000 business users.

ActiveCampaign is part of the broader digital marketing and

adtech space, which has received much attention from corporate venture investors over the past decade. Over the past few years, the number of corporate-backed deals has remained somewhat flat and in 2020 it even registered a slight drop. Similarly, the total estimated capital in those

rounds remained at broadly the same level since 2016, hardly suggesting any surges in valuations. This, however, may change going forward given the overall exuberance and upwards pressure in valuations in nearly every innovation space venture capitalists invest in.

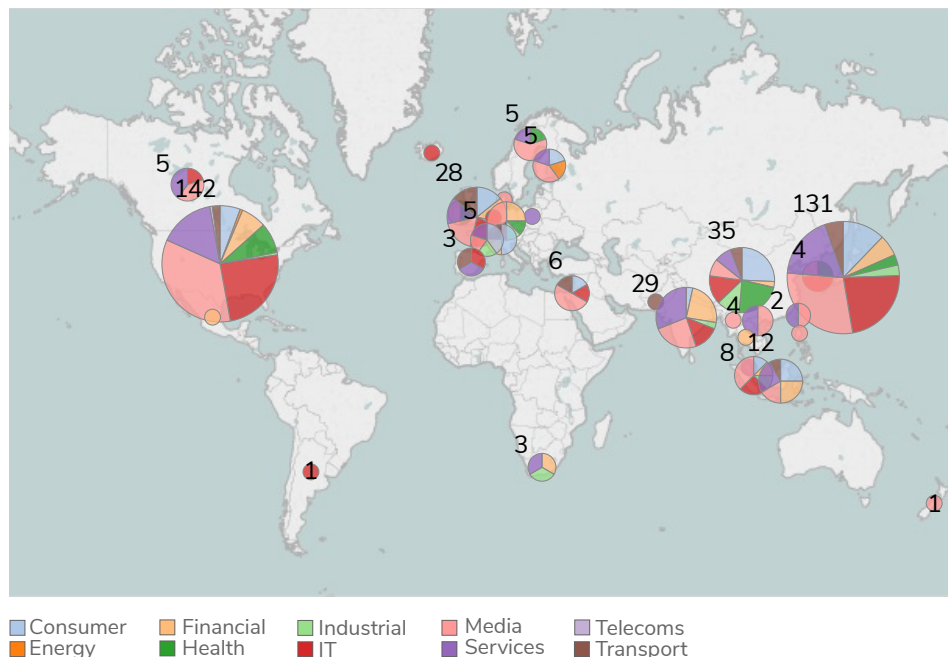


Source: GCV Analytics

Data of March 30

The sector in charts

Global view of past year's deals



For the period between April 2020 and March 2021, we reported 453 venturing rounds involving corporate investors from the media sector. A considerable number of them (142) took place in the US, while 131 were hosted in Japan, 35 in China and 29 in India.

Investments of media sector corporates over the past year

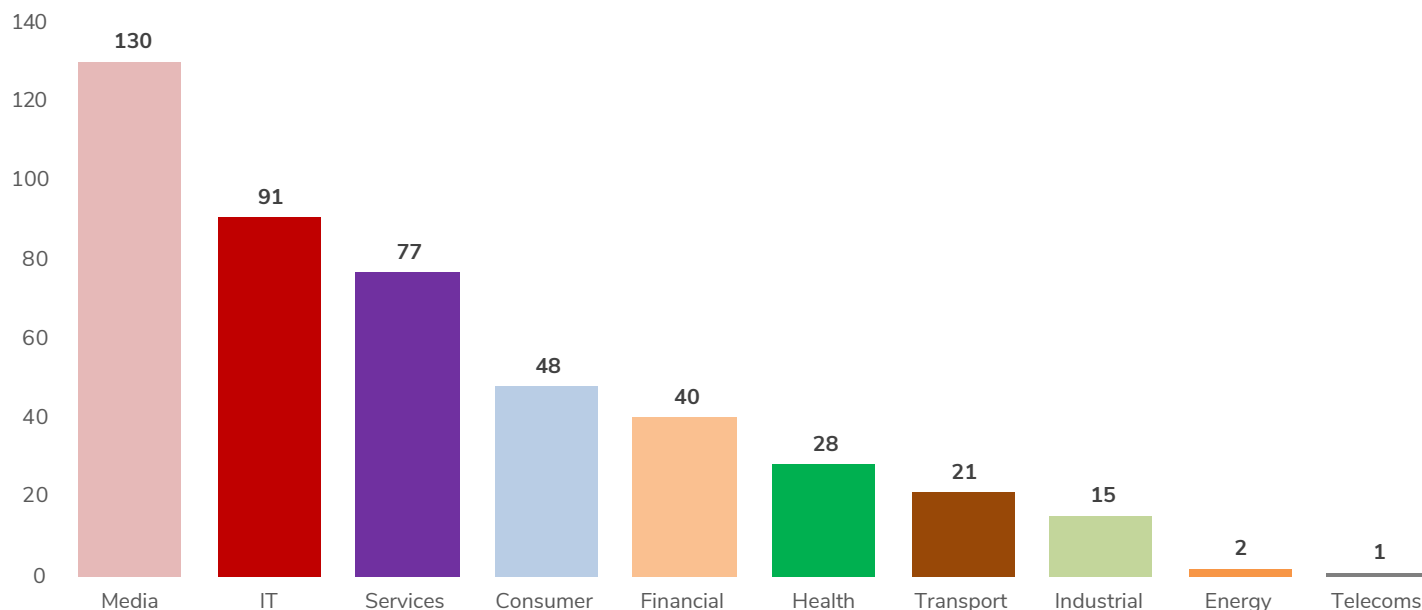
Media 130 (games and gaming, digital marketing and adtech, audio and video content)

IT 91 (enterprise software, AI and cybersecurity)

Services 77 (education and edtech, HR tech and accommodation and travel tech)

Consumer 48 (food and beverage, e-commerce platforms, hygiene and beauty)

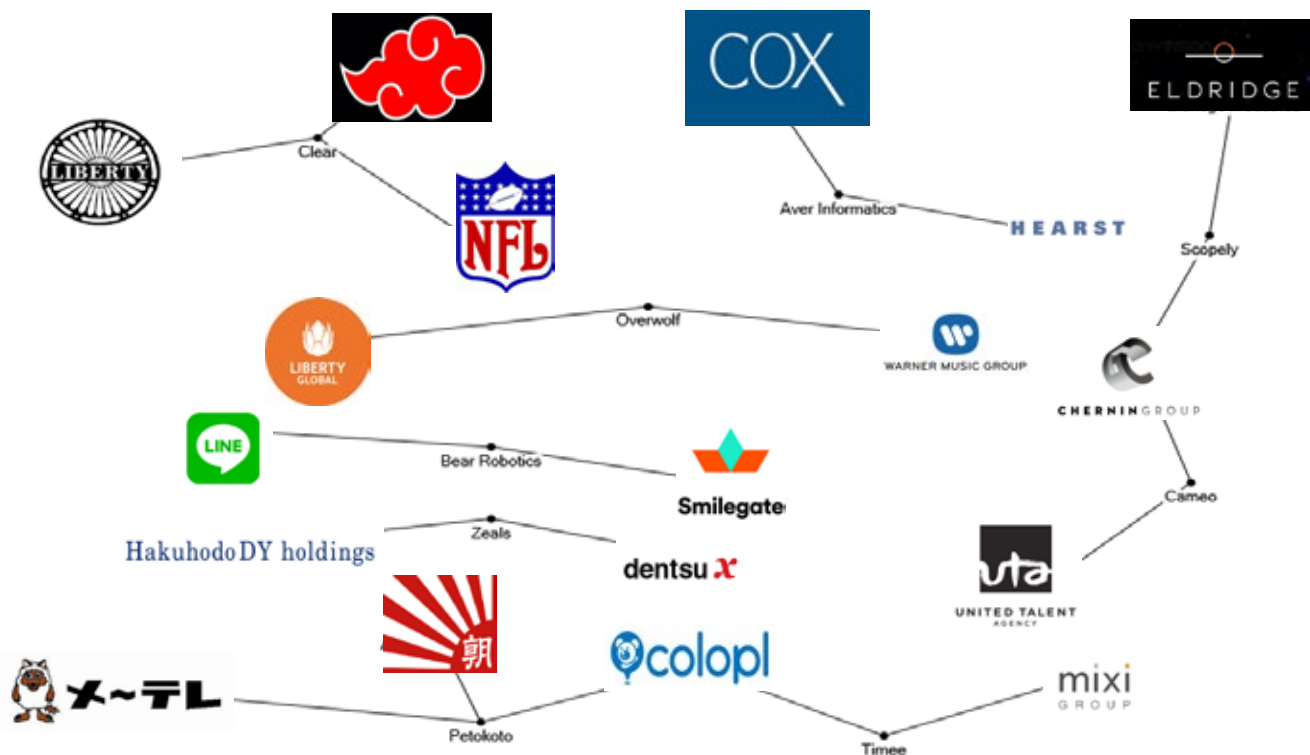
Financial 40 (payment tech, personal finance and insurtech)



Source: GCV Analytics

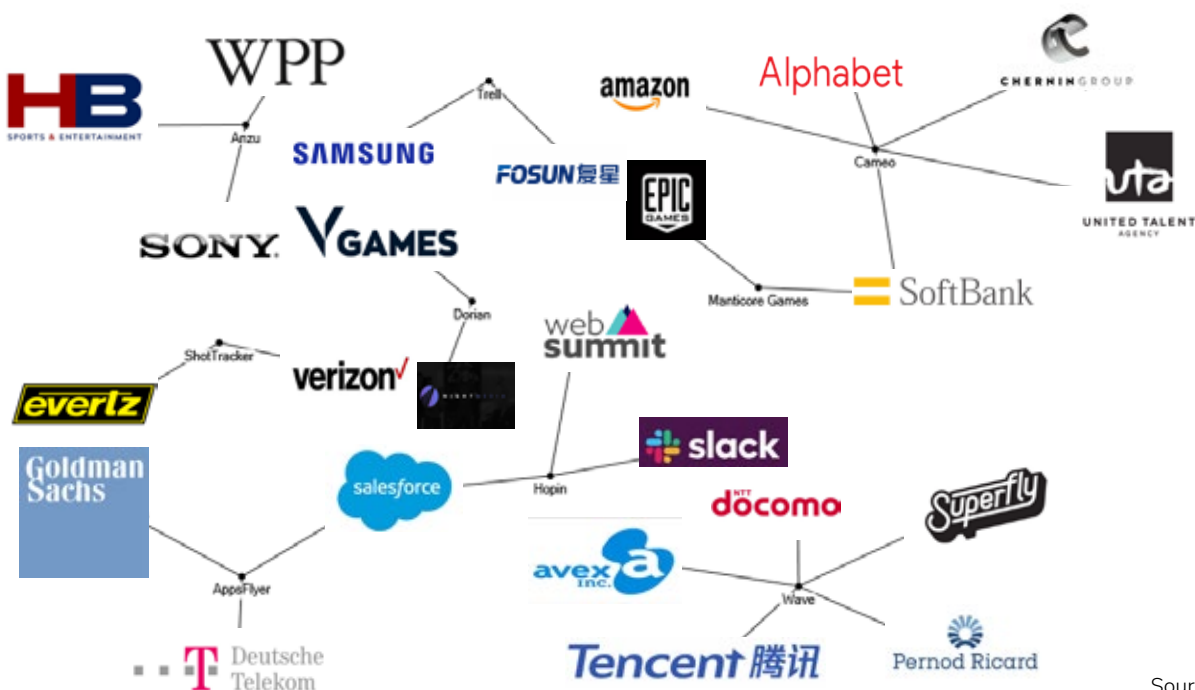
Co-investments of media sector corporate venturers

- > AI and robotics (Bear Robotics)
- > Online marketplaces (Overwolf)
- > Job placement platform and HR bots (Timee, Zeals)
- > Video sharing (Cameo)
- > Mobile gaming (Scopely)
- > Healthcare IT (Aver Informatics).



Corporate co-investments in media sector enterprises

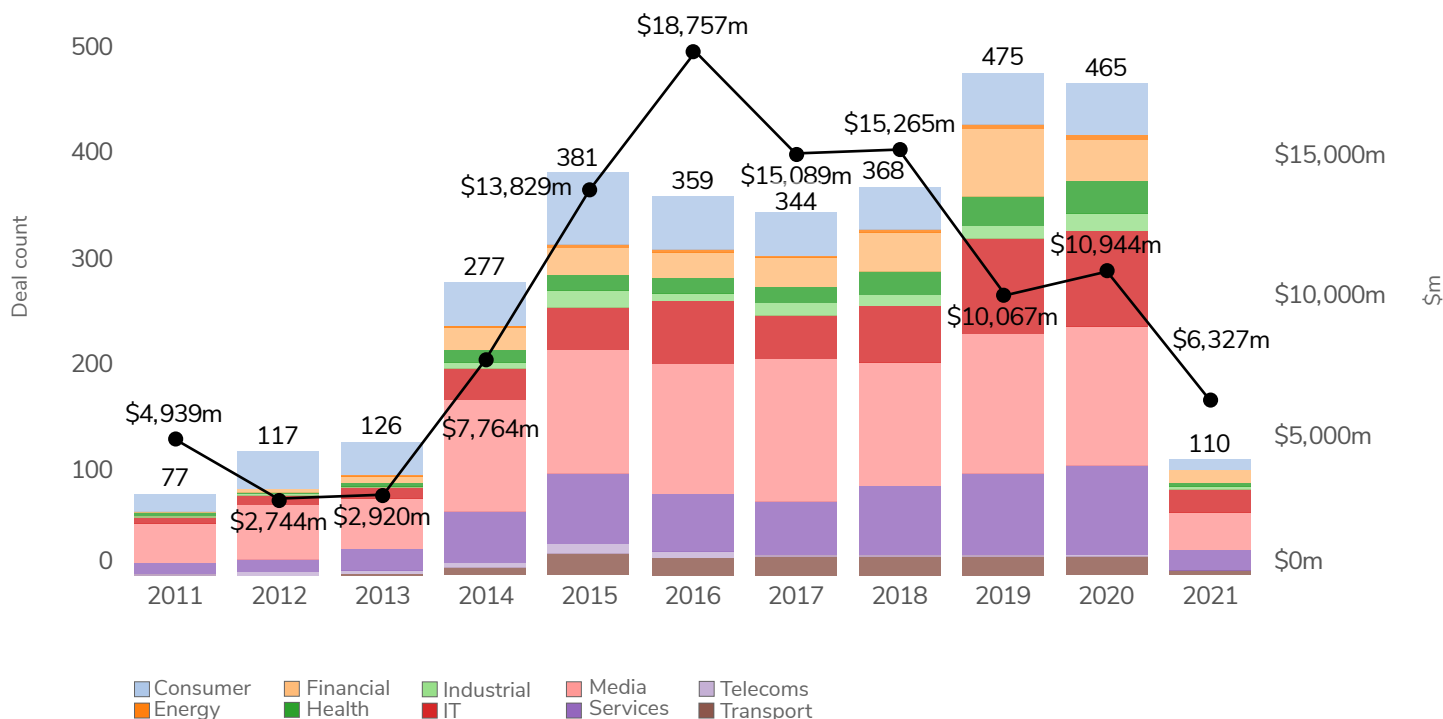
- > In-game advertising and digital marketing analytics (Anzu, AppsFlyer)
- > Video sharing, content creation (Cameo, Dorian, Trell)
- > VR platforms for music (Wave)
- > Video conferencing (Hopin)
- > Gaming (Manticore)
- > Data tools for sports statistics (ShotTracker).



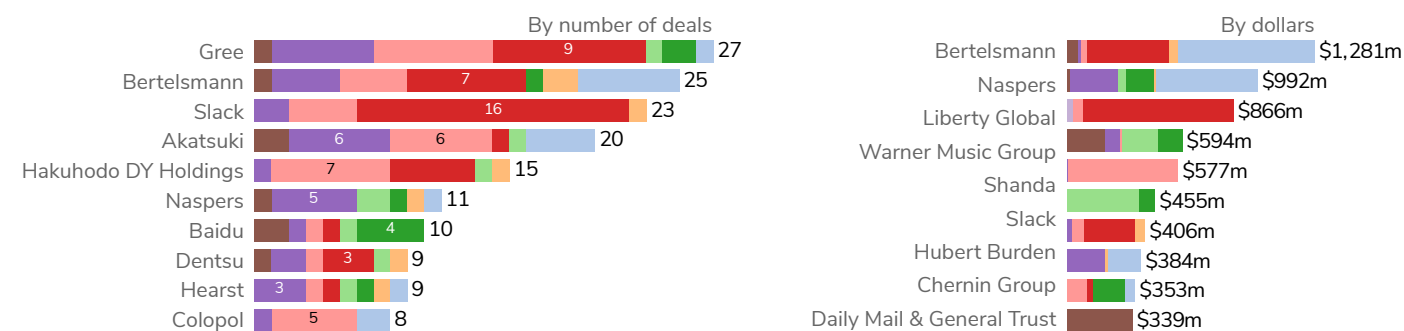
Source: GCV Analytics

Deals by media corporates

On a calendar year-on-year basis, total capital raised in corporate-backed rounds went up from \$10.1bn in 2019 to \$10.94bn in 2020, suggesting a 9% increase. The deal count, however, decreased by 2% from 475 deals in 2019 up to 465 tracked by the end of last year. The 10 largest investments by corporate venturers from the media sector were not concentrated in the same industry.



Top media investors over the past year

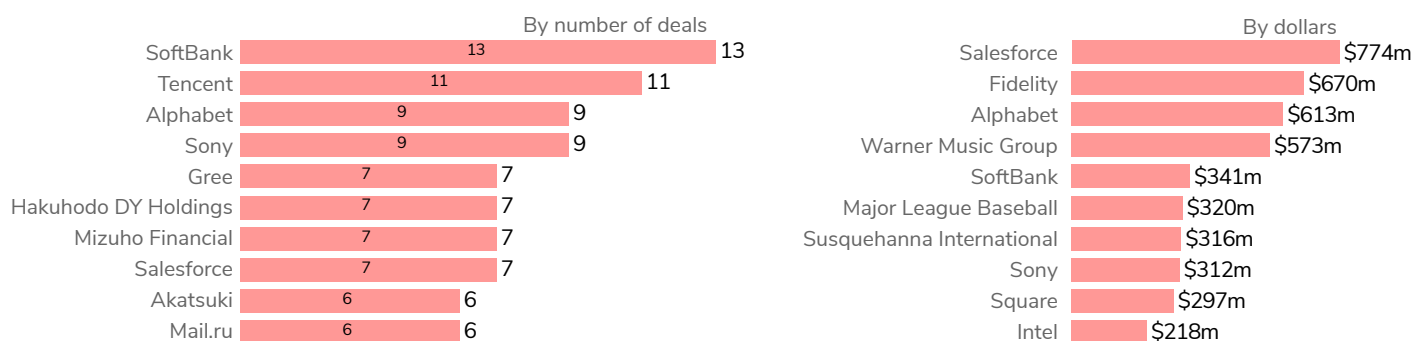


Source: GCV Analytics

The leading corporate investors from the media sector in terms of largest number of deals were digital media company Gree, media group Bertelsmann and messaging app Slack. The list of media corporates committing capital in the largest rounds was headed by Bertelsmann, media and e-commerce group Naspers and mass media group Liberty Global.

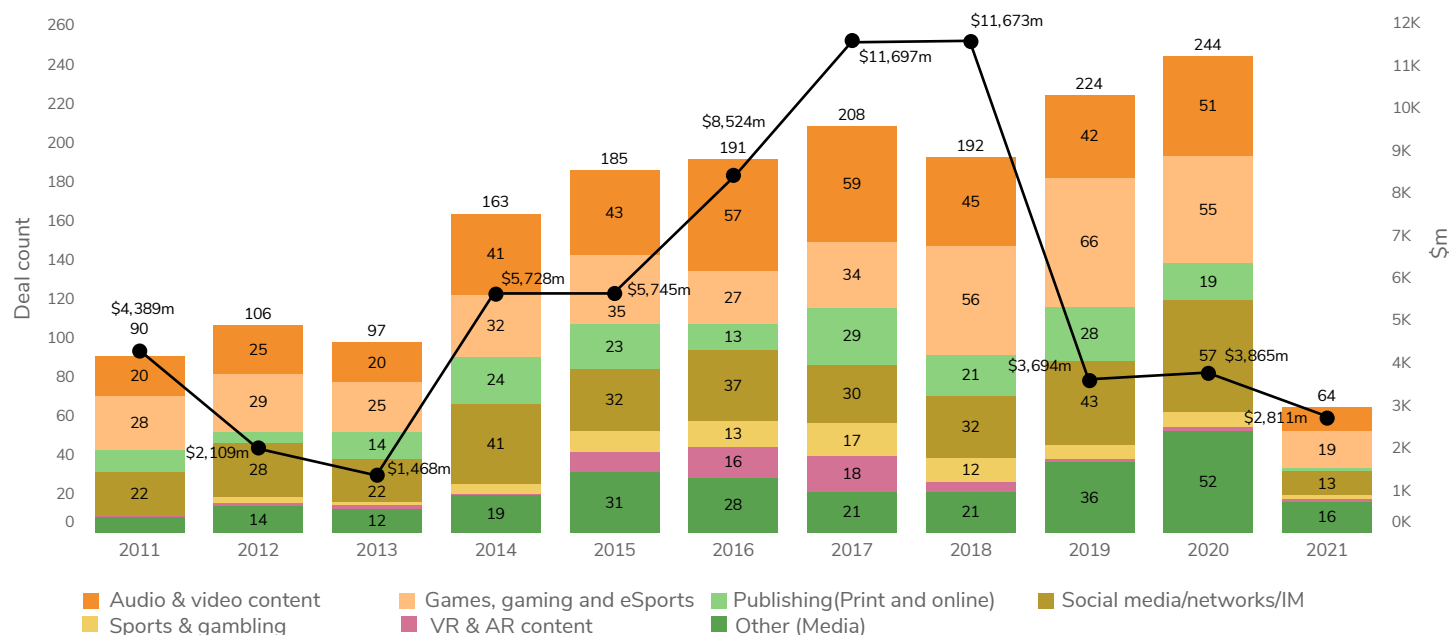
Top investors in the media sector over the past year

The most active corporate venture investors in the emerging media companies were financial telecoms and internet conglomerate SoftBank, internet company Tencent and diversified internet conglomerate Alphabet.



Corporate-backed deals in media enterprises

Overall, corporate investments in emerging media-focused enterprises went up from 224 rounds in 2019 to 244 by the end of 2020, suggesting a 9% increase. Estimated total dollars in those rounds stayed largely flat at \$3.87bn, compared to \$3.69bn in 2019. Overall, the pandemic shock did not have a big effect on dealmaking and flow of capital into these emerging businesses.



Source: GCV Analytics

Deals

Top 10 deals by media sector corporates (April 2020-March 2021)

Portfolio Company	Location	Sector	Round	Round size	Investors List
GoPuff	USA	Consumer	Undisclosed	\$1.15bn	Baillie Gifford D1 Capital Partners Eldridge Industries Fidelity Luxor Capital Reinvent VC SoftBank
Wolt	Finland	Consumer	Undisclosed	\$530m	83North Coatue DST Global EQT Ventures Goldman Sachs Highland Europe Iconiq Capital KKR Naspers Tiger Global Management Vintage Investment Partners
Lacework	USA	IT	Undisclosed	\$525m	Altimeter Capital Management Coatue D1 Capital Partners Dragoner Investment Group Liberty Global Snowflake Computing Sutter Hill Ventures Tiger Global Management
Roblox	USA	Media	E and beyond	\$520m	Altimeter Capital Management Dragoner Investment Group Investment Group of Santa Barbara Warner Music Group (WMG)
Dataminr	USA	IT	Undisclosed	\$475m	ArrowMark Partners Eden Global Eldridge Industries Institutional Venture Partners (IVP) MSD Capital Reinvent Capital Valor Equity Partners
Zwift	USA	Consumer	Undisclosed	\$450m	Amazon Causeway Media Partners Highland Europe KKR Novator Partners Permira Specialized Bicycle Components True
Chang Guang Satellite Technology (CGSTL)	China	Industrial	Undisclosed	\$375m	Chinese Academy of Sciences CICC Capital Estar Capital Government of China Haitong Securities iFlytek Matrix Partners Shanda Shenzhen Capital Group
Keep	China	Consumer	E and beyond	\$360m	5Y Capital Bertelsmann Coatue GGV Capital Hillhouse Capital Management Jeneration Capital SoftBank Tencent
Scopely	USA	Media	E and beyond	\$340m	Baillie Gifford Battery Ventures BlackRock Canada Pension Plan D1 Capital Partners Declaration Partners Eldridge Industries Greycroft Partners Highland Capital Partners Moore Strategic Ventures NewView Capital Revolution Sands Capital TSG Consumer Partners Wellington Management
Cazoo	UK	Transport	Undisclosed	\$308m	BlackRock D1 Capital Partners Daily Mail & General Trust (DMGT) Durable Capital Partners Fidelity General Catalyst L Catterton Mubadala Ventures Novator Partners Spruce House Partnership undisclosed investors

Source: GCV Analytics

Corporates from the media sector invested in large multimillion-dollar rounds, raised mostly by enterprises from other sectors, primarily consumer and IT.

1 Cazoo, a UK-based online marketplace for used vehicles, obtained £240m (\$308m) in a funding round, featuring DMG Ventures, the corporate venturing arm of media group Daily Mail and General Trust (DMGT). General Catalyst and D1 Capital Partners co-led the round with funds managed by Fidelity and Blackrock. The round also featured including L Catterton, Durable Capital Partners, Spruce House Partnership, Novator, Mubadala Capital and unnamed backers.

The company was valued at more than \$2.5bn. Founded in 2018, Cazoo runs an online

dealership that enables customers to purchase used vehicles and have them delivered within three days. Users can access financing through the website and calculate the value of a part exchange for their current car.

2 GoPuff, the US-based operator of a personal services app, received \$1.15bn from investors including SoftBank's Vision Fund at an \$8.9bn valuation. Investment and financial services group Fidelity Management and Research also took part in the round, as did hedge fund managers Luxor Capital and D1 Capital Partners, investment manager Baillie Gifford and investment firms Eldridge and Reinvent Capital.

Founded in 2013, GoPuff runs an online platform that allows users

to order products such as food and drink, cleaning, baby and pet products, over-the-counter medications and, in some places, alcohol, for delivery. The company operates out of a network of fulfillment centres and charges a flat \$1.95 fee per delivery. It will use the funding to expand geographically, extend its product range, increase its team and bolster its technology.

3 Finland-headquartered food and consumer goods delivery service Wolt completed a \$530m funding round that included Prosus, the internet company formed by Naspers. The round was led by Iconiq Growth, a vehicle for investment firm Iconiq Capital, and also featured Goldman Sachs' Growth Equity unit, Tiger Global Management, DST Global, KKR,

EQT Ventures and EQT Growth, Coatue, 83North, Highland Europe and Vintage Investment Partners. Wolt runs an app that allows users in 23 countries to order food and consumer goods from restaurants, grocers and other local retailers for delivery, having expanded outwards from its core restaurant-focused business in the past year.

4 US-based cloud security software provider Lacework completed a \$525m funding round, featuring Liberty Global Ventures and Snowflake Ventures, representing mass media group Liberty Global and data management technology producer Snowflake respectively. Private equity firm Sutter Hill Ventures and technology

investment firm Altimeter Capital co-led the round, which included D1 Capital Partners, Coatue, Dragoner Investment Group and Tiger Global Management. Lacework has built a cybersecurity platform designed for use with a range of cloud service providers, detecting behavioural anomalies and run-time threats in addition to ensuring cloud compliance. The company said it increased revenue by more than 300% during 2020.

5 US-based game development platform Roblox raised \$520m in a series H round that included entertainment provider Warner Music Group, valuing it at \$29.5bn. Investment firms Altimeter Capital and Dragoner Investment Group

co-led the round, which also featured Investment Group of Santa Barbara.

Roblox is the creator of an online platform that allows users to build their own games and then share them with others. The platform had more than 31 million active users as of September 2020. Roblox subsequently went public through a reverse merger.

6 Dataminr, the information discovery software provider backed by financial services firm Credit Suisse, completed a \$475m financing round, valuing it at \$4.1bn. Eldridge, Valor Equity Partners, MSD Capital, Reinvent Capital, ArrowMark Partners, IVP



Roblox allows users to build their own games and then share them with others



Scopely is a mobile game publisher

and Eden Global provided the funding along with investment funds managed by investment banking firm Morgan Stanley's Tactical Value subsidiary. Founded in 2009, Dataminr has built a software platform that analyses public data from sources including social media, blogs, web forums, the deep and dark web, internet-of-things sensors, audio and radio transmissions in real time to detect patterns and unearth information.

7 Zwift, the US-based operator of a social exercise platform, raised \$450m from investors including e-commerce and home electronics firm Amazon's Alexa Fund and bicycle maker Specialized Bicycle Components' Zone 5 Ventures fund. Investment firm KKR led the round, which also featured private equity firm Permira, investment firms Novator Partners and True, venture capital firm Highland Europe and VC fund Causeway Media. It reportedly valued the company at more than \$1bn.

Founded in 2014, Zwift runs an online platform where runners and cyclists can connect and race each other at home in immersive computer-generated environments. The platform has more than 2.5 million users and

has begun organising dedicated events such as a virtual Tour de France. The funding has been earmarked for further development of the company's software and the commercial launch of its first hardware products.

8 China-headquartered satellite developer Chang Guang Satellite Technology completed a RMB2.46bn (\$375m) in a pre-IPO financing round, featuring artificial intelligence technology producer iFlytek. Haitong Securities affiliate Haitong Innovation Capital Management, Shenzhen Capital Group, Estar Capital, CICC Capital, Matrix Partners China, Shanda Capital, CAS Star and a government-guided fund from Jilin Province also took part in the round. Chang Guang is building a 60-strong satellite constellation called Jilin-1 that will use remote sensors to capture high-definition videos and optical and hyperspectral images for use in areas such as agriculture and forest management, city planning and map applications.

9 China-based online fitness class operator Keep recently completed a \$360m series F round led by the SoftBank's Vision Fund.

Bertelsmann Asia Investments, a vehicle for Bertelsmann, also took part in the round, as did Tencent, Hillhouse Capital, Coatue Management, GGV Capital, 5Y Capital and Jeneration Capital. The cash was secured reportedly at a post-money valuation of about \$2bn.

Keep's online platform provides livestreamed fitness class run by a network of fitness influencers, and it has expanded its registered users to 300 million, as the pandemic impacted gyms and users stayed home. The company has expanded into producing stationary exercise bikes and treadmills similar to the ones provided by US-based Peloton, in addition to healthy snacks and exercise apparel.

10 Scopely, the US-headquartered mobile game publisher backed by media group Advance, game producer Take-Two Interactive and over-the-top media company Chernin Group, secured \$340m in series E funding. Wellington Management, NewView Capital, TSG Consumer Partners, Canada Pension Plan Investment Board's CPP Investments subsidiary, D1 Capital Partners, Battery Ventures, Eldridge and funds managed by BlackRock were all among the investors in the round, which reportedly valued the company at \$3.3bn.

Founded in 2011, Scopely specialises in licensed games, having produced mobile game tie-ins to properties such as Marvel, Star Trek, The Walking Dead, the WWE and Looney Tunes. It will use the cash for strategic acquisitions as it looks to expand its line of games.

Top investments in media sector enterprises (April 2020-March 2021)

Portfolio Company	Location	Sector	Round	Round size	Investors List
Roblox	USA	Media	E and beyond	\$520m	Altimeter Capital Management Dragoneer Investment Group Investment Group of Santa Barbara Warner Music Group (WMG)
Hopin	USA	Media	C	\$400m	Andreessen Horowitz Coatue DFJ Growth General Catalyst Institutional Venture Partners (IVP) Northzone Salesforce Tiger Global Management
Fanatics.com	USA	Media	E and beyond	\$350m	Fidelity Franklin Templeton Neuberger Berman Private Equity Funds Thrive Capital
Scopely	USA	Media	E and beyond	\$340m	Baillie Gifford Battery Ventures BlackRock Canada Pension Plan D1 Capital Partners Declaration Partners Eldridge Industries Greycroft Partners Highland Capital Partners Moore Strategic Ventures NewView Capital Revolution Sands Capital TSG Consumer Partners Wellington Management
Tidal	USA	Media	Stake purchase	\$297m	Square
Epic Games	USA	Media	Undisclosed	\$250m	Sony
Highspot	USA	Media	E and beyond	\$200m	Bain & Company Iconiq Madrona Venture Group OpenView Venture Partners Salesforce Sapphire Ventures Shasta Ventures Tiger Global Management
Pocket Outdoor Media	USA	Media	B	\$150m	Jazz Venture Partners Next Ventures Sequoia Capital Specialized Bicycle Components
Glance	Singapore	Media	Undisclosed	\$145m	Alphabet Mithril Capital Management
Podium	USA	Media	C	\$125m	Accel Partners Alkeon Capital Alphabet Institutional Venture Partners (IVP) Recruit Holdings Sapphire Ventures Summit Partners Y Combinator

Source: GCV Analytics

There were other interesting deals in emerging media-focused businesses that received financial backing from corporate investors in the same and other sectors.

1 Hopin, the US-based developer of a virtual events platform, hiked its valuation to \$5.65bn in a \$400m series C round featuring enterprise software provider Salesforce's corporate venturing subsidiary, Salesforce Ventures. VC firms IVP, Andreessen Horowitz and General Catalyst co-led the round, which included Coatue, DFJ Growth, Northzone and Tiger Global Management. Sriram Krishnan, general partner at Andreessen Horowitz, is joining the company's board of directors. Hopin's software enables users to create immersive virtual live events using video and interactive tools. It was founded in June 2019.

2 Fanatics, the US-based sports memorabilia retailer backed by SoftBank and e-commerce firm Alibaba, secured \$350m in series E funding.

Investment and financial services group Fidelity co-led the round with venture capital firm Thrive Capital. It included Franklin Templeton and Neuberger Berman and valued Fanatics at \$6.2bn. Fanatics' e-commerce platform sells a range of apparel and memorabilia spanning several American and international sports, and has also branched out into esports items.

3 Digital payment processor Square agreed to pay \$297m in cash and stock for a majority stake in Tidal, a US-based music streaming service backed by SoftBank. Square will own a "significant" majority stake in the business once the transaction closes, while existing artist shareholders will remain shareholders. Founded in 2014, Tidal operates a subscription-based music service that offers studio-level audio quality. Its catalogue consists of more than 70 million songs with a focus on exclusive content, and the service is available to consumers in more than 56

countries. The company was bought and relaunched by rapper Shawn Carter, better known as Jay-Z, in 2015, before SoftBank's mobile carrier subsidiary, Sprint, purchased a 33% stake two years later for a reported \$200m.

4 Consumer electronics and media group Sony Corporation invested \$250m in Epic Games, a US-based video game developer backed by corporate investors Tencent, Walt Disney and Axiomatic, at a reported valuation of nearly \$17.9bn. Epic has created a series of games based on its multiplayer first-person shooting game engine, Unreal Engine. The most popular is Fortnite, which had generated in excess of \$4bn of revenue by the end of 2019. Houseparty, the social mobile gaming app it bought in June 2019, had its user numbers balloon during lockdown.

5 US-based sales management software provider Highspot secured

\$200m at a \$2.3bn valuation, in a series E round that included management consulting firm Bain & Company and enterprise software producer Salesforce. Hedge fund manager Tiger Global Management led the round, which included Iconiq Growth, Madrona Venture Group, OpenView Venture Partners, Sapphire Ventures and Shasta Ventures. Salesforce invested through CVC unit Salesforce Ventures. Highspot has built an AI and data-enhanced platform that helps sales representatives manage customer relations, leads and accounts.

6 US-based sports media company Pocket Outdoor Media completed a \$150m series B round featuring Zone 5 Ventures, the venture capital firm funded by bicycle component producer Specialized Bicycle. Sequoia Heritage, the community investment platform formed by VC firm Sequoia Capital, led the round, which included Jazz Ventures

and Next Venture. Founded in 2017, Pocket Outdoor provides a media offering focused on active lifestyles and adventure sports that spans web, print, social media, video content and podcasting. The company has also bought, or agreed to acquire, adventure media company Outside Integrated Media, adventure sports producer Outside TV, event registration software developer AthleteReg, cycling magazine publisher Peloton and mapping app developer Gaia GPS.

7 Internet technology provider Google and investment firm Mithril Capital supplied \$145m for Glance, the Singapore-based owner of social video streaming platform Roposo, at a valuation it told Mint was above \$1bn. Roposo, a short-form video platform that has more than 33 million monthly active users, broadcasting personalised content on the lockscreens of Android phones in 10 languages including English, Hindi and Tamil.

8 US-based customer messaging software provider Podium raised \$125m in a series C round backed by human resources provider Recruit and GV, an investment subsidiary of Alphabet. Startup accelerator YC Combinator's Continuity fund led the round, participating alongside venture capital firms IVP, Accel and Sapphire Ventures, growth equity firm Summit Partners and investment adviser Alkeon Capital. It reportedly valued Podium at about \$1.5bn. The company provides a range of software tools enabling businesses to interact with their customers, receive feedback or close payments, having originally concentrated on a platform that helped them secure customer reviews. The company's offering is used by 45,000 businesses and it will use the funding to launch a free version of its product that will enable clients to interact with customers entirely through messaging.



Podium makes customer messaging software

Top exits by media corporate investors (April 2020-March 2021)

Portfolio Company	Location	Sector	Exit Type	Acquirer	Exit size (\$m)	Exiting investors
Cazoo	UK	Transport	Reverse merger		\$1.55bn	Ajax I Altimeter BlackRock Daily Mail & General Trust (DMGT) Fidelity Marcho Partners Morgan Stanley Mubadala Ventures Pelham Capital Investments Senator Investment Group Spruce House Partnership
Li Auto (Chehejia)	China	Transport	IPO		\$1.1bn	BlueRun Ventures Bytedance China Merchants Wealth China Taiping Insurance Fancheng Capital InTime Retail Leo Group Matrix Partners Minshi Hexun Capital Ping An Insurance Private Investor Shougang Group Source Code Capital Wang Xing
Signal Sciences	USA	IT	Acquisition	Fastly	\$775m	CRV Harrison Metal Capital Index Ventures Lead Edge Capital O'Reilly Media
Zhihu	China	IT	IPO		\$523m	Advantech Baidu Capital Today Innovation Works Kuaishou Oceanpine Capital Qiming Venture Partners SAIF Sinovation Ventures Sogou Sunshine Insurance Group Tencent
Coursera	USA	Services	IPO		\$519m	California Institute of Technology (Caltech) EDBI Future Fund G Squared GSV Asset Management International Finance Corporation (IFC) Kleiner Perkins Laureate Education Learn Capital Venture Partners New Enterprise Associates private investors Seek SuRo Capital The Lampert Foundation Times Internet undisclosed investors University of Pennsylvania
Brandwatch	UK	Media	Acquisition	Cision	\$450m	Cision Gorkana Highland Capital Partners London Business Angels Nauta Capital Partech Ventures
Evolv Technology	USA	IT	Reverse merger		\$450m	Eldridge Industries Magnetar Capital Motorola Solutions NewHold Investment Corp private investors Senator Investment Group Stanley Black & Decker UBS
BacklotCars	USA	Transport	Acquisition	KAR Auction Services	\$425m	Chaifetz Group KCRise Fund Origin Ventures Pritzker Group Venture Capital Renren Revolution Royal Street Ventures Stripes Group
Wondery	USA	Media	Acquisition	Amazon	\$300m	Advancit Capital Bam Ventures BDMI Bertelsmann Fox Corporation Greycroft Partners Lerer Hippeau Powerhouse Ventures undisclosed investors Walt Disney Water Tower Ventures Waverley Capital
17Zuoye	China	Services	IPO		\$288m	Bytedance CITICPE DST Global H Capital private investors Shunwei Capital Temasek Tiger Global Management

Source: GCV Analytics

1 Cazoo, the UK-based online automotive marketplace that counts media group DMGT as an investor agreed a reverse merger with special purpose acquisition company Ajax I. The combined company will take on the New York Stock Exchange listing obtained by Ajax through its \$750m initial public offering in October 2020. The deal is boosted by \$800m in private investment in public equity (PIPE) financing at a \$7bn valuation.

Ajax's sponsors and D1 Capital Partners are anchoring the PIPE, which includes investment and

financial services group Fidelity, Morgan Stanley's Counterpoint Global unit, Altimeter, Marcho Partners, Mubadala Capital, Pelham Capital, Senator Investment Group, Spruce House Partnership and funds and accounts managed by BlackRock. Cazoo operates an e-commerce platform for customers in the UK, Germany, France and Portugal to buy and sell vehicles. The company has also built a monthly car subscription business by buying Drover and Cluno.

2 Li Auto, a China-based electric vehicle (EV) producer backed by

several corporates, priced its shares at \$11.50 to raise \$1.1bn in its IPO. Previous corporate backers include digital media company Bytedance, mobile services portal Meituan Dianping, steel producer Shougang, department store chain InTime, insurance firms Taiping and Ping An as well as pump and gardening equipment maker Leo Group. The company issued 95 million American Depositary Shares (ADSs), representing 190 million ordinary shares. Shares opened at \$15.50 on the first day of trading and reached a high of \$17.50, before closing at \$16.46.

The company listed on the Nasdaq Global Select Market using the ticker symbol LI. Meituan Dianping and Bytedance committed to purchasing \$330m and \$30m in a concurrent private placement.

Founded in 2015, Li Auto has developed a hybrid electric sports utility vehicle, Lixiang One. It had reportedly received almost 10,000 pre-orders for the vehicle.

3 Edge computing platform provider Fastly agreed to purchase US-based web cybersecurity technology developer Signal Sciences in a \$775m cash-and-stock transaction, allowing media company O'Reilly to exit. The deal was made up of \$200m in cash and \$575m in shares of Fastly, which had a market capitalisation of roughly \$9.7bn at the time.

Signal Sciences is the creator of a programmable cybersecurity product designed to protect web applications. Its technology is used on more than 40,000 applications and its customers include Twilio, SendGrid and DoorDash. The company's technology will enhance Secure@Edge, a product Fastly intends to launch that will help businesses securely pursue digital transformation.

4 China-based online answer platform developer Zhihu went public in a \$523m IPO representing an exit for video-sharing app developer Kuaishou, internet companies Tencent, Baidu and Sogou as well as insurance firm Sunshine Insurance. The offering consisted of 55 million ADSs, each representing half a common share, priced at \$9.50 each, at the foot of the IPO's \$9.50 to \$11.50 range. The company floated on the New

York Stock Exchange, alongside a \$250m private placement consisting of \$30m from Tencent, \$100m each from e-commerce groups Alibaba and JD.com, and \$20m from video game developer Lilith Games. Zhihu runs an online platform with 76 million monthly active users who can post questions to crowdsource answers. It more than doubled its revenue to \$207m in 2020 while cutting its net loss from \$150m to \$79.3m.

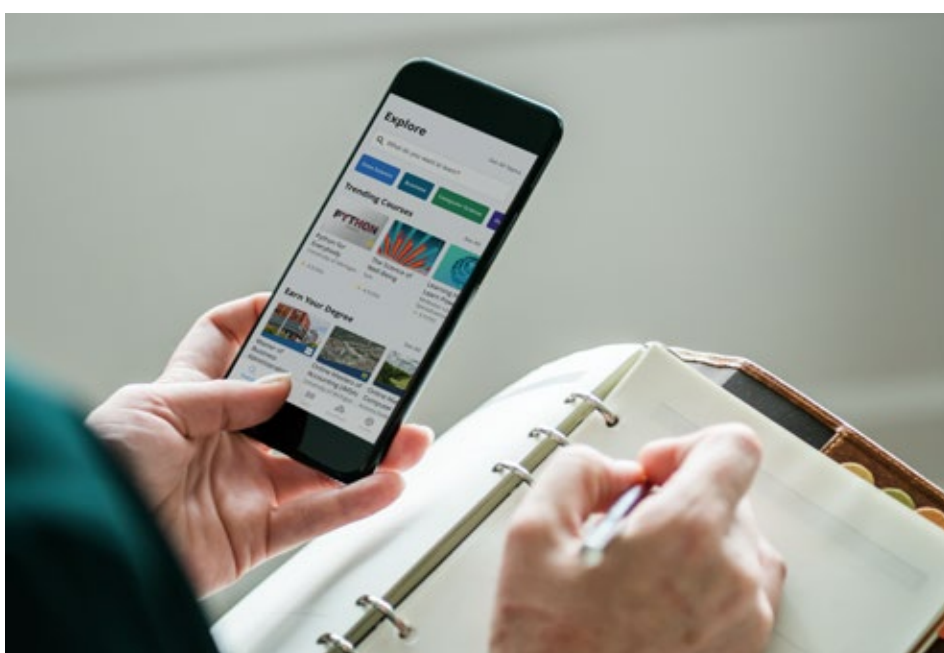
5 US-headquartered online education provider Coursera floated in a \$519m IPO, representing an exit for media conglomerate Bennett, Coleman & Co and education provider Laureate Education. The company issued nearly 14.7 million shares on the New York Stock Exchange while shareholders divested more than 1 million of their shares. They were priced at the top of the IPO's \$30 to \$33 range, giving it a market capitalisation of nearly \$4.3bn.

Coursera's online platform offers educational content on a range of subjects, enabling adult learners

to acquire new skills and improve their knowledge. It increased revenue 59% to \$294m in 2020, though its net loss also went up, from \$48.4m to \$66.6m.

6 Public relations and marketing services provider Cision agreed to acquire its portfolio company Brandwatch, a UK-based developer of a social media monitoring and content marketing analytics software, for \$450m. Brandwatch's platform uses artificial intelligence technology to provide insights to consumer brands and marketing agencies on their social media interactions with the public. It also provides analytics tools as well as consumer data and market research. The company said its product has supported more than 2,000 brands and agencies globally.

7 Evolv Technology, a US-based touchless screening technology developer backed by corporates Motorola Solutions and Stanley Black & Decker, agreed a reverse takeover



Coursera's online platform offers educational content on a range of subjects



Motorola Solutions is backed a PIPE financing deal for Evolv

with special purpose acquisition company NewHold Investment Corp. The deal will give the merged company a post-transaction pro forma enterprise value of \$1.25bn and the spot on the Nasdaq Capital Market taken by NewHold when it floated in a \$150m initial public offering in August 2020.

Communications equipment maker Motorola Solutions, Magnetar Capital, Eldridge, Senator Investment Group, UBS O'Connor and various individuals are backing a \$300m PIPE financing deal that will support the merger. Founded in 2013 and spun out of Duke University, Evolv provides touchless security screening systems that use its proprietary AI technology.

8 Automotive remarketing technology provider KAR Auction Services agreed to buy BacklotCars, the operator of an online automotive reselling platform, in a \$425m deal that will enable social media company

Renren to exit. The acquisition is intended to strengthen KAR's online auction platform, TradeRev.

Founded in 2015, BacklotCars is the owner of an online dealer-to-dealer marketplace for second-hand vehicles, allowing companies such as rental services and dealers to buy and sell cars without having to travel. Inspections are carried out by trained mechanics it employs.

9 Media group Bertelsmann and entertainment producer Walt Disney will exit US-based podcast publishing studio Wondery after it agreed to be acquired by e-commerce and technology group Amazon. The deal was reportedly sized at about \$300m. Wondery will join Amazon's on-demand audio content streaming subsidiary, Amazon Music, once the deal closes. Founded in 2016, Wondery runs a US-focused podcast production studio that commissions audio fiction and documentaries for

distribution through its podcasting app and third-party affiliates. Amazon Music will maintain Wondery's presence on content marketplaces other than its own but hopes to attract more listeners to its own podcasting facility, which launched in September 2020.

10 China-based education software provider 17 Education & Technology Group floated in the United States in an IPO sized at almost \$288m that enabled digital media group ByteDance to exit. The company issued 27.4 million ADSs, each of which represented 40% of an ordinary share, priced at \$10.50 each, in the middle of the IPO's \$9.50 to \$11.50 range. Also known as 17Zuoye, 17EdTech combines in-class learning software that use data to drive learning and assessment products, in addition to large-class online tutoring services that use AI to offer personalised learning.

Top exits from media enterprises (April 2020-March 2021)

Portfolio company	Location	Sector	Exit Type	Acquirer	Exit size	Exiting investors
Slack	USA	Media	Acquisition	Salesforce	\$27.7bn	SoftBank
Hyperconnect	South Korea	Media	Acquisition	Match Group	\$1.73bn	Altos Ventures SoftBank
Brandwatch	UK	Media	Acquisition	Cision	\$450m	Cision Gorkana Highland Capital Partners London Business Angels Nauta Capital Partech Ventures
Wondery	USA	Media	Acquisition	Amazon	\$300m	Advancit Capital Bam Ventures BDMI Bertelsmann Fox Corporation Greycroft Partners Lerer Hippeau Powerhouse Ventures undisclosed investors Walt Disney Water Tower Ventures Waverley Capital
Appier	Taiwan	Media	IPO		\$271m	AMTD EDBI FirstFloor Capital Hopu-Arm Innovation Fund Insignia Venture Partners Jafco Line MediaTek Naver Pavilion Capital Qualgro Sequoia Capital SoftBank TGWest Capital Translink Capital UMC Corporation United Overseas Bank UOB Venture Management WI Harper Group
Playdots	USA	Media	Acquisition	Take-Two Interactive Software	\$192m	Greycroft Partners Northzone Slow Ventures Tencent Tuesday Capital undisclosed investors
Strawbear Entertainment Group	China	Media	IPO		\$126m	iQiyi undisclosed investors
Blued	China	Media	IPO		\$85m	CDH Investments China Mobile Crystal Stream Capital New World Group Shunwei Capital UG Investment Ventech Vision Knight Capital
NeoGames	Israel	Media	IPO		\$82m	William Hill
Iugo Mobile Entertainment	Canada	Media	Acquisition	Deca Games		Gree

Source: GCV Analytics

Global Corporate Venturing also reported several exits of emerging media-related enterprises that involved corporate investors from the same as well as other sectors.

1 Cloud-based enterprise software producer Salesforce agreed to acquire Slack, the US-based publicly listed communication platform which previously counted SoftBank, Alphabet and media group Comcast among its backers. The transaction was sized at \$27.7bn, \$26.8bn cash and the remainder in Salesforce shares.

The latter plans to leverage the platform as the new interface for its application and customer identity management tool, Salesforce Customer 360, and expand it into a platform that enables employees, customers and partners to communicate through existing workflows.

Founded in 2009, Slack runs an enterprise messaging platform with about 12 million daily active users. The covid-19 pandemic forcing a large number of employees around the globe to work remotely gave it a boost. The company went public in a direct listing in June 2019, bypassing an expensive IPO.

2 Online dating platform Match Group agreed to acquire South Korea-based online communication technology provider Hyperconnect for roughly \$1.73bn. The transaction, which involves cash and stock, would give SoftBank an exit. The latter committed capital to the company in its \$8.6m series A round almost six years ago.

Launched in 2014, Hyperconnect runs a one-on-one video and audio chatting app dubbed Azar, which has been downloaded

more than 540 million times, and Hakuna Live, a group livestreaming app featuring augmented reality avatars. The latter has been downloaded more than 23 million times. The company says it has reached profitability, after generating more than \$200m in revenue during 2020.

3 Appier, a Taiwan-based enterprise software tool developer backed by Japan-listed SoftBank, raised ¥29.8bn (\$271m) in an IPO on the Tokyo Stock Exchange. Appier's shares were priced at ¥1,600 each in the IPO and closed up 19% at ¥1,900 at the end of first day. SoftBank owned 4.4% of Appier, according to regulatory filings. Founded in 2012, Appier operates AI platforms that analyse and predict user behaviour in real time to enable personalised advertising campaigns. The company hopes to strengthen its market position

in Asia before expanding into additional territories.

4 Video game publisher Take-Two Interactive Software agreed to buy US-based mobile gaming studio Playdots in a \$192m deal, allowing Tencent to exit. The transaction consisted of \$90m in cash and \$102m in newly issued shares in Take-Two. The company expects the acquisition to strengthen and diversify its casual mobile gaming portfolio. Founded in 2013, Playdots designs minimalist puzzle games for mobile devices. Its three games – Dots, Two Dots and Dots & Co – have been downloaded more than 100 million times.

5 Strawbear Entertainment Group, a China-based television producer that counts online streaming platform iQiyi as an investor, floated on the Hong Kong Stock Exchange in a HK\$975m (\$126m) IPO. The company issued 166 million shares priced at HK\$5.88 each. They opened trading at HK\$7.00 each and closed at \$10.80. E-commerce platform developer Vipshop, Snow Lake Capital and IDG's Origin Flair subsidiary were among the anchor investors for the offering.

Founded in 2014, Strawbear develops, produces and distributes drama series for television and online viewing, and will channel the proceeds from the IPO into production activities.

6 BlueCity Holdings, the China-based owner of gay dating app Blued, floated in an \$84.8m IPO, enabling corporates New World Development and China Mobile Games and Entertainment to exit. The company priced 5.3 million ADSs, each representing two



Betting firm William Hill backed NeoGames

common shares, at \$16.00 each, at the mid-point of the IPO's \$15 to \$17 range. Its shares closed at \$25.99 on the Nasdaq Global Market, valuing it at approximately \$462m. Blued's app has more than 49 million registered users and averages 6 million monthly active users. About \$30m of the IPO proceeds will go to an international growth drive that will include spending on marketing and promotion. Another \$22.5m will support technology upgrades in areas such as AI technology and big data.

7 NeoGames, a Luxembourg-registered, Israel-headquartered digital lottery software provider backed by betting firm William Hill, raised \$81.7m in its IPO. The company issued nearly 2.63 million shares on the Nasdaq Global Market while its shareholders divested a further 2.18 million. They were priced at \$17.00 each, above the IPO's \$14 to \$16 range. Spun off by online gaming technology provider Aspire in 2014, NeoGames offers technology that enables lottery operators to sell tickets and run

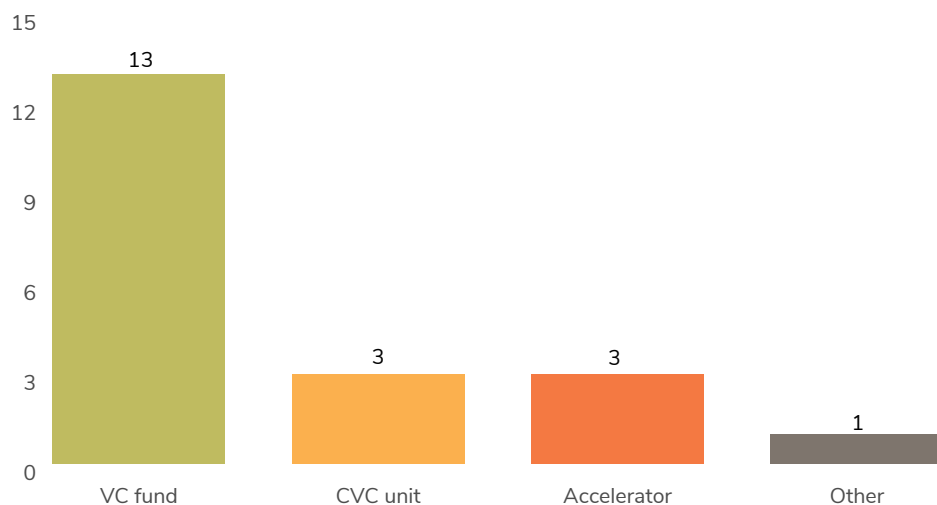
specialist games online. The company's revenue declined year on year from \$35.2m to \$24.1m in the first nine months of 2020, with a corresponding \$4m profit turning to a \$3.3m net loss.

8 Canada-based mobile game developer Iugo Mobile Entertainment agreed to an acquisition by video game holding company Embracer Group's Deca Games subsidiary that will allow Gree to exit. Japan-based Gree made a minority investment of undisclosed size in Iugo in 2012, after it opened its first North American office the previous year. The size of the deal was not disclosed but Embracer bought the company through a mixture of cash and shares.

Founded in 2003, Iugo develops free-to-play mobile games and is the co-creator and developer of The Walking Dead: Road to Survival, which has been installed more than 45 million times since its release in 2015. The company has also worked with global publishing partners on titles such as Middle-Earth: Shadows of War and Knights & Dragons.

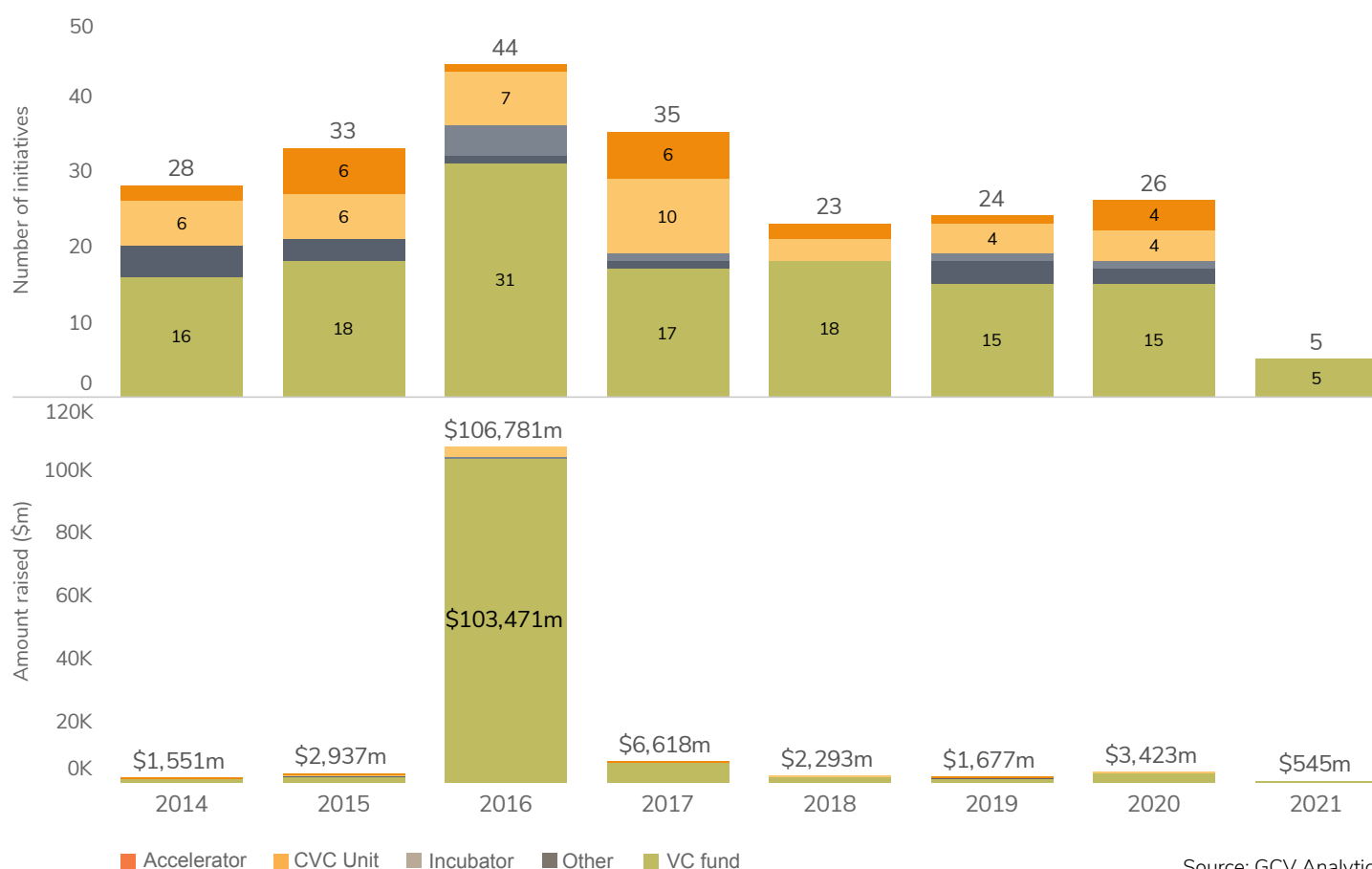
Funds

New funding initiatives



For the period between April 2020 and March 2021, corporate venturers and corporate-backed VC firms investing in the media sector secured \$2.77bn in capital via 20 funding initiatives, which included 13 VC funds, three new or refunded venturing units, three accelerators and one other initiative.

Media sector funding initiatives



Source: GCV Analytics

On a calendar year-to-year basis, the number of funding initiatives in the media sector went up slightly from 24 in 2019 to 26 registered by the end of last year. Total estimated capital, however, more than doubled from \$1.67bn in 2019 up to \$3.42bn in 2020.

Top media funding initiatives (April 2020–March 2021)

Fund Name	Type	Funds Raised	Location	Focus	Backers
Unnamed Bloomage Fund	VC Fund	\$1.43bn	China	Media	Alan AMC Bloomage International Group Lancy
HV VIII Fund	VC Fund	\$625m	Germany	Media	Holtzbrinck Ventures
Bitkraft Ventures I	VC Fund	\$165m	USA	Media	Adidas Advance Publications Bitkraft Esports Ventures Logitech WPP
BA Capital fund II	VC Fund	\$147m	China	Consumer, Media	BA Capital Undisclosed strategic investors
Connect Ventures	CVC Unit	\$100m	USA	Media	Creative Artists Agency (CAA) New Enterprise Associates
Genesisia Venture Fund II	VC Fund	\$76m	Japan	Consumer, IT, Media	Aizawa Securities Canon Dai Nippon Printing Genesisia Ventures Gree Hakuho DY Holdings JA Mitsui Leasing Marui Group Mixi Mizuho Financial Nihon Unisys Oriental Land Company Tokyu Fudosan
Japanet-Pegasus Unnamed Fund	VC Fund	\$50m	USA	Media	Japanet Holdings Pegasus Tech Ventures
Hustle Fund II	VC Fund	\$34m	Japan	Media	Foundry Group Next Line Shanda Group
Mixi Entertainment Fund I	VC Fund	\$29m	Japan	Media	Mixi
Oriental Land Innovations	CVC Unit	\$27.4m	Japan	Services, Media	Oriental Land Company

Source: GCV Analytics

1 B China-based diversified conglomerate Bloomage International Group anchored a culture and sports-focused fund with a RMB10bn (\$1.43bn) target. Alan Asset Management Company (Alan AMC), an investment firm formed in 2016 by financial services firm Hana Financial Group's Hana Bank and Hana Financial Investment subsidiaries and women's apparel brand Lancy, is also a cornerstone investor. Bloomage was founded in 1989 and operates in two main business areas: culture and sports, and cosmetics and healthcare. The company's asset portfolio includes sports stadiums such as Wukesong Arena, the 2008 Summer Olympics basketball venue and the 2022 Winter Olympics ice hockey site. The vehicle will seek out investment opportunities in top-tier cities in China.

2 Germany-headquartered venture capital firm HV Capital announced a €535m (\$625m) eighth fund that featured publishing group

Holtzbrinck among its limited partners (LPs). HV Capital was founded in 2000 as Holtzbrinck's corporate venturing unit before being spun off in 2010, and it said the latest fund brings its assets under management to about \$2bn.

The vehicle was revealed alongside its rebranding from Holtzbrinck Ventures. The firm is expanding its investments through Fund VIII, which will allow it to back companies at a later stage, primarily through series B and C rounds. It will also look to supply up to €50m for later-stage portfolio companies.

The fund was also backed by institutional investors such as pension funds and university endowments in addition to private investors including the founders of several HV Capital portfolio companies. The growth investments team will be led by general partner (GP) Christian Saller, who said: "The core of our investment strategy continues to be investing in the most promising digital startups in their early stages, (seed and

series A), and then support them throughout their growth.

3 US-based VC firm Bitkraft Ventures closed its second fund at \$165m with backers including apparel producer Adidas, media group Advance Publications, computer peripherals manufacturer Logitech and advertising group WPP. Family office Carolwood and investment firms Declaration Partners and JS Capital are also among the LPs for the fund, which had an initial target size of \$125m for its close.

Bitkraft Ventures Fund I will target early-stage deals in gaming, esports and interactive media. It has already begun investing and, with Bitkraft's Pre-Seed Fund, has built a portfolio of more than 50 companies across North America, Europe and Asia. The firm's portfolio includes Venn, the gaming and esports streaming network also backed by Bertelsmann, and 3D game developer Manticore Games, which has entertainment and talent services provider Roc Nation as an investor.

4 China-based venture capital firm BA Capital closed a second yuan-denominated fund at RMB1bn (\$147m) with the help of unnamed internet and consumer products firms. Unnamed funds of funds provided around 60% of the capital. BA Capital invests only in the consumer products and media sectors and has a total of 15 brands since its debut in 2016.

The move came weeks after BA Capital raised a \$100m dollar-dominated fund in September 2020. Details of this earlier vehicle could not be confirmed. BA Capital's portfolio encompasses bubble tea bar chain Heytea, yoga products supplier Simple Love and beverage company Yuan Qi Sen Lin.

5 US-based talent agency Creative Artists Agency (CAA) formed an investment vehicle with VC firm New Enterprise Associates (NEA) that was launched with \$100m in capital. Connect Ventures will leverage CAA's relationships in sports and entertainment industries, and it reportedly plans to invest up to \$400m through the venture. The fund is run by Rick Yang, the NEA GP and the firm's head of consumer investing. CAA's end will be overseen by its new head of consumer investments, Michael Blank. The first startup to receive funding from Connect Ventures was Spire Animation Studios, a US-based animation studio co-founded by Brad Lewis, the producer of Pixar feature *Ratatouille*.

6 Japan-based VC firm Genesisia Ventures closed its second fund at roughly ¥8bn (\$76.3m), with several corporates as LPs. Canal Ventures, Canon Marketing Japan, Hakuodo DY Ventures, Mizuho Capital, Oriental Land Innovations and TFHD Open Innovation Program invested on behalf of IT services firm Nihon Unisys, imaging technology producer Canon, marketing firm Hakuodo DY, financial services firm Mizuho Financial Group, theme park operator Oriental Land Company and property developer Tokyu Fudosan Holdings respectively.

Printing services firm Dai Nippon Printing, digital media company Gree, retailer Marui Group and internet company Mixi were also



Spire's co-founders (from left): PJ Gunsagar and Brad Lewis

among the LPs, as were brokerage Aizawa Securities, leasing services firm JA Mitsui Leasing, state-owned Development Bank of Japan and Mizuho Financial Group's Mizuho Bank and Mizuho Securities Principal Investment subsidiaries.

Founded in 2016, Genesis Ventures invests in and partners seed and early-stage companies that are based in Japan and Southeast Asia. The second fund will have a similar focus to its predecessor and will concentrate on software-as-a-service, e-commerce, augmented and virtual reality technologies among others.

7 Japan-headquartered television shopping group Japanet launched a \$50m CVC fund in partnership with US-based venture capital firm Pegasus Tech Ventures. The latter will manage the fund, which will invest in North America, Israel, Europe and Asia. It will also seek out startups that could help Japanet build its planned Stadium City complex in Nagasaki, Japan.

Centred on a sports stadium due to open in 2024, the Stadium City project includes the development of mixed-use facilities. Pegasus Tech already runs funds for 35 companies including chemicals

producer Taiyo. The corporations will have access to more than 180 Pegasus portfolio companies, such as SpaceX, 23andMe, SoFi, Bird, Color and App Annie.

8 US-based venture capital firm Hustle Fund has raised \$33.6m for its second fund from LPs including messaging platform developer Line. The Japan-headquartered firm reupped in Hustle Fund II through corporate Line Ventures having committed to the first fund, which closed in September 2018 at about \$11m. Hustle Fund II's other LPs include investment firms Foundry Group Next and Shanda Group.

The second fund, managed by co-founders Eric Bahn, Elizabeth Yin and Shiyan Koh, is expected to invest in about 200 early-stage portfolio companies. Hustle Fund I backed 101 startups, writing initial cheques of \$25,000, with about 25% receiving \$250,000 to \$500,000 in additional capital. About 38% of its portfolio companies have at least one female co-founder and 17% have a black or Latinx co-founder.

9 Japan-headquartered internet company Mixi has closed a ¥3bn (\$28.9m) live entertainment digital transformation

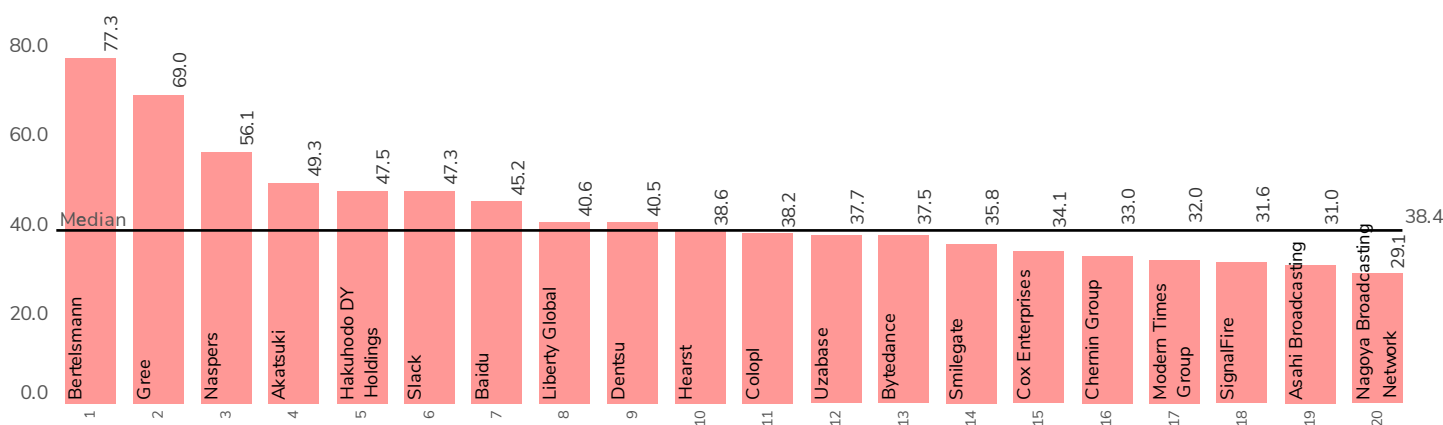
vehicle dubbed Mixi Entertainment Fund I. The vehicle will concentrate on digitalisation technology in theatrical production, and sports and music events. Mixi intends to invest up to roughly \$96m in this area, including the fund.

Founded in 1997 as an employment platform called Find Job and later renamed e-Mercury, the company pivoted to social networking in 2004 and eventually rebranded to Mixi. It had been conducting corporate venturing through its i-Mercury Capital, which was formed in 2013 with roughly \$50m.

10 Japan-based theme park and tourism site operator Oriental Land Company (OLC) has formed a ¥3bn (\$27.4m) corporate venturing vehicle, Oriental Land Innovations. Founded in 1960 by railway Keisei Group, OLC runs the Tokyo Disneyland and Tokyo DisneySea theme parks in Japan.

The fund will invest in and partner developers of technologies and products related to OLC's core entertainment and resort management businesses. The unit will be overseen by Rikiya Toyofuku, who managed OLC's food business development group.

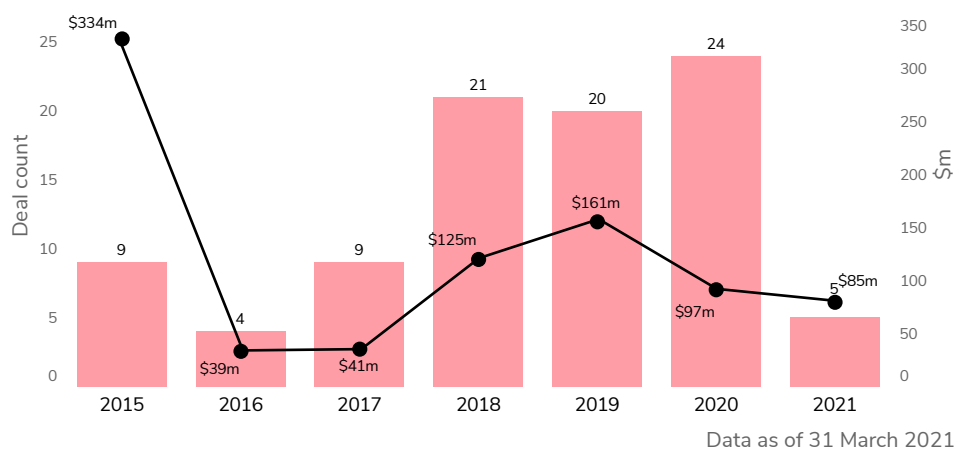
Power ranking



Source: GCV Analytics

Universities

Deals in university spinouts



Source: GCV Analytics

Over the past few years, we reported various commitments to university spinouts in the media sector through our sister publication, Global University Venturing. By the end of 2020, there were 24 rounds raised by university spinouts, up from the 20 and 21 registered in the previous two years. The level of estimated total capital deployed last year stood at \$97m, down from \$161m in 2019.

1 Soci, a US-headquartered retail brand reputation software publisher backed by Stanford University's Daper Fund, completed an \$80m series D round led by growth equity firm JMI Equity. Venture capital firm Ankona Capital provided a share of the capital, as did Afif Khoury, co-founder and chief executive of Soci, and Doug Winter, founder and chief executive of Seismic.

Founded in 2012, Soci runs a software platform used by more than 350 enterprises to organise online marketing targeted to local areas on platforms such as search engines and customer review websites. The software is equipped to help national chains vary their marketing output for individual outlets.

Soci claims to have added more than 100 new customers in 2020, which together operate 30,000 business locations. The funding is anticipated to support Soci's growth plans through product development, strategic M&A activity and building up its sales and marketing operation.

2 Statespace, a US-based video game technique software producer spun out of New York University (NYU), secured \$29m in a series B round that was led by VC firm Khosla Ventures.

The round also featured VC firm FirstMark Capital, which participated in a \$15m series A round for the company in May 2020 that was also led by Khosla Ventures and included June Fund, Expa and Lux Capital.

Founded in 2017, Statespace has built a software platform called Aim Lab where esports players can hone their skills through training environments intended to assess their visual accuracy. Customers run the software through computer game marketplace Steam and are able to practice in a sandbox environment that replicates the way their chosen game is controlled.

Statespace was founded by Wayne Mackey, a postdoctoral fellow in the Computational Neuroimaging Lab at NYU.

3 US-based in-venue customer engagement platform UpShow closed a \$14m series A round with a \$4.8m extension led by 4490 Ventures, a venture firm aligned to University of Wisconsin-Madison. Signature Venture Banking Group, the VC arm of commercial banking firm Signature Bank, also participated in the series A round with Jump Capital and TDF Ventures. The last two co-lead the initial \$6m tranche in March 2019. 4490 Ventures is backed by Wisconsin Alumni Research Foundation (Warf), the university's commercialisation arm, which first contributed to 4490 Ventures in 2013.

UpShow supplies a technology to convert existing TV displays in venues such as retail and hospitality outlets into billboards. Visitors can also download a smartphone app to receive loyalty discounts and perks, although UpShow claims to divert less of the user's attention to their phone than competing products from major tech firms that have their own digital advertising motives.

People

Amy Banse, executive vice-president of US-listed Comcast and head of funds for its corporate venturing unit, Comcast Ventures, will retire at the end of 2021. Mike Cavanagh, chief financial officer at Comcast, has taken over her role overseeing Comcast Ventures immediately. Banse, a Global Corporate Venturing Powerlist 2020 award winner, is now a senior adviser to Comcast's executive leadership team.



Amy Banse

Michael Angelakis, chairman and CEO of Atairos, will advise Cavanagh and Comcast Ventures on the organisation's strategic and financial priorities during this transition period. Banse had began her career at Comcast in 1991 as an in-house attorney responsible for Comcast Cable's acquisition of programming and content. For the past 10 years, Banse has led Comcast Ventures, expanding the team from Philadelphia to include offices in San Francisco, New York, and Los Angeles, growing the portfolio to over 100 companies and a number of exits.

Hearst Ventures, the corporate venturing arm of US-headquartered media group Hearst, augmented its team

with three appointments across offices in the US, UK and China. It promoted Kunal Mehta to principal at Hearst Ventures' New York office. Mehta joined Hearst Ventures in early 2018 from New York University's Innovation Venture Fund.

Jacqueline Cegla was been hired as senior associate at the unit's London office, splitting her time between there and Tel Aviv focusing on deal flow across both countries. Cegla was an associate at venture capital fund MMC Ventures from late 2018, having previously spent about 18 months at BCG Digital Ventures, a corporate venturing and incubation vehicle for consulting firm Boston Consulting Group.

Hearst Ventures also hired Isabel Lo, in March last year, as an associate based at its Shanghai office. She had been senior investment associate at VC firm Amphora Capital that began in 2017. Lo began her career with Hearst China in 2015 as a venture intern before being promoted to corporate development analyst later the same year.

US-based media conglomerate Cowles promoted corporate controller Skye Henderson to investment manager at its corporate venture capital (CVC) unit, Cowles Ventures. Steve Rector, chief financial officer at Cowles, runs the CVC unit, which has invested about \$85m over the past eight years, across 28 companies in the western United States. Henderson joined Cowles in late 2018, and his corporate controller position will be filled by Tom Brajcich, who has served

as the company's print media controller since early 2019.

Prosus Ventures, the corporate venturing arm of Euronext-listed internet and e-commerce group Prosus, hired Sachin Bhanot to lead its investment activities in Southeast Asia. Spun off by South Africa-headquartered media and e-commerce group Naspers, Prosus has also taken on the portfolio of its largest investment vehicle, Naspers Ventures. Based in Singapore, according to his LinkedIn profile, Bhanot was a principal at B Capital Group, the VC firm backed by consulting firm Boston Consulting Group set up by Facebook co-founder Eduardo Saverin, for roughly two years.



Sachin Bhanot

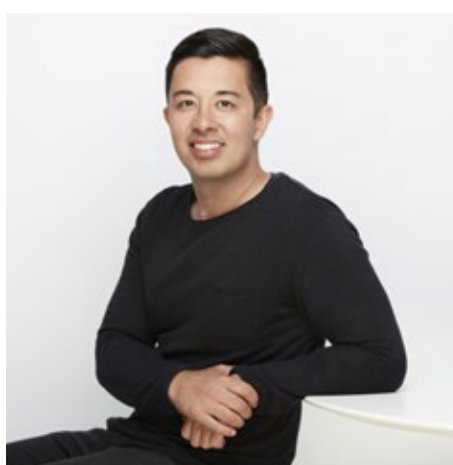
Japan-based marketing firm Dentsu and its advertising business, Information Services International-Dentsu (ISID), established a US-based joint venture focusing on software engineering and minimum. Yu Hirayama, a general partner for Dentsu Ventures, was promoted to oversee ISID as president and chief executive while Kazuya Komon, vice-president of research and development at ISID America, to be its chief operating officer. The new company has

specialised groups in areas including business development, design, software engineering and data analysis that will explore business trends, identify local partners, build software tools and carry out proofs of concept.

Daniel Gulati, managing director at Comcast Ventures, set up Forecast Fund as an early-stage venture fund investing \$500,000 to \$2m in consumer startups. Forecast was incubated within CV and Gulati, a Global Corporate Venturing Rising Stars 2019 winner, said he would be managing the fund as founding partner and added: "I will continue to work with my existing portfolio companies and the CV team." Forecast has been active since January 2020.

Daniel Broger, head of corporate development, strategy and mergers and acquisitions at Switzerland-listed industrial group Orell Füssli, left to be replaced by Désirée Heutschi, former CEO

of consultancy Swiss Startup Factory. Founded 1519 as a book printer, Orell Füssli is a diversified industrial and trading group with activities including bank note and security printing and book retail. Heutschi took over from Broger as Orell's new head of corporate development, and a member of its executive board, at the end of 2020. She has been CEO of Swiss Startup Factory since 2019 and had previously worked for Microsoft Switzerland for 14 years.



Daniel Gulati

CyberAgent Capital (CAC), the corporate venture capital subsidiary of Japan-based internet company CyberAgent, has set up technical support and public relations support divisions.

The unit has appointed multiple sector specialists who will help its portfolio companies in different fields, including technical manager Rikuo Hayami, who was chief technology officer of CyberAgent's now-defunct Bitcoin unit, search engine optimisation professional Ken Kimura and Takeshi Matsuoka, who will support technical organisation.

CyberAgent's portfolio companies will receive help in legal support from Ryo Nagai, public relations help from Eri Shimodaira, organisational support from Tetsuhito Soyama and scientific assistance from Yusuke Narita, who had helped the parent company build an AI algorithm for advertisement distribution.

Comment

Cutting the cable cord

- > Comcast's CVC staff scatter
- > Unit was moved to strategic business development team
- > Fresh eyes may prove a blessing

By James Mawson
Editor-in-chief

If demotivated, “talented people will quickly cut the cord”, we wrote in November.

This was in response to US-listed cable group Comcast's decision to limit its successful corporate venturing unit, as GCV reported at the time.

Almost six months on and the team has broken up as feared. And the unit, which was founded in 1999 and which has more than 120 portfolio companies, has announced investments in just two companies since November when it co-led a \$38m round for Zapata Computing.

Amy Banse, managing director and head of funds for Comcast Ventures, announced in September last year she would be retiring, while managing director David

Zilberman left shortly afterwards to join venture capital firm Norwest Venture Partners.

Of the other managing directors, Sam Landman is now co-founder and general partner at VC fund Mastry while Dinesh Moorjani has left to return to angel investing and his portfolio of board seats, such as Zoox. Rick Prostko has become managing director for North America at Ontario Teachers' Pension Plan's innovation platform.

Others who appeared to have cut their ties with Comcast directly are Gil Beyda, whose LinkedIn page states he has stopped being a managing director at Comcast and returned to a managing partner position at Genacast Ventures, and Daniel Gulati, who became the founding partner at Forecast Fund

in May 2020 and whose LinkedIn profile reveals he left Comcast last year. The company, however, has effectively retained their talents, as a spokesperson said Forecast Fund was set up within Comcast Ventures while Genacast was established with Comcast support.

The upshot is that only Andrew Cleland is left directly as an MD at Comcast Ventures, though other experienced people within the group include Sam Schwartz, executive vice-president and chief business development officer for Comcast.

A similar, smaller exodus has occurred at the principal level. Chris Hill departed in December to become a strategic adviser at Retina AI, Andre Iguodala left his venture partner role at Comcast's Catalyst fund and Morgan Polotan joined B Capital Group as a principal.

This has left Sheena Jindal, Min-Sik Jun and Adam Spivack as principals and the operations team, such as Arjun Kapur and Madura Wijewardena, under managing director and chief financial officer Kim Armor.

Comcast's spokesman said by email: "Comcast Ventures was just repositioned to be within the strategic development group at Comcast Cable and continues to operate as a fund and as Comcast Ventures. It just went from one department to another. We issued a statement on this and here is what we said which has not changed: 'Comcast Ventures has been a valuable innovation pipeline, providing insight into adjacent industries and investment opportunities.

'We are aligning our approach to venture investing more closely



Comcast's Technology Center

with our business units and repositioning Comcast Ventures and its fund under the strategic business development team at Comcast Cable.

'Our business development teams across the company continue to invest in new technology and businesses, which we believe will yield more strategic opportunities and benefits for Comcast and the companies in which we invest. We will continue to support our existing portfolio companies through investment and strategic partnership.'

Comcast has aligned its corporate venturing activities – it also runs Sky Ventures in the UK under James McClurg and Mike Martin, and NBCUniversal's growth team under Don Mathis – around its broader entrepreneurial activities, which include Danielle Cohn's Lift Labs accelerator, now on its fourth cohort managed by Techstars.

Since its launch, 32 companies from around the world have completed the Lift Labs accelerator programme and 75% have secured pilots or agreements with a division or business unit of Comcast NBCUniversal.

Another insider at one of Comcast's corporate venturing divisions said they were also looking at their governance and compensation, and whether to leave.

Comcast had been a top quartile venture investor – the enterprise value of Gulati's portfolio alone while at Comcast Ventures was more than \$4bn, he said – but has to now rebuild just as the parent's strategy has to.

Comcast had risen to the status of a Fortune 50 company by riding the wave of pay television in the US. But this peaked in 2012 with 90% of people subscribing to one bundle or another.

Now, cable's cords are being cut and the range of options people have to consume media has grown.

At a time when the cable and media industry is undergoing disruption, therefore, having fresh eyes and direction for Comcast Ventures might yet end up a blessing if it brings a growth mindset and new resources. The alternative is a narrow focus on trying to protect a cash cow slowly being undermined in the way print media has been by the internet.

Feature

Using human brains to improve AI

- > Sparsity looks to make AI infrastructure more efficient
- > AI increasingly useful in the software stack
- > Quantum and classical hardware evolves

By James Mawson
Editor-in-chief

René Descartes, in the mid-17th century, was the first to connect thought with the engineering of his day – in his case living systems were mechanical automata with plumbing or hydraulics to move ideas and actions.

Now, brains are too often thought of by neuroscientists as little computers with a processing capacity and a hard drive.

The internet, however, is a better metaphor for the brain, according to the book, *An Internet in Your Head*, by Daniel Graham. Both are places of trying to sort and process information in the most rapid and effective way.

As Graham writes: “In some ways, it is odd that it has taken so long to recognise that flexible, efficient, reliable communication is precisely what both the internet and the brain do.

“The key innovations – such as a system for dividing up messages into chunks of fixed size – have been known for more than half a century. We should not expect that the brain works exactly like the internet. But tricks similar to those used by the internet seem necessary in the brain as well.”

And as well as in making comparisons to the internet, computer scientists are looking

more closely at the brain's tricks to see if insights can be found for the infrastructure underpinning artificial intelligence (AI).

Zaid Kahn, general manager in Microsoft's cloud hardware infrastructure engineering group, where he leads a team focusing on advanced architecture and engineering efforts for AI, said: "AI currently is in an arms race.

"Because the industry is at a young stage to train large and useful models there is a large chip landscape of companies, such as

Graphcore and Nvidia, to process these large models in a dense matrix of parameters.

"To build and scale the infrastructure to train models is not a trivial task to put together at a large scale. It requires enormous power – 300 to 500 Megawatts and this is increasing.

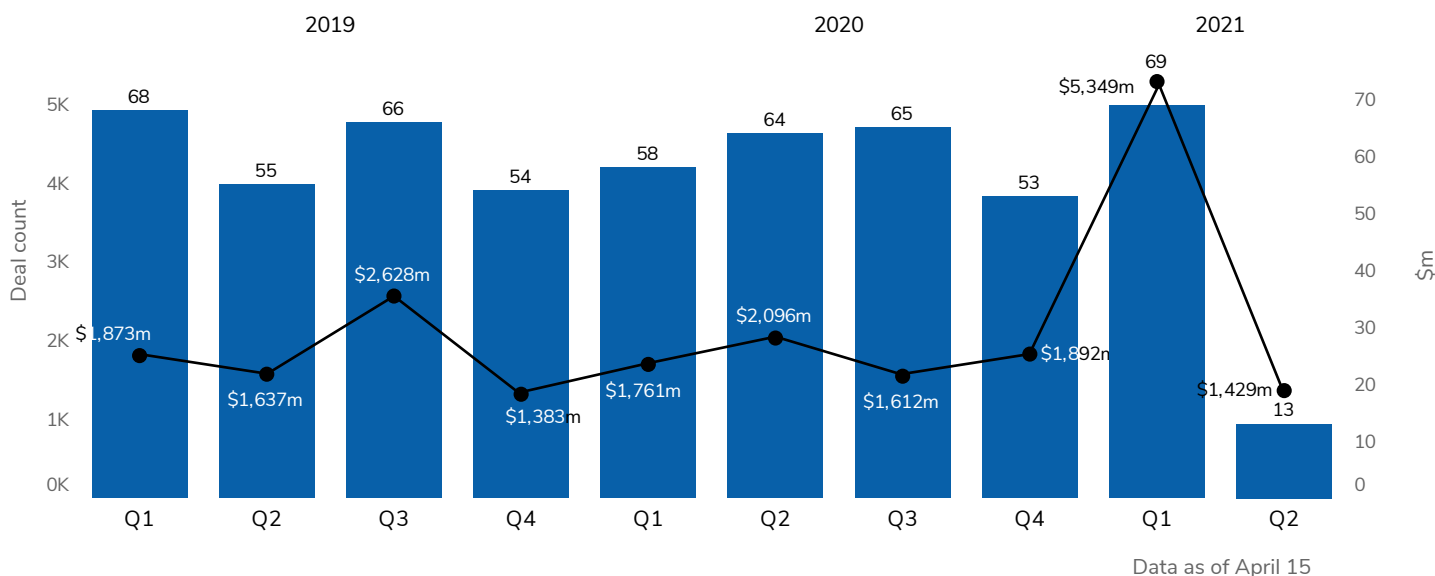
"So I look at this and at some point think efficiency will become important. The brain is 1,000 times faster using 25 watts of power – equivalent to a lightbulb – because humans know five things rather

than record every detail. This is the sparsity model and a big opportunity."

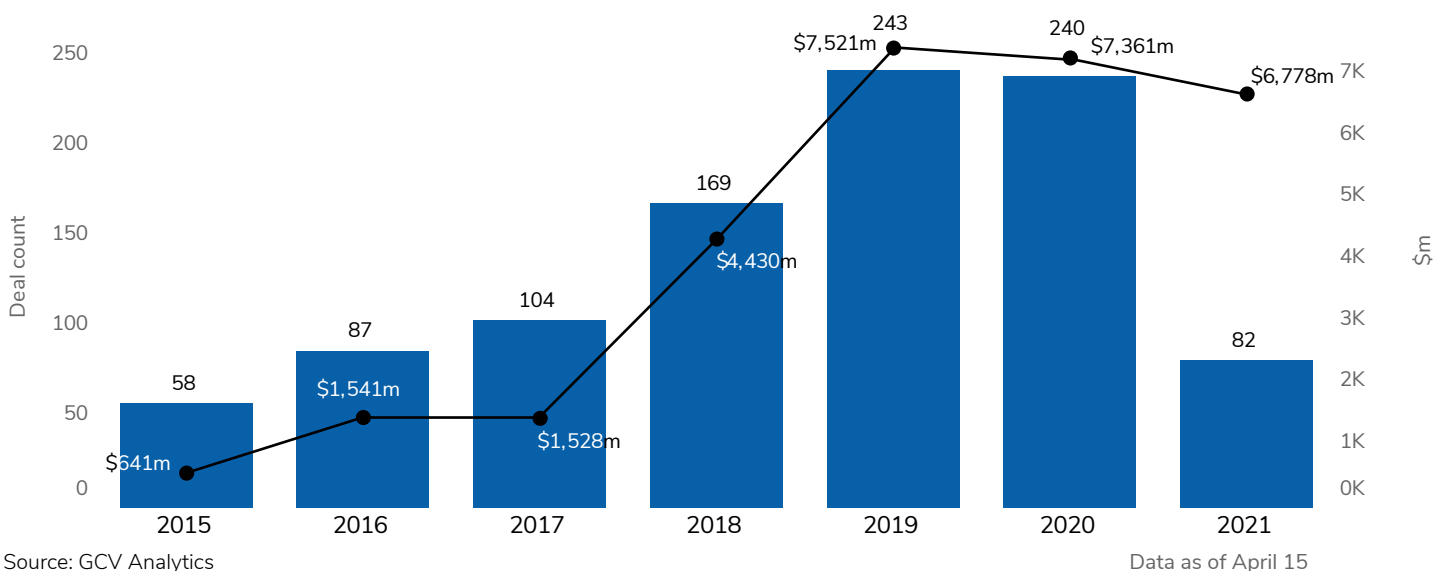
In AI inference (which are the capabilities learned during deep learning training are put to work) and machine learning, sparsity refers to a matrix of numbers that includes many zeros or values that will not significantly impact a calculation.

The goal, as Nvidia noted last year when developing its third-generation Tensor Cores, is to reduce the mounds of matrix

Corporate-backed artificial intelligence and machine learning deals by quarter



Corporate-backed artificial intelligence and machine learning deals by year



Source: GCV Analytics

multiplication deep learning requires, which shortens the time to good results without losing accuracy.

To this end, Nvidia, other established chip companies and startups, such as SambaNova, Horizon Robotics, GraphCore, Groq, Nuvia (recently acquired by Qualcomm), Cambricon, and Cerebras, have been raising money to tackle inference and training systems.

This, however, is hard to do because the feedback loop from model to measuring accuracy can be lengthy and the gap between hardware and software can cause issues.

Software near the end user or customers – the upper stack – has greater fluidity and can iterate faster than the chips or hardware that become outdated within a year.

This creates tensions for the bit in the middle – the lower stack – where the software code compiler sits and tries to optimise for the different hardware and deliver the

output. Ultimately, these compilers are expected to plug in to all the successful chips and hence churn out the code the software applications can use.

“Fundamentally what is going on in the world right now is that the traditional model of how computers are programmed has been turned on its head.”

“The brain is 1,000 times faster using 25 watts of power – equivalent to a lightbulb – because humans know five things rather than record every detail. This is the sparsity model and a big opportunity”

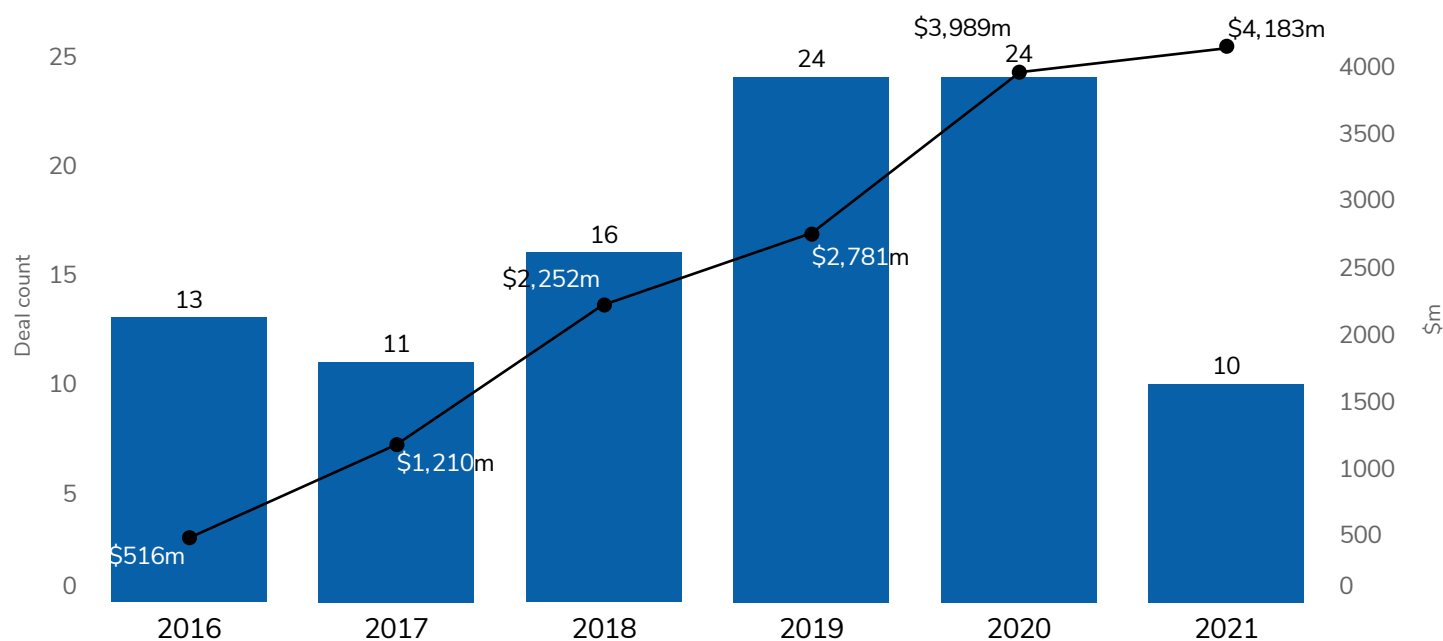
Zaid Khan

AI will then write the software and potentially optimise the compilers.

Jeff Herbst, vice-president of business development at Nvidia and head of Nvidia GPU Ventures, spoke to George Hoyem, managing partner at In-Q-Tel, at the GCV Digital Forum 2021 in end of January: “Modern AI is basically pattern recognition on data, whether it is images or voice.

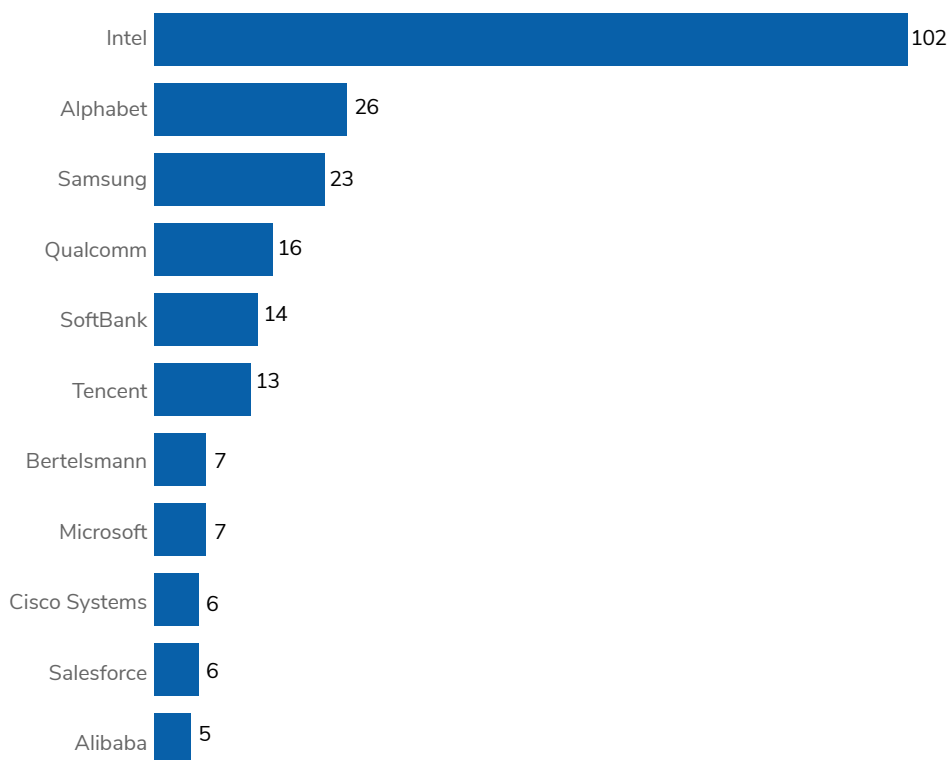
As Rashmi Gopinath, general partner at venture capital firm B Capital Group said, training and inference time, energy consumption and memory usage of AI is catching up with the dynamism of open source software and potential of quantum and classical hardware. Gopinath will be speaking at and a speaker at next month’s Software for AI Optimization Summit.

Corporate-backed exits in artificial intelligence and machine learning



Data as of April 28

Top investors in artificial intelligence and machine learning



Source: GCV Analytics

And once the stack is being optimised for performance by the algorithms having clarity on the data inputs and model outputs becomes more of a focus.

The revolutions of electricity, semiconductors and the internet has transformed society and business and created the conditions for data and information to be created and shared.

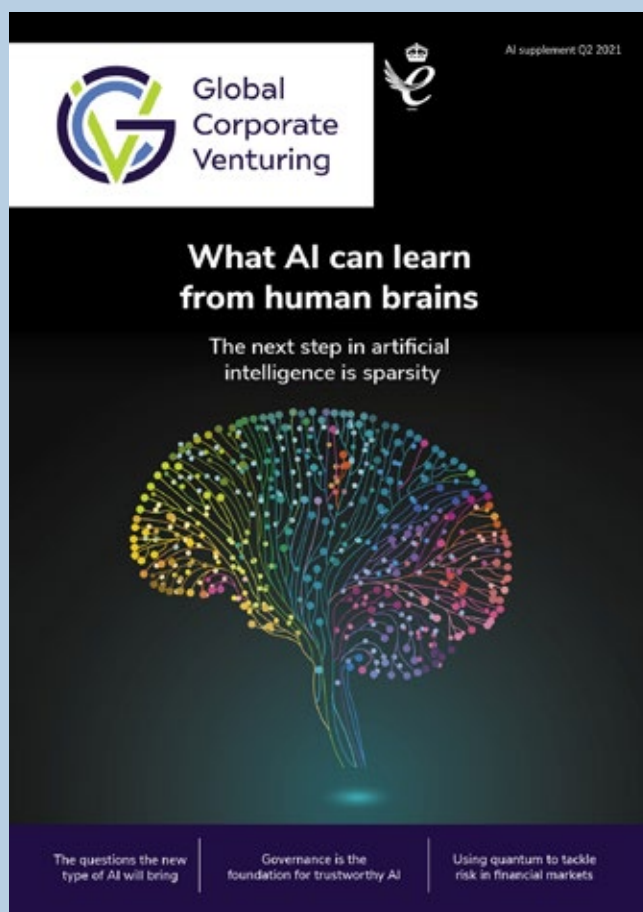
Now it is a race to when convergence between humans and AI or the singularity can happen, which some AI scientists, such as Jürgen Schmidhuber, speaking at Nvidia GTC 2021 last month, expect by 2040.

By then the next metaphor for the brain and computers will have been developed by algorithms, such as GPT-3.

Data as of April 28

Quarterly AI supplement out this month

- > Sparsity is the next big challenge
- > Wrestling with the governance questions
- > Using quantum to tackle market risk in finance



Innovative region

Israel ushers in innovation and technology

- > Corporate-backed deals grew considerably
- > Innovation level only behind Silicon Valley
- > Evolved from startup to scale-up nation

By Liwen-Edison Fu
Supplements editor

“If you are going to the Middle East to look for oil, you can skip Israel; if you are looking for brains, look no further,” said Warren Buffett, chairman and chief executive of US-headquartered conglomerate Berkshire Hathaway. “Israel has shown that it has a disproportionate amount of brains and energy.”

Israel has the largest number of startups per capita in the world, according to cloud computing conference CloudFest copywriter Jordan Yerman’s article, *A Startup Nation: Why Israel Has Become The New Silicon Valley*, and its level of innovation is only behind the San Francisco Bay Area.

The country also produces the highest number of engineers per capita and has the world’s second-highest research and development (R&D) spending as a percentage of the gross domestic product (4.3%), according to consultancy Deloitte.

David “Dede” Goldschmidt, Israel-based vice-president, managing director and head of Samsung Catalyst Fund (SCF), a corporate venture capital (CVC) vehicle for South Korea-headquartered consumer electronics conglomerate Samsung, pointed out the Israeli ecosystem’s strong suits: “First, a unique entrepreneurial culture: Israelis are very practical and agile in their

problem-solving attitude, seeking a way for fast implementation of new concepts and technologies. They are more open to taking risks and be the first to operate in blue ocean, emerging domains.

“Second, relevant knowledge and expertise: The brightest minds that serve at Israeli Defence Forces have access to leading-edge technology and opportunity for high-scale implementation, and the very active and vibrant local tech scene with thousands of funded startups and over 350 multinationals’ R&D centres. Also, academia is very strong in multiple domains, such as computer vision – the foundation for [chipmaker Intel’s Israel-based autonomous vehicle subsidiary] Mobileye.

“For this reason, we see a lot of interest in Israel from foreign VCs. In fact, more than 75% of the direct investments in Israel are by foreign investors, whereas in Europe, traditionally the majority of capital invested was local. Moreover, the magnitude of venture funding in Israel is very

high – Israel alone attracts more venture capital dollars than most large European nations.

“Israel follows Silicon Valley and is probably ahead of Europe in the maturity of the venture ecosystem. Earlier in this century, Israel had strong sources for early-stage financing; however it lacked the capital needed to fund growth. This resulted in early exits at relatively lower valuations. Over the past decade, we have seen many growth-stage players attracted to Israel, allowing liquidity to the early investors and growth capital to the companies, fuelling their growth and scale – by now Israel has more than 15 unicorns.

“SCF and many of the other CVCs have a strong presence in Israel, even compared with other regions in the world.”

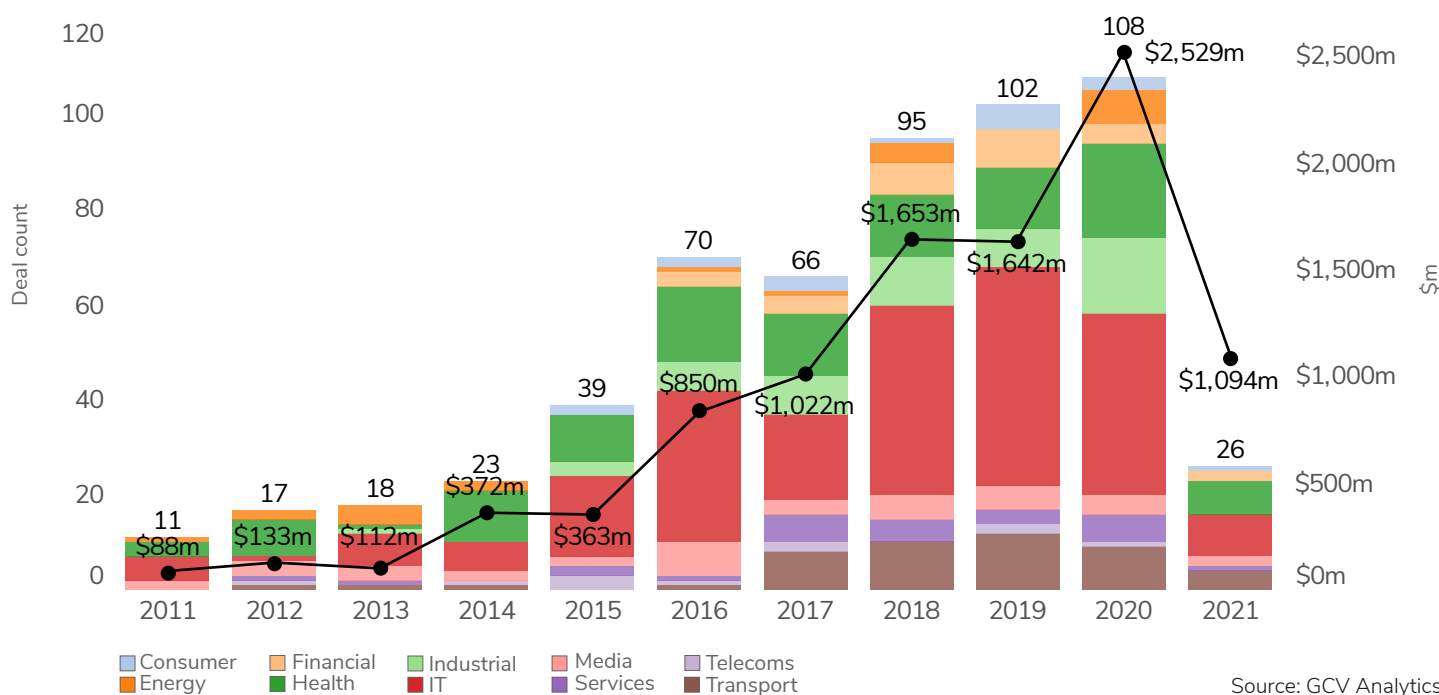
Irad Dor, an Israel partner for US-based software supplier Microsoft’s corporate venturing arm, M12, added: “There is an exceptionally strong sense of collaboration between ecosystem players in

Israel, significantly higher than in Europe and to some extent in Silicon Valley. You could easily find examples of multinationals co-operating within the local ecosystem to benefit individual startups, common social projects or even the ecosystem as a whole.

“Due to the size and connectedness of Israel’s technology ecosystem, and the constant flow of talent between multinational corporations, startups, the military and academia, the relative volume of multidisciplinary technology innovation in the country tends to be higher.”

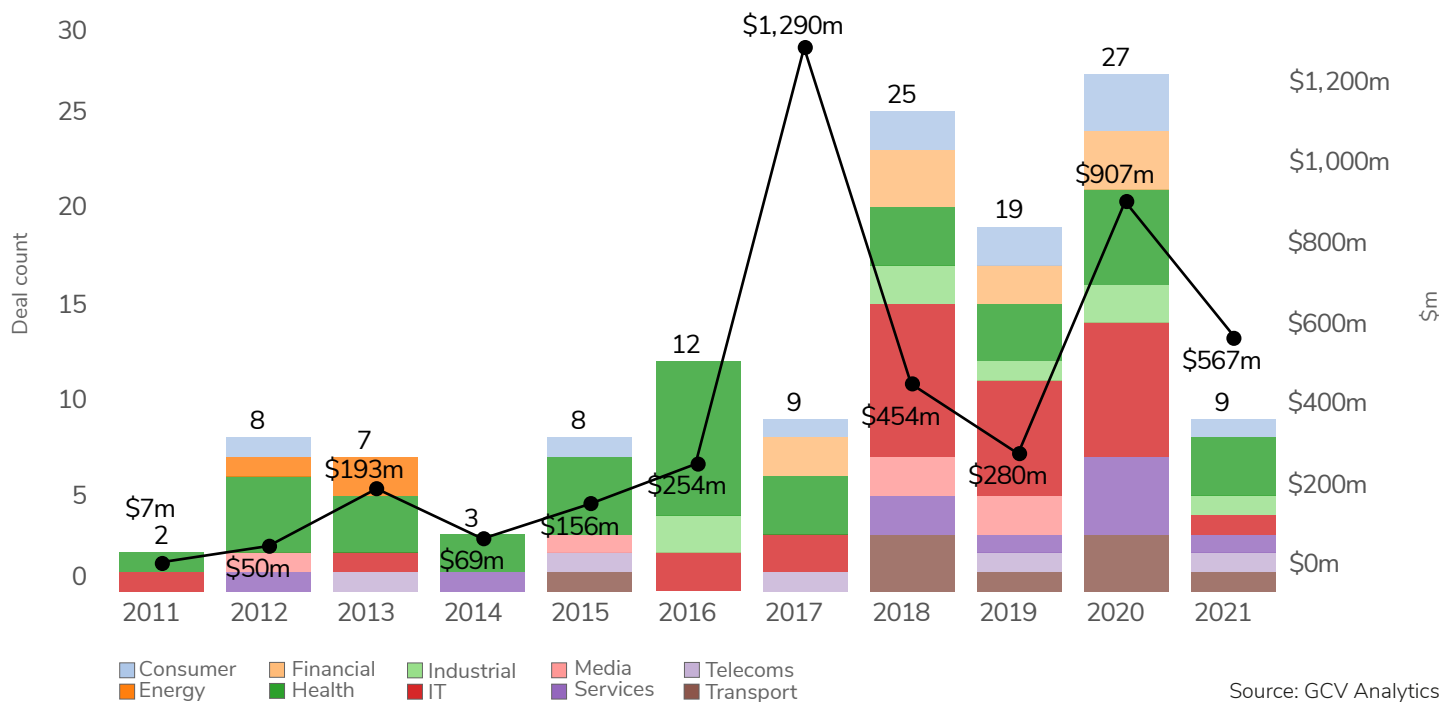
Joseph Kowen, an Israel venture partner for Evonik Venture Capital (EVC), the strategic investment subsidiary of Germany-listed speciality chemicals provider Evonik Industries, also said: “Israel is a compact country with a small population. A large percentage of the academic, research, corporate and entrepreneurial activity takes place in a narrow strip of the country from Beersheba in the

Corporate-backed deals in Israel-based enterprises 2011-21



Source: GCV Analytics

Deals by Israel-based corporates 2014-21 by sector



south to Haifa in the north. Israelis tend to be highly networked, so non-confidential information travels quickly between people. The effect is that a particularly hot area of startup activity finds its way around the country very efficiently.

“Some cultural characteristics play a part too. Israelis are willing to try new things, take some risks, and while driven to success are not intimidated by failure. They draw conclusions, pick themselves up, and go to work again. Driven by the natural proclivity of Israelis to network, digital tools and platforms such as WhatsApp groups are established and populated with great ease. Common issues are shared almost instantaneously.

“By way of example, I am a member of a WhatsApp group that shares information on foodtech, an area of interest for EVC, and so I am served a daily diet of information about new ideas, ventures, events and even a jobs board which gives an indication who is hiring and for what positions.



Joseph Kowen

“There is a healthy interaction between academia and the tech community. In fact, a lot of serious basic research easily becomes applied research with the objective of taking the idea to market in some form, which explains the high level of activity among technology transfer organisations of all the main research institutions. Academic researchers are frequently bitten by the entrepreneurial bug and make an easy transition from academia into the high-tech world. Graduate students from a good higher education system often end

up being employees in startups that are set up to commercialise the research. A prominent example is professor Amnon Shashua, a computer science professor from the Hebrew University, who led Mobileye to an acquisition by Intel for \$15.3bn.

“Finally, I would add that Israelis are very international in their activities, directly as a result of the country’s size. As a very small country with a high percentage of immigrants, Israeli tech entrepreneurs are well-connected internationally from day one and think globally with great ease. Technology companies easily establish contact with their counterparts from many countries. The ecosystem here is enriched with contacts from around the world. For this reason, one can find investors, collaborators and business partners from a range of countries all active here, from North America to western Europe, through eastern Europe and Asian technology centres, such as Singapore, China and Japan.

“There is no region that is not well-represented in the search for new ideas and investments.”

Israel ranked 13th among the world's most innovative economies in the Global Innovation Index 2020 and is the most innovative economy in western Asia.

Corporate-backed deals in Israel peaked both in number (108) and funding (\$2.5bn) in 2020 despite covid-associated lockdowns and disruptions. Similar to previous years, IT investments dominated the market, followed by healthcare and industrial ones.

Deals conducted by Israel-headquartered corporate venturers also reached a notable number (27) and overall funding amount (\$907m), the latter only surpassed by the figure in 2017 (\$1.3bn).

Significant deals from the past few years have included rounds raised by Landa Digital Printing, Yotpo, GetTaxi, BioCatch, Lightricks, Fireblocks, K Health, Innoviz, Cato Networks and Vayyar Imaging.

SCF's Goldschmidt explained the innovation scene's development: “The ecosystem has matured quite significantly in the past years and we are seeing larger Israeli companies and larger exits. 2019 was a record-breaking year both in startups fundraising which exceeded a total of \$8bn raised and in exits with a total exits value of \$21.7bn across 138 deals. We see more and more serial entrepreneurs, forming their third or fourth company, seeking this time to build category leaders.

“Our investment approach has changed accordingly and we at

SCF now invest in more mature companies.

“With a long-term view, we see how Israeli talent has adjusted to serve demand, following ‘hype cycles’. Back in the 90s, the Israel ecosystem had very strong telecom and wireless systems startups such as Breezecom and others. In the early 2000s, we saw a rise in storage and networking subsystems and chipsets such as XIV, Passave and Broadlight.

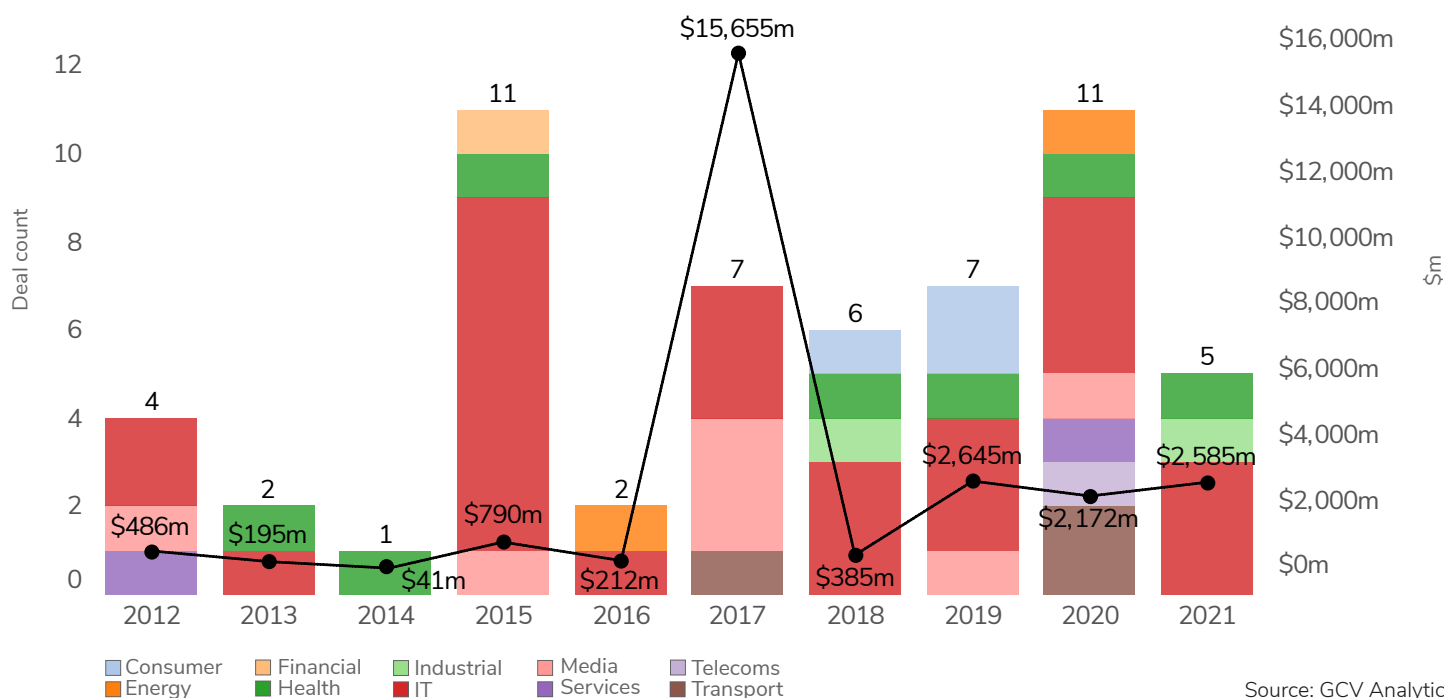
“The second decade of this century saw a strong rise in cybersecurity, adtech, internet and mobile, with companies such as Waze, Wix and Trusteer. Later came the automotive and AI wave with companies such as Innoviz – globally leading automotive lidar technology – and Habana Labs – an AI chip developer, which

Top corporate-backed deals in Israel-based businesses 2011-21

Portfolio company	Sector	Round	Round size (\$m)	Co-participant list
Landa Digital Printing	Industrial	Undisclosed	300	Altana Skion
Yotpo	Services	E and beyond	230	Bessemer Venture Partners Claltech Coin Ventures Hanaco Tiger Global Management undisclosed investors Vertex Ventures Vintage Investment Partners
GetTaxi	Transport	D	150	Access Industries Vostok New Ventures
BioCatch	IT	C	145	American Express Bain Capital CreditEase Industry Ventures Maverick Ventures OurCrowd
Lightricks	Media	C	135	Access Industries Goldman Sachs Insight Venture Partners
Fireblocks	IT	C	133	BNY Mellon Coatue Cyberstarts Galaxy Digital Paradigm Ribbit Capital Silicon Valley Bank Stripes Group Swisscom Tenaya Capital
K Health	Health	E and beyond	132	14W BoxGroup GGV Capital Kaiser Permanente LTS Investments Marcy Venture Partners Max Ventures Pico Venture Partners Primary Venture Partners undisclosed investors Valor Equity Partners
Innoviz	Transport	C	132	China Merchants Capital Investment Harel Insurance Company New Alliance Capital Phoenix Insurance Shenzhen Capital Group
Cato Networks	IT	Undisclosed	130	aCrew Capital Aspect Ventures Coatue Greylock Partners Lightspeed Venture Partners private investors Singtel (Innov8)
Vayyar Imaging	IT	D	109	Battery Ventures Bessemer Venture Partners Claltech Israel Cleantech Ventures ITI Venture Capital Partners Koch Industries Regal Funds Management Walden-Riverwood Ventures
Pagaya	Financial Services	D	102	Aflac Bank Hapoalim Clal Insurance GF Securities Oak HC/FT Private Investor Siam Commercial Bank Viola Ventures
Voyager Labs	IT	Undisclosed	100	Horizons Ventures Oracle Sir Ronald Cohen
Papaya Global	IT	C	100	Access Ventures Alkeon Capital Bessemer Venture Partners Dynamic Loop Capital Greenoaks Capital Group 11 Insight Venture Partners Institutional Venture Partners (IVP) New Era Capital Partners Scale Venture Partners Workday
V-Wave	Health	C	98	Aperture Venture Partners BRM Group Deerfield Management Endeavour Vision GHS Fund Israel Secondary Fund Johnson & Johnson Pontifax Pura Vida Investments Triventures
Team8	IT	Undisclosed	85	Airbus SAS Barclays Bessemer Venture Partners Cisco Systems Dimension Data Innovation Endeavors Microsoft Moody's Corporation Munich Re Ventures Nokia Scotiabank SoftBank Temasek Walmart

Source: GCV Analytics

Corporate exits from Israel-based enterprises 2012-21



was acquired for \$2bn in 2019 – both portfolio companies of the Samsung Catalyst Fund.

“It is worth noting the emergence of data and AI-driven startups. Data-driven innovation is disrupting many verticals and we are specifically interested in the large, trillion-dollar markets being disrupted by these companies. Examples of such verticals are fintech, healthcare and digital health, and industry 4.0.

“We are looking to invest in these companies which have demonstrated a flywheel effect. As these companies grow and have more customers, they collect more data and improve the solution based on the collected data, which in turn drives additional customer growth.”

Global and local corporate exits reached an all-time high in the country, respectively logging 11 and four transactions valued at \$2.1bn and \$1.7bn.

Top exits from Israel have included Mobileye, IronSource, Habana



Irada Dor

Labs, Checkmarx, Anobit, Spot (Spotinst), Annapurna Labs, Medit-Tate, Skycure and OrthoSpace.

M12’s Dor added: “Until recently, Israel was a startup nation where startups were acquired for \$100m to \$200m by multinationals. In recent years, however, it has become a monstrous scale-up nation and Israeli founders produce unicorns at an unparalleled per-capita rate. More than a dozen privately held Israeli founded startups have crossed the \$1bn mark in 2021 alone, a similar number to India.

“Today, Israeli founders make Israel the country which produces the highest number of per capita tech unicorns. Our investment approach in Israel is aiming to invest in startups with a real chance to become unicorns.”

EVC’s Kowen agreed and said: “There has always been a relatively high level of innovation in Israel from early days with the founding of companies such as Scitex, Elbit and Elscint. What has occurred over the years is a dispersion of technology and entrepreneurial activity across a broader range of companies and into new technology areas. This has affected the number of CVCs active here. Startup Nation Central lists 35 foreign CVCs active in Israel, of which 24 have become active since 2015.

“A lot has been written about the role of the army in developing important parts of the ecosystem, but we see increasing activity in non-military related technologies. This has been a driver of EVC’s

increasing interest in connecting with the Israeli ecosystem. Evonik's innovation growth fields are additive manufacturing, advanced food ingredients, cosmetic solutions, healthcare solutions, membranes, sustainable nutrition and digital aspects of these fields.

“Some areas of interest for EVC that we target in Israel are smart coatings and additives, personalised skincare, 3D printing, microbiome-related innovations, tissue engineering and cultured meat, and precision livestock management. The dispersion and broadening of the ecosystem have begun to present opportunities for EVC. The natural curiosity within the ecosystem generates a growing number of out-of-the-box ideas that complements EVC's internal innovation activities.

“EVC's investment focus lies primarily in materials, and it seeks out less well-known, but no less interesting hot areas. Alternative protein and cultured meat is an area of interest for Evonik, and this is a very hot topic in Israel right now.

“Lots of money is flowing into the space. The broader area of foodtech and agritech is also very active.

“EVC generally addresses B2B companies and is interested in startups that are developing future-oriented technologies and disruptive business models.”

Similar to Australia, China and Malaysia, Israel also runs state-owned venture funds with some of the earliest government-led VC vehicles. Yozma – which means initiative in Hebrew – was formed in 1993 to provide tax relief designed for foreign VC schemes operating in the country and to help boost their deals with public money.

Another example is the Israel Innovation Authority's Incubators Program, which invests millions of dollars in high-tech entrepreneurs who are building innovative startups.

Dor, who joined M12 in March 2021 to focus on early-stage investments in cloud infrastructure, cybersecurity and enterprise software in the country, said: “M12

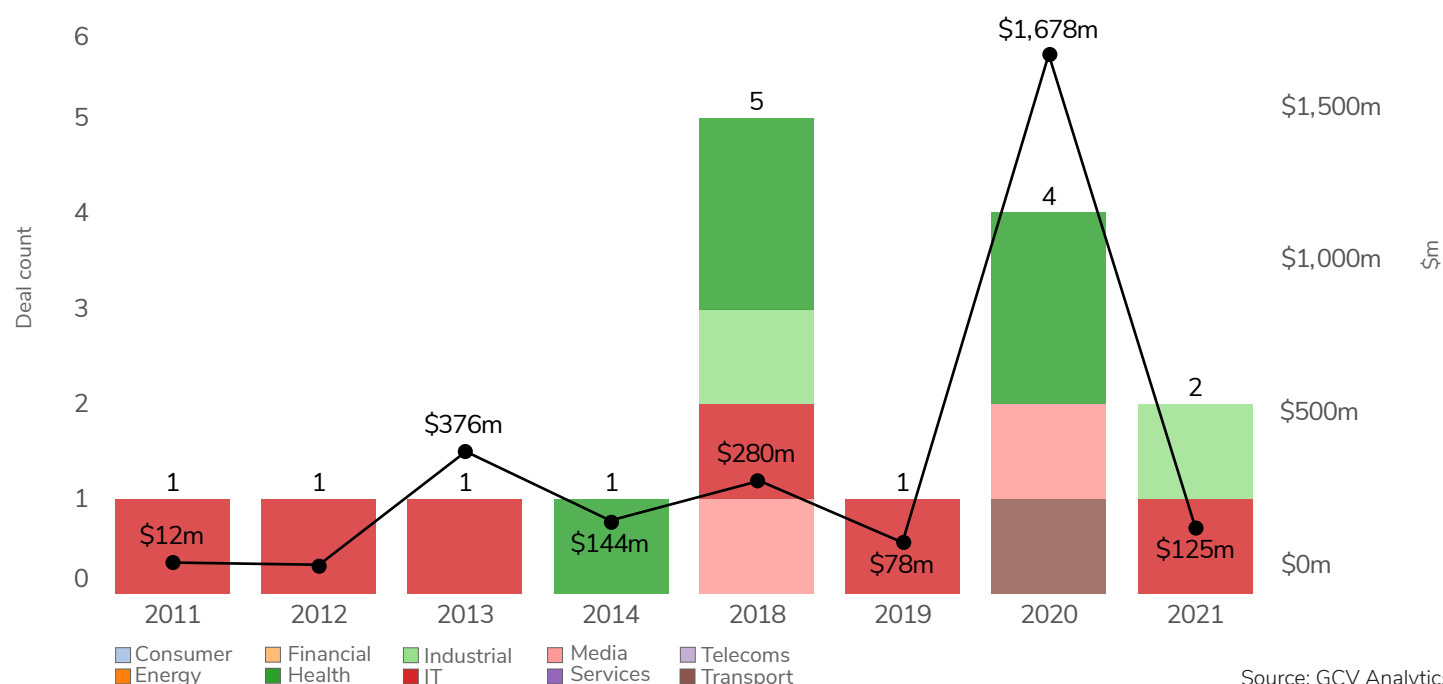
is highly collaborative and financially driven, working to help support our portfolio companies and the local ecosystem in general. We share dealflow with partner VCs and have networked with local accelerator programmes to best stay connected to the next wave of homegrown, visionary startup leaders.”

He was a director for nearly six years at telecommunications firm SingTel, first at Singtel Innovation Centre in Israel and Europe before joining its corporate venturing unit, Innov8 VC. He then joined Eight Roads, a subsidiary of financial services and investment group Fidelity, as a venture partner where he spent almost three years from 2018.

Kowen said: “EVC began looking at investments in Israel some years back as interesting opportunities were presented to the company through its international network in the business, investment and technology communities.

“As open innovation is key for Evonik, in 2017 the company

Exits of Israel-based corporates 2014-21



Source: GCV Analytics

Top corporate-backed exits from Israel-based businesses 2011-21

Portfolio company	Location	Sector	Round	Round size (\$m)	Co-participant list
Mobileye	Israel	Transport	Acquisition	15,300	Undisclosed strategic investors
IronSource	Israel	IT	Other	2,200	Access Industries Baupost Group Fidelity Hedosophia Morgan Stanley Nuveen Real Estate Thoma Bravo Advantage Tiger Global Management Wellington Management
Habana Labs	Israel	IT	Acquisition	2,000	Battery Ventures Bessemer Venture Partners Intel Walden-Riverwood Ventures
Checkmarx	Israel	IT	Acquisition	1150	Hellman & Friedman Salesforce
Anobit	Israel	IT	Acquisition	450	Apple Battery Ventures Intel Micron Technology Pitango
Spot (Spotinst)	Israel	IT	Acquisition	450	Highland Capital Partners Intel Leaders Fund Pico Venture Partners Vertex Ventures
Annapurna Labs	Israel	IT	Acquisition	370	Arm Walden International
Medi-Tate	Israel	Health	Acquisition	260	Laborie Olympus
Skycure	Israel	IT	Acquisition	250	Foundation Capital New York Life Insurance Pitango private investors Shasta Ventures
OrthoSpace	Israel	Health	Acquisition	220	Johnson & Johnson Smith & Nephew
Altair Semiconductor	Israel	IT	Acquisition	212	Bessemer Venture Partners BRM Group Giza Venture Capital Jerusalem Venture Partners Sandisk Sony
N-trig	Israel	IT	Acquisition	200	Challenger Microsoft
Magisto	Israel	Media	Acquisition	200	Horizons Ventures Magma Venture Partners OurCrowd Qualcomm Samsung Sandisk Western Digital
DBMotion	Israel	Health	Acquisition	195	Allscripts Gemini Israel Funds Ness Technologies Pitango Vertex Ventures
Otonomo	Israel	Transport	Other	173	Avis Budget Group Delphi NTT Docomo SK Group Software Acquisition Group II

Source: GCV Analytics

decided to upgrade its activities through the appointment of Lars Böhnisch as the executive responsible for EVC's investment activities in the country. He began visiting the country on a regular basis and through his visits he established connections with VCs, CVCs, government representatives and universities in the country."

In April 2020, EVC appointed Kowen as the local venture partner

in Israel, and he has continued the task of building connections with key players in the ecosystem that are relevant for EVC's areas of interest. The company has made two investments in Israel and collaborates closely with local VC funds and investors as it accompanies them in their technological and commercial development.

Goldschmidt, who was promoted

from managing director for Israel and Europe to SCF's global head in March 2021, concluded: "We work closely with CVCs and institutional VCs as co-investors. As a corporate VC, whether we lead or not, we will always prefer to invest together with a strong syndicate. We think it makes sense to have a financial VC in the syndicate. In addition, we look to the earlier-stage local VCs as a source for later-stage deals."



How Evox is engineering a new class of therapeutics

- > The company works with exosomes
- > Cells use these to communicate and transfer material
- > The target is currently rare metabolic conditions

By **Thierry Heles**
 Editor, Global University Venturing

Spinouts always operate, by their very nature, on the cutting edge of science, but every once in a while, one comes along that could prove truly transformational by inventing an entirely new field. Evox Therapeutics, which exploits research from University of Oxford and Karolinska Institute, is one of these: the spinout is a pioneer in the exosome therapeutics space – a new class of therapeutics that Evox is initially aiming at rare metabolic conditions but that has applications far beyond these target areas.

Evox, established in 2016, is building on work undertaken by Matthew Wood, professor of

neuroscience and deputy head of the medical sciences division at Oxford, and Samir El Andaloussi, associate professor in biomolecular medicine at Karolinska. A third co-founder, Per Lundin (now Evox's chief operating officer) was instrumental in bringing the two university founders and their intellectual property together.

Evox is led by chief executive Antonin (Tony) de Fougères, who gained a PhD in immunology from Harvard University in 1993 and brings a wealth of experience to the job: his last three jobs were chief scientific officer at, respectively, Ablynx, Moderna Therapeutics and Tolerx, and

before this he served as vice-president, research, at Alnylam Pharmaceuticals.

Wood began looking into exosomes in 2010, when he was “the first one to think about using exosomes as a means to deliver drugs and demonstrate it *in vivo*”, de Fougerolles told sister publication Global University Venturing.

“Exosomes had been known about but had largely been thought of as small vesicles that cells secrete, mostly as a way to get rid of stuff – a garbage disposal system so to speak,” he explained. “But they are much more than that: cells are using exosomes to communicate with each other and to transfer payloads like proteins and mRNA safely and effectively.”

Wood’s stroke of genius, de Fougerolles continued, was to load exosomes with siRNA molecules made in the lab. He engineered the exosomes to display ligands on the surface that would help them cross the blood-brain barrier. Doing this, he successfully demonstrated in mice that “he could systemically administer a siRNA-loaded engineered exosome and get delivery and target silencing in the brain”, de Fougerolles continued. “That was something nobody else had been able to do and that has really opened up the whole exosome therapeutic field.”

The initial focus for Evox’s internal pipeline was due to a range of factors. “We are in a fortunate position with our technology in that we can pretty much deliver any payload to a multitude of different tissues,” de Fougerolles declared. “What particularly attracted us to rare metabolic disorders were three things. Firstly, there is a high unmet



‘From a drug development perspective, the only risk we are taking is whether the exosome can deliver enough of the enzyme to the right place...We have distilled it to a simple pharmacology risk’

Tony de Fougerolles

need. Secondly, the preclinical models are extremely predictive of what happens in man. Thirdly, we have very clear readouts in animal models and in patients that allow us to understand if the drug is working. In the case of urea cycle disorders, by looking at plasma, ammonia levels, a bunch of the substrates and products of the enzymatic reaction we can really know if it is working.”

There was another, more obvious reason for going after rare genetic

diseases, too, he added: “we know what we need to deliver to correct the disease”.

He clarified: “These patients have a defective enzyme, and we know exactly what that enzyme is. We can load the functional copy of that into our exosomes and get that delivered. From a drug development perspective, the only risk we are taking is whether the exosome can deliver enough of the enzyme to the right place. If it can do that, we know

the drug will work, so we have eliminated all sorts of target risk. We have distilled it to a simple pharmacology risk.

“Obviously if we are successful with this, we can advance rapidly through clinical trials and commercialise it ourselves. That is part of Evox’s ultimate goal – much like it was at other companies I have worked at like Moderna and Alnylam – to develop a proprietary pipeline of products.”

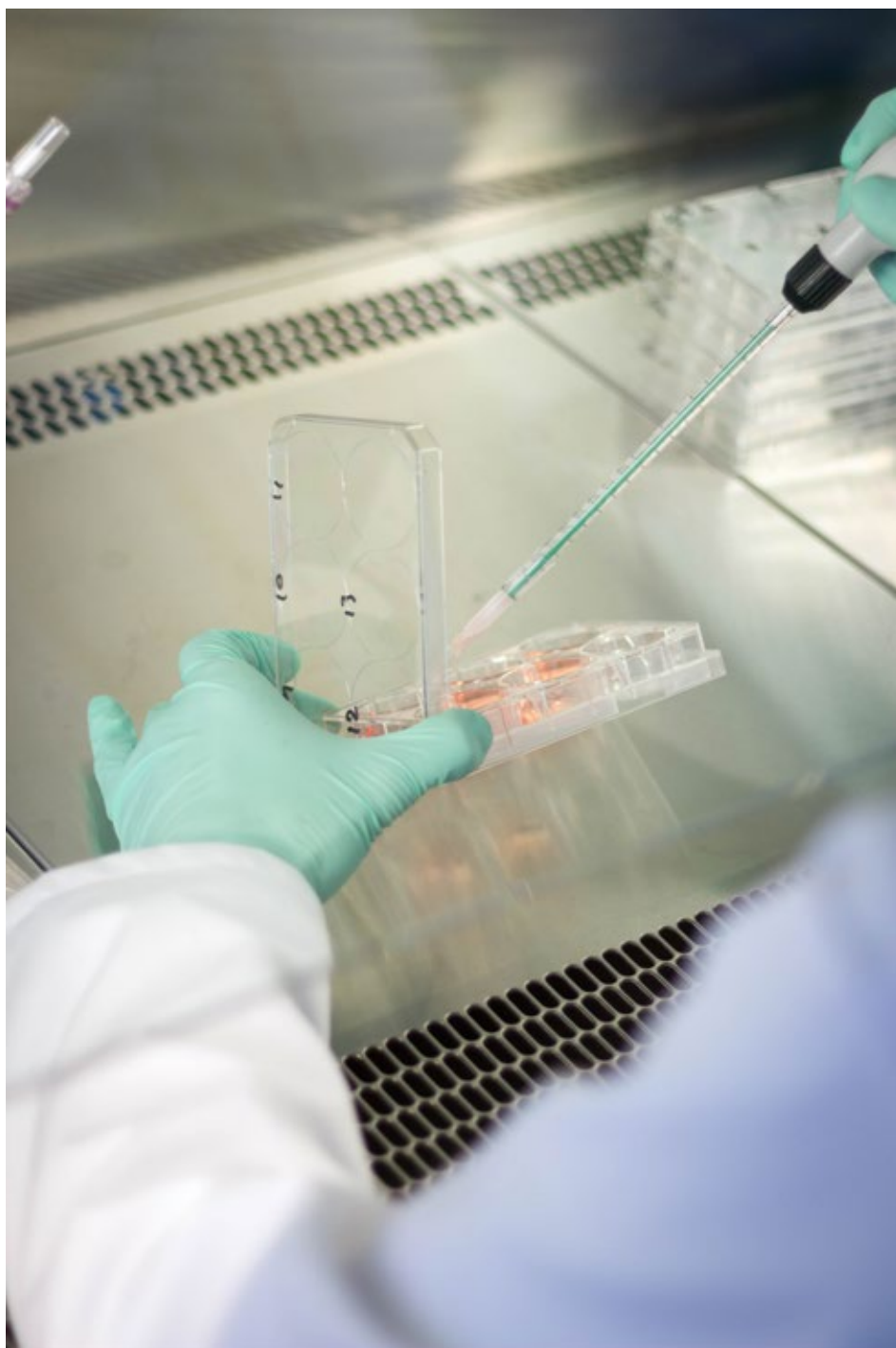
Evox is, however, also working on an external pipeline. Its partners include pharmaceutical firms Eli Lilly and Takeda. The former deal, signed in June 2020, is a four-year agreement for five targets, though all are undisclosed. The latter, finalised in March 2020, is a five-target deal aimed at rare diseases, including Niemann-Pick disease type C, a progressive genetic disorder characterised by an inability of the body to transport cholesterol and other fatty substances inside cells. Symptoms include learning difficulties, movement, speech and swallowing problems, and a significantly shortened lifespan – patients diagnosed as children typically die before the age of 20. There is currently no treatment approved in the US, and patients elsewhere at best only have recourse to therapies that slow the progression of the disease.

De Fougerolles explained: “We work with partners because obviously we cannot do it all ourselves. In a lot of cases, the partner will bring specific expertise that is critical to making rapid progress. Takeda brings a huge amount of experience in rare diseases and Lilly brings siRNA payloads, so we do not have to worry about designing those.”

The partnerships came about after Evox’s technology piqued the interest of several pharmaceutical companies, he said. De Fougerolles has had this experience of working with international giants before, he noted: “When I joined Alnylam, we were five people and fewer than that at Moderna. It is all part of the process – Evox learns a lot by working with partners. It is useful for the growth of the company but

most importantly for the expertise that the partners bring to allow us to do things that we could not do ourselves.”

Exosome therapeutics being a new modality, there were always challenges to overcome “because you are writing the playbook as you go along,” he revealed. “The same was true when I was working on mRNA and RNA



Evox is working on an external pipeline



Evox is a spinout of University of Oxford and Karolinska Institute

interference. The main challenge is to remain flexible, humble and be data-driven. You need to see where the data takes you.”

But, he stressed, many of the initial challenges with exosomes were proving tractable: “We have been able to engineer them, load different drug cargoes and manufacture them at scale.”

Looking ahead, Evox anticipated having drugs approved for several life-threatening diseases within five to 10 years, and having built a substantial therapeutic platform. There was no pre-defined exit strategy, de Fougerolles stated. “The only exit strategy you can plan for is to do good work and create impactful drugs for patients. Two of the companies I was with – Moderna and Alnylam – have done

it all themselves, while Ablynx was bought out once their lead asset was approaching approval stage. We want to do good science and make great drugs. Beyond that, we will see what happens.”

The field being so new and Evox being the pioneer, competitors are few and far between. Around half a dozen businesses operate in the space and, apart from Evox, the most notable is arguably Codiak Biosciences, which is based on research at University of Gothenburg and University of Texas MD Anderson Cancer Center. Codiak went public in an \$82.5m initial public offering in October last year.

“As with all fields, I expect more people coming in,” de Fougerolles said. “We are on the radar of almost

all of the big pharma and biotech companies, and we are in active discussions with many of them.”

Five years on from having been spun out, the vast majority of research into engineered exosomes is now being conducted in-house, de Fougerolles said. But its academic origins still came up in discussions with potential investors and partners, because it showed the foundational work was well thought out. “That is useful,” he stated. And the links to Oxford and Karolinska had not vanished. “We still have ongoing collaborations with both of our founder labs. They help contribute to the exploratory work that is on the cutting edge. We do some of that in-house too, but we leverage those labs to continue to push what the technology can do.”

He added: “Being close to the university is still very important not just in regard to the founders, but for instance we signed a strategic collaboration with the Oxford-Harrington Rare Disease Centre in November last year. We are working closely with researchers there and coming up with new programmes and new ways of using exosomes to treat a variety of rare diseases.”

Oxford in particular had been helpful in another way too. Its patient capital fund Oxford Sciences Innovation (OSI) provided the first round in its entirety, de Fougerolles said. “They put £10m in and that really set the tone and the degree of commitment. It showed this is a transformational approach. That is hugely validating. It is also very helpful to recruit people because you are in a good financial position.”

OSI had continued to be very supportive, joining both follow-on rounds, he underlined. Corporates, too, are an important type of backer and de Fougerolles drew attention to the fact that Lilly converted a \$10m convertible note as part of Evox’s \$95.4m series C round two months ago.

Another intriguing investor on Evox’s list of backers is philanthropic organisation Bill and Melinda Gates Foundation. This was “a small amount of grant funding” rather than an equity investment, de Fougerolles clarified, but its involvement “is important because there were technology aspects that we wanted to test out with them”.

Adam Stoten, chief operating officer at tech transfer office Oxford University Innovation, who sat on Evox’s board from 2016 to 2019,

recently told Global University Venturing in an interview on the Talking Tech Transfer podcast that he wished there were more spinouts like Evox coming out of Oxford. It is easy to see why – beyond the impressive funding raised, the technology could have a global impact.

And there are many reasons why de Fougerolles is the ideal person to lead the spinout. “I have been hooked on transformational platform technologies, so everything I have done has been around startups with technologies that come from nature and try to apply them broadly,” he explained his decision to join Evox.

“I actually came across Wood’s work when I was with Alnylam working on RNA interference therapeutics as a new modality. We worked with about 200 different companies and labs around the world on enabling RNA delivery, and I had spotted the exosome work when it came out.

“I was contacted by Evox seven years later and was just interested scientifically in what happened

to that technology, which led me to take the call. It had advanced significantly since that first publication and there was now data showing you could broadly apply it across multiple different drug cargoes and deliver to multiple different tissues. That is one of the holy grails of the nucleic acids drug field.”

Alnylam, Ablynx, Tolerx and Moderna all emerged out of academic research – Max Planck Institute for Biophysical Chemistry, VIB and Free University of Brussels, University of Oxford and Harvard University, respectively. And although Tolerx ultimately folded – it was exploring a then under-appreciated area of biology called immune tolerance and immuno-oncology – Alnylam, Ablynx and Moderna became great successes.

What attracted de Fougerolles to each of them was that they had all been built “around transformational, natural mechanisms. It underpins the importance of basic research. For example, RNA interference came



Evox’s de Fougerolles describes himself as ‘hooked on transformational platform technologies’

from researchers at University of Massachusetts looking at it in the nematode *C elegans*. The mRNA work partially came out of Derrick Rossi's group at Harvard University but the original foundational work came out of University of Pennsylvania led by Katalin Karikó and Drew Weissman."

He declared: "There is a lot of that work that does not receive a lot of attention until it does. That is what is attractive about things coming out of the academic ecosystem. The challenge is to separate out the things that are going to become the next Moderna versus those that do not."

While de Fougères helped Moderna and Alnylam grow from ground zero to phase 2, and took

Ablynx's technology from phase 2 to approval, he noted that he liked "all parts of the process" and "with Evox, the goal is to do it from start to finish".

Moderna is, arguably, the best known of de Fougères' career stops. The company was one of the first to secure approval for a covid-19 vaccine and even though de Fougères left the business almost eight years ago he said its success "is a nice feeling".

He added: "In our work, and this is true for all drug development, it takes years if not decades to see things come to fruition – or sometimes not. I remember vividly at Moderna, looking at data and convincing chief executive Stéphane Bancel that we should go

into vaccines, which was not a first choice in 2013. It has obviously gone through a lot of optimisation by many people, but it is nice to see that have real impact."

Looking ahead, there were still scientific challenges in the back of his mind that he would like to see solved even though his focus right now is obviously on Evox and all the applications it could put its exosomes towards, he said.

Ultimately, the success of Evox pointed "to the importance of having a solid ecosystem around you", de Fougères concluded. "Oxford biotech has significantly expanded and there are a lot more companies around, and we are planning for continued growth in the UK."

Taking CVC impact further

- > Improving human welfare without affecting growth
- > Economist Cowen talks of “strange kind of tech boom”
- > Key sectors are healthcare and green energy

By James Mawson
Editor-in-chief

American Enterprise Institute columnist James Pethokoukis published an conversation with economist and professor Tyler Cowen on “a very strange kind of technology boom” in healthcare and green energy improving human welfare without potentially affecting growth.

Cowen picks out breakthroughs tackling more viruses. Messenger RNA could deliver a potential vaccine for HIV/AIDS, while University of Oxford has followed its work on a covid-19 jab with one proving effective against malaria.

On “green energy” Cowen said “Again, you could be very optimistic about those, but the main thing they are doing is helping us avoid a catastrophe.

“So, they are boosting gross domestic product relative to a quite awful counterfactual of just continuing to burn coal and other fossil fuels. But I am not sure we will feel we have higher standards of living relative to what we were used to simply because there is a solar panel on your home.”

The impact of cheaper, cleaner, limitless energy and people

living longer, healthier lives are two of the main drivers for human evolution and throw in unprecedented changes in information and communications technology and limitless capital for innovation and growth.

The impact will likely be significant, as discussed in late April’s GCV webinar with Alex McCracken from SVB in the main for creating spillover opportunities and as new ideas create more new ideas.

US President Joe Biden has called for a decline in US carbon levels to 50% to 52% below those of 2005 within nine years.

Investor Azeem Azhar, author of Exponential View blog, has also talked about a green golden age in his latest discussion thread from the US-led climate summit.

Even if – unlikely – the only benefit is upgrading century-old infrastructure and technology and keeping millions more people alive for unproductive jobs the world will still be a better place. The innovators and those who allocated capital to them will have done their work.

Data

New highs in April

- > Higher deal numbers and dollars vs April 2020
- > Triple the number of exits versus same month last year
- > Funding initiatives up in number and dollar value

By Kaloyan Andonov
Analyst

There has been much optimism in the world since the beginning of 2021, while the corporate venturing arena has seen a rise in deals, exits and funding initiatives at least since the successful development and

approval of coronavirus vaccines. This trend continued in April as well and is strengthening, as many countries see vaccine rollouts and a gradual easing of pandemic-related restrictions.

Deals

336

Exits

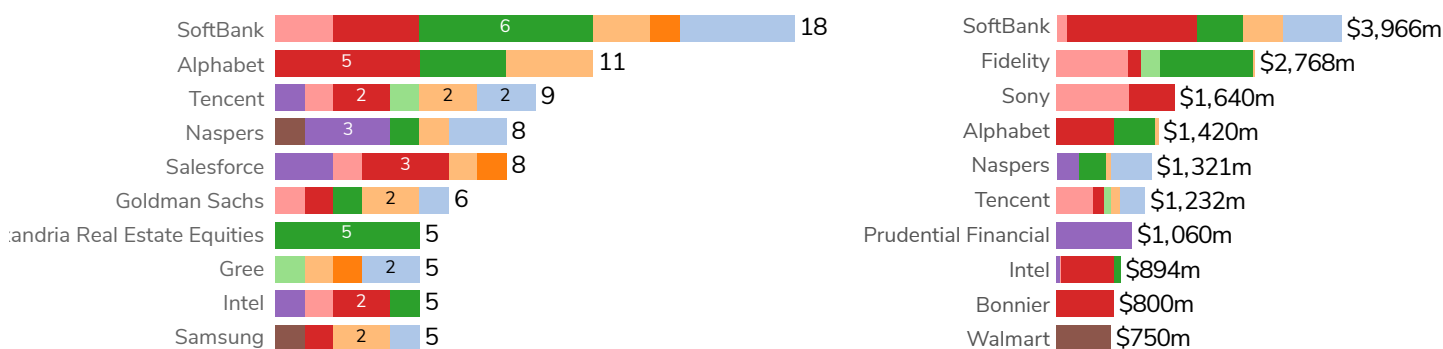
52

Funding
initiatives

38

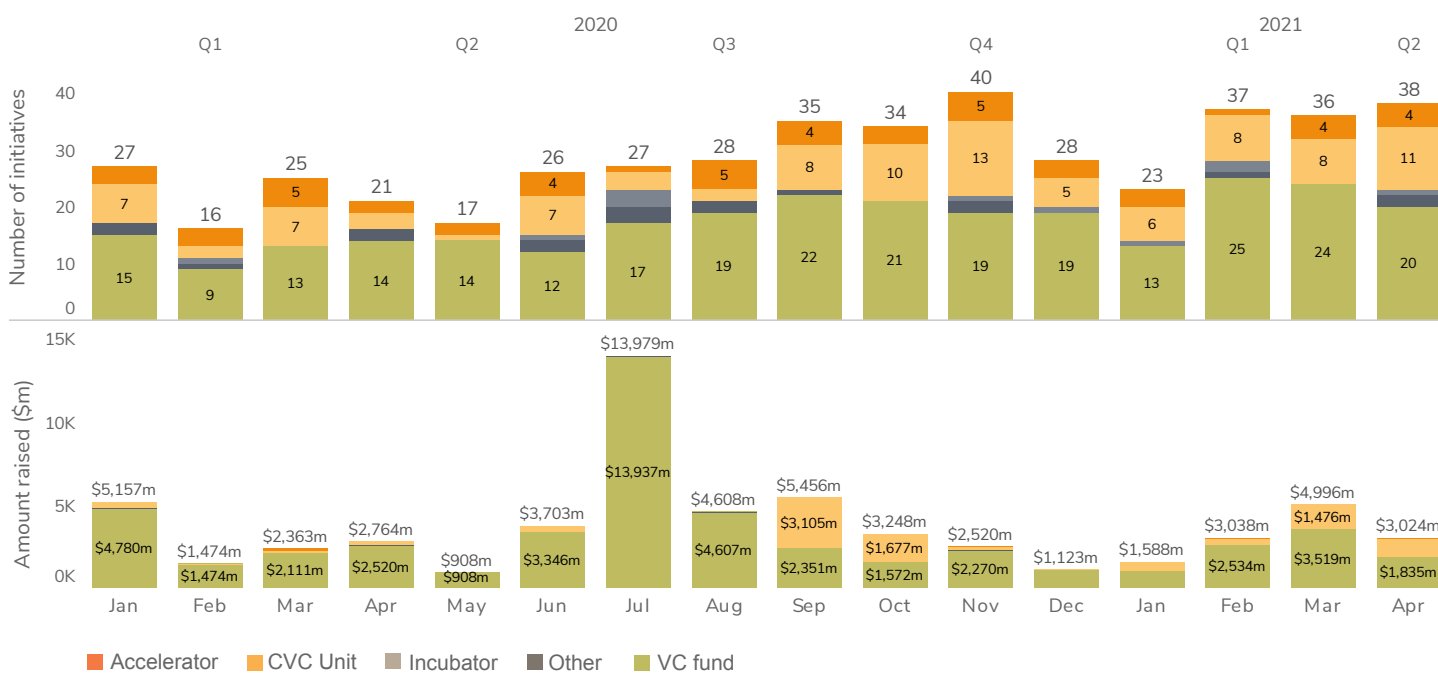
Top investors

The leading corporate investors by number of deals were internet and telecoms conglomerate SoftBank, diversified internet conglomerate Alphabet and internet and gaming company Tencent. In terms of involvement in the largest deals, SoftBank was top of the list along with investment management and financial services group Fidelity and consumer electronics manufacturer Sony.



Funding initiatives

GCV Analytics reported 38 corporate-backed funding initiatives, including VC funds, new venturing units, incubators, accelerators and other. This figure is higher than the one from April 2020, which registered 21 initiatives. The estimated capital raised in those initiatives amounted to \$3.02bn, 9% higher than the \$2.76bn raised in the same month last year.

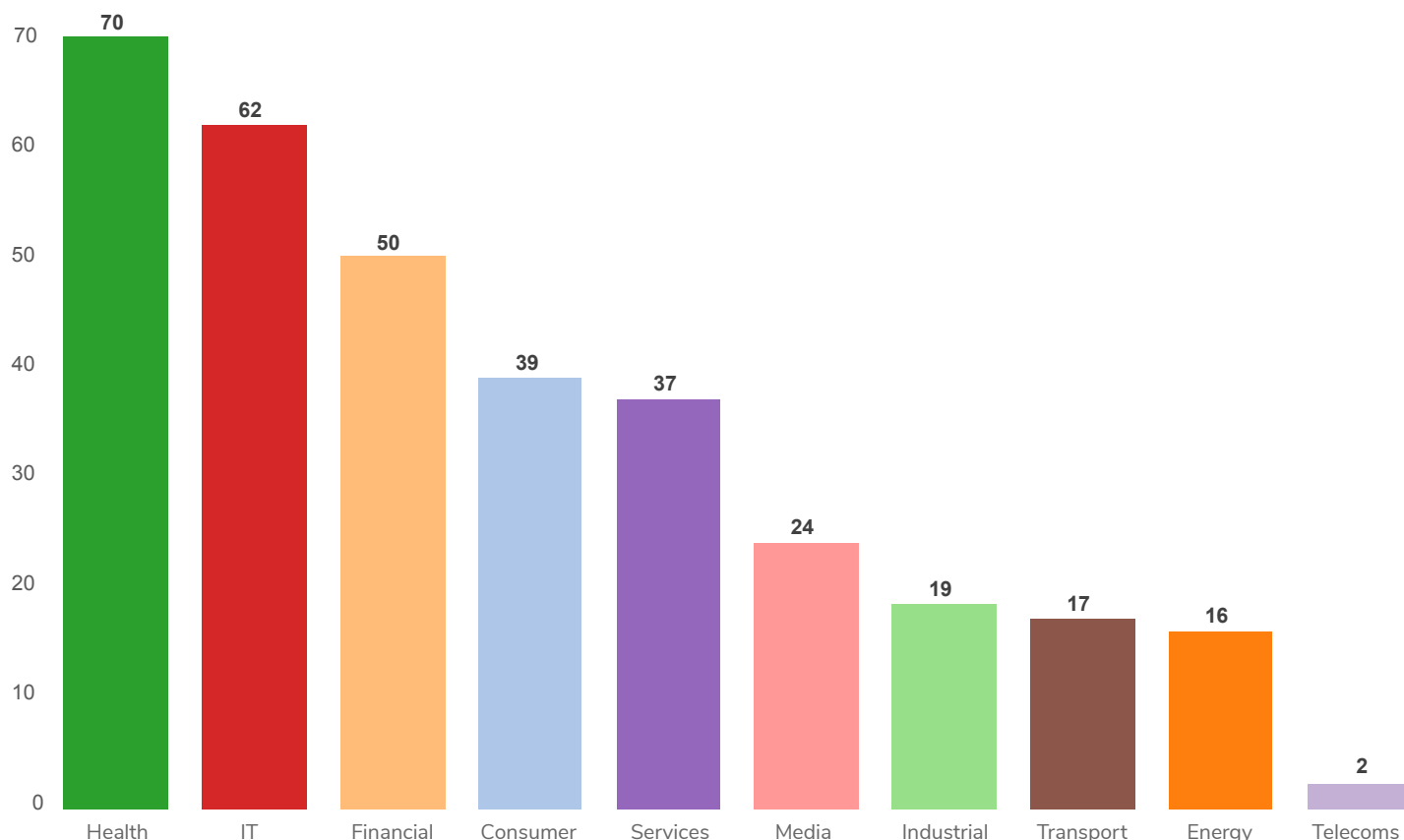


Source: GCV Analytics

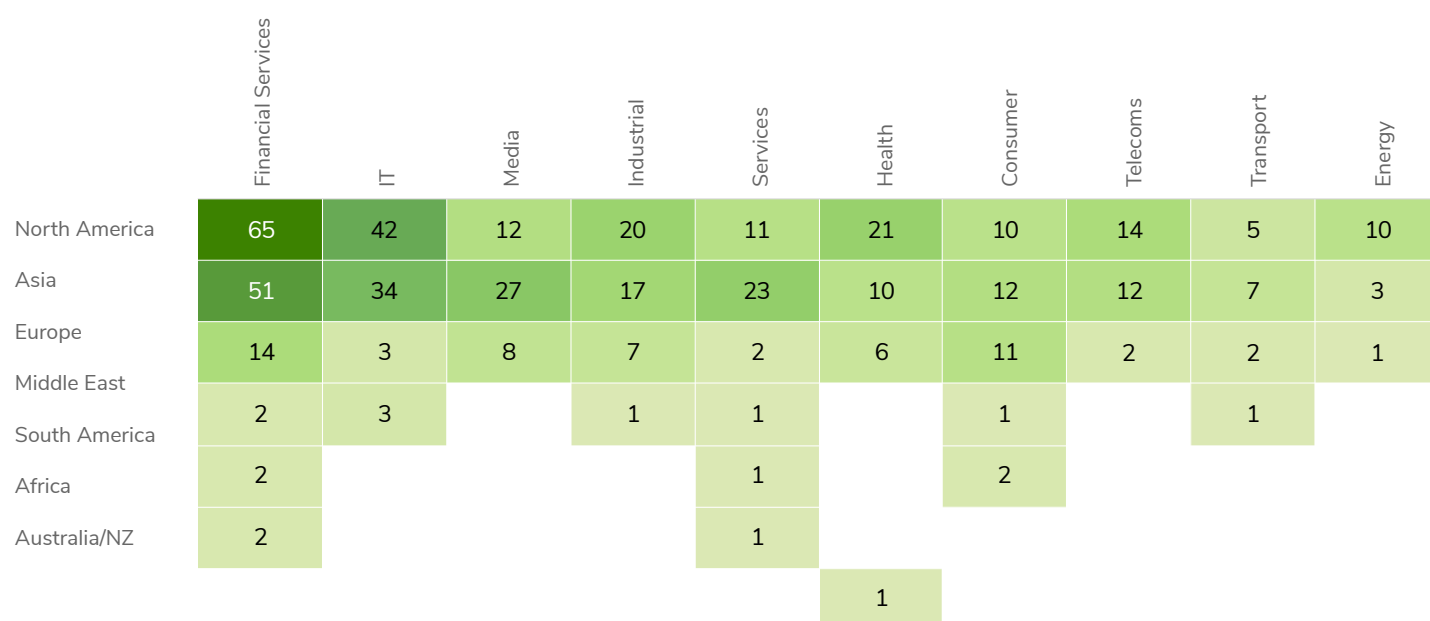
Deals

By sector

Emerging businesses from the health, IT, financial and consumer sectors led in raising the largest number of rounds in April 2021. The most active corporate venturers came from the financial, IT, media and industrial sectors.



Heatmap



Source: GCV Analytics

Top 10 deals

Portfolio company	Location	Sector	Round	Round size (\$m)	Co-Participant List
Epic Games	USA	Media	Undisclosed	\$1bn	AllianceBernstein Altimeter Capital Management Appaloosa Management Baillie Gifford BlackRock Fidelity Franklin Templeton GIC KKR Luxor Capital Ontario Teachers' Pension Plan Board Park West Asset Management Sony T Rowe Price
MessageBird	Netherlands	IT	C	\$800m	Accel Partners Atomico BlackRock Bonnier Eurazeo Glynn Capital Management LGT Group Longbow Capital Mousse Partners NewView Capital Owl Rock Capital Tiger Global Management Y Combinator
GM Cruise	USA	Transport	Undisclosed	\$750m	undisclosed investors Walmart
SambaNova Systems	USA	IT	D	\$676m	Alphabet BlackRock GIC Intel SoftBank Temasek Walden International WRVI Capital
Trax	Singapore	IT	E and beyond	\$640m	BlackRock Omers SoftBank Sony
Polestar (Sweden)	Sweden	Transport	Undisclosed	\$550m	Chongqing Chengxing Equity Investment Fund Partnership SK Group undisclosed investors Zibo Financial Holding Zibo Hightech Industrial Investment
OneTrust	USA	IT	C	\$510m	Coatue Franklin Templeton Insight Partners SoftBank TCV
ShareChat	India	Media	E and beyond	\$502m	Lightspeed Venture Partners Snap Tencent Tiger Global Management Twitter undisclosed investors
Better Mortgage	USA	Financial Services	Undisclosed	\$500m	SoftBank
Plaid	USA	Services	D	\$425m	Altimeter Capital Management Andreessen Horowitz Index Ventures Kleiner Perkins New Enterprise Associates Ribbit Capital Silver Lake

Source: GCV Analytics

1 US-headquartered video game developer Epic Games closed a \$1bn funding round featuring a \$200m investment by Sony, valuing it at \$28.7bn. Sony was joined by Fidelity, among many other investors. Epic specialises in multiplayer online games using its Unreal Engine, and its most famous titles are battle royale game Fortnite and first-person shooter series Gears of War.

The company is looking to build a 'Metaverse' of games, having acquired multiplayer sports title Rocket League by buying its developer, Psyonix, in mid-2019 and agreeing to buy another studio, Tonic Games, the creator of battle royale platformer Fall Guys.

2 Netherlands-based customer service software provider Messagebird added \$800m to a series C round featuring media group Bonnier, expanding it to \$1bn. Bonnier joined Eurazeo, Tiger Global Management, BlackRock,

Owl Rock, Glynn Capital, LGT Lightstone, Longbow, Mousse Partners, NewView Capital, Accel, Atomico and Y Combinator in the extension, which was 70% equity financing and 30% debt.

Messagebird offers a range of customer service tools across a variety of channels including email, phone, WhatsApp, text messaging and push notifications. The company revealed it has channelled \$600m of the extension into acquiring SparkPost, the US-based creator of an email optimisation software platform it claims oversees some 4.5 trillion emails a year for its customers.

3 US-based autonomous driving software developer Cruise added \$750m from big-box retailer Walmart and unnamed institutional investors to its latest round, boosting it to \$2.75bn. The capital was raised at a valuation of about \$30bn and followed a \$2bn first close in January, featuring software provider Microsoft and carmakers

Honda and General Motors (GM) as well as unnamed investors.

Cruise is developing autonomous driving software in addition to robotics and hardware such as cameras and sensors. The company is also working on a ride hailing app intended to serve as the basis for a robotaxi service and is trialling its technology in driverless vehicles in San Francisco. It agreed a deal to operate the service in Dubai and could also be expanding into delivery vehicles.

4 SoftBank's Vision Fund 2 led a \$676m series D round for US-based artificial intelligence (AI) software developer SambaNova Systems. The round included Intel Capital and GV, corporate venturing subsidiaries for semiconductor and data technology provider Intel and Alphabet respectively, and it reportedly valued the company at \$5.1bn.

Singaporean state-owned entities Temasek and GIC filled out the round together with Walden

International, WRVI and funds and accounts managed by BlackRock. SambaNova is developing systems to run advanced AI applications that are intended to be more powerful than existing central or graphics processing units, for use across data centres, the cloud and edge computing.

5 Vision Fund 2 also co-lead a \$640m series E round for Singapore-headquartered intelligent retail technology provider Trax with investment management firm BlackRock. The round included Sony Innovation Fund by IGV2, a corporate venture capital vehicle for Sony, in addition to pension fund manager Omers, and it valued the company at \$2bn according to Globes.

Trax provides computer vision and AI equipped technology that

tracks in-store conditions and stock levels to help grocery retailers and consumer packaged goods producers make more effective decisions in real time.

6 Polestar, the Sweden-based electric vehicle (EV) developer spun off by automotive manufacturer Volvo Cars, received \$550m in funding from investors including conglomerate SK Group. Chongqing Chengxing Equity Investment Fund Partnership co-lead the round with Zibo Financial Holding and Zibo Hightech Industrial Investment, and it included undisclosed other participants. It represents the brand's first external funding.

Volvo bought Polestar's predecessor, a touring car racing team of the same name, in 2015

and announced its intention to begin developing EVs under its brand two years later. It has since released a hybrid electric sports car called Polestar 1 and an all-electric fastback model dubbed Polestar 2.

The offshoot maintains a dedicated production facility in China, where Volvo Cars' parent company, carmaker Geely, is based, in addition to a sales and distribution network.

7 Vision Fund 2 was also the leader for a \$210m second tranche for US-based security and governance software provider OneTrust that took its series C round to \$510m. Asset manager Franklin Templeton also took part in the second close, which followed a \$300m tranche featuring TCV and existing investors including Insight



The Polestar 2 electric fastback

Partners and Coatue in December 2020. The final close came at a \$5.3bn post-money valuation. OneTrust's software uses AI and robotic automation technology to enable companies to operationalise security, privacy, data governance, ethics and compliance activities to ensure they meet all their regulatory requirements.

8 Two entities owned by Tencent have provided \$225m for India-based social network operator ShareChat as part of its \$502m series E round. The round was led by hedge fund manager Tiger Global Management and also featured venture capital firm Lightspeed Venture Partners as well as Snap, the owner of messaging app Snapchat.

Tencent provided almost half the capital in the form of convertible debt, from Netherlands-registered vehicles Zennis Capital and Hlodyn, which list Tencent executives Jingsi He and Constant Pieter van der Merwe as directors. Should the debt be converted into equity, they would own a 19.7% stake in ShareChat.

Tencent would be unable to invest in the company directly due to strict rules governing the acquisition of stakes in India-based companies by Chinese entities. ShareChat runs an online platform with more than 160 million monthly users who can communicate with each other in 15 languages. It also operates a short-form video app called Moj with 120 million monthly active users.

9 SoftBank provided \$500m in funding for US-based online mortgage platform Better at a reported \$6bn valuation. The round boosted the company's overall funding to \$954m and increased its valuation



American Express is invested in online mortgage platform Better and financial data software provider Plaid

50% from November 2020 when it completed a \$200m series D round that included insurance group Ping An and American Express Ventures, a subsidiary of payment services provider American Express. Better offers a streamlined online mortgage and mortgage refinancing service through financial services partners. The company is preparing to float later this year, according to the Wall Street Journal.

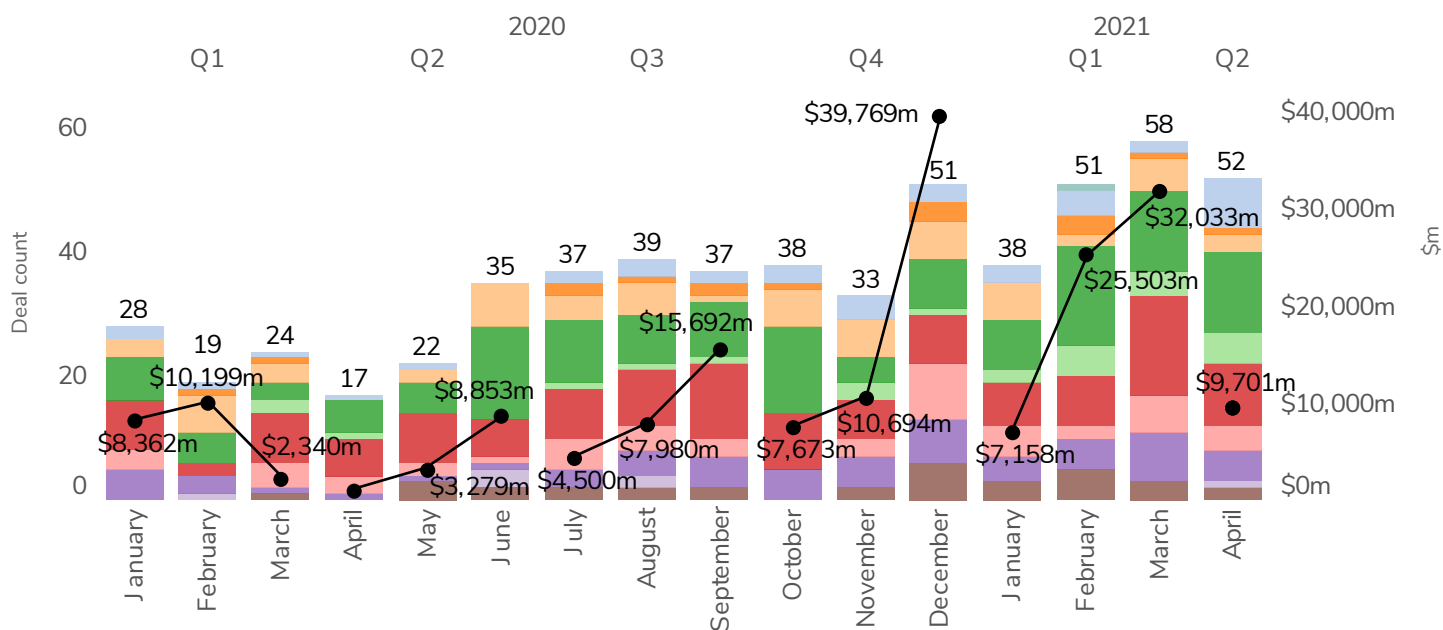
10 Plaid, a US-based financial data software provider backed by Alphabet, financial services and payment companies American Express, Citi, Mastercard and Visa, raised \$425m in series D funding. Growth equity firm Altimeter Capital led the round, investing together with Andreessen

Horowitz, Index Ventures, Kleiner Perkins, New Enterprise Associates, Ribbit Capital and Silver Lake. The round reportedly valued the company at \$13.4bn.

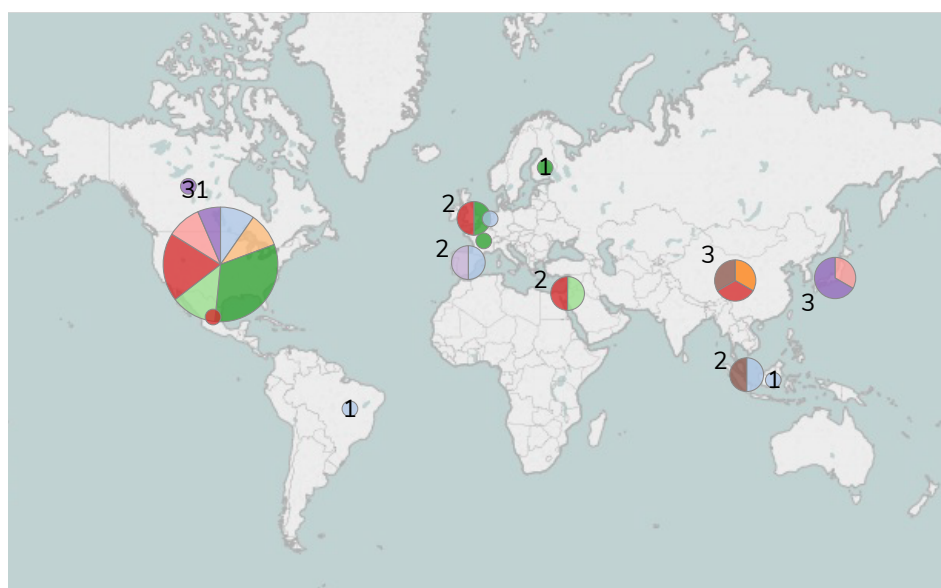
Founded in 2013, Plaid has created a software tool that helps users connect their bank accounts with products provided by external financial technology providers such as Coinbase, Robinhood and Venmo. The company's chief executive, Zach Perret, told CNBC the money will be used to develop new services and hire staff, after it increased headcount by 40% in 2020. Visa agreed in January to terminate its \$5.3bn acquisition of Plaid. The US Justice Department filed an antitrust lawsuit in November and the companies decided to cancel the deal instead of fighting the suit.

Exits

Record highs were also tracked in exits. GCV Analytics tracked 52 exits involving corporate venturers as acquirers or exiting investors in April. The transactions included 30 acquisitions, 14 initial public offerings (IPOs), five reverse mergers with special purpose acquisition companies (Spacs) and three mergers.



Global view of exits



The exit count figure tripled that from April 2020, which was 17. The total estimated exited capital stood at \$9.7bn, considerably lower than the record numbers registered in February (\$25.5bn) and March (\$32bn) this year.

- Consumer
- Financial
- Industrial
- Media
- Telecoms
- Energy
- Health
- IT
- Services
- Transport

Source: GCV Analytics

Top 10 exits

Portfolio company	Location	Sector	Exit type	Acquirer	Exit size (\$m)	Co-Participant List
UiPath	USA	IT	IPO		\$1.54bn	Alkeon Capital Alphabet Altimeter Capital Management Coatue Dragoneer Investment Group Institutional Venture Partners (IVP) Madrona Venture Group Sands Capital Sequoia Capital T Rowe Price Tencent Tiger Global Management Wellington Management
Tusimple	China	Transport	IPO		\$1.35bn	VectoIQ
Grab	Singapore	Transport	Reverse merger		\$1.2bn	Altimeter Capital Management Altimeter Growth Corp BlackRock Booking Holdings Central Group Didi Chuxing Djarum Group Experian Fidelity Honda Hyundai Janus Henderson Investors Kasikornbank Mirae Asset-Naver Asia Growth Fund Mitsubishi UFJ Financial Morgan Stanley Mubadala Nuveen Real Estate Permodalan Nasional Ping An Insurance private investors Qunar Shinsegae I&C Sinar Mas SoftBank T Rowe Price Temasek TIS Intec Group Tokyo Century Corporation Toyota Uber Yamaha
Mobidiag	Finland	Health	Acquisition	Hologic	\$795m	Autobio Diagnostics Springvest
Zymergen	USA	Industrial	IPO		\$500m	AME Cloud Ventures Baillie Gifford Baron Capital Group Data Collective Draper Fisher Jurvetson GIC Goldman Sachs Hanwha Iconiq Capital Innovation Endeavors Obvious Perceptive Advisors Prelude Ventures SoftBank Tao Venture Capital Partners True Ventures Two Sigma Investments
SmartRent	USA	IT	Reverse merger		\$500m	Amazon Baron Capital Group Conversant Capital D1 Capital Partners Fifth Wall Acquisition Corp Invitation Homes Koch Industries Lennar Long Pond Capital Starwood Capital Group
Sarcos Robotics	USA	Industrial	Reverse merger		\$460m	BlackRock Caterpillar General Electric Jaws Estates Capital Microsoft Millennium Management Palantir Technologies private investors Rotor Acquisition Corp Schlumberger
Compass	USA	Services	IPO		\$450m	.406 Ventures Advance Publications Canada Pension Plan Dragoneer Investment Group Fidelity Founders Fund Institutional Venture Partners (IVP) private investors Qatar Investment Authority SoftBank Thrive Capital Wellington Management
Unchained Labs	USA	Health	Acquisition	Novo	\$435m	Canaan Partners Novo TPG Tri-Valley Ventures
Bridg	USA	Media	Acquisition	Cardlytics	\$350m	Canyon Creek Capital Karlin Ventures March Capital Partners Morpheus Ventures NextEquity Partners The Hive Visa

Source: GCV Analytics

1 UiPath, the robotic process automation (RPA) software producer that counts Alphabet and Tencent as investors, closed its IPO at almost \$1.54bn. The company issued 9.4 million shares priced at \$56 each, above the \$52 to \$54 range for the offering. Investors including Alphabet unit CapitalG sold nearly 14.5 million more shares. The extra shares bumped the number issued by UiPath to 13 million and the move came after UiPath's shares rose significantly post-IPO.

The company provides RPA technology enabling enterprises to automate repetitive back-office tasks, and it made nearly \$608m in revenue in 2020 together with a \$92.4m net loss. It had raised

approximately \$2.05bn prior to the offering.

2 TuSimple, a US-based driverless truck producer backed by corporate investors, floated in a \$1.35bn IPO on the Nasdaq Global Select Market. The company issued approximately 27 million class A shares priced at \$40 each while SunDream, a vehicle for Charles Chao, chairman and chief executive of internet company Sina, sold nearly 6.8 million additional shares. The range for the offering had been set at \$35 to \$39 and the price gave TuSimple a market capitalisation of approximately \$8.53bn.

Founded in 2015, TuSimple is developing self-driving vehicles

from bases in Arizona, New Mexico and Texas intended for land freight transportation, and expects to commercially launch them in 2024. It made a \$178m net loss in 2020.

3 Grab, a Singapore-headquartered ride hailing service backed by range of corporate investors, agreed a reverse takeover with Spac Altimeter Growth Corp at an initial pro-forma equity value of \$39.6bn. The combined business will take the position secured by Altimeter Growth, an affiliate of technology investment firm Altimeter Capital Management, which floated in a \$450m IPO in October 2020. The valuation makes this the largest reverse merger agreement.

Funds managed by Altimeter Capital are putting up \$750m for a \$4bn private investment in public equity (PIPE) financing deal supporting the transaction that includes conglomerate Sinar Mas, clove cigarette producer Djarum and Fidelity. Formerly known as GrabTaxi, Grab's core business is its on-demand ride service but it has diversified into food and package delivery as well as financial services, through an offshoot that raised more than \$300m in January this year.

4 Women-focused medical technology producer Hologic agreed to acquire Mobidiag, a Finland-headquartered molecular diagnostics technology developer backed by clinical diagnostics product maker Autobio Diagnostics, for €668m (\$795m). The deal involves a cash payment of \$714m combined with \$81m of net debt financing.

Founded in 2000, Mobidiag produces polymerase chain reaction-based tests and equipment for acute care conditions including gastrointestinal and respiratory infections. The company's offering includes the Amplidiag range, for high-throughput molecular diagnostics, and Novodiag for fast on-demand molecular diagnostics.

It generated approximately \$42m of revenue in 2020.

5 Zymergen, the US-based biomanufacturer backed by SoftBank and conglomerate Hanwha, went public in a \$500m IPO on the Nasdaq Global Select Market. The offering consisted of just over 16.1 million shares, upsized from an initial allocation of 13.6 million and priced at the top of its \$28 to \$31 range. Founded in 2013, Zymergen produces materials using biological processes, including films for use in smart electronics devices such as rollable tablets. It made a \$262m net loss in 2020 from \$13.3m in revenue but will channel the IPO proceeds into product commercialisation.

6 SmartRent, a US-based intelligent home technology developer backed by e-commerce firm Amazon, agreed a reverse merger Spac Fifth Wall Acquisition Corp I at a \$2.2bn valuation. The merged entity will take the spot acquired by the latter, which was formed by property-focused VC firm Fifth Wall, which floated in a \$345m IPO on the Nasdaq Capital Market in February 2021.

Property developer Lennar, home leasing service Invitation Homes, Starwood Capital Group, Koch

Real Estate Investments, Baron Capital Group, D1 Capital Partners, Long Pond Capital and Conversant Capital are taking part in a \$155m PIPE financing supporting the deal.

Founded in 2017, SmartRent provides residential internet-of-things (IoT) automation software and hardware products designed to help real estate maintenance managers and rental firms monitor the IoT tools installed in their properties. Its existing shareholders will hold about 73% of the company post-merger.

7 Sarcos Robotics, a US-based industrial robotics technology manufacturer backed by software producer Microsoft, construction equipment maker Caterpillar, air carrier Delta and oilfield services provider Schlumberger, agreed to list through a reverse merger. The company joined forces with special purpose acquisition company Rotor Acquisition Corp in a transaction that will value them at a combined \$1.3bn. The merged business, Sarcos Technology, will take the spot on the New York Stock Exchange secured by Rotor in a \$240m IPO in January 2021.

Caterpillar's subsidiary Caterpillar Venture Capital, Schlumberger and data analytics provider Palantir backed a \$220m private investment in public equity financing for the deal with Millennium Management, Jaws Estates Capital, Michael F Price and funds and accounts managed by BlackRock. Sarcos produces robotic exoskeletons that help users lift heavy objects while preventing injuries.

8 Compass, the US-based real estate software provider backed by SoftBank and media group



Mobidiag is a Finnish molecular diagnostics technology developer



Sarcos Robotics listed through a reverse merger

Advance Publications, went public in a \$450m IPO. The offering consisted of 25 million shares priced at \$18.00 each, at the foot of an \$18 to \$19 range cut from \$23 to \$26 at the same time the size of the offering was reduced from 36 million shares. The company floated on the New York Stock Exchange and its shares closed at \$18.59, giving it a market capitalisation of roughly \$7.2bn.

Investors including SoftBank's Vision Fund and hedge fund manager Discovery Capital Management had expressed interest in buying \$140m in the offering but have not revealed whether they did so. Founded in 2012, Compass has built an online platform that provides extensive listings of homes for sales. Its technology helps its brokers provide a more efficient service for both buyers and sellers, and it

made a \$270m net loss in 2020 from \$3.72bn in revenue.

9 Pharmaceutical firm Novo is set to exit US-based life science research tool developer Unchained Labs in an agreed \$435m acquisition by private equity firm Carlyle Group. The company provides a range of life science tools used by biologics and gene therapy researchers to analyse and identify large, complex molecules. It has eight product lines and expects to generate over \$75m of revenue in 2021.

10 Consumer purchase data aggregator Cardlytics agreed to purchase Bridg, a US-based customer data analysis software provider backed by payment services group Visa, for at least \$350m in cash. Cardlytics could also make two cash and stock

earnout payments sized between \$100m and \$300m, one and two years after the acquisition, depending on Bridg's sales run rate in the United States.

Bridg was founded in 2012 as Ecinity and has built a software product designed to help retailers and consumer brands understand customer behaviour through data in addition to assisting them with providing personalised services. Cardlytics' advertising tool is embedded in financial services firms' digital platforms and allows users to acquire loyalty rewards. The software then helps the service providers analyse how their customers spend money for more effective marketing campaigns.

Note: Monthly data can fluctuate as additional data are reported after each issue of GCV magazine goes to press.



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