



Global
Corporate
Venturing



Big data

How analysing
millions of zettabytes
became the driver of
change in the IT
sector

H1 figures
smash records

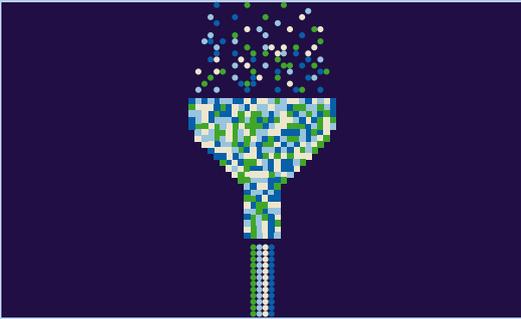
Touchdown's latest stock
outperformance analysis

Breakdown of key states in
US innovative region

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IT innovation now spills into virtually all other sectors of the economy. Be it smart homes, artificial intelligence or the cloud, digitisation – and its disruptive potential – is nearly ubiquitous.

It was digital technology that enabled the switch to remote working in the early days of the pandemic. Human ingenuity kept the world going in dire straits. Big data and datafication lie at the core of digitisation but the challenge comes in how we deploy them – and what comes next.



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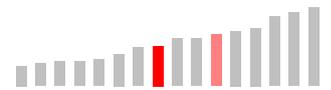
- Exclusivity rights restrict business opportunities and exit valuation potential
- Call-options and matching rights impede a successful exit
- Asking for strategic rights may lead to an adverse selection problem and complete CVC failure

The problem with these strategic rights is that they may also have a severe detrimental impact on the likelihood that the startup can be sold for the highest price possible.

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520

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1,263

Deals in Q2

Global Corporate Venturing

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 Global Corporate Venturing

Editorial

CVCs poised to benefit from positive momentum

- > Markets are “a bit frothy”
- > Public and private markets are almost equal
- > Corporates must communicate their benefits



By James Mawson
Editor-in-chief

In filing his data analytics report (p. 105), Kaloyan Andonov described it as showing “a lot of positive momentum.

“It even feels a bit frothy.”

That is some understatement. The first half of the year had a total of 2,288 deals with an estimated total capital of \$131.78bn, according to GCV Analytics.

That value, involving at least one corporate venturer, is more than the whole of last year and almost at the all-time record of \$134bn in 3,232 deals posted in 2019.

Global venture capital funding in the first half of 2021 shattered

records as more than \$288bn was invested worldwide, according to data provider Crunchbase.

The effective equality between public and private capital markets, therefore, is almost complete. Allied to widespread understanding and acceptance of open innovation and it is little surprise corporates, along with hedge and mutual funds, institutional and family investors and traditional or specialised VC funds, can provide as much capital as public markets while the rotation on and off stock exchanges has been made much easier through the use of special purpose acquisition companies

and direct listings and back into private hands through leveraged buyouts.

US initial public offerings have already totalled \$171bn, passing the 2020 record of \$168bn, according to data from Dealogic, published by Reuters, while global mergers and acquisitions was a record \$2.4 trillion in H1, up 158% from the same period last year, according to Refinitiv Deals Intelligence.

Once capital markets have caught up with a more efficient allocation of resources to the entrepreneurs and managers who can best use it, what comes next? Looking at first principles can help. Low interest rates and monetary stimulus pushes more people into a risk-on position to find returns. This is adding the froth to venture investing, but the drivers of innovation remain in place, as advances in sectors feed off each other and impact other sectors around the world.

This is not a linear process but more exponential and now the capital is increasingly abundant to fund the innovations.

While corporate venture capitalists (CVCs) are increasingly professional – shown by the leaders' support for the GCV Institute this year – there remains a slight sense too many are yet to weaponise their advantages to take their rightful share of rounds and drive company building. Having spent so long trying to improve their reputation with entrepreneurs and syndicate partners, it is natural many experienced corporate venturers are cautious about coming over as too hard-edged in negotiations.

This form of competition and collaboration is refined and hence fragile if communication fails.

Global Corporate Venturing's sector councils covering health, finance, energy and artificial intelligence and deep tech, with

others to come around mobility and industry 4.0, are designed to support this communication and hence efficient allocation of capital. They are also intended to build off a common language and best practices shared by CVCs for CVCs, through GCV's training institute, reports and events.

This work is thanks to the community's support and leadership in the innovation capital ecosystem. Increasingly, it means working with and is welcomed by independent VCs looking for corporate limited partners and the added-value CVCs can bring.

We will recognise these leaders in the GCV Powerlist published on 21 July as part of our Digital Forum that runs to 28 July. We will return to live and hybrid events from September, starting at the GCVI Summit in California before moving to Brazil, the UK, Florida and Asia.

There will be plenty to talk about.

News

Anterra Capital raises \$175m for Fund II

- > Lenskart sees its way to \$20m fund
- > ABN Amro assembles \$507m impact vehicle
- > Blockchain Capital locks in \$300m corporates

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

Netherlands-based venture capital firm Anterra Capital has pulled in \$175m for the first close of its second food and agriculture technology fund with backing from pharmaceutical firm Novo and agriculture focused-bank Rabobank.

Anterra F&A Ventures II's other limited partners (LPs) include investment and financial services group Fidelity's Eight Roads Ventures unit, investment group Tattarang and unspecified family offices, sovereign wealth funds and state-owned investment vehicles.

Rabobank committed capital to the fund through corporate venture capital unit Rabo Investments.

The VC firm expects to hold a final close for the fund in the third quarter of 2021.

Anterra was spun off by Rabo Investments in 2013 with funding from Fidelity subsidiary Moonray Investors and is still backed by Rabobank and Eight Roads Ventures.

9Unicorns gallops to \$50m corporate-backed close

India-based investment firm Venture Catalysts' startup accelerator scheme 9Unicorns has reached a \$50m fourth close for a debut fund featuring various corporate backers, the Economic Times reported .

Packaged food providers Haldiram's and Parakh Foods were among the LPs in this close, as were infrastructure machinery manufacturer Puzzolana Group, state-owned financial services firm Indian Bank and Chona Family Office.

9Unicorns provides about \$150,000 per deal in exchange for an equity stake sized at between 5% and 7%, on a sector-agnostic basis. It has an active portfolio of 59 companies at a \$420m collective valuation and intends to back 150 startups in the next year.

Lenskart sees its way to \$20m fund

India-based direct-to-consumer eyewear vendor Lenskart has set aside \$20m for a corporate venture capital vehicle (CVC), Lenskart Vision Fund.

The company runs an online platform which partners more than 750 stores and processes the sale of some 8 million pairs of glasses a year. It also provides eye exams at customers' homes and work.

The vehicle will target entrepreneurs working on technologies and products related to vision care, including glasses

and contact lenses, as well as the retail sector in general.

ABN Amro assembles \$507m impact fund

Netherlands-headquartered financial services firm ABN Amro has announced a €425m (\$507m) impact investment vehicle that will back companies developing products supporting sustainability and inclusiveness.

Sustainable Impact Fund will invest between €500,000 and €4m per company across three areas: the circular economy, energy transition and social impact. It is seeking financial returns and social results and is targeting companies with a proven concept.

The first two Netherlands-based recipients of funding through the vehicle included Envision, a creator of smart spectacles that raised \$1.8m in a round also backed by Impact Ventures, existing backer 4impact and various angel investors.

Blockchain Capital locks in corporates for \$300m fund

US-based VC firm Blockchain Capital closed its Blockchain Capital V fund at \$300m with

commitments from digital payment processor PayPal and payment services firm Visa.

Other LPs include undisclosed strategic investors, pension funds, university endowments and family offices. Some of the LPs, including Visa and PayPal, will participate in Blockchain Capital's strategic partnership programme.

Founded in 2013, Blockchain Capital has backed more than 110 companies to date, investing both through equity and cryptocurrency assets.

The firm will now focus on blockchain infrastructure, decentralised finance, non-fungible tokens and emerging applications for blockchain-based technology.

MetaProp settles third fund at \$100m

Several corporate investors have committed capital to the third fund for US-based VC firm MetaProp, which closed at \$100m.

MetaProp was founded in 2015 and focuses on real estate technology developers. The fund's LPs include real estate services providers Cushman & Wakefield, CBRE and JLL, the last represented



Envision makes smart spectacles

by its corporate venturing unit, JLL Spark.

Property developers Mitsui Fudosan, Ivanhoé Cambridge, Damac, Ananda Development and Swire Properties also contributed to the vehicle, as did construction materials provider Eugene Corporation, heating and plumbing equipment maker Ferguson and industrial gas supplier Messer.

Intact Ventures, the VC subsidiary of property and casualty insurance group Intact Financial, is also an LP, along with financial services holding group Sumitomo Mitsui Trust Bank and PGIM, the asset management arm of insurer Prudential Financial.

USAA marches to Academy Investor Network

Insurance and financial services provider USAA has supplied a \$2.5m anchor investment for US-based Academy Investor Network (AIN)'s debut fund, which has a \$50m target, TechCrunch reported.

AIN is an investment network of graduates from military academies. It will primarily invest in veteran-led startups operating across a variety of sectors, but also civilian-led companies developing technology for the government and defence sectors.

AIN is led by managing partners Emily McMahan and Sherman Williams. McMahan is also a venture partner at Scout Ventures, the VC firm that was the fund's first LP.

Amplitude raises \$163m for debut fund

Canada-based VC firm Amplitude Venture Capital has closed its debut precision medicine fund at C\$200m (\$163m) with backers



Royal Bank of Canada contributed to an Amplitude fund

including life sciences real estate investment trust (REIT) Alexandria Real Estate Equities.

Financial services firm Royal Bank of Canada and Alberta Enterprise (on behalf of the Province of Alberta) also contributed to the fund. Alexandria Real Estate Equities took part through its VC arm, Alexandria Venture Investments.

Dion Madsen and Jean-François Pariseau founded Amplitude in 2019 after working on the healthcare investing team at the state-owned BDC Capital, which also committed capital to the fund.

Petronas accelerates second cohort

Petronas, a Malaysian state-owned oil major, has started the second edition of its technology accelerator programme for local startups.

Petronas FutureTech 2.0 is run by venture capital firm 500 Startups and has partnerships in place with government-linked companies Telekom Malaysia and Sime Darby Plantation.

The themes for the batch are industry 4.0, future of energy, digital transformation, retail

innovation and specialty chemicals and advanced materials.

Rev1 revisits corporates for \$20m Fund II

US-based startup studio Rev1 Ventures has launched its \$20m second fund with backing from diversified metals manufacturer Worthington Industries, healthcare provider Cardinal Health, media company Dispatch Printing, insurer Nationwide and grid operator AEP Ohio.

The LPs for Fund II also include financial services firms Huntington Bank and US Bank, diversified holding company Crane Group, VC firm Drive Capital, Ohio State University and University of Dayton.

The fund will invest in seed and early-stage companies across the digital health, healthcare IT, data analytics, enterprise software-as-a-service, life sciences, human resources, financial and insurance technology sectors, and will target deals outside Ohio for the first time.

CapitaLand constructs sustainability fund

Singapore-based real estate developer CapitaLand has

launched a S\$50m (\$37.8m) investment fund focused on sustainability in the “built environment”.

The corporate will deploy capital from the CapitaLand Innovation Fund over the next five years with the aim of fostering sustainability-focused innovation in property development.

CapitaLand launched corporate venturing unit C31Ventures in 2016, but it closed in 2019.

Interlace Ventures initiates \$14m vehicle

US-based VC firm Interlace Ventures has secured \$14m for its first vehicle, from backers including digital payment processor PayPal and equity management technology provider Carta.

The LPs also included Bain Capital Ventures, the VC arm of private equity firm Bain Capital, in addition to unnamed family offices and individuals.

Founded in 2019, Interlace Ventures is targeting pre-seed and seed-stage commerce technology developers operating in a post-pandemic context, and intends to back up to 30 companies with the fund.

Grab Ventures Velocity grafts on fourth batch

Singapore-headquartered ride hailing service Grab has teamed up with BRI Ventures, the venture capital arm of Indonesian state-owned financial services firm BRI, to form an accelerator partnership, Tech in Asia has reported.

Grab Ventures Velocity (GVV) Batch 4 x Sembrani Wira will back startups based in Indonesia that are working on innovative products and services for retailers and

micro-enterprises at the post-seed round stage.

GVV was formed in 2018 alongside sister unit Grab Ventures and has some 20 alumni companies from across Southeast Asia, such as online fruit and vegetable retailer Sayurbox, agricultural technology developer Tanihub and online insurance service Qoala.

Sembrani Wira is an accelerator formed by BRI Ventures in March this year, targeting digitalisation-focused companies located in its home country.

RET Ventures builds \$165m second fund

US-based VC firm RET Ventures' second fund has reached a \$165m final close with backing REITs Essex Property Trust, Invitation

Homes, Mid-America Apartment Communities and UDR.

Forty North America-based multifamily and single-family real estate owners, operators and developers including BH Management, Bozzuto, Cortland, Edward Rose & Sons, Greystar Real Estate Group, Starlight Capital, Starwood Capital Group and Waterton were also among the LPs for the fund.

Founded in 2017 and also known as Real Estate Technology Ventures, RET Ventures targets real estate technology developers with the potential to help LPs manage their investment portfolios.

PayPal backs \$22m SV Latam fund

US-based venture capital firm SV Latam Capital closed its second



Startups in Grab Ventures Velocity's second batch



United Airlines has started a CVC unit focusing on sustainability and travel

fund at \$22m with commitments from LPs including digital payment processor PayPal.

Other Fund II investors include wealth management firm Investment Placement Group, The Julian Grace Foundation and individuals Crystal Sacca and Chris Sacca as well as an undisclosed bank.

SV Latam typically invests in technology and science-based startups, with a focus on companies addressing societal challenges such as financial inclusion, climate change and healthcare.

Crescent Enterprises to double venture investments

United Arab Emirates-based industrial conglomerate Crescent Enterprises plans to double its corporate venture capital

investments to Dh1bn (\$272m) by next year.

Founded in 2017 with a \$150m commitment, Crescent's corporate venturing unit, CE-Ventures, has already invested more than \$136m in 32 startups and VC funds around the world, including Tarabut Gateway, Hippo Insurance, China Union Pay, Nerdwallet and Turtlemint.

CE-Ventures said it would invest more in the financial, food, energy and software sectors.

United Airlines sets up ventures unit

United Airlines, a US-based flight operator, has started its corporate venturing unit.

United Airlines Ventures will focus on sustainability concepts that support the company's goal of net-

zero emissions by 2050, as well as other travel-related startups.

Michael Leskinen, United's vice-president of corporate development and investor relations, will become unit president and incorporate its initial investments in Archer Aviation, Clear and Fulcrum BioEnergy.

Recorded Future sets up Intelligence Fund

Recorded Future, a US-based threat intelligence company backed by corporate venturing unit REV Venture Partners over the past six years, has set up a \$20m fund for early-stage startups.

Recorded Future's Intelligence Fund will back seed and series A rounds, with its first deals including SecurityTrails and Gemini Advisory.

In May 2019, private equity firm

Insight Partners agreed to acquire a controlling interest in Recorded Future, a software provider backed by corporates Alphabet, RELX and Massachusetts Mutual Life Insurance, at a \$780m valuation.

MetaVC Partners targets debut fund

MetaVC Partners, a US-based VC firm, has made a first close of its planned \$100m debut fund, with commitments from Bill Gates, a co-founder of software provider Microsoft, and Nathan Myhrvold, formerly chief technology officer at Microsoft, who runs intellectual-property firm Intellectual Ventures.

MetaVC has licensed about 200 patents on metamaterials from Intellectual Ventures for its companies to use, managing partner Conrad Burke told Wall Street Journal.

Burke and co-managing partner Chris Alliegro were previously executives at Invention Science Fund, a startup incubator at Intellectual Ventures that span out

several startups commercialising advances in metamaterials including Kymeta and threat-detection company Evolv Technologies, which is going public through a special purpose acquisition company.

Alantra completes first close of Klima fund

Asset manager Alantra has reached the first close at more than €80m (\$97m) for its Klima Energy Transition Fund including commitments from Enagás, a Spain-based gas grid operator.

The fund aims to raise €150m to back companies accelerating the energy transition: low carbon gases, such as hydrogen, carbon capture, and biomethane; smart power grids, energy storage and renewable technologies; digitalisation of the whole energy equation; and sustainable transportation.

Managing directors Bastien Gambini, the former MD of Norway state-owned Equinor's corporate

venturing unit in Europe, and Lucille Bonnet, previously a principal at state and corporate-backed High-Tech Gründerfonds, lead Alantra's team of six managing the fund.

Tenacious Ventures closes first fund

Tenacious Ventures, an Australia-based VC firm focused on agriculture and food technology, has closed its first fund at A\$35m (\$27m).

The local state-backed Clean Energy Finance Corporation and family office Grok Ventures have committed to the fund, Tenacious Ventures Fund I. The fund is targeting pre-series A businesses.

Matthew Pryor, co-founder of Observant, and Sarah Nolet, founder of AgThentic, founded the firm, which has backed Goterra, SwarmFarm Robotics, Nori, Vow, RapidAIM and Nowadays.

Barda selects GHIC for healthcare fund

The US Department of Health and Human Services (HHS) has set up a public-private partnership with Global Health Investment Corporation to invest at least \$50m in medical startups to tackle pandemics.

Barda Ventures, the investment unit of HHS's Biomedical Advanced Research and Development Authority, committed a minimum of \$50m over five years with potential for up to \$500m over 10 years.

GHIC, a non-profit established to provide long-term funding for global health research and development, will set up a global health security fund with matching capital from other investors, according to news provider Fierce Biotech.



The inside of an Enagás liquid natural gas tank

Tokiwa Lab experiments with second batch

Japan-based cosmetics contract manufacturer Tokiwa Corporation has launched the second iteration of its Tokiwa Lab accelerator with ¥30m (\$275,000).

Founded in 1948, Tokiwa was a pencil and paper manufacturing business before it added a cosmetics division 20 years later.

Following an initial cohort in July last year, the latest batch will similarly target beauty care-focused startups. Tokiwa Lab began as a result of a strategic business and capital partnership with private equity group Carlyle Japan in early 2019 that involved the latter offering marketing, business operations and market expertise in a bid to help Tokiwa expand internationally and boost innovation efforts.

Alibaba Cloud floats \$1bn investment scheme

Alibaba Cloud, the cloud services subsidiary of e-commerce group Alibaba, has pledged \$1bn to an initiative to support tech startups and developers, Bloomberg reported.

Project AsiaForward is intended to support 100,000 recipients over the next three years while providing training for prospective software developers and linking entrepreneurs to VC investors.

The move comes as Alibaba's cloud platform is reportedly losing ground to competitors such as internet group Tencent and electronics producer Huawei.

Fortune VC smiles on \$858m first close

China-based VC firm Fortune Capital's yuan-denominated

vehicle, Chuanghong Fund, has reached a RMB5.5bn (\$858m) first close with backing from LPs including several corporates.

Mass media group Hunan TV & Broadcast Intermediary, soy milk machine producer Joyoung and property developers Century Golden Resources Group and Country Garden all made commitments to the fund.

Financial services providers China Merchants Bank and Ping An Bank also contributed to the vehicle, as did the firm's management team, funds of funds run by Gopher Asset Management and Zero2IPO Group, and unnamed family offices and government-backed asset management firms.

Hunan TV & Broadcast Intermediary is the majority shareholder and injected over 10% of the capital for Chuanghong Fund's first close. Fundraising began in Q3 2020 and it is targeting roughly \$1bn for a final close.

Toyota Ventures gets refuelled with \$300m

Japan-headquartered automotive

manufacturer Toyota committed another \$300m in capital to its corporate venturing unit last month, also rebranding it from Toyota AI Ventures to Toyota Ventures.

Toyota AI Ventures was launched under the auspices of the company's Toyota Research Institute in 2017 with \$100m in capital. Toyota provided a further \$100m for its Fund II in late 2019.

The capital will be divided evenly between two funds. One of those, Toyota Ventures Climate Fund, will concentrate on developers of innovative technologies to promote carbon neutrality, such as renewable energy and hydrogen production.

Toyota Ventures Frontier Fund will invest in developers in areas like AI cloud computing, autonomy, mobility, robotics, smart cities, digital health, advanced materials, energy and financial technology.

Uncle Nearest drinks to \$50m investment vehicle

US-based whiskey distillery Uncle Nearest has formed a \$50m corporate venture capital initiative



Toyota Ventures is splitting capital between two funds

it has dubbed Uncle Nearest Venture Fund.

The fund will target liquor companies run by minority entrepreneurs including black, indigenous and female founders. It has already provided \$2m each for UK-based rum vendor Equiano and Jack From Brooklyn, the US-headquartered producer of a hibiscus-based alcoholic drink.

Founded in 2016, Uncle Nearest owns the Uncle Nearest Premium Whiskey brand, which was named after an enslaved African American distiller, Nathaniel "Nearest" Green, who taught Jack Daniel, the founder of spirits producer Jack Daniel's Distillery, to make whiskey.

Coupa creates \$50m corporate venturing fund

US-based spending management software provider Coupa Software has launched a \$50m corporate venturing fund dubbed Coupa Ventures.

Coupa Ventures will focus on early and growth-stage companies developing products or services designed to help businesses make more efficient spending decisions.

The fund is mainly targeting startups at series A stage and beyond but also has the capacity to invest in seed rounds. It will typically provide between \$500,000 and \$2.5m per deal and is headed by managing director JJ Freitag, also Coupa's senior vice-president of corporate development.

V-Capital raises \$235m

V-Capital, the CVC arm of China-based cigarette packaging

materials producer Huaxi Holdings, reached a RMB1.5bn (\$235m) first close for a fund last month.

Local government-backed funds and corporations have committed capital as LPs, as have new and returning other investors.

The vehicle will target developers of healthcare, telecommunications, cultural services, semiconductors, IT, smart manufacturing and new energy technologies across China.

V-Capital has about \$3bn under management. Its shareholders include state-owned enterprise group Guolian Group's Industrial Investment vehicle, Anhui JiongKong Industrial Development Fund, Wuxi HuiKai Investment Management and Federal Reserve Innovation.



Uncle Nearest founder Fawn Weaver, who launched the fund

MPower Partners Fund backed by corporates

Sompo Holdings, Dai-ichi Life and Sumitomo Mitsui Trust Holdings have backed MPower Partners' inaugural vehicle, which has a \$150m target.

Japan-based VC vehicle MPower Partners Fund has launched with backing from LPs including insurers Sompo Holdings and Dai-ichi Life and financial services holding company Sumitomo Mitsui Trust Holdings.

The fund will primarily invest in local companies in sectors such as financial technology, healthcare, consumer goods and services and the environment. It will also focus on environmental, social and governance-based investing.

The majority of the fund's investments will be at growth and late stage, and it will use the remainder of the fund's capital for early-stage investments outside Japan.

Collab Capital collects PayPal for \$50m fund

Collab Capital, a US-based VC firm focused on black entrepreneur-led startups, has closed its debut fund at \$50m with a commitment from digital payment services provider PayPal.

Collab Capital Fund I has been backed by 99 unnamed LPs according to a Medium post by the firm. It was founded in 2018 and began fundraising for the vehicle the following year.

The fund is focused on early-stage companies run by black founders in US cities such as Atlanta, Washington DC, Houston, Detroit, St Louis and New Orleans.

Collab Capital has a particular interest in startups using technology to address issues such as the future of work, learning and healthcare.

People

Garratt goes from Salesforce Ventures to CRV

- > Arnost added to Verizon Ventures roster
- > Van Horne advances to JPMorgan
- > McKee leaves Arista for Third Point

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

Matt Garratt is leaving his managing partner position at Salesforce Ventures, the strategic investment arm of US-based enterprise software producer Salesforce, for a general partner position at venture capital firm CRV.

Salesforce hired Garratt in 2013 in a corporate development and strategy role after more than four years at technology investment firm Battery Ventures. He helped manage the launch of the venture arm the following year as senior director of corporate development.

Garratt became senior vice-president and managing partner of Salesforce Ventures in 2018, two

years after he featured in GCV's Rising Stars list.

Singh leaves JetBlue for JLL

Raj Singh has joined real estate services provider JLL's corporate venturing subsidiary, JLL Spark, as managing partner, after five years as managing director at air carrier JetBlue's Technology Ventures unit.

US-headquartered JLL established its Spark unit in 2017 under co-chief executives Yishai Lerner and Mihir Shah. The pair then set up JLL Technologies as a business unit to offer property clients modern tech.

Singh was a joint GCV Powerlist award winner for 2020 at JetBlue

Technology Ventures alongside Bonny Simi, who subsequently joined portfolio company Joby.

Arnost added to Verizon Ventures roster

Verizon Ventures, the corporate venturing arm of US-based telecoms group Verizon, has appointed Tom Arnost as a principal, the unit revealed.



Arnost began in the role in May and is responsible for executing and managing strategic investments on behalf of the corporate. He had been part of Verizon's corporate development team, where he was involved in merger and acquisition deals and strategic planning projects.

Arnost was an associate at investment bank Houlihan Lokey from 2016 to 2019.

Van Horne advances to JPMorgan

Osei Van Horne has departed from financial services firm Wells Fargo's strategic



investment arm, Wells Fargo Strategic Capital (WFSC), and joined US-based investment bank JPMorgan.

Wells Fargo hired Van Horne to lead WFSC in 2017 after a seven-year stint at investment banking firm Goldman Sachs' merchant banking group, participating in areas including private equity, VC and corporate development.

Van Horne co-founded WFSC and served as managing director of

its technology practice, where he invested in deals in fields such as cybersecurity, consumer, financial technology, the internet of things, logistics and property technology. Global Corporate Venturing named him an Emerging Leader in 2020 and featured him again this year.

McKee leaves Arista for Third Point

Curtis McKee, head of corporate development, ventures and investor relations at US-based tech company Arista Networks, has joined hedge fund Third Point's ventures unit as a partner.



McKee had joined Arista in October 2019 after six years as part of Intel Capital's equity investing team. At US-listed chip and data firm Intel's corporate venturing unit McKee's deals included Big Switch Networks, which Arista acquired in February 2020.

Intel Capital lost dozens of its investors during the reign of its former head, Wendell Brooks, and is rebuilding under Anthony Lin.

Hain leaves Vattenfall for EWE

Alexander Hain, lead for venture building and investment activities for Sweden-based utility Vattenfall's wind (renewables) sector, has moved to local peer EWE to be senior investment manager and executive director.



Hain had joined Vattenfall in May 2019 from Wincubator, Wilo's innovation subsidiary.

At Vattenfall, his venture building initiatives from its green:field innovation platform had included spin-offs of Proteqnic at the end of last year and Solytic in 2018.

Vattenfall remains as a minority shareholder, strategic partner and customer. Proteqnic, an automated health monitoring and decision support for wind power operators, had its origin as one of the ideas in the Vattenfall Innovation Contest, Vattenfall's internal idea competition for employees.

Inagawa promoted at NTT Docomo

Takayuki Inagawa, chief executive of NTT Docomo Ventures, the CVC arm of Japan-based telecommunication firm NTT Group's mobile network subsidiary, NTT Docomo, has been promoted to general manager and the head of innovation management department at the subsidiary.



Since 2018, Inagawa, a GCV Powerlist 2020 award winner, has overseen the development of innovative mobile communication services and products, partnering and collaborating with emerging companies that develop information and communications technology, big data, cloud and authentication security across all stages.

Founded in 2008, NTT Docomo Ventures has invested in more than 110 companies in a bid to accelerate innovation on behalf of the NTT Group.

Martin takes on General Mills's corporate venturing leadership

General Mills, a US-based food maker, has promoted Doug Martin

to run its corporate venture unit from July.

The CVC unit, 301 INC, will move into a newly-formed “disruptive growth” team



led by Martin, who has been president of the company’s dairy operating division for nearly two years and from July become disruptive growth officer.

The team will combine 301 INC; Gworks, General Mills’ internal innovation incubator; and Isquad, the company’s innovation and core growth strategy consulting team.

Hansjee resurfaces at Fabric Ventures

Anil Hansjee, former head of PayPal Ventures in Europe, has resurfaced at VC firm Fabric Ventures.

Hansjee had spent five years to April as the Luxembourg-based co-founder of US-based payments company PayPal’s corporate venturing unit. His deals there included Cloud.iQ, Raisin, Monese, PPro and Tink.

Over the past two decades Hansjee has advised financial funds EQT, Creandum, MCI, Investinor, Seedcamp, IDG Ventures, Mojo.capital and Firestartr.co, and set up investment teams for corporates Google, Modern Times Group MTGx.

Dolbec leaves GE for Momenta

Momenta, a US-based VC firm, has hired Michael Dolbec as managing partner.



For more than 30 years, Dolbec has been an executive in institutional and corporate VC in Silicon Valley, most recently serving as executive managing director for GE Ventures, the corporate venturing unit of industrial conglomerate General Electric, from late 2012.

Dolbec began his investment career with Kleiner Perkins Caufield & Byers and continued with Greylock. He went on to VC leadership roles at IBM, 3Com, Orange, and LG Electronics.

Momenta has made over 50 investments and recently closed its third digital industry fund, the AIoT Ecosystem Fund, at \$50m with limited partners including Advantech, an industrial intelligence corporation.

Li leaves HCM for CoinEx

Haili Li, has joined China-based cryptocurrency exchange CoinEx as head of its corporate venturing unit.



As head of CoinEx’s Viabtc Capital since April, Li said on her LinkedIn profile she was looking at blockchain investments, as well as decentralised finance, web 3.0 and layer 2 startups.

Li had spent two and a half years as an investment manager of HCM Capital, the global venture investment arm of Taiwan-based computer maker Foxconn Technology Group.

Her most recent deals at HCM included Figure Technologies, a US-based fintech company, and Provenance.io, a distributed stakeholder blockchain.

Ravji and Torres Pascual to lead new CVC unit

Calidad Pascual, a Spain-based dairy business, has set up its corporate venturing unit.



Sejal Ravji, a former GBFoods and Nestlé executive who joined the dairy business in 2018 as director of open innovation, is leading the new unit with Gabriel Torres Pascual, Calidad Pascual’s director of innovation.

The family-owned business formed Pascual Innoventures to work with and invest in startups doing business in areas including the circular economy, personalisation and health, according to news provider Just Food.

Pascual Innoventures is already working with Spain-based startup Venvirotech on turning waste into bioplastics.

Reisner marks new role with Stripes

Aliza Reisner, an investor at France-based insurer Axa’s corporate venturing unit for the past year, has joined growth equity firm Stripes as a software investor.



Reisner joined Axa in March last year after an analyst role at Altman Vilandrie.

Markovic leaves BayWa for LBBW

Jelena Markovic, senior associate for BayWa Renewable Energy (BayWa RE), Germany-based trading conglomerate BayWa Group’s clean energy subsidiary,

has joined LBBW Venture Capital as an investment manager for the universal bank in the state of Baden-Württemberg.

She said her investment focus was now business-to-business software startups in the German-speaking region of Europe in late seed and series A rounds.



Markovic, a GCV Rising Stars 2020 award winner, joined BayWa RE Energy Ventures as a VC analyst shortly after it was formed in mid-2018 before being promoted last year.

Wedberg leaves Scania for Inzile

Daniel Wedberg, founder and managing director of Sweden-based truck maker Scania's corporate venturing unit, has left to join electric vehicle startup Inzile as chief executive.



Wedberg set up Scania Growth Capital in early 2017 and its deals include battery provider Northvolt, which recently raised \$2.75bn.

Inzile is developing a fossil-free, modular transport service and previous CEO and founder, Ragnar Åhgren, will remain within the company in business development.

Lok chews on Clif Bar role

Greg Lok, former corporate development director at Genesys,



has last month joined US-based food producer Clif Bar as head of incubator innovation.

As CEO of the Trailblazers Incubator, Clif Bar's so-called moonshot factory, he said on his LinkedIn profile he would launch "new business ventures for the fit for movement revolution".

Previously, Lok was a co-founder of Ambit Analytics, a US-based voice startup backed by investors including Amazon's Alexa Fund. Ambit was spun out of SRI International where Lok had been an entrepreneur-in-residence.

Saiprasad rejoins Kashyap at SoftBank

Priya Saiprasad, a founding principal at M12, the corporate venturing arm



of US-based software producer Microsoft, has rejoined her former boss, Nagraj Kashyap, at SoftBank Investment Advisers.

Kashyap, a GCV Powerlist 2020 award winner, joined SoftBank earlier this year as a managing partner for its two Vision Funds.

Saiprasad left M12 in mid-2019

for a venture investor role at VC firm Mayfield Fund. Saiprasad was a founding member of M12 in 2016 and oversaw investments in business-to-business software providers, including Workboard, Go1 and Skedulo.

CapitalG appoints three vice-presidents

CapitalG, the growth equity arm of US-headquartered internet technology conglomerate Alphabet, has promoted investment associates Nina Gerson, Jamie Rosen and Jeremy Zhu to vice-president positions.

The unit hired Gerson in 2019 after her two-year stint as an investment banker at investment banking firm Union Square Advisors, where she advised technology companies with mergers and acquisitions (M&A) and private capital funding transactions.

Rosen also joined CapitalG in 2019, having previously been an associate consultant for two years at professional services firm Bain & Company, where she focused on areas including consumer packaged goods, healthcare and private equity.

The unit likewise brought Zhu on board in the same year as Gerson and Rosen. He had been an investment banking analyst for two years at investment bank Moelis & Company, which tasked him with M&A and restructuring deals in the technology, media, and telecommunications space.

Analyses

- > E-commerce boost likely to translate into exits
- > Fintech appears to be recovering from pandemic slump
- > Large Northvolt raise is unusual in the capital-intensive energy storage sector
- > Mobility exits are rising

By Kaloyan Andonov, Liwen-Edison Fu and Robert Lavine

Etsy acquires Depop

E-commerce marketplace Etsy agreed to buy UK-headquartered social commerce platform developer Depop, which counts consultancy group Lumar among its backers, for more than \$1.62bn. The company had raised \$100m by the time the acquisition was announced. Lumar contributed to a \$8.25m round in 2016.

Founded in 2011, Depop runs an online marketplace with 30

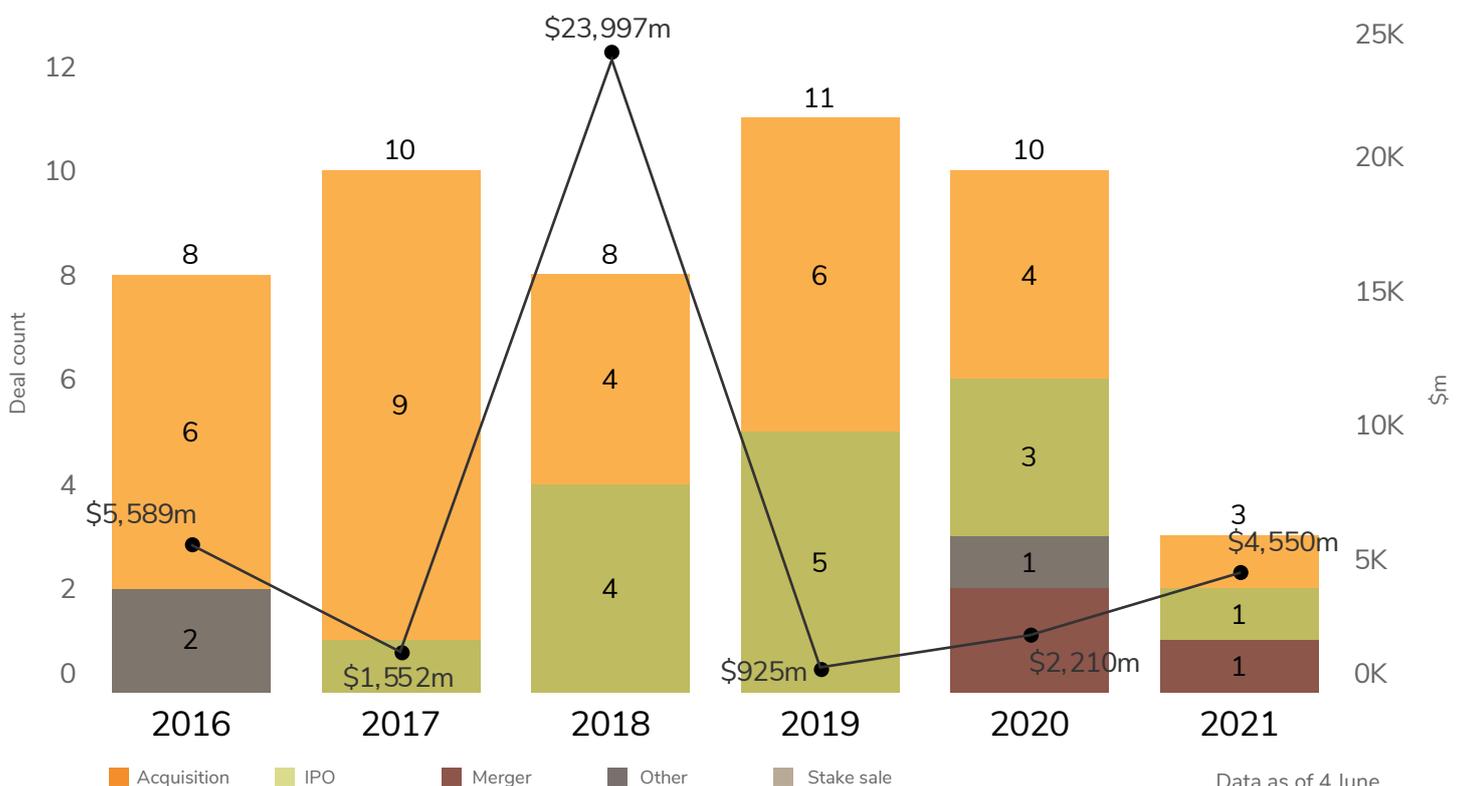
million registered users, 90% of whom are reportedly under 26. Users of the platform can buy and sell secondhand and new fashion items in addition to offering styling services. The company generated \$70m in revenue in 2020.

Depop is part of the broader e-commerce space, which has received much attention from corporate investors in recent

years, Exits, however, have been relatively stable in both number (up to 10-11 a year) and total estimated dollars.

E-commerce businesses, however, were given a substantial boost with the pandemic and stay-at-home orders, which is likely to translate into more exits, as public and merger and acquisition markets have been gathering momentum.

Exits from corporate-backed e-commerce business



Source: GCV Analytics

Nubank deposits additional \$750m

Nubank, a Brazil-based digital bank operator, raised \$750m in a series G extension round, which was led by Berkshire Hathaway, the insurance company and conglomerate led by famous investor Warren Buffett.

With the extension, the round amounted to a total of \$1.15bn and reportedly valued the company at \$30bn post-money. Nubank also has Tencent as a backer. The internet company returned for the first close of this series G round, sized at \$400m and completed in January. The latest funding will be used to increase Nubank's presence

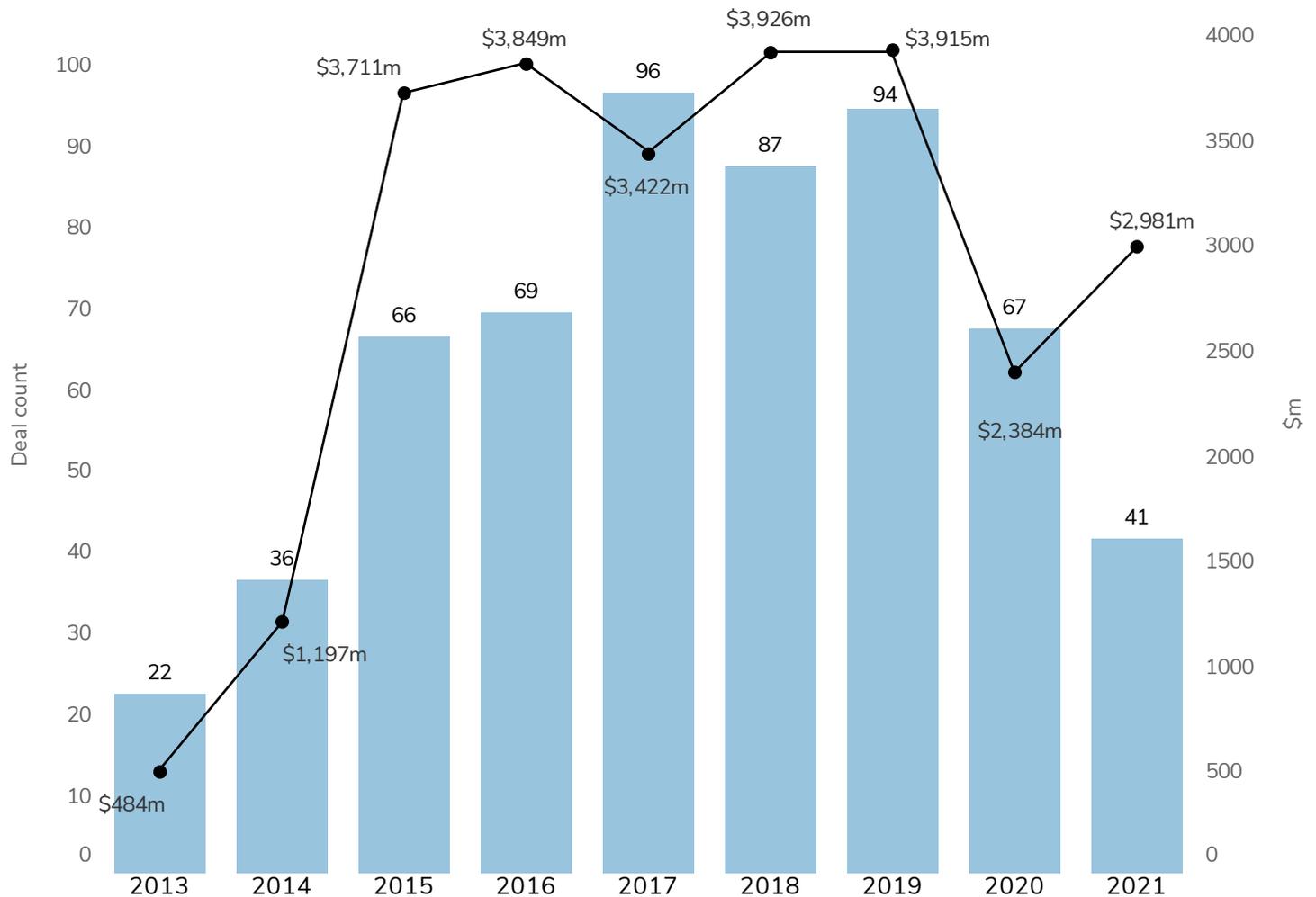
internationally, release new offerings and hire more staff.

Founded in 2013, Nubank provides online bank accounts that come with a no-fee credit card and which are accessible through a mobile app. The "neo-bank" initially catered to customers in its home country and has since expanded into other Latin American countries including Mexico, Colombia and Argentina. It offers current and savings accounts for consumers, entrepreneurs and small and medium-sized enterprises, a loyalty reward programme and personal loans.

The company is part of the larger banking and personal finance space an area within fintech, which has seen considerable attention from corporate venture investors in recent years.

The number of corporate-backed deals in these businesses reached a maximum of 96 in 2017 and has fluctuated since, dropping down to 67 in 2020, largely due to the pandemic shock and despite the fact that digital banking businesses were given a boost by it. Over the first five months of this year, we have already tracked 41 deals in this space, with a total estimated capital of \$2.98bn in those rounds.

Corporate-backed deals in banking, personal finance and wealth management



Source: GCV Analytics

Data as of 10 June

Northvolt gets \$2.75bn recharge

Sweden-headquartered battery producer Northvolt raised a \$2.75bn private placement round, in which automotive manufacturers Volkswagen committed \$620m.

The round was co-led by investment bank Goldman Sachs' asset management subsidiary, pension funds AP1, AP2, AP3, AP4 and Omers Capital Markets, a vehicle for pension fund manager Omers. The transaction also included commercial vehicle producer Scania, among many other investors. Volkswagen and Scania were returning investors. Other corporate investors backed the company in previous rounds, such as industrial technology and

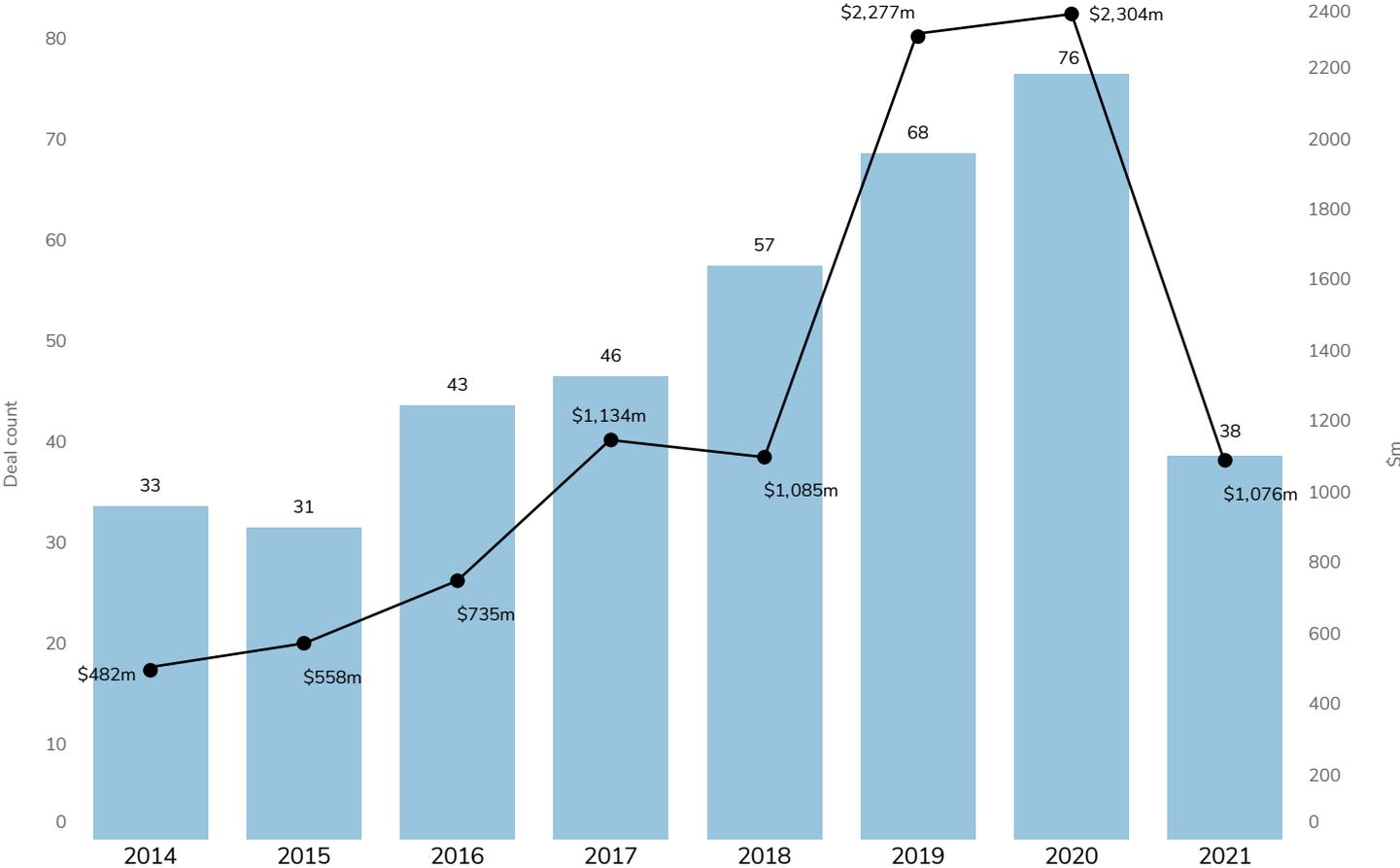
appliance manufacturer Siemens, energy utilities Skellefteå Kraft and Vattenfall, insurance firm Folksam and carmaker BMW.

Founded in 2016 as SGF Energy, Northvolt has developed lithium-ion batteries for use in electric vehicles in addition to portable electronics products such as drones. The batteries can be also used as renewable energy storage. The financing will support the expansion of the company's Gigafactory from a capacity of 40 GWh per year to 60 GWh per year. Northvolt is considering building two facilities by the end of this decade to meet the forecast surge in demand.

Northvolt forms part of the broader energy storage and renewable energy tech space which has seen heightened interest from many corporate investors over the past few years.

The number of corporate-backed deals last year reached 76, an all-time-high, and a total estimated capital of \$2.3bn, up from an estimated \$482m over 23 rounds in 2014. The renewable energy and energy storage tech are very capital intensive and require a longer investment horizon, which renders them not suitable for all venture investors. It is therefore a surprise to see a financing round of this size raised by a startup.

Corporate-backed deals in renewable energy and energy storage



Source: GCV Analytics

Data as of 15 June

Manbang Group goes public

Full Truck Alliance, a China-based trucking services platform developer, raised nearly \$1.57bn in an initial public offering (IPO), which gave an exit to internet conglomerates SoftBank, Alphabet, Baidu and Tencent.

The IPO comprised 82.5 million American Depositary Shares, each representing 20 ordinary shares, issued on the New York Stock Exchange. The shares were priced at the top of its \$17 to \$19 range. The price rose above \$20 per share, giving the company a market capitalisation of over \$21bn. In parallel with the IPO, Ontario Teachers' Pension Plan

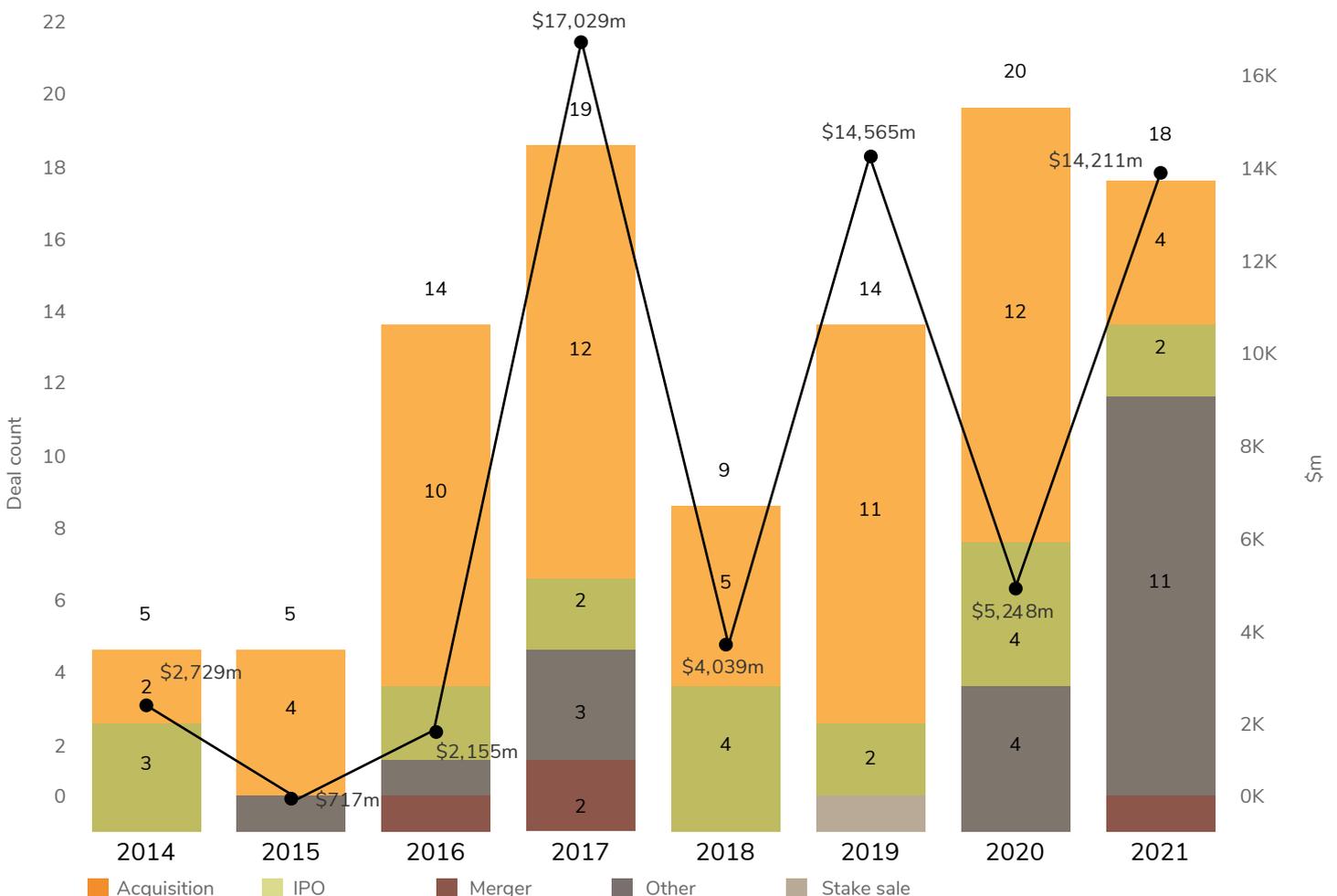
Board and an affiliate of Mubadala Investment Company purchased \$100m of additional shares through a private placement.

Full Truck Alliance was formed in 2017 when freight booking services Huochebang and Yunmanman merged to form Full Truck Alliance, also known as Manbang Group. The company runs a digital freight platform that provides shippers with access to a network of some 2.8 million trucks, employing artificial intelligence to increase efficiency. It made a \$532m net loss in 2020 from just over \$395m in revenue. The proceeds will be

used for expanding its services and strengthening infrastructure development and technology.

The company is part of the broader transport and mobility space, from which has seen some exits from corporate-backed businesses over the years. The number of exits has not really exceeded 19 to 20 even in peak years. However, by mid-June 2021, we had already tracked 18 such exits, worth an estimated \$14.21bn, with 11 of them reverse mergers with SPACs. There is clearly an upward trend in exits from the mobility space and Manbang's IPO is just one of its latest manifestations.

Exited from corporate-backed transport enterprises



Source: GCV Analytics

Data as of 24 June

Sector report

IT sector keeps the world going

- > Record highs in both deal count and total dollars y-o-y
- > Exits and exit dollars up y-o-y as well
- > Many people moves over the past year

By Kaloyan Andonov
Analyst

In today's world, IT innovation goes beyond the sector itself, with significant spill over into virtually all other sectors of the world economy, each of which is undergoing digitisation to a different degree. Be it smart homes, smart factories, smart cities, the Internet of Things (IoT), connected vehicles, applications and software optimised with artificial intelligence (AI) and machine learning (ML), or the cloud, digitisation – and its disruptive potential – is nearly ubiquitous.

Digital technology enabled the fast switch to remote working in the first days of the covid-19 pandemic. Whether remote working will remain in such proportions in the post-pandemic world is unclear but it is clear

The GCV Analytics definition of the IT sector encompasses general artificial intelligence applications, big data and analytics, virtual and augmented reality technologies, semiconductors and microchips, cybersecurity, enterprise and other software and other IT businesses.

decades of human ingenuity went into the IT that is being used to keep the world going, even in dire straits. And that is quite something!

Big data and datafication lie at the core of digitisation. The ever-smarter internet-connected devices we use tend to generate enormous streams of data.

Harnessing the potential and unlocking the operationalisation of big data, in terms of extracting relevant information and insights, has been one of the major challenges.

According to “Big Data and analytics services global market report 2021: covid-19 growth and change to 2030” by ResearchAndMarkets.com, the big data analytics services market was estimated at \$73bn globally in 2020 and is forecast to reach \$76bn by the end of 2021 at a compound annual growth rate (CAGR) of 3.9%. The expected growth is driven by companies resuming operations and adapting to the new normal and recovering from the pandemic’s impact, according to the report. The report also expects this market to reach \$117.19bn in size by 2025, at a CAGR of 11%.

The expected medium-term growth is attributed to the expansion of IoT and its massive datafication effect: “The increasing growth of integration of internet of things in daily lives is a key factor driving the growth of the big data and analytics services market. When organisations take a hold of the data for the purpose of research, IoT serves as a major source for that data and this is the point where the position of big data in IoT comes into the picture. IoT devices produce a huge amount of unstructured data, which are stored in the big data network and this data largely depends on 3V factors such as volume, velocity and variety. About 44 trillion gigabytes of data is expected to be generated by the internet of things by year 2020.”

Long gone are the days when big data tools used to be seen

David Krane, CEO and managing partner, GV

David Krane is chief executive and managing partner for GV, US-based technology conglomerate Alphabet’s early-stage corporate venturing subsidiary formerly known as Google Ventures, and manages the vehicle’s activities globally.

GV’s focus areas include life sciences, consumer, enterprise and frontier technology. During his time at the unit, Krane has helped the unit back a variety of technology companies such as ride-sharing provider Uber, consumer goods stock exchange StockX, smart home device maker Nest and coffee roaster and retailer Blue Bottle Coffee.

Before joining Google, Krane had spent his time in both startups



and public companies having worked for consumer electronics producer Apple, mobile chipmaker Qualcomm, Four11 – the predecessor of email service provider Yahoo Mail – and two cybersecurity technology developers.

Krane holds a bachelor of arts in journalism and music from Indiana University (IU) Bloomington and currently serves on the dean’s advisory board for the IU School of Informatics, Computing and Engineering.

as just a fancy new technology. The business world has largely come to grips with the fact they are becoming mission critical for big enterprises. According to consulting firm New Vantage Partners’ ninth annual survey of senior corporate executives on the topics of big data and AI business adoption: “Today... mainstream companies have come a long way in having expanded their commitment and investments in data. This is evidenced by the percentage of firms investing in data initiatives – 99%, appointment of a Chief Data Officer – 65%, and reporting of measurable business outcomes – 96%. There is no question that big data has been absorbed into the mainstream during this decade.”

The role of AI

Handling massive data streams is unthinkable without employing the power of AI, which is the

other major factor in IT innovation. In recent years, media have popularised buzzwords like “artificial intelligence”, “machine learning” and “deep learning” (DL) and they have become part of everyday business speak. AI refers to any instances of a machine performing tasks characteristic of human intelligence – from recognising objects and images through speaking languages to problem solving. Machine learning is a specific kind of AI where a machine learns how to perform a task without having been explicitly programmed to do so. Deep learning, in turn, is an approach to ML, inspired by the functioning of neural networks in the human brain.

Within AI, we have heard much talk about “natural language processing” (NLP), a branch that deals with to extracting or generating meaning and intent from texts in a natural, readable

and grammatically correct form. “Computer vision”, another branch of AI, aims to extract meaning or intent from visual elements, whether characters in text documents or faces, objects and scenes from images.

Far from being a mere fad or good buzzwords for PowerPoint presentations, AI and ML are already yielding measurable results for businesses. Studies like the third edition of the State of AI report, issued by consulting and auditing firm Deloitte, found some nuances about the use and adoption of AI are beginning to change. According to the report, the use of AI may no longer viably provide the advantage it did: “Early-mover advantage may fade soon. As adoption becomes ubiquitous, AI-powered organisations may have to work harder to maintain an edge over their industry peers. An indicator of a levelling of the playing field – most adopters expect that AI will soon be integrated into more and more widely available applications.”

Why is AI used by big businesses? The short answer is simply to make things more efficient “Virtually all adopters are using AI to improve efficiency; mature adopters are also harnessing the technologies to boost differentiation. Using AI for automation and optimisation can provide significant benefits, but organisations should work to move beyond these objectives by leveraging AI to create new products and ways of working,” the report says.

It also found that most AI adopters are buyers, not developers, of the technology: “AI adopters tend to buy more than they build, and they see having the best AI technology as key to competitive advantage. As options for platforms, solutions,

and vendors proliferate and improve, becoming more astute consumers of AI technologies will likely become increasingly important for companies.” This finding has wide and positive implications for the future of small emerging businesses that are developing AI.

Humans and robots

There are some controversial points around AI’s side-effects on the economy, particularly on human labour. While the planet is still comfortably a long way from a robot-dominated world, AI is bound to drastically augment human productivity in the next few decades. However, much of this process will likely come along with a Schumpeterian “creative destruction”. That implies a broad need to reskill and retrain the labour force and, naturally, feelings of fear and rejection. According to a survey cited in the 2019 Global Human Capital Trends by Deloitte, 38% of respondents expected

technology to eliminate jobs at their organisations within the next three years, while only 13% thought automation would “eliminate a significant number of positions”. This is a problem yet to be tackled in the post-pandemic world.

During the pandemic we had even some reasons to be slightly more optimistic for a more peaceful transition to an AI-powered future of work. According to the 2020 Global Human Capital Trends by Deloitte, the health crisis may have given a glimpse of the way forward: “Covid-19 showed people that while technology can augment and supplement work, it does not replace what is needed from humans. The health crisis gave people a greater appreciation for the fact that humans and technology are more powerful together than either can be on their own. Consider how telemedicine, manufacturing, education and even grocery delivery drew on the power of integrated human-machine teams during the crisis.”

Shinichiro Hori, president, Z Venture Capital

Shinichiro Hori serves as president of Z Venture Capital (ZVC), a ¥30bn (\$271m) vehicle created in April 2021 as the result of a union between Line Ventures and YJ Capital, the corporate venturing subsidiaries of messaging platform developer Line and Japan-based internet company Yahoo Japan.

Yahoo Japan and Line, the latter formed by South Korea-headquartered internet group Naver, closed their merger earlier in the same month and operate under Z Holdings, a publicly-

listed holding company backed by Naver and telecoms firm SoftBank.



The corporate venture capital vehicle 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.

“We aim to generate win-win collaboration between startups and Yahoo, Line and other group companies of Z Holdings,” Hori told Global Corporate Venturing.

Despite its potential negative social impact, with the current strong tailwinds for AI, it is perfectly conceivable it will continue to create opportunities for many emerging businesses, as it has in the last five years.

Cybersecurity and the cloud

Digitisation inevitably involves significant digital threats that the cybersecurity subsector addresses. The growth of the cybersecurity market has been driven by the adoption of digital technologies across a wide range of industries as well as the increased use of internet-connected mobile technologies by consumers. Cyberthreats have also grown more sophisticated and larger, as we witnessed in the case of a hack which took down Colonial, the largest fuel pipeline in the US.

Analyst Steve Duplessie, founder of Enterprise Strategy Group once aptly described the field of cybersecurity: "Cybersecurity is a magnificent market because the problem can never be solved entirely. Fix one hole, the bad guys find another. It is a ping-pong match for hackers."

Cybersecurity threats accelerated during the pandemic with the emerging of remote working. Cybersecurity threats are bound to remain and grow stronger, even if teleworking levels go down. According to "Cybersecurity Services Global Market Report 2021" by report aggregator Reportlinker.com, the global cybersecurity services market was forecast to grow from \$65.41bn in 2020 up to \$103.89bn by the end of 2025, at a CAGR of 11%. The report attributes the growth to "increasing instances of massive cyber-attacks" ". The report also cites data that say ransomware threats have risen by 40% quarter-on-quarter to 199.7 million attacks worldwide in Q3 2020. "The primary motive behind cybercrimes is political competition, financial gain, negative credibility, foreign competition and radical involvement of religious groups," said the report.

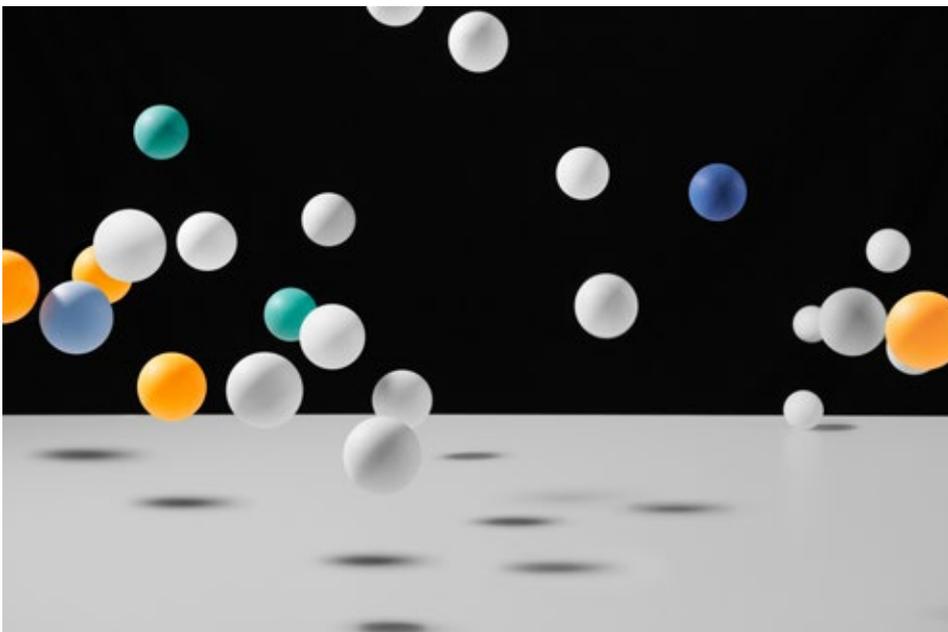
With booming data and connectivity of everything, today's digitised world would be almost unimaginable without cloud computing and infrastructure.

Many data-driven and data-dependent businesses have either moved operations completely to the cloud or reduced their operational expenses on private data centres. The 2021 State of the Cloud Survey, conducted by tech asset management solution provider Flexera, found that even in a nearly post-pandemic context, "enterprises continue to embrace multi-cloud and hybrid cloud strategies and are increasing spend with vendors across the board, citing a higher-than-expected cloud usage due to the covid-19 pandemic restrictions throughout 2020".

Respondents of the survey claimed they had registered their highest levels of spending on cloud technologies, though they lamented that "they continue to struggle to forecast spend accurately as they significantly exceed their cloud budgets". It is no surprise that optimising existing cloud use is on the top of priority lists, along with migrating more workloads to the cloud, according to the report.

While business operations and the workforce have been migrating to the cloud, individual consumers are moving towards virtual reality (VR) and augmented reality (AR) technologies. It remains still unclear whether and to what extent the two technologies may converge or diverge as they become more marketable and adopted more widely thanks to the rollout of 5G technologies.

According to the "Augmented Reality Services Global Market Report 2021: Covid 19 growth and change to 2030" by ReportLinker, the AR market was estimated at \$48.92bn in 2020 and is expected to reach \$291.96bn by 2025 at a



Steve Duplessie once described cybersecurity as "a ping-pong match"



Virtual reality is a growth sector

CAGR of 44%. The report cites the pandemic as having been the major driver of growth, as businesses have had to adopt AR services. This adoption is also expected to generate further growth in the post-pandemic world.

According to the “Global Virtual Reality Market Report 2021-2026” by ResearchAndMarkets, the world VR market – including both services and hardware technology, was \$23.7bn in 2020 and is forecast to grow to \$80.16bn by 2026.

The report cites the increased use of VR in the events business due to the pandemic as a catalyst of wider longer-term adoption and acceptance of VR technologies. However, it considers the scientific and training capabilities as “among the most vital applications of virtual reality technology”.

Chips crisis

On the hardware side of things, it is chips and semiconductors that enable sufficient computing power for everything from big data and AI to cloud computing and VR. There is currently a significant shortage of semiconductors for the automotive and other industries, largely due to supply chains disruptions by the pandemic and swings in demand. “It is not an exaggeration to say at the moment that we have a crisis in our supply chain,” stated US commerce secretary Gina Raimondo during a hearing before the Senate. This is likely to drive a concerted effort to foster domestic production, rather than just design, of such critical products in the future, not just in the United States.

According to the “Semiconductor Industry Landscape – Growth,

Trends, Covid-19 Impact, and Forecasts (2021-2026)” report by ResearchAndMarkets.com, the semiconductor industry is forecast to grow at a CAGR of above 6% by the end of 2026. The major drivers will continue to be the clusters of technologies around IoT and AI:

“The advent of IoT and artificial intelligence (AI), along with the proliferation of sophisticated electronics are driving the high-end application segment across the consumer electronics and automotive industries. These dynamics have increased the rate of adoption of the latest semiconductor manufacturing, to meet the growing demand.” The report, however, notes consumer electronics and their sales growth will play major role in driving the growth of semiconductors.

Key sub-sectors

Big data and analytics

Neo4j, a US-based provider of graph-centric database and related products, has raised \$325m at a more than \$2bn valuation in its series F round led by France-based private equity firm Eurazeo, with additional capital from Alphabet's corporate venture unit GV (formerly known as Google Ventures) through partners Erik Nordlander – who

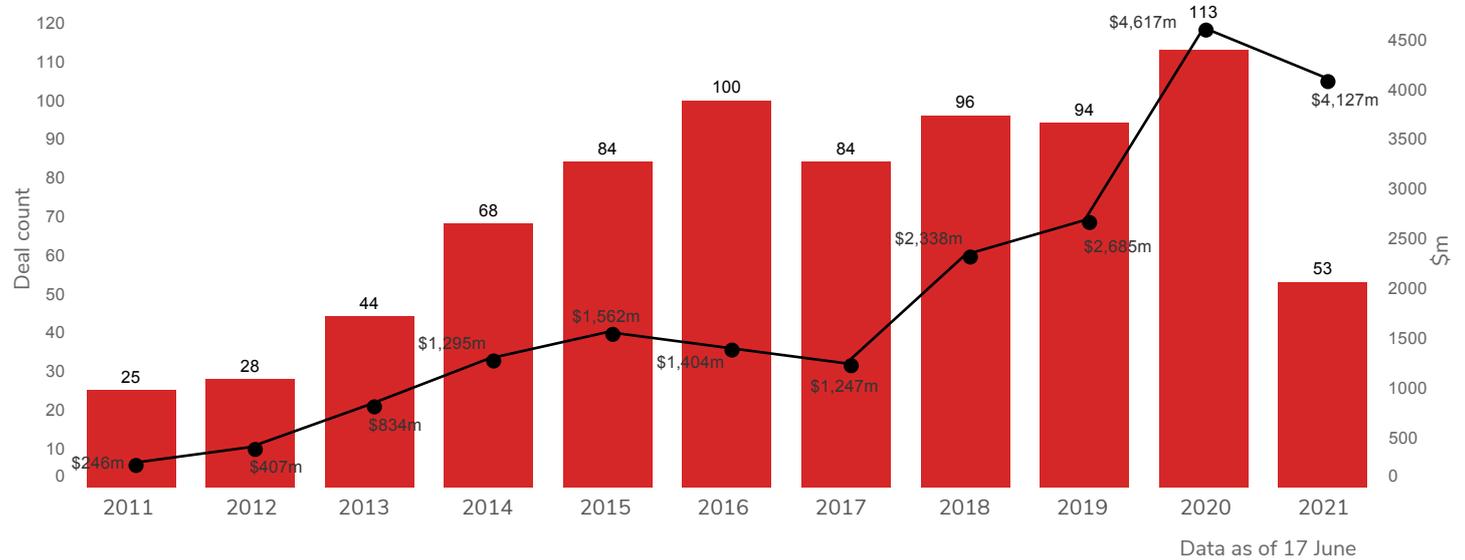
wrote the first cheque in Cockroach Labs (last value \$2bn earlier this year) – and Tom Hulme. In addition, Deutsche Telekom's corporate venturing unit, DTCP, was a new investor through Florent-Aurélien Couturier-Crouzillac.

As news provider TechCrunch noted, in the past, most business analysis was built on relational databases but interconnected

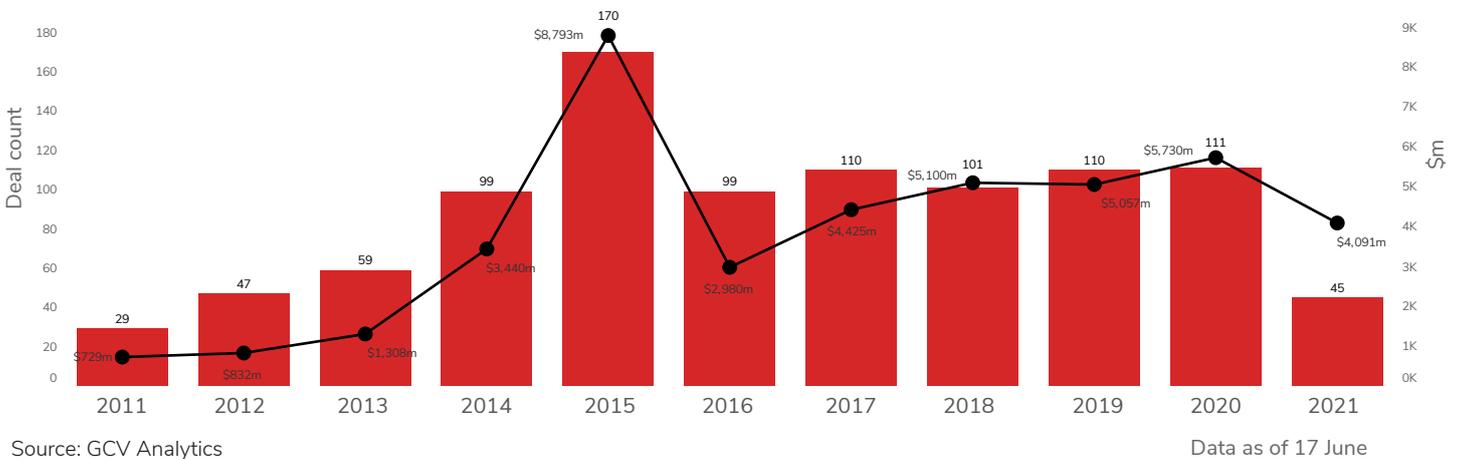
complexity is creeping in everywhere so graph-based data models have become central to modern machine learning and artificial intelligence applications.

This interest in the next generation of analytics tools is pushing the subsector to record heights both by deal value and volume for rounds including corporations, according to GCV Analytics.

Corporate-backed deals in big data and analytics

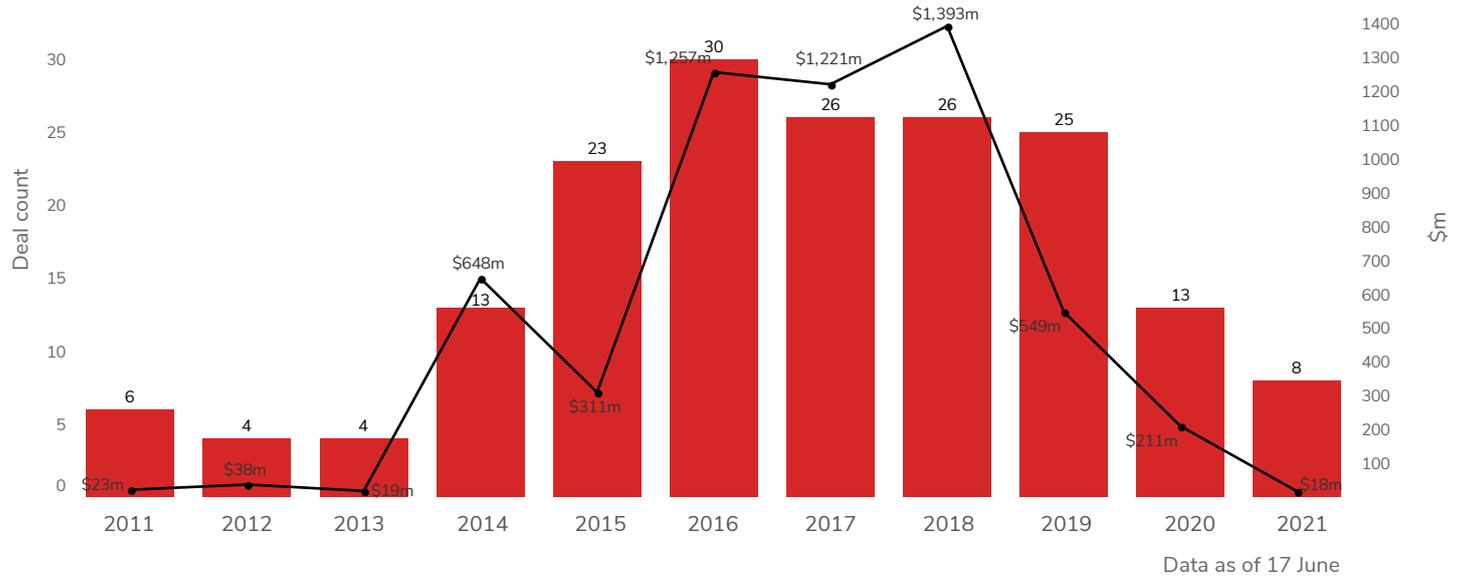


Corporate-backed deals in cloud computing

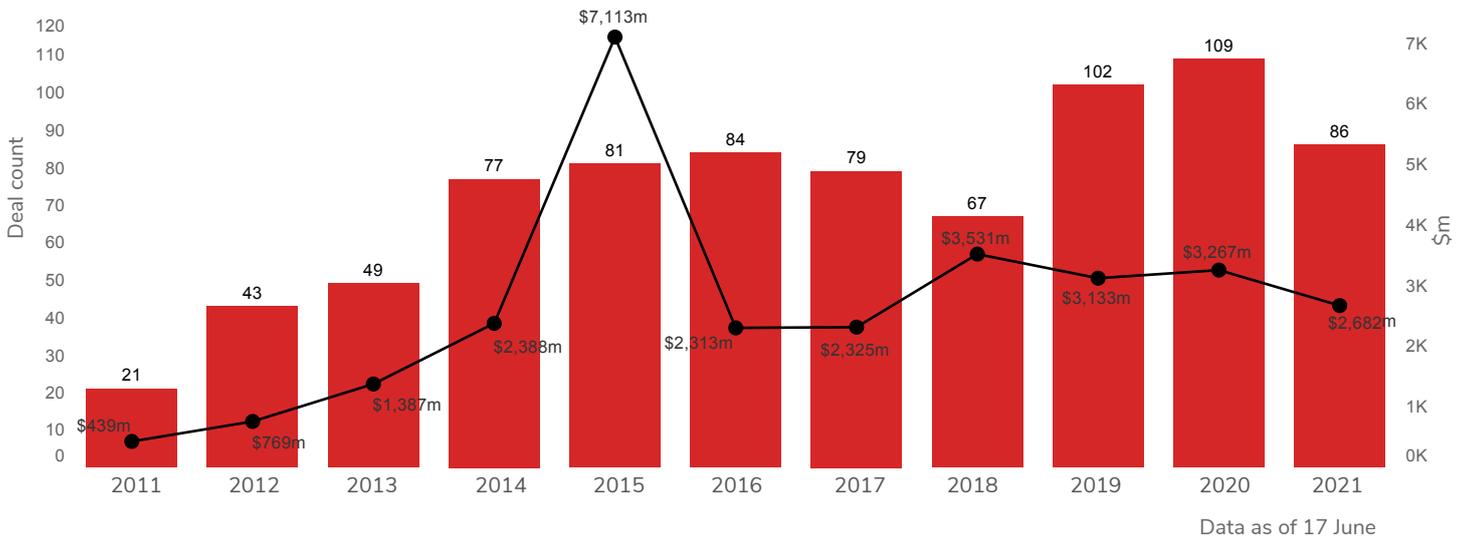


Source: GCV Analytics

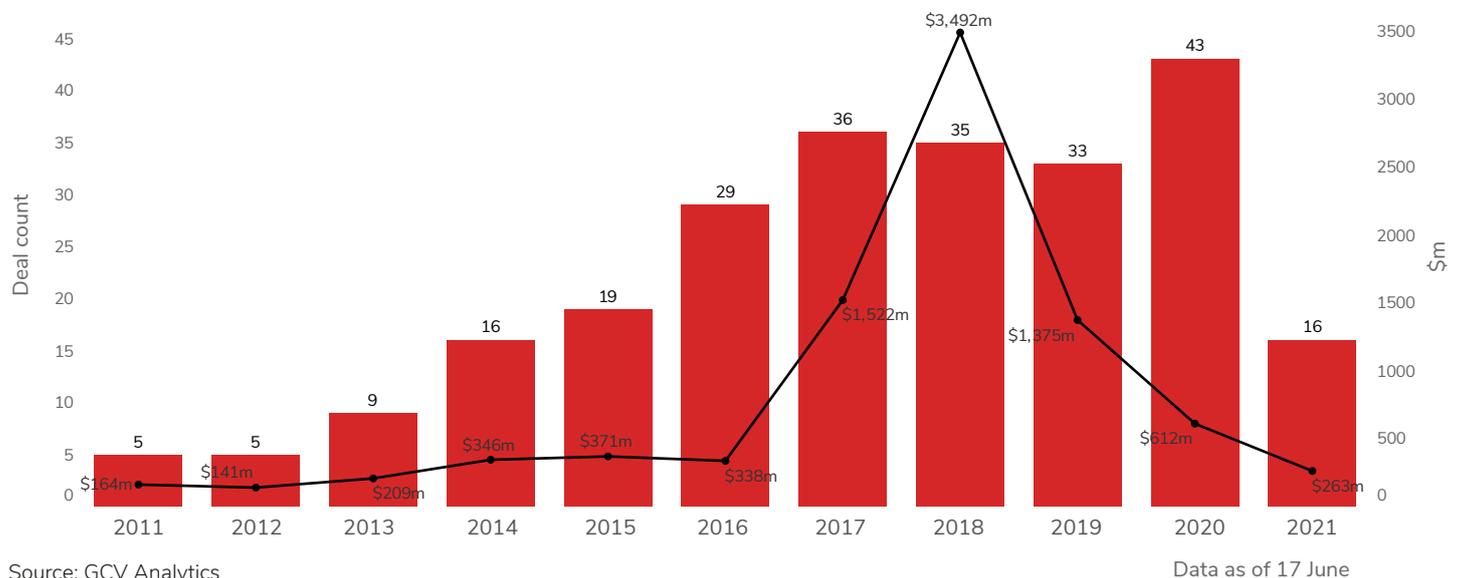
Corporate-backed deals in virtual reality and augmented reality technology



Corporate-backed deals in enterprise software

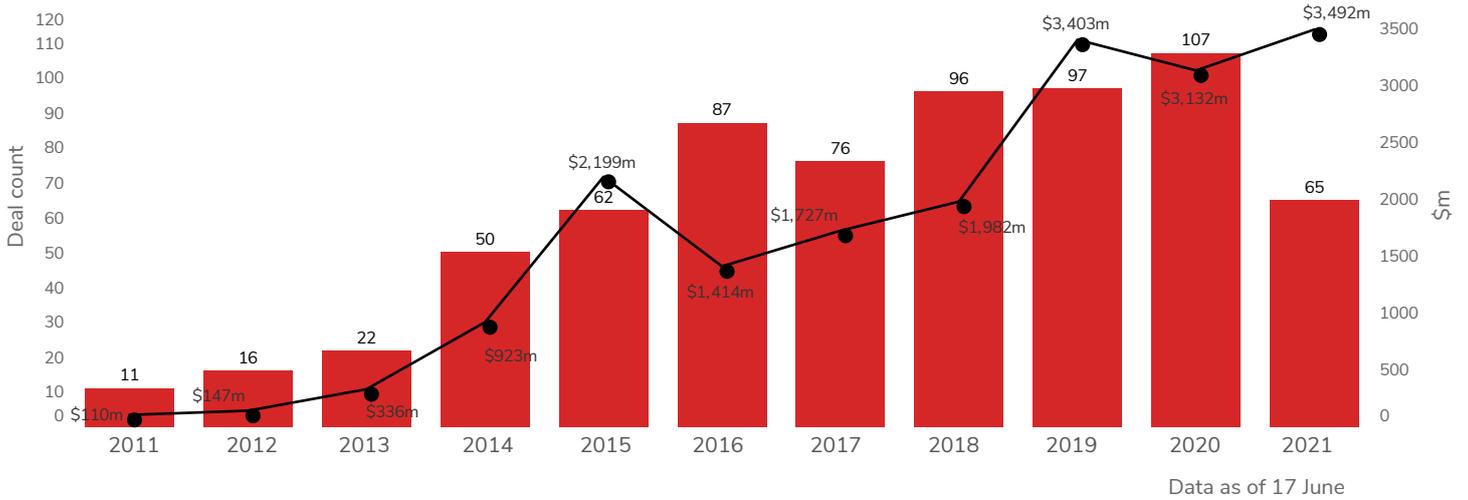


Corporate-backed deals in internet of things

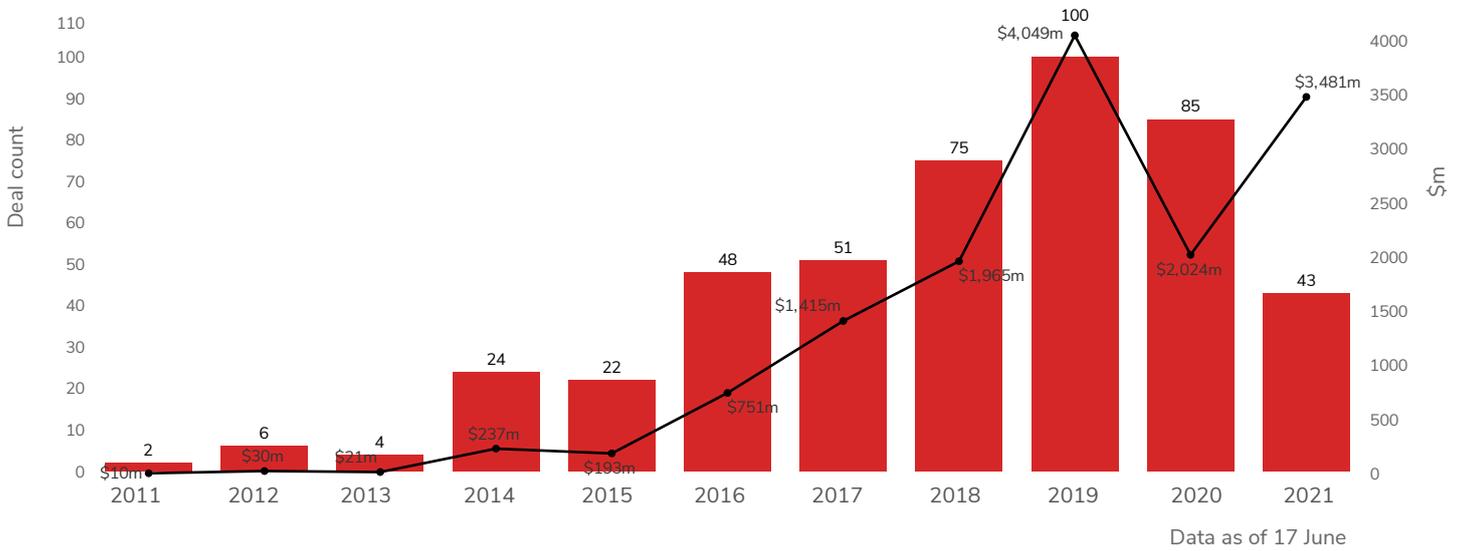


Source: GCV Analytics

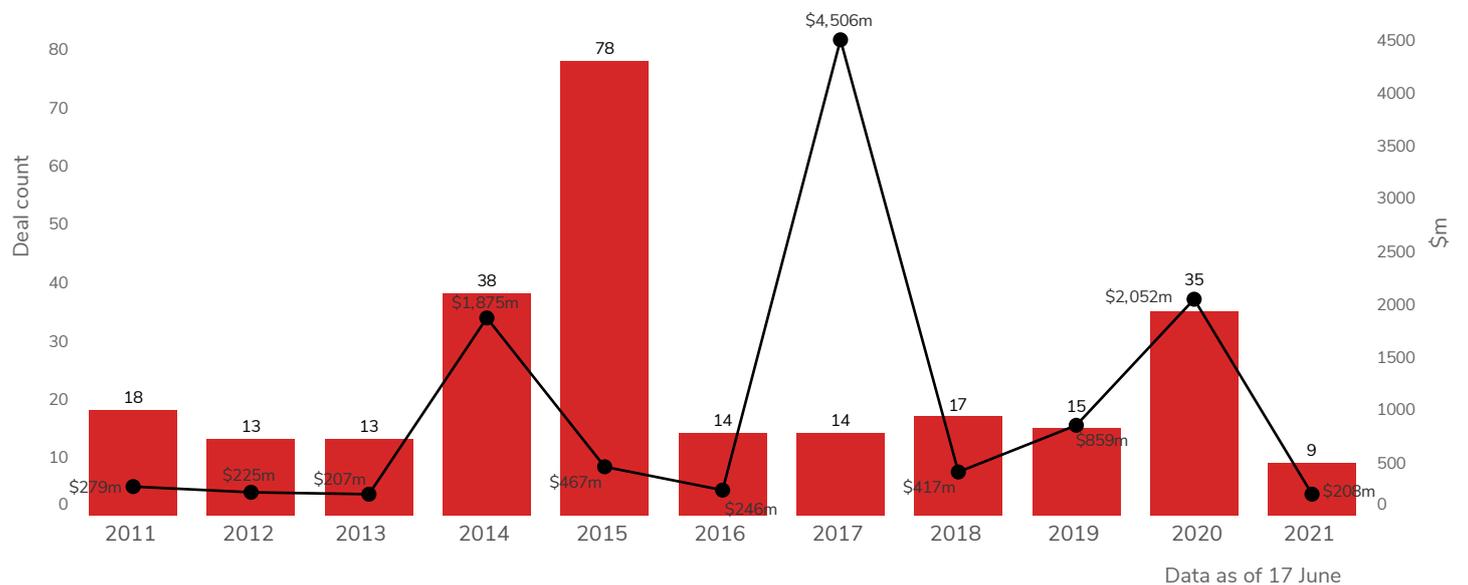
Corporate-backed deals in cybersecurity



Corporate-backed deals in artificial intelligence



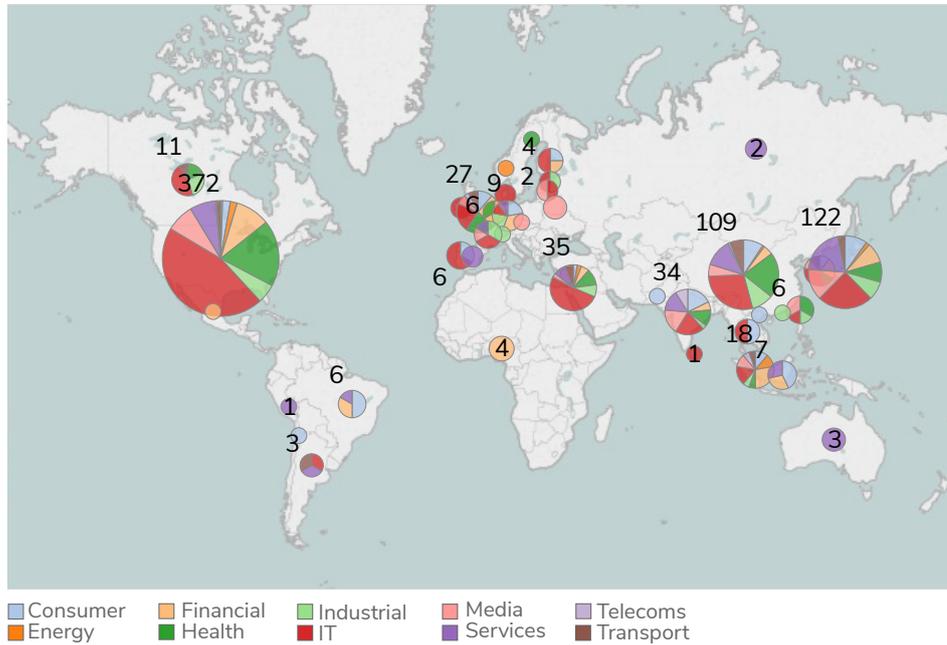
Corporate-backed deals in semiconductors and chips



Source: GCV Analytics

The sector in charts

Global view of past year's deals



For the period between June 2020 and May 2021, we reported 825 venturing rounds involving corporate investors from the IT sector. A considerable number of them (372) took place in the US, while 122 were hosted in Japan and 109 in China.

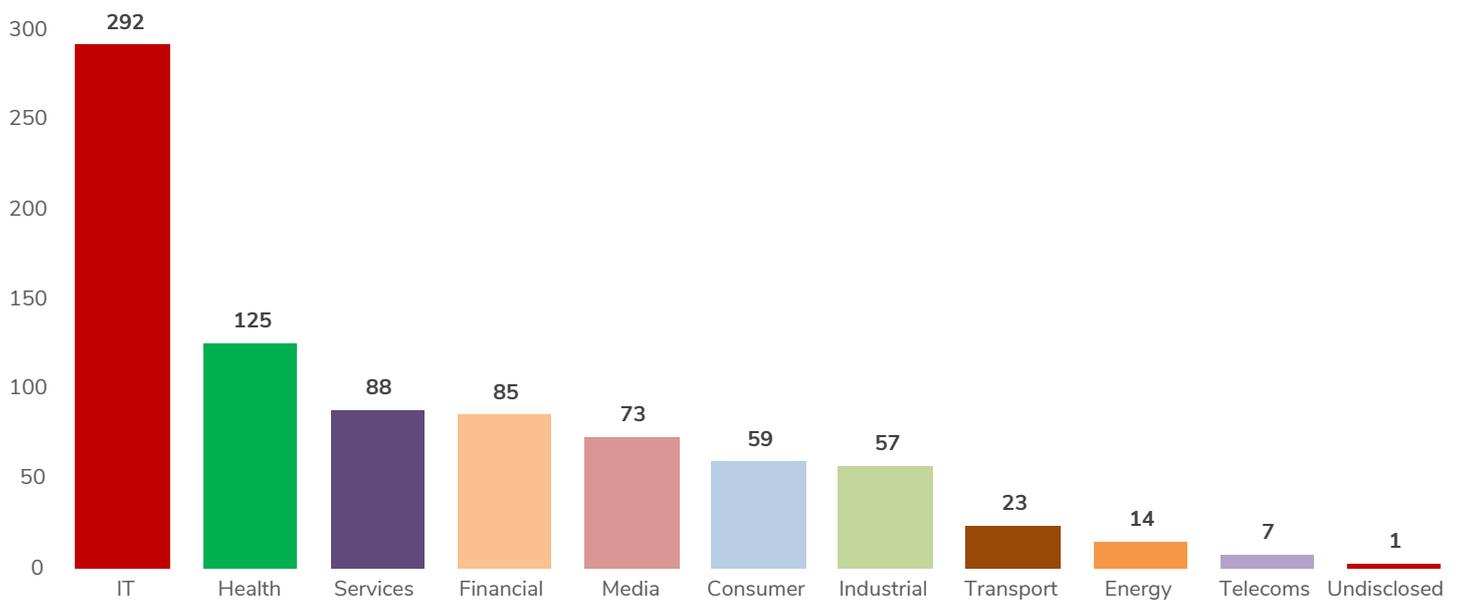
Investments of IT sector corporates over the past year

IT 292 (big data, enterprise software, cybersecurity, artificial intelligence)

Health 125 (pharmaceuticals, healthcare IT and medical devices)

Services 88 (human resources, logistics and supply chain management, edtech)

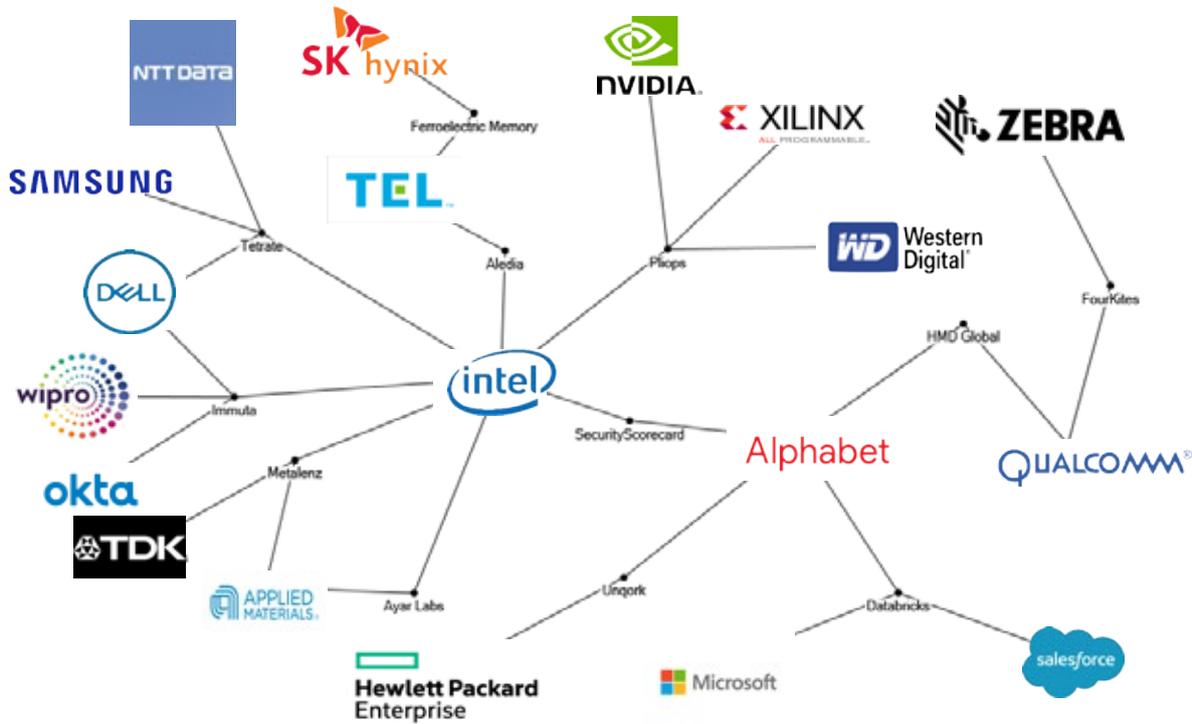
Financial 85 (payment tech and cryptocurrencies, insurtech and other fintech)



Source: GCV Analytics

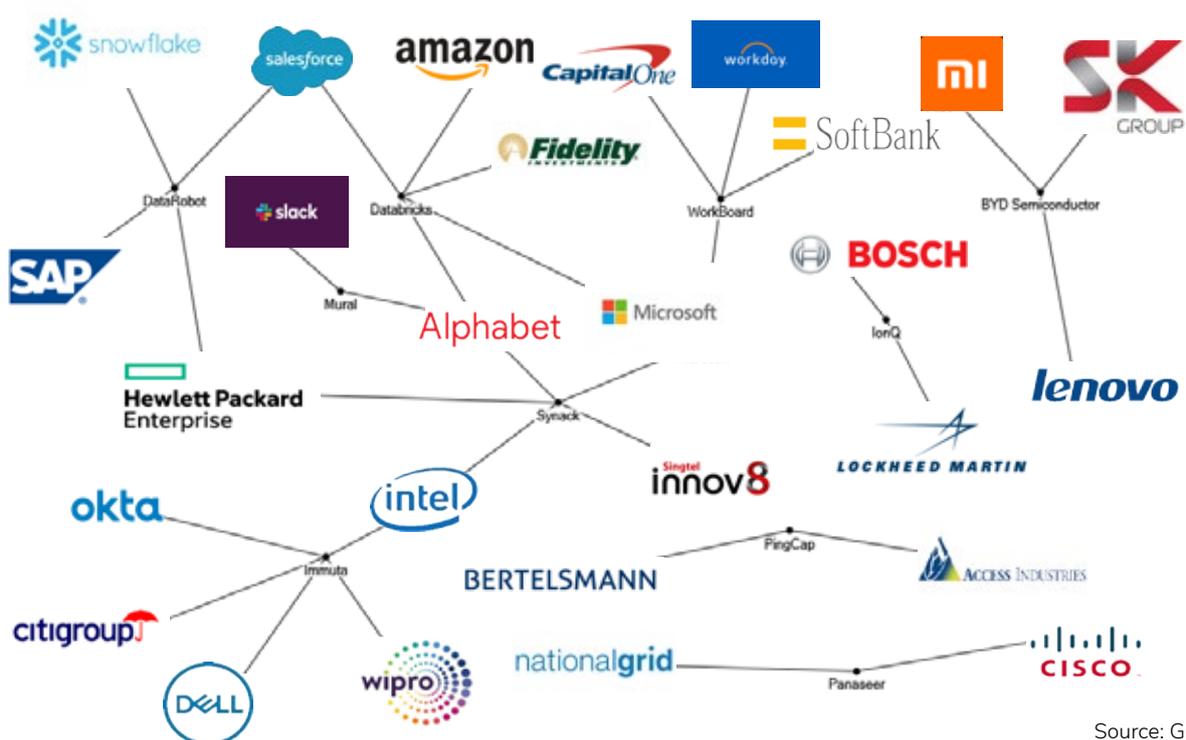
Co-investments of IT sector corporate venturers

- > Big data and analytics (Databricks, Immuta, Pliops)
- > Semiconductors and hardware (Ferroelectric Memory, Ayar Labs)
- > Optics (Aledia, Metalenz)
- > Cybersecurity (SecurityScorecard)
- > Enterprise software (Tetrate, Unqork,)
- > Industrial IoT (FourKites).



Corporate co-investments in IT sector enterprises

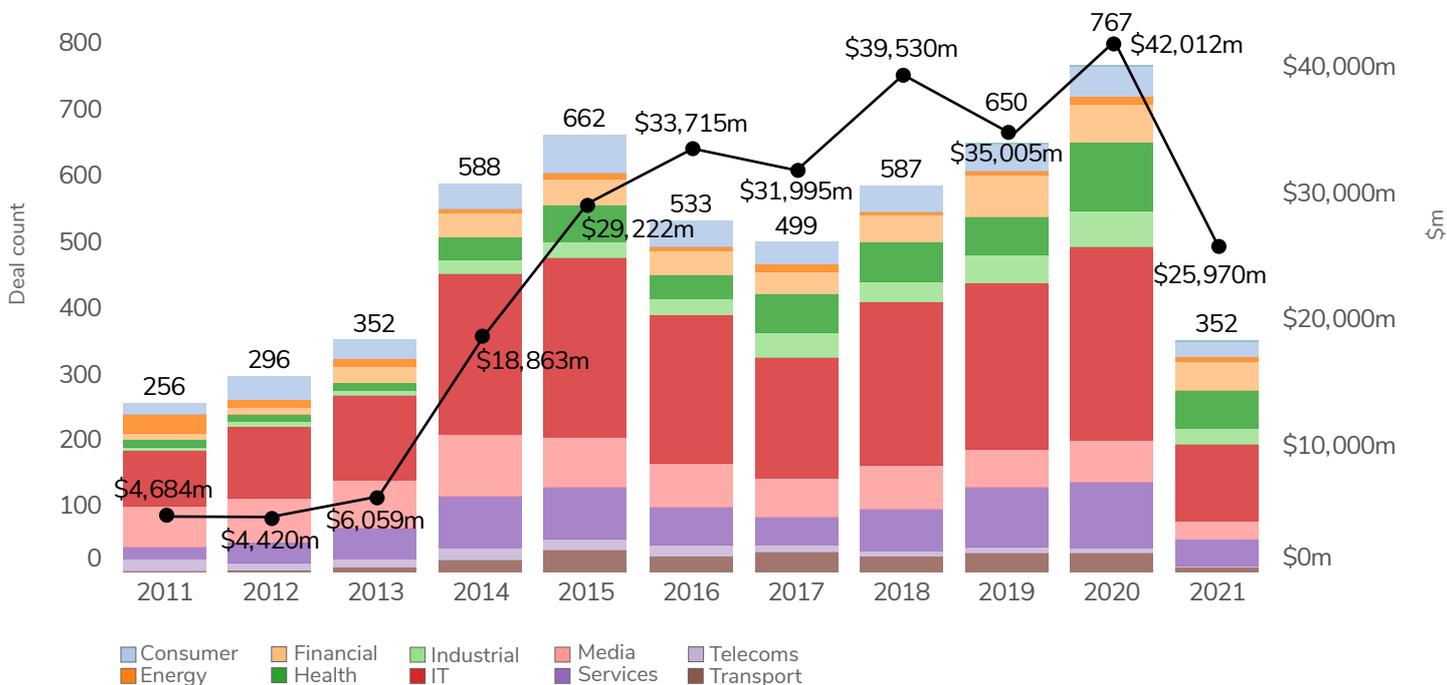
- > Semiconductors (BYD Semiconductor)
- > Enterprise software (Mural, WorkBoard)
- > Quantum computing (IonQ)
- > Cybersecurity (Panaseer, Synack)
- > Big data tech (Databricks, Datarobot, Immuta, PingCap).



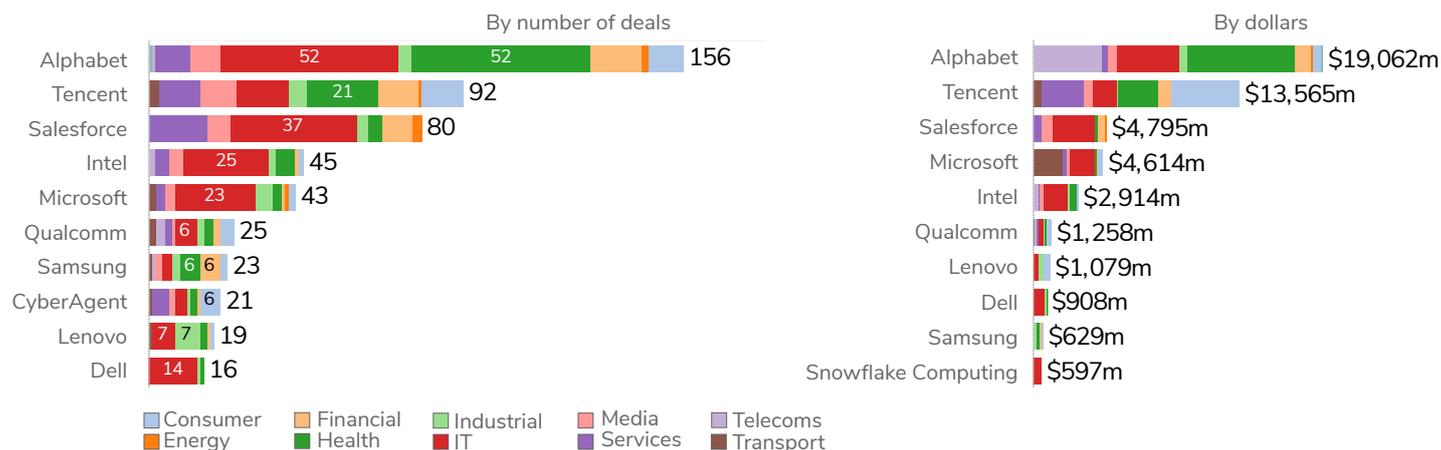
Source: GCV Analytics

Deals by IT corporates

On a calendar year-on-year basis, total capital raised in corporate-backed rounds went up from \$35bn in 2019 to \$42bn in 2020, suggesting a 20% increase. The deal count also increased by 18% from 650 deals in 2019 up to 767 tracked by the end of last year. The 10 largest investments by corporate venturers from the IT sector were not necessarily concentrated in the same industry.



Top IT investors over the past year

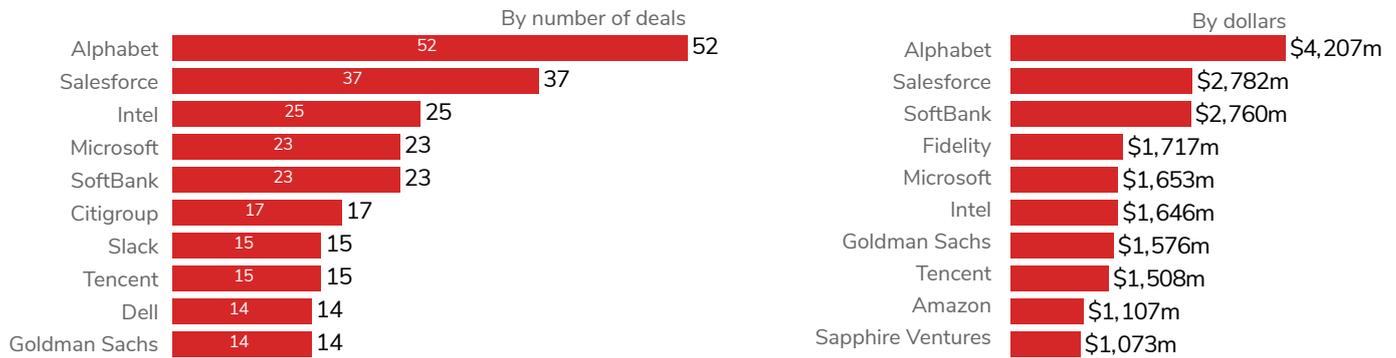


Source: GCV Analytics

The leading corporate investors from the IT sector in terms of largest number of deals were internet conglomerate Alphabet, internet company Tencent and cloud enterprises software provider Salesforce. The list of IT corporates committing capital in the largest rounds was headed by Alphabet, Tencent and cloud enterprise software provider Salesforce

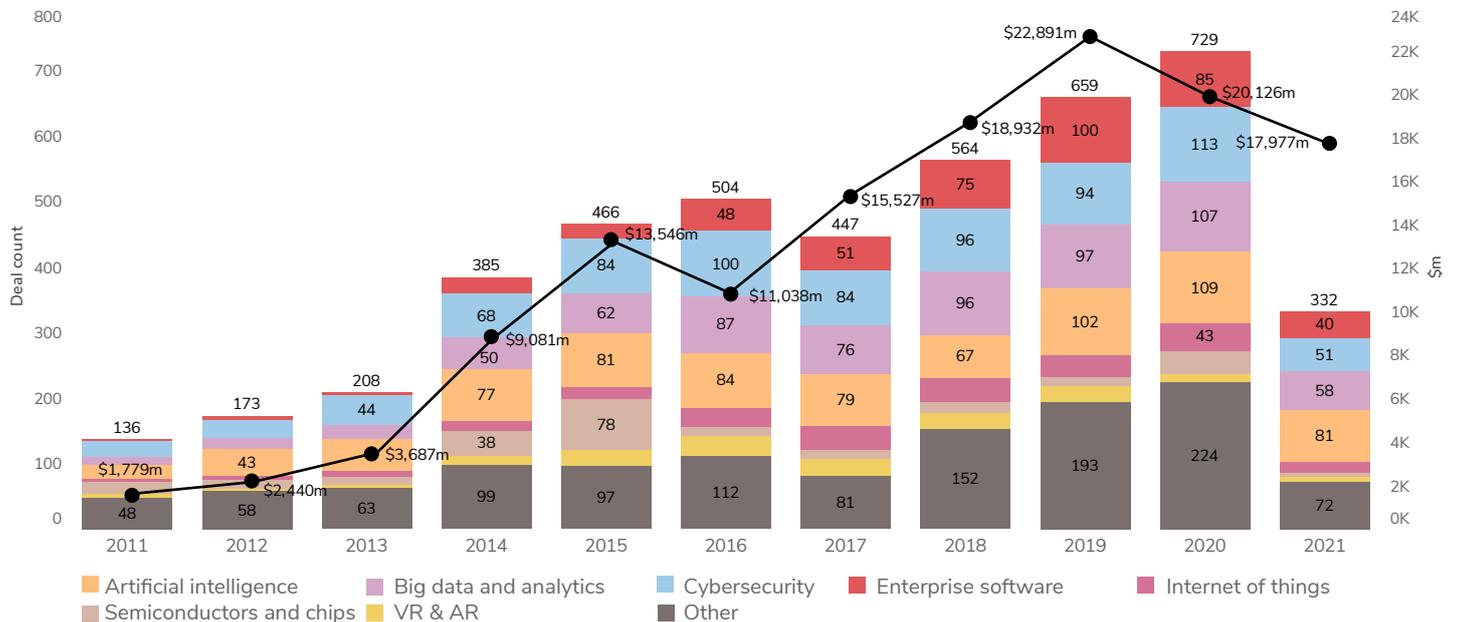
Top investors in the IT sector over the past year

The most active corporate venture investors in the emerging IT companies were Alphabet, Salesforce and semiconductors and chip maker Intel.



Corporate-backed deals in IT enterprises

Overall, corporate investments in emerging IT-focused enterprises went up from 659 rounds in 2019 to 729 by the end of 2020, suggesting an 11% increase. Estimated total dollars in those rounds went down, however, by 12% from \$22.89bn in 2019 to \$20.12bn in 2020. Overall, the pandemic shock did not affect much dealmaking and flow of capital into these businesses.



Source: GCV Analytics

Deals

Top 10 deals by IT sector corporates (June 2020-May 2021)

Portfolio Company	Location	Sector	Round	Round size	Investors List
Jio Platforms	India	Telecoms	Stake purchase	\$4.5bn	Alphabet
Xingsheng Youxuan	China	Consumer	Undisclosed	\$2bn	China Evergrande FountainVest Partners KKR Primavera Capital Sequoia Capital Temasek Tencent
GM Cruise	USA	Transport	Undisclosed	\$2bn	General Motors Honda Microsoft undisclosed investors
Manbang Group	China	Services	Undisclosed	\$1.7bn	Fidelity GGV Capital Hillhouse Capital Management Lightspeed China Partners Permira Sequoia Capital SoftBank Tencent YF Capital
Databricks	USA	IT	E and beyond	\$1bn	Alkeon Capital Alphabet Amazon Andreessen Horowitz BlackRock Canada Pension Plan Coatue Discovery Capital Dragoneer Investment Group Fidelity Founders Circle Franklin Templeton Geodesic Capital GIC Green Bay Ventures Greenoaks Capital Microsoft New Enterprise Associates Octahedron Capital Salesforce T Rowe Price Tiger Global Management Whale Rock Capital
Resilience	USA	Health	Undisclosed	\$800m	Alphabet
Sana Biotechnology	USA	Health	Undisclosed	\$700m	Alaska Permanent Fund Alphabet Altitude Life Science Ventures Arch Venture Partners Baillie Gifford Bezos Expeditions Canada Pension Plan Fidelity Flagship Pioneering Omega Funds Public Sector Pension Investment Board undisclosed investors
Verily Life Sciences	USA	Health	Undisclosed	\$700m	Alphabet Ontario Teachers' Pension Plan Board Silver Lake Temasek
SambaNova Systems	USA	IT	D	\$676m	Alphabet BlackRock GIC Intel SoftBank Temasek Walden International WRVI Capital
Lacework	USA	IT	Undisclosed	\$525m	Altimeter Capital Management Coatue D1 Capital Partners Dragoneer Investment Group Liberty Global Snowflake Computing Sutter Hill Ventures Tiger Global Management

Source: GCV Analytics

Corporates from the IT sector invested in large multimillion-dollar rounds, raised by enterprises from a variety of sectors – telecoms, consumer, transport, health and IT itself.

1 Internet technology provider Google invested \$4.5bn in Jio Platforms, the digital services spinoff of diversified India-based conglomerate Reliance Industries. Google, part of Alphabet, will take a 7.7% stake in Jio and plans to collaborate with it on the development of technology including an affordable entry-level smartphone. Jio operates a mobile network and broadband service, as well as about a dozen proprietary apps offering functionality such as music, film and television streaming, cloud storage and chat. It aims to expand into online retail, digital payments, education and healthcare, building an ecosystem modelled on that of China-based Alibaba.

2 China-based community buying platform developer Xingsheng Youxuan secured approximately \$2bn in a funding round featuring internet group Tencent and real estate developer China Evergrande Group. Sequoia Capital China led the round, which also featured FountainVest Partners, Primavera Capital Group, KKR and Temasek. It valued Xingsheng at \$6bn pre-money. Xingsheng Youxuan runs an e-commerce business that allows local communities to club together to purchase items in bulk. The company processes more than 8 million daily orders and covers more than 30,000 towns across China.

3 US-headquartered autonomous driving technology developer Cruise raised more than \$2bn from investors including software provider Microsoft and automotive manufacturers General Motors

(GM) and Honda. The corporates were joined in the round by undisclosed institutional investors, and the cash was provided at a \$30bn post-money valuation. Microsoft invested through a strategic partnership that will involve it combining its cloud computing and engineering capabilities, manufacturing expertise and partner ecosystem with Cruise's to bolster the commercialisation of the latter's technology. Cruise is working on autonomous driving software that will be used in all-electric vehicles forming the basis for shared taxi services, in addition to hardware such as sensors, robotics and telematics systems.

4 Telecoms and internet group SoftBank's Vision Fund has co-led a \$1.7bn funding round for Manbang Group, the China-based trucking services provider also known as Full Truck Alliance. The round was co-led

with investment and financial services group Fidelity, Permira's Growth Opportunities Fund and Sequoia Capital China. It included Tencent, Hillhouse Capital, GGV Capital, Lightspeed China Partners and YF Capital and valued the company at almost \$12bn.

Manbang operates an app-based service that uses artificial intelligence to match drivers with space in their trucks to customers who require cargo to be transported, taking a cut of the fee and plotting out optimal routes for drivers.

5 US-based data analytics software developer Databricks secured \$1bn in a series G round featuring software provider Microsoft. E-commerce group Amazon, Alphabet and Salesforce

participated through Amazon Web Services, CapitalG and Salesforce Ventures respectively, and the round valued Databricks at \$28bn. It was led by investment firm Franklin Templeton and included investment and financial services group Fidelity, Canada Pension Plan Investment Board, Whale Rock, Andreessen Horowitz, Alkeon Capital Management and funds and accounts managed by BlackRock.

Databricks has created a data management platform that can handle all structured, semi-structured and unstructured data for enterprise-scale analytics. The technology is based on Apache Spark, the open-source analytics software developed at University of California, Berkeley, by some of Databricks' co-founders, including chief executive Ali Ghodsi, who

continues to be an adjunct professor at the university.

6 Resilience, a US-based developer of medical manufacturing technology, emerged from stealth with over \$800m in funding from investors including GV. The Google unit participated in a recently closed \$750m series B round co-led by Arch Venture Partners and 8VC and backed by fellow venture capital firm New Enterprise Associates and unnamed pharmaceutical companies, public mutual funds, foundations, family offices and pension funds.

Founded in 2020 and also known as National Resilience, Resilience is developing technologically advanced pharmaceutical manufacturing facilities that will help therapeutics developers



Amazon has backed data analytics developer Databricks



Singaporean sovereign wealth fund Temasek has backed Verily and SambaNova

concentrate more capital on drug discovery activities. The technology is intended to allow gene and cell therapies, vaccines, proteins and viral vectors to be produced quickly and safely at scale.

7 US-based stem cell medicine developer Sana Biotechnology closed its inaugural funding round, having raised more than \$700m from investors including GV. The round also featured F-Prime Capital, a fund owned by investment and financial services group Fidelity, as well as Canada Pension Plan Investment Board, Alaska Permanent Fund and the Public Sector Pension Investment Board.

Sana is working on technology intended to repair and control genes in cells and replace missing or damaged cells to tackle the underlying causes of serious diseases, ranging from cancer and central nervous system conditions to heart disease and various genetic disorders. The funding has been allocated to advancing the startup's core platforms, including those focusing on gene delivery,

immunology, stem cell biology and gene modification and control.

8 Verily, a US-headquartered developer of data-focused life sciences technology, received \$700m in funding from investors including its parent company Alphabet. The company said the funding was provided by its current investors and named private equity firm Silver Lake, Singaporean state-owned investment firm Temasek and pension fund manager Ontario Teachers' Pension Plan alongside Alphabet.

Launched in 2015 after being incubated within Alphabet's Google X division, Verily is working on hardware and software products in partnership with other companies to utilise data in drug development and disease management. The cash will go to commercialising Verily's product range.

9 SoftBank's Vision Fund 2 led a \$676m series D round for US-headquartered 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 valued the company at \$5.1bn.

Singaporean state-owned entities Temasek and GIC filled out the round 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.

10 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, Dragoneer 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.



Top investments in IT sector enterprises (June 2020-May 2021)

Portfolio Company	Location	Sector	Round	Round size	Investors List
Databricks	USA	IT	E and beyond	\$1bn	Alkeon Capital Alphabet Amazon Andreessen Horowitz BlackRock Canada Pension Plan Coatue Discovery Capital Dragoneer Investment Group Fidelity Founders Circle Franklin Templeton Geodesic Capital GIC Green Bay Ventures Greenoaks Capital Microsoft New Enterprise Associates Octahedron Capital Salesforce T Rowe Price Tiger Global Management Whale Rock Capital
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
UiPath	USA	IT	E and beyond	\$750m	Alkeon Capital Altimeter Capital Management Coatue Dragoneer Investment Group Institutional Venture Partners (IVP) Sequoia Capital T Rowe Price Tiger Global Management
4Paradigm	China	IT	D	\$700m	Boyu Capital China Development Bank CPE Capital CSC Financial FountainVest Partners Goldman Sachs Haitong Securities Hopu Investments JIC JinYi Capital joint fund for Qingdao Minxin Qiyuan Investment and China Reform Holdings National Manufacturing Transformation and Upgrading Fund Primavera Capital Sequoia Capital Xicheng Jinrui
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
Lacework	USA	IT	Undisclosed	\$525m	Altimeter Capital Management Coatue D1 Capital Partners Dragoneer Investment Group Liberty Global Snowflake Computing Sutter Hill Ventures Tiger Global Management
OneTrust	USA	IT	C	\$510m	Coatue Franklin Templeton Insight Partners SoftBank TCV
Palantir Technologies	USA	IT	Undisclosed	\$500m	Sompo Holdings
Apex Microelectronics	China	IT	Undisclosed	\$489m	China Integrated Circuit Industry Investment Fund Goldstone Investment Gree Electric Hengqin Financial Investment Zhuhai Gree Financial Investment Management

Source: GCV Analytics

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

1 Netherlands-headquartered 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 made up of 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. It had raised a total of \$100m

from investors including Y Combinator, Accel and Atomico prior to this round. The company revealed it had 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 on behalf of its customers.

2 UiPath, the US-based robotic process automation (RPA) software producer backed by Tencent and Alphabet, raised \$750m in series F funding at a \$35bn post-money valuation. Hedge fund Alkeon Capital Management and investment management firm Coatue co-led the round, which also featured Altimeter Capital, Dragoneer, IVP, Sequoia Capital, Tiger Global Management and funds and accounts advised by T Rowe Price. Founded in 2005, UiPath provides

RPA technology that leverages AI to help businesses automate repetitive tasks and increase efficiency.

3 4Paradigm, a China-based AI technology provider backed by corporates China Three Gorges, Cisco and Lenovo, closed a \$700m series D round. Primavera Capital, Boyu Capital and Hopu Investments co-led the round, which also attracted Goldman Sachs, among other investors.

Founded in 2014, 4Paradigm is working on an enterprise-grade AI platform and applications to support digital business transformation and increase efficiency in sectors such as finance, retail, manufacturing, energy, healthcare and logistics. The series D capital will allow 4Paradigm to accelerate its ambition to build an ecosystem around its offering.

4 SoftBank's Vision Fund 2 co-led 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 CVC vehicle for consumer electronics producer Sony, in addition to pension fund manager Omers, and it reportedly valued the company at \$2bn.

Trax provides computer vision and AI-equipped technology that tracks in-store conditions and stock levels to help grocery retailers and consumer packaged goods (CPG) producers make more effective decisions in real time.

5 Vision Fund 2 also led 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 Partners and Coatue in December 2020.

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

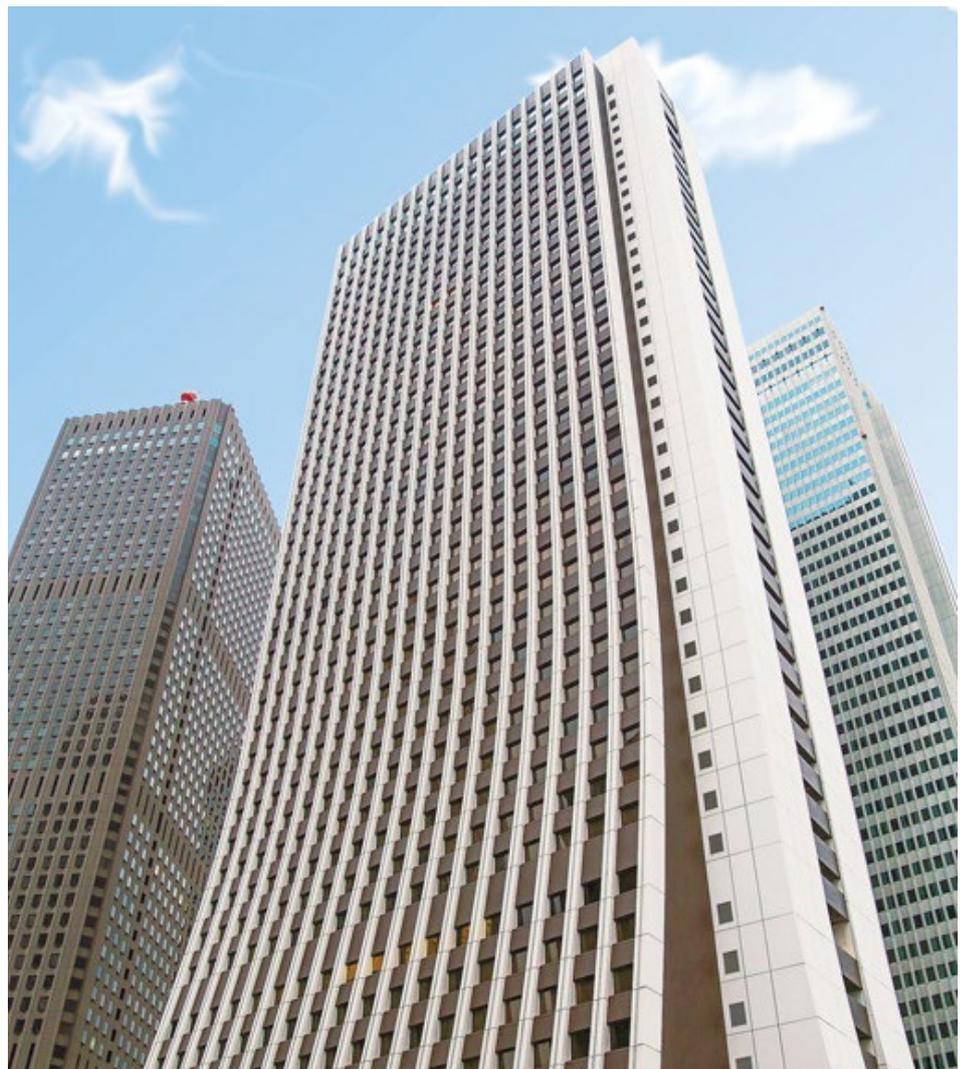
6 Insurance firm Sampo Holdings agreed to invest ¥54bn (\$500m) in Palantir, a US-based data analysis services provider. The deal came after Sampo and Palantir launched a Japanese joint venture in November 2019, and the companies said

in a statement that Palantir Japan's duties have included work combating Covid-19. Palantir has built big data analysis software that uses AI to sift through massive amounts of structured and unstructured data in order to find informative patterns. Its customers include US law enforcement agencies as well as businesses such as Sampo.

7 Apex Microelectronics (Apexmic), a semiconductor subsidiary of printing and imaging product maker Ninestar Corporation, secured RMB3.2bn (\$489m) from investors including home appliance manufacturer Gree Electric Appliance. It invested through its Zhuhai Gree Financial Investment

Management unit, joining 11 others including China Integrated Circuit Industry Investment Fund II, which led the round, Goldstone Investment and Hengqin Financial Investment.

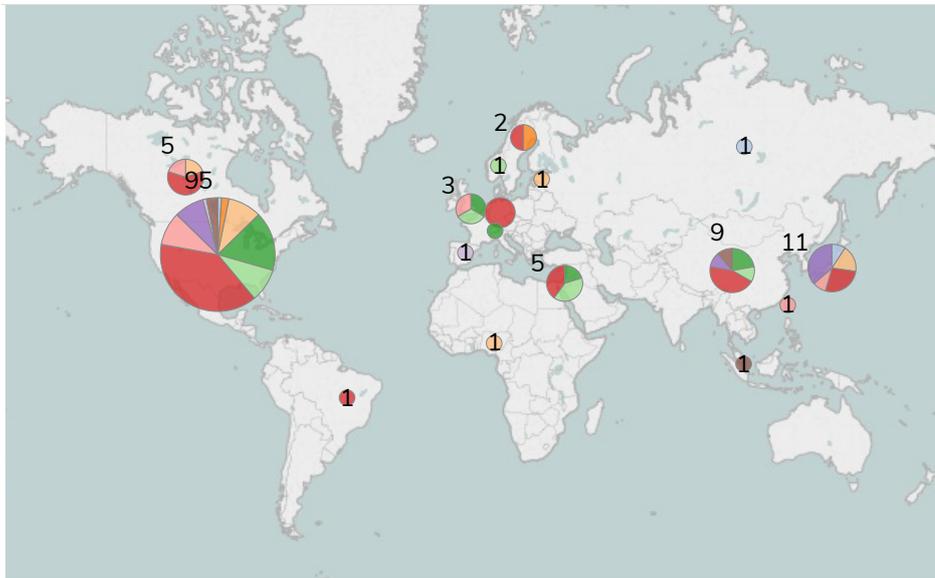
Formed in 2004 in the city of Zhuhai, Apexmic produces microcontrollers, chips for smart printers and internet-of-things systems, and secure system-on-chip technology for network communication. The company provides its technology for customers in industries including defence, aerospace, healthcare, semiconductor, cybersecurity and connected IT. It recently launched a chip that will be used in the cartridges of Epson's EW-M530F printers.



Sampo invested in Palantir

Exits

Global view of past year's exits

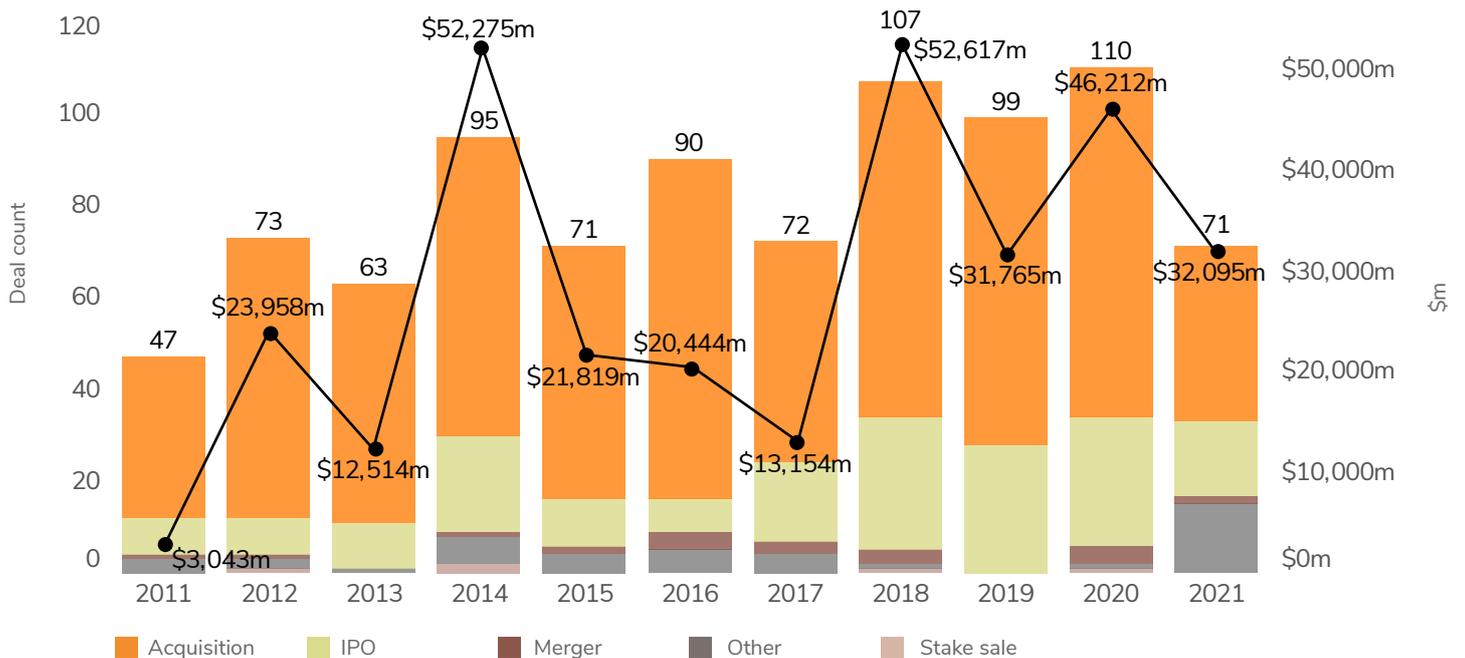


Corporate venturers from the IT sector completed 142 exits between June 2020 and May 2021 – 86 acquisitions, 39 initial public offerings (IPOs), two mergers and 15 other transactions.



Exits by IT corporates

As for year-on-year, the transaction volume went up from 99 to 110 between 2019 and 2020, while the estimated dollar value increased by 22% from \$31.77bn up to \$46.21bn.



Source: GCV Analytics

Top exits by IT corporate investors (June 2020-May 2021)

Portfolio Company	Location	Sector	Exit Type	Acquirer	Exit size (\$m)	Exiting investors
Grail	USA	Health	Acquisition	Illumina	\$8bn	Ally Bridge Group Alphabet Amazon Arch Venture Partners Bezos Expeditions Blue Pool Capital Bristol-Myers Squibb Canada Pension Plan Celgene China Merchant Securities International CRF Investment Decheng Capital Hillhouse Capital Management HuangPu River Capital ICBC International Illumina Johnson & Johnson McKesson Corporation Memorial Sloan Kettering Merck & Co Milky Way Ventures private investors Public Sector Pension Investment Board Sequoia Capital Sutter Hill Ventures Tencent Varian Medical Systems WuXi AppTec
Auth0	USA	IT	Acquisition	Okta	\$6.5bn	Bessemer Venture Partners Deutsche Telekom K9 Ventures Meritech Capital Partners NTT Docomo NXT Corp Partners Portland Seed Fund Salesforce Sapphire Ventures Silicon Valley Bank Telstra Trinity Ventures World Innovation Lab
Kuaishou	China	IT	IPO		\$5.4bn	Boyu Capital Sequoia Capital Temasek Tencent Yunfeng Capital
Airbnb	USA	Services	IPO		\$3.49bn	Alphabet Andreessen Horowitz Baillie Gifford China Broadband Capital (CBC) Dragoneer Investment Group DST Global FirstMark Capital Founders Fund General Atlantic General Catalyst GGV Capital Hillhouse Capital Management Horizon Ventures Kleiner Perkins Sequoia Capital Silver Lake Sixth Street SV Angel T Rowe Price TCV Temasek Tiger Global Management TPG Tuesday Capital Wellington Management Y Combinator
Snowflake Computing	USA	IT	IPO		\$3.36bn	Altimeter Capital Management Capital One Dragoneer Investment Group Iconiq Capital Madrona Venture Group Meritech Capital Partners Redpoint Ventures Salesforce Sequoia Capital Sutter Hill Ventures Wing Ventures
Segment	USA	IT	Acquisition	Twilio	\$3.2bn	Accel Partners Alphabet E.Ventures Kleiner Perkins Meritech Capital Partners New Enterprise Associates Sapphire Ventures SV Angel Thrive Capital Y Combinator
Ke.com	China	Services	IPO		\$2.12bn	China Vanke Country Garden Holdings Gaochun Capital Gaw Capital Hillhouse Capital Management Huaxing Capital Partners New Horizon Capital Sequoia Capital SoftBank Source Code Capital Strait Capital Sunac China Holdings Tencent
Joby Aviation	USA	Transport	Other		\$1.6bn	Baillie Gifford BlackRock Fidelity Intel JetBlue Reinvent Technology Partners Toyota Uber
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
Xiaopeng Motors	China	Transport	IPO		\$1.5bn	Alibaba Anatole Aspex Management CICC CloudAlpha Coatue Duowan Entertainment Eastern Bell Venture Capital Everbright Zhongying Capital GGV Capital Hillhouse Capital Management Hon Hai IDG Capital K11 Investment Kinzon Capital Lightspeed Venture Partners Markarian Investments Matrix Partners Morningside Mubadala Neumann Capital Primavera Capital Private Investor Qatar Investment Authority Sequoia Capital Shengyu Investment Shunwei Capital Tairen Alpha Fund UCAR Xiaomi Yunfeng Capital ZWC Partners

Source: GCV Analytics

1 US-based medical diagnostics technology Grail agreed to an \$8bn acquisition by genomics technology producer Illumina, which had originally spun out the former. Grail will receive \$3.5bn in cash and another \$4.5bn in stock. Former backers of Grail include GV, a subsidiary of Alphabet, among many other corporates, such as pharmaceutical firms Johnson & Johnson, Bristol-Myers Squibb, Celgene, Merck & Co and WuXi AppTec as well as Tencent and

e-commerce firm Amazon. Spun out in 2015, Grail is working on technology that combines gene sequencing with population-level clinical studies to detect cancer at an earlier stage, increasing a patient's odds of survival.

2 Identity authentication technology provider Okta agreed to purchase US-based identity verification platform developer Auth0 in a \$6.5bn deal enabling telecoms firm NTT Docomo, Telstra and Deutsche

Telekom as well as Salesforce to exit. The acquisition is an all-share deal. Salesforce Ventures led a \$120m series F round in July 2020 valuing Auth0 at \$1.92bn that included DTCP and Telstra Ventures, which represented telecommunications firms Deutsche Telekom and Telstra.

Auth0's software platform enables app development teams to secure and authorise access for users, mobile devices and other applications.

3 China-based video streaming platform developer Kuaishou Technology raised \$5.4bn in an IPO on the Hong Kong Stock Exchange that scored exits for Tencent and Baidu. The company issued about 365 million shares priced at HK\$115 (\$14.83) each. Its shares leapt to HK\$338m at the start of trading and closed at HK\$300 on the first day of trading, giving it a market cap of roughly \$160bn.

Investment and financial services group Fidelity bought \$270m of shares in the IPO while Capital Group purchased \$500m, Invesco \$270m and Morgan Stanley Investment Management \$125m according to Nikkei, which also named GIC, Abu Dhabi Investment Authority, Canada Pension Plan Investment Board and Boyu Capital as buyers. Kuaishou has built a short-form social video app with more than 300 million daily active users. Its chief rival, Douyin, is better known internationally as TikTok.

4 US-headquartered short-term accommodation marketplace Airbnb went public in a \$3.49bn IPO on the Nasdaq Global Select Market, giving an exit to Alphabet. The company issued 50 million class A shares priced at \$68.00 each, significantly above the offering's \$56 to \$60 range, while its shareholders divested just over 1.32 million shares at the same price. The price valued Airbnb at roughly \$47bn.

Airbnb runs an online platform that enables users to list properties and rooms for short or long-term rental by others, and although its business has been impacted sharply by social distancing measures amid the covid-19 pandemic, 5.6 million of its 7.4 million listings were active as of the end of September 2020.

5 US-based data analysis software provider Snowflake went public in an IPO on the New York Stock Exchange, which came along with a \$250m investment by enterprise

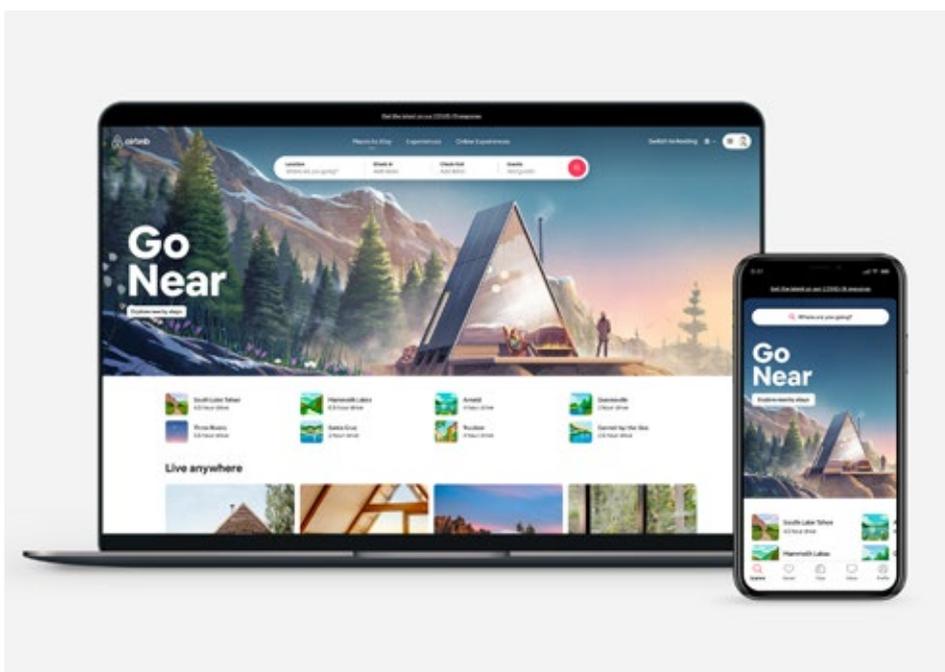
software producer and existing investor Salesforce. Snowflake issued 28 million shares at \$120 each, above the \$100 to \$110 range it had set, after having lifted it from an initial \$75 to \$85 a share.

Salesforce subsidiary Salesforce Ventures and investment holding company Berkshire Hathaway, headed by renowned investor Warren Buffett, provided \$250m each to Snowflake via a concurrent private placement. On the first day of trading, the stock price surged above \$300, giving day traders and high-frequency trading algorithms a 150% gain.

Founded in 2012, Snowflake has developed a cloud software platform which enables users to unify large amounts of data that are siloed in different places, combine them with new data and analyse them. The company boasts over 3,100 customers and has more than doubled its revenues to \$242m in the first half of 2020 with a net loss of \$171m.

6 Enterprise communication software producer Twilio agreed to acquire US-based customer data platform developer Segment for \$3.2bn in shares, enabling Alphabet's GV subsidiary to exit. Twilio is to pay for the deal entirely through common stock, while the valuation was more than double that at which Segment last raised money, in a \$175m series D round co-led by GV in April 2019.

Founded in 2012, Segment has built a software platform that allows users to standardise and unify the collection and management of customer data so it can be efficiently channelled into other parts of the company.



Airbnb went public

7 Tencent invested \$800m to lead a series D round for China-based real estate brokerage Ke.com sized at almost \$1.2bn that included \$50m from property developer Country Garden. Private equity fund manager Gaw Capital Partners supplied \$100m for the round while VC firm Gaochun Capital invested \$80m, Source Code Capital \$52m, New Horizon \$30m, China Renaissance unit Huaxing Capital \$20m and Strait Capital \$5m. The round was filled out by undisclosed additional investors who put up a total of \$113m, and it valued Ke.com at \$9.5bn.

Ke.com runs an online platform where users can buy new, secondhand and rental properties in some 500 cities across China and use VR technology to help users inspect properties. It was spun off by online real estate portal Lianjia in 2018. The cash will support an ongoing expansion in Ke.com's research and development and marketing costs in addition to increased management investment.

8 Joby Aviation, a US-based air taxi developer backed by corporates Intel, JetBlue, Toyota and Uber, agreed a reverse merger with special purpose acquisition company Reinvent Technology Partners. Baupost Group, funds and accounts managed by BlackRock, Fidelity and Baillie Gifford have anchored a \$835m private investment in public equity, while Uber will convert \$75m of bonds into equity.

Combined with \$690m held in trust by Reinvent, Joby Aviation will receive \$1.6bn in gross proceeds and the combined business is expected to fetch a



Segment was bought by Twilio

\$6.6bn post-money valuation. Founded in 2009, Joby is developing vertical take-off and landing aircraft to take passengers to their destinations.

The company has conducted more than 1,000 test flights and intends to launch its service in 2024. Proceeds will allow Joby to begin its commercial flights by getting regulatory approvals and opening manufacturing sites.

9 UiPath, the 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, while 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



Joby Aviation agreed a reverse merger with a SPAC

move came after UiPath's shares rose significantly post-IPO.

UiPath enables enterprises to automate repetitive back-office tasks. It made nearly \$608m in revenue in 2020 and a \$92.4m net loss. The company had raised a total of approximately \$2.05bn prior to the offering.

10 Xpeng, the China-based electric vehicle (EV) manufacturer backed by corporates Alibaba, UCar, Xiaomi, Duowan and Foxconn, went public in an IPO sized at approximately \$1.5bn.

It consisted of 99.7 million American Depositary Shares (ADSs), each equating to two common shares, issued on the New York Stock Exchange priced at \$15 each. The company had originally planned to issue 85 million ADSs priced between \$11 and \$13 each. The IPO price will give it a market capitalisation of about \$21.3bn.

Xpeng produces smart EVs that utilise its proprietary autonomous driving technology and in-car operating system. It has released a sports utility vehicle and sports sedan model.

Top exits from IT enterprises (June 2020-May 2021)

Portfolio company	Location	Sector	Exit Type	Acquirer	Exit size (\$m)	Exiting investors
Auth0	USA	IT	Acquisition	Okta	\$6.5bn	Bessemer Venture Partners Deutsche Telekom K9 Ventures Meritech Capital Partners NTT Docomo NXTP Corp Partners Portland Seed Fund Salesforce Sapphire Ventures Silicon Valley Bank Telstra Trinity Ventures World Innovation Lab
Kuaishou	China	IT	IPO		\$5.4bn	Boyu Capital Sequoia Capital Temasek Tencent Yunfeng Capital
Snowflake Computing	USA	IT	IPO		\$3.36bn	Altimeter Capital Management Capital One Dragoneer Investment Group Iconiq Capital Madrona Venture Group Meritech Capital Partners Redpoint Ventures Salesforce Sequoia Capital Sutter Hill Ventures Wing Ventures
Segment	USA	IT	Acquisition	Twilio	\$3.2bn	Accel Partners Alphabet E.Ventures Kleiner Perkins Meritech Capital Partners New Enterprise Associates Sapphire Ventures SV Angel Thrive Capital Y Combinator
IronSource	Israel	IT	Other		\$2.2bn	Access Industries Baupost Group Fidelity Hedosophia Morgan Stanley Nuveen Real Estate Thoma Bravo Advantage Tiger Global Management Wellington Management
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
Workfront	USA	IT	Acquisition	Adobe	\$1.5bn	AllianceBernstein Atlas Peak Capital Escalate Capital Greenspring Associates JMI Equity OpenView Venture Partners Susquehanna International Group University Venture Fund W Capital Partners
Nuvia	USA	IT	Acquisition	Qualcomm	\$1.4bn	Atlantic Bridge BlackRock Capricorn Investment Group Dell Fidelity Mayfield Fund Mithril Capital Management Nepenthe private investors Redline Capital Management Temasek WRVI Capital
Tuya (IoT)	China	IT	IPO		\$915m	Canada Pension Plan Dragoneer Investment Group Hillhouse Capital Management Tencent Tiger Global Management
Signal Sciences	USA	IT	Acquisition	Fastly	\$775m	CRV Harrison Metal Capital Index Ventures Lead Edge Capital O'Reilly Media

Source: GCV Analytics

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

1 IronSource, the Israel-based app monetisation software provider backed by conglomerate Access Industries, agreed a reverse merger with a SPAC at an \$11.1bn pro forma equity valuation. The company joined forces with Thoma Bravo Advantage, which is sponsored by private equity firm Thoma Bravo, and will obtain the listing on the New York Stock Exchange it received in a \$900m IPO.

A Thoma Bravo affiliate led a \$1.3bn private investment in public equity deal supporting the transaction, investing with Morgan Stanley's Counterpoint Global

unit, Tiger Global Management, Nuveen, Hedosophia, Wellington Management, Baupost Group and funds managed by investors including Fidelity Investments Canada.

IronSource provides software tools that help app developers, particularly mobile game developers, monetise their products and engage more effectively with their users, by adding specific touchpoints where relevant content can be delivered.

2 Marketing and imaging software producer Adobe agreed to acquire US-based work management software provider Workfront in a \$1.5bn deal, giving quantitative trading firm Susquehanna International Group an exit. Founded in 2001 as AtTask,

Workfront has built a software platform that allows enterprises to focus workplace activity and collaboration in a single place, allowing marketing employees to create content, automate processes, measure resources and outcomes, manage collaborations, share ideas and complex projects.

The company claims to have a customer base of 3,000 companies and about 1 million users. Clients include mass media group Comcast, networking equipment supplier Cisco, telecoms firm BT, financial services provider TSB and guitar manufacturer Fender.

3 Mobile semiconductor manufacturer Qualcomm agreed to purchase US-based silicon computing technology developer Nuvia in a \$1.4bn deal that will allow



Qualcomm agreed to buy Nuvia

computing technology provider Dell to exit.

The acquisition is being conducted by the corporate's Qualcomm Technologies subsidiary, and Nuvia's technology is expected to enhance its mobile graphics processing unit, digital signal processor, multimedia accelerator and artificial intelligence engine products.

Nuvia is developing silicon power management systems, performance processors and systems on a chip for use in compute-intensive devices, particularly those in data centres which require large amounts of energy to operate.

4 Tuya, a China-based IoT technology provider backed by Tencent,

priced its IPO to raise \$915m. The company priced approximately 43.6 million shares at \$21 each, above the IPO's \$17 to \$20 range, and floated on the New York Stock Exchange. Tencent had expressed interest in acquiring \$100m of shares in the offering, a portion of a prospective \$500m of share purchases by existing Tuya shareholders.

Tuya provides an IoT platform that enables users such as original equipment manufacturers and systems integrators to create and produce their own smart products. It increased revenue 70% in 2020 to almost \$180m and cut its net loss from \$70.5m to \$66.9m.

5 Edge computing platform provider Fastly agreed to purchase US-based web cybersecurity technology

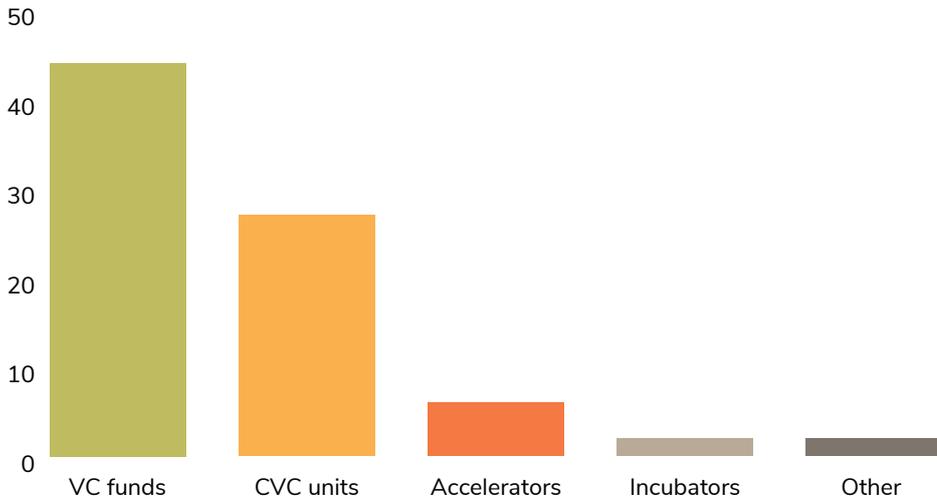
developer Signal Sciences in a \$775m cash-and-stock transaction that will allow media company O'Reilly to exit. The deal was made up of \$200m in cash and \$575m in shares of Fastly, which has a current market capitalisation of roughly \$9.7bn. The company had raised approximately \$62m since being founded in 2014.

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.

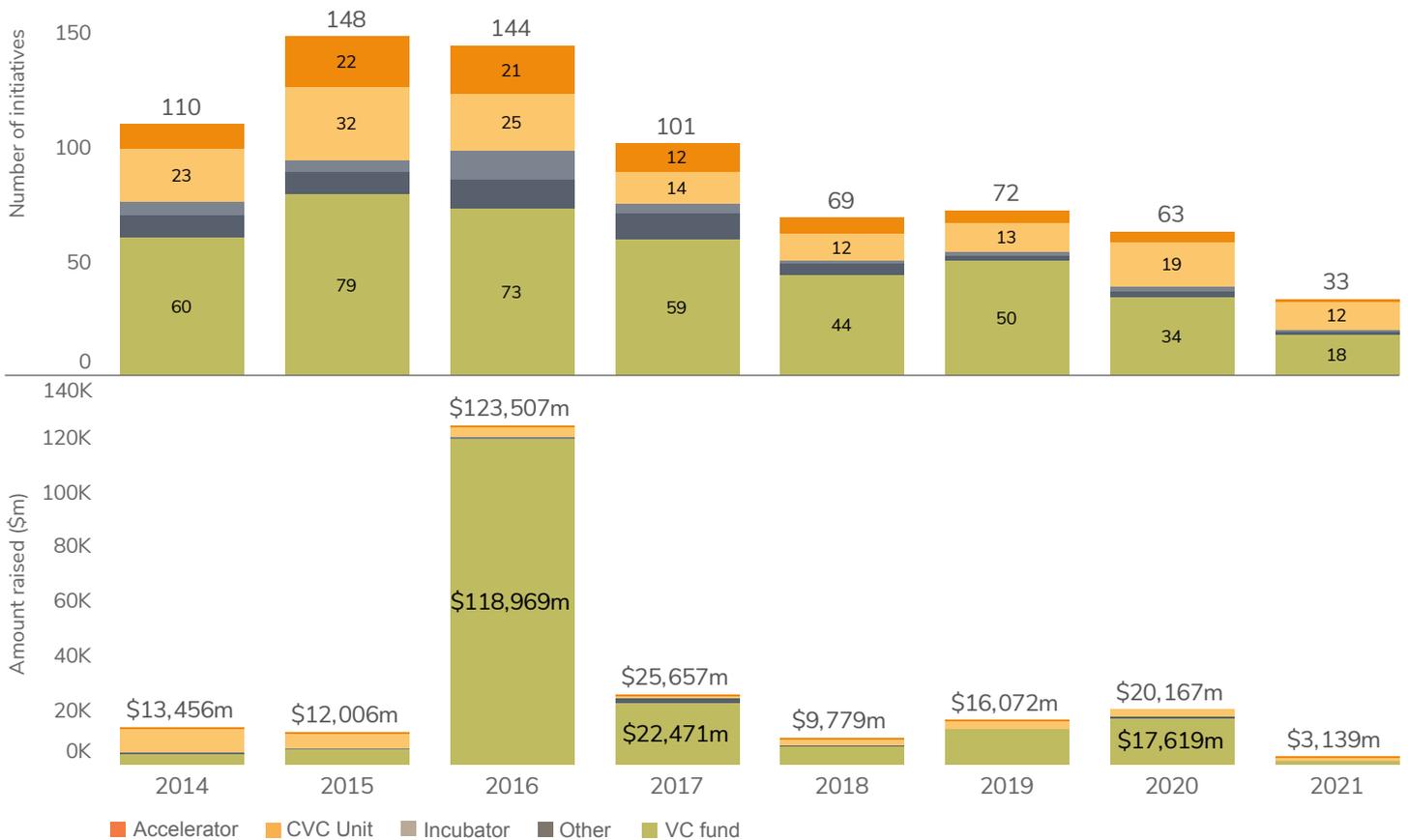
Funds

New funding initiatives



For the period between June 2020 and May 2021, corporate venturers and corporate-backed VC firms investing in the IT sector secured \$21.8bn in capital via 81 funding initiatives, which included 44 VC funds, 27 new or refunded venturing units, six accelerators, two incubators and two other initiatives.

IT sector funding initiatives



Source: GCV Analytics

On a calendar year-to-year basis, the number of funding initiatives in the IT sector went down by 13% from 72 in 2019 to 63 registered by the end of last year. Total estimated capital, however, went up from \$16.07bn in 2019 up to \$20.17bn in 2020, a 25% increase.

Top IT funding initiatives (May 2020–April 2021)

Fund Name	Type	Funds Raised	Location	Focus	Backers
Google for India Digitization Fund	VC Fund	\$10bn	India	IT	Alphabet
Climate Pledge Fund	VC Fund	\$2bn	USA	IT, Industrial, Energy	Amazon
Unnamed Konka Fund	VC Fund	\$1.45bn	China	IT, Industrial	Konka Group Yancheng Government
B Capital II	VC Fund	\$820m	USA	Services, IT, Financial, Health, Transport, Consumer	Boston Consulting Group (BCG)
Woven Capital	VC Fund	\$800m	Japan	IT	Toyota
LC Fund VIII	CVC Unit	\$500m	China	Consumer, IT, Industrial, Health	Legend Holdings undisclosed investors
Qiming Venture Partners RMB Fund VI	VC Fund	\$441m	China	IT, Telecoms, Media, Health	Qiming Venture Partners Xiamen C&D
Tuya Unnamed Unit	CVC Unit	\$400m	China	IT	Hillhouse Capital Management Tuya (IoT)
Z Venture Capital	CVC Unit	\$271m	Japan	Consumer, Health, IT, Financial	Line Yahoo Japan
Xerox's Corporate Development	CVC Unit	\$250m	UK	IT	Xerox

Source: GCV Analytics

1 Alphabet intends to invest \$10bn in India over the next five to seven years through a Google for India Digitization Fund. The capital will be deployed through equity investments in India-based companies and in partnerships and investment in operations, infrastructure and the technology ecosystem. Alphabet intends to target digital technologies that can be beneficial for India in particular, including AI products in areas like education, health and agriculture as well as language diversification and companies looking to boost their own digitisation.

2 US-based e-commerce, cloud computing and consumer device group Amazon launched a \$2bn investment fund that will back developers of products that can support carbon reductions. The Climate Pledge Fund is targeting transportation, logistics, manufacturing, materials, food and agriculture technology developers as well as those engaged with clean power production and storage and those involved with the circular economy.

3 China-based consumer electronics manufacturer Konka Group formed a RMB10bn (\$1.45bn) industry fund in partnership with the municipal government of the Chinese city of Yancheng. Konka is providing 40% of the capital for the fund, preliminarily dubbed Konka Yancheng Electronic Information Industry Investment Fund, while Yancheng is putting up 59.9%. The other 0.1% will come from an unspecified limited partner (LP). The fund will debut with a RMB3bn and will target investments in semiconductor, AI and internet-of-things technology as well as advanced machinery and materials. Founded in 1980, Konka produces televisions, audio equipment, tablets, power banks and home appliances in addition to LCD-based signs and screens.

4 B Capital Group, the US-based VC firm affiliated with consulting firm Boston Consulting Group (BCG), closed its second fund at \$820m. Founded in 2014, B Capital targets growth-stage deals and pursues a portfolio management strategy that

involves connecting its companies to corporates which can help them scale, through a network provided by BCG.

The firm invests between \$10m and \$60m per round, at series B to D. its areas of interest include enterprise software, financial, healthcare, consumer, transportation and logistics technology.

5 Legend Capital, the VC firm spun off by China-based conglomerate Legend Holdings, closed its latest fund, LC Fund VIII, at \$500m. The LPs included undisclosed existing LPs as well as corporate investment funds, sovereign wealth funds, family offices and private pension funds. Founded in 2001, Legend Capital oversees about \$8bn of assets under management (AUM).. It focuses on growth-stage deals in areas such as enterprise software, consumer internet, advanced manufacturing, healthcare and deep technology.

6 China-based VC firm Qiming Venture Partners raised RMB 2.9bn (\$441m) for the final close of its RMB Fund

VI, with money from state-backed conglomerate Xiamen C&D.

Existing LPs also made capital commitments to the vehicle, including China-based insurance companies, fund of funds manager Oriza FOFs Investment Management and science and technology-focused fund of funds. Founded in 2006, Qiming manages nine US dollar and six renminbi-denominated funds, and has \$5.9bn of assets under management. It has investments in more than 380 companies, 40 of which have achieved a valuation of more than \$1bn. The firm targets early and growth-stage companies in the technology, telecommunications, media and healthcare sectors.

7 China-headquartered internet-of-things (IoT) technology producer Tuya formed a \$400m strategic investment fund with hedge fund manager Hillhouse Capital. 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. Liu Yao, chief financial officer of Tuya, was quoted by DealStreetAsia as saying the company plans

to “help IoT enterprises and developers speed up their product development and adopt intelligent business models, while building an open, fully-neutral, third-party platform for IoT developers”.

8 Line Ventures and YJ Capital, the respective corporate venturing subsidiaries of messaging platform developer Line and internet company Yahoo Japan, merged with ¥30bn (\$271m) of capital. Japan-headquartered Yahoo Japan and Line, the messaging platform formed by South Korea-headquartered internet group Naver, closed their merger and will operate under Z Holdings, a publicly-listed holding company backed by Naver and telecoms firm SoftBank.

The new CVC capital 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. Z Venture Capital will target portfolio companies in Japan and South Korea as well as in the United States, China and Southeast Asia. It also intends to help US-based developers of edge

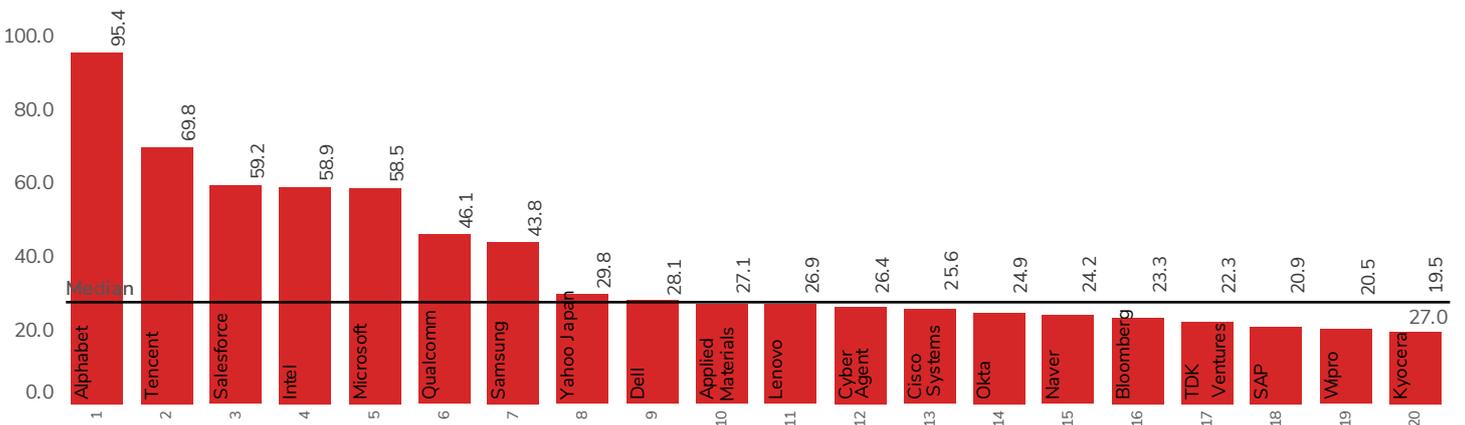
technologies like AI, robotics and blockchain to expand in East Asia.

9 US-based printing technology producer Xerox has announced details of its plans to launch innovation and corporate development divisions through a reorganisation involving the formation of a \$250m corporate venturing arm.

Xerox’s corporate development group will engage in investments and merger and acquisition deals and deploy the \$250m fund. The unit will invest in mid-sized, growth-stage companies aligned with Xerox’s strategic interests. It will be led by executive vice-president Louie Pastor, who has also been appointed chief corporate development officer and chief legal officer. The company first set up a dedicated corporate venturing subsidiary called Xerox Technology Ventures in 1988 with \$30m in capital, but later closed the unit.

Xerox also appointed Naresh Shanker, senior vice-president and chief technology officer, to lead its Parc Innovation division, essentially an expansion of the Palo Alto Research Center (Parc) centre it opened in 1970 that will include scientists and engineers from several US and Canadian facilities.

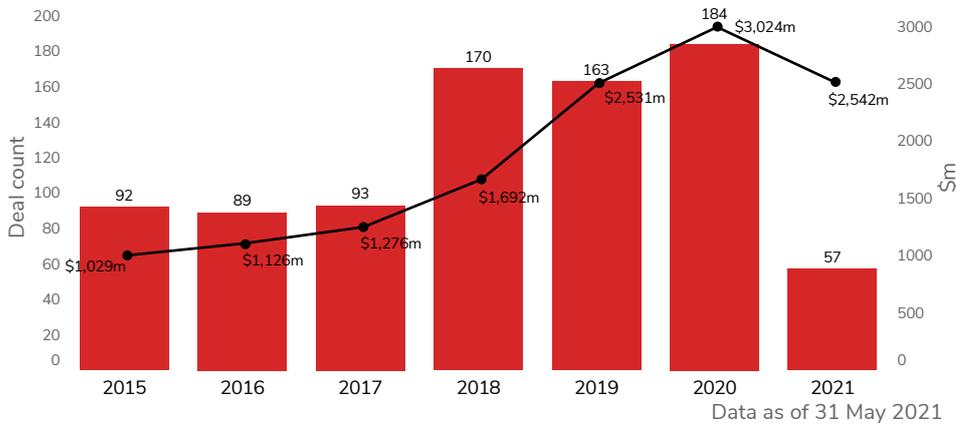
Power ranking



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 IT sector through our sister publication, Global University Venturing. By the end of 2020, there were 184 rounds raised by university spinouts, up 13% from the 163 registered in the previous year. The level of estimated total capital deployed last year stood at \$3.02bn, up 20% from \$2.53bn in 2019.

1 Graphcore, the US-based intelligent processor producer with links to University of Bristol, raised \$222m in series E funding at a \$2.77bn post-money valuation. The round was led by Ontario Teachers’ Pension Plan Board and also featured funds managed by investment and financial services group Fidelity and asset manager Schroders, in addition to existing backers including Baillie Gifford and Draper Esprit.

Spun off by semiconductor technology producer Xmos –itself a spinout of University of Bristol – in 2016, Graphcore has developed a microprocessor called the Intelligence Processing Unit which is designed for use with next-generation artificial intelligence

workloads. It said it has now secured \$710m in funding to date.

2 Beyond Limits, a US-based AI technology developer based on California Institute of Technology research, attracted \$133m in series B financing. The round was co-led by cloud computing firm Group 42 and petroleum company BP’s corporate venturing arm BP Ventures. The company has received an initial \$113m, with the remaining \$20m committed. Beyond Limits has developed cognitive AI technology that combines human-like reasoning with data to solve challenges and offer insights into improving operating conditions and enhancing business performance. The technology is based on research at Caltech and

its federally-funded, Nasa-aligned Jet Propulsion Laboratory.

3 Menlo Security, a US-based cloud security software provider based on research at University of California, Berkeley, secured \$100m in series E funding led by Vista Equity Partners. The round, which valued Menlo at \$800m, also included investment banking firm JPMorgan, General Catalyst, Neuberger Berman funds and undisclosed existing backers. Founded in 2013, Menlo provides cybersecurity technology that helps protect enterprise customers from malware across the web, email and documents by isolating content. The series E proceeds will support the expansion of its engineering and go-to-market activities.

For more on university spinouts, visit www.globaluniversityventuring.com



Global University Venturing

People

We reported various people moves within major corporate venture investors in the IT sector over the past year.

South Korea-listed conglomerate Samsung shook up its two US-based corporate venturing units. Young Sohn retired as president and chief strategy officer (CSO) of Samsung Electronics, Sean Kae came in as acting head of Samsung Strategy and Innovation Center (SSIC) and David Lee joined as head of Samsung Next.

Sohn but will continue as chairman of Harman, the autonomous driving subsidiary acquired by the company for \$8bn, as well as a strategic adviser to its largest division, Samsung Electronics.

Kae, now executive vice-president of strategy and corporate development, joined SSIC in 2019 to help Sohn “define and expand the organisation’s mission and focus areas for new innovation and investment”. SSIC runs corporate venturing unit Samsung Catalyst, reporting to the company’s device solutions division.

Lee co-founded venture capital firm Refactor Capital in 2016 with former Andreessen Horowitz investor Zal

Bilimoria, who is now looking to raise \$50m for Refactor’s third fund, according to a regulatory filing. Lee had previously been a managing partner at Ron Conway’s VC firm, SV Angel.

Luc Julia, Samsung’s chief technology officer and senior vice-

president of innovation, reportedly left and his team was disbanded, according to Silicon Valley Business Journal.

David ‘Dede’ Goldschmidt was appointed head of Samsung Catalyst Fund (SCF)

to lead the unit’s global activities. Goldschmidt has been in the VC ecosystem for two decades. SCF hired him in 2015 as an Israel-based managing director to oversee investments in the country and in Europe, covering areas including 5G, artificial intelligence, automotive, cloud, healthcare, quantum and robotics technologies. Managing directors Christopher Chu, Scott Levine and Nicolas Autret – selected as Global Corporate Venturing’s Rising Stars in 2019 and 2018, and an Emerging Leader in 2021 respectively – will form part of SCF’s leadership team alongside Goldschmidt. GCV Powerlist 2020 members Shankar Chandran and Francis Ho departed their SCF co-head roles after more than eight years at the unit.

SoftBank Investment Advisers (SBIA), which manages Japan-headquartered telecoms and internet group SoftBank’s Vision Funds, hired Nagraj Kashyap as managing partner. Kashyap was head of US-based software producer Microsoft’s corporate venturing unit, M12. A serial GCV Powerlist

award winner, he had joined Microsoft in 2016 having previously headed Qualcomm Ventures, the corporate venturing arm of mobile chipmaker Qualcomm. Kashyap was also serving a four-year term as board member of the US trade body National Venture Capital Association.

A number of SBIA team members left the firm. Ruwan Weerasekera left his chief operating officer (COO) role. He was also a managing partner for Vision Fund I and II and had joined SBIA in late 2017 after more than two decades at investment banking group UBS in several senior roles. Neil Hadley, SBIA chief executive Rajeev Misra’s chief of staff, assumed the COO position along with his existing responsibilities.

Penny Anne Bodle, a partner and global head of investor relations, has also left SBIA. Operating partner Avi Golan moved to facial technology producer AnyVision as its chief executive. Chief risk officer Maria Khan joined Eight Roads, a VC arm of investment and financial services group Fidelity, as head of risk and compliance. Private equity firm Gores Group brought SBIA partners Ted Fike and Justin Wilson on board as senior managing directors. Both currently focus on SPACs.

Managing directors Rajeev Misra and Marcelo Claire left their positions on SoftBank’s board of directors. Misra, head of the company’s Vision Fund, and Claire, the COO officer of SoftBank who also oversaw its



David Goldschmidt



David Lee



Nagraj Kashyap



Rajeev Misra

\$5bn Latin America fund, were joined by SoftBank CSO Katsunori Sago and Yasir Al-Rumayyan, a representative of Saudi Arabia's Public Investment Fund. SoftBank announced their departures on the same day as financial results indicating that it had increased net income to about \$18bn for the six months to the end of September 2020, while the paper value of its Vision Fund investments had also risen significantly. The moves were intended to increase the proportion of external directors on the board and followed the appointment of independent directors Lip-Bu Tan and Yuko Kawamoto.

Sago had joined SoftBank in 2018 after three years as chief investment officer of Japan Post Bank, a subsidiary of postal service Japan Post. He had previously been an investment banker at Goldman Sachs in Japan. Sago "played a crucial part in expanding [SoftBank Group's] potential as an investment company," founder Masayoshi Son said in a statement. The Financial Times commented that Sago's exit marks the second time a high-profile executive has quit after being recruited as potential heir to Son, following the 2016 departure of former Google executive Nikesh Arora. The move came after the former, who is 63, recently said that he plans to stay as the leader of the group beyond the age of 70.

Colin Fan left his managing partner role at SBIA. Fan had joined SBIA in 2017 after almost two



Colin Fan

decades at financial services firm Deutsche Bank in various executive roles. He managed financial technology deals on behalf of the Vision Funds, overseeing deals for

portfolio companies including Fair, Flexport, Greensill, Cheduoduo (Guazi) and Zume. Fan took up an adviser position at SBIA while his duties were assumed by Munish Varma, a UK-based SBIA managing partner who relocated to the United States.

Jeffrey Housenbold, managing partner at SoftBank's Vision Fund, stepped down in July 2021.



Jeffrey Housenbold

Housenbold, a former GCV Rising Star award winner, joined SoftBank almost four years ago after it raised nearly \$100bn for its first Vision Fund. His deals for the fund include DoorDash, OpenDoor, Compass, Rappi, Memphis Meats, Ordermark, Alto Pharmacy, Plenty, Whoop, Globality, Clutter, Get Your Guide, Katerra, Brandless, Wag, Heed and InMobi, according to his LinkedIn profile.

SoftBank has assigned two former managing partners at its Vision Fund, Akshay Naheta and Kentaro Matsui, to senior roles. Naheta took a senior vice-president position to mitigate the vehicle's investment losses, offering strategic assistance to the management team. Based in the United Arab Emirates, he had been leveraging his connections with Abu Dhabi sovereign wealth fund Mubadala Investment to help raise the second Vision Fund. SBIA hired Naheta in 2017 after a stint at Knight Assets & Co, the UK-based investment firm he founded in 2011. He had been head of principal strategies at financial services firm Deutsche Bank.

Matsui assumed a senior advisory post to enhance Vision Fund's investment strategy, having

concentrated on Asia-based financial, healthcare and logistics technology deals from SBIA's Tokyo office. China-based Didi Chuxing, Manbang Group and Ping An Healthcare Management formed part of his portfolio. Matsui came from brokerage Mizuho Securities where he advised SoftBank's acquisitions of semiconductor manufacturer Arm and telecoms operators Vodafone Japan and Sprint.

Daisy Cai, former partner at SoftBank's Vision Fund, joined VC firm B Capital Group to open its



Daisy Cai

China office. In April 2020, Cai accepted a partner position at the Vision Fund. Cai had previously been a founding partner at Gaocheng Capital, a growth-stage private equity firm backed by hedge fund manager Hillhouse Capital, and also had been a managing partner for China-based internet group Baidu, working on both early-stage fund Baidu Ventures and late-stage vehicle Baidu Capital, having joined the company in 2016.

GV, the early-stage investment subsidiary of Alphabet formerly known as



Terri Burns

Google Ventures, promoted Terri Burns to investing partner. Burns joined GV as a principal in October 2017 after spending 14 months as an associate product manager at social media company Twitter where she concentrated on improving user experience. Having begun her career as a developer evangelist and front-end

engineer at Venmo, digital payment processor PayPal's mobile payment subsidiary, in 2015, Burns went on to serve as an adviser at coding school Codecademy the year after.

GV also laid off seven members of its investor operations team. The unit's investor operations activities focus on adding value for portfolio companies through expertise in areas outside capital, such as research, design or human resources. The cuts equated to 8% of GV's overall staff. David Krane, GV's chief executive, told Axios: "In this rapidly changing market, we are constantly evolving GV's operational services to best meet our portfolio's needs. Reinvesting in how we work with founders at scale is essential as we continue into the next decade." The decision did not seem to be a reflection of GV's investment rate.

GV hired Daniel Lynch as an executive venture partner and appointed Mojca Skoberne as entrepreneur-in-residence. Lynch is chairman of five biopharmaceutical companies: Xilio Therapeutics, SpringWorks Therapeutics, Blueprint Medicines, Translate Bio and BlueBirdBio, and has held similar positions at 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. Her role will involve her mentoring entrepreneurs building immunotherapy-themed companies.

Blake Byers stepped down as a general partner at GV to launch his own firm.



Blake Byers

Byers Capital will invest evenly between technology and biotech companies at series A and B stage, and opportunistically in growth equity deals. GV hired Byers in 2010 and he mainly invested in life-science and technology developers such as brain chip technology developer Neuralink, drug developer Denali Therapeutics and cancer diagnostics technology producer Grail. Before joining GV, Byers founded two companies and led research projects on biomedical engineering and stem cell biology at Stanford University.

Wendell Brooks, senior vice-president at US-listed chipmaker and data technology provider Intel and president of its corporate venturing unit, Intel Capital, resigned after six years of heading the unit. Anthony Lin, who had been leading M&A and international investing for Intel, assumed leadership of the unit on an interim basis. He was already part of the unit's equity investing committee. At the time, Intel postponed its rollout of next-generation chips and organisational changes were expected to occur.



Wendell Brooks

Anthony Lin was eventually confirmed as the new head of Intel Capital. Lin, a GCV Powerlist award winner, joined Intel's merger and acquisitions team in 2008 and stepped up to run Intel Capital on an interim basis after the departure of Wendell Brooks. As set out in his keynote at the GCVI Summit in 2019, Lin has focused Intel



Anthony Lin

Capital's investments on leading more rounds in more diverse companies. In 2020, Intel Capital committed \$735m in 35 new deals and 45 follow-on deals. It was the lead investor in 66% of new venture deals and about a quarter of its new venture investments were in diverse entrepreneurs with 15% of all venture dollars committed to companies led by black entrepreneurs.

Philip Kirk left networking technology producer Cisco to lead strategy, venture investments and acquisitions at US-based enterprise software provider ServiceNow as vice-president of corporate development. The move came after 13 years in the same role at Cisco, covering cloud, big data, analytics, infrastructure software and data centres. He was a board observer at two of its portfolio companies, Moogsoft and Puppet Labs. Kirk's earlier deals had included investments in Platfora, which was acquired by Workday in 2016, and Piston Cloud Computing.



Philip Kirk

YJ Capital, internet company Yahoo Japan's corporate venturing arm, promoted Hogil Doh from partner to COO. YJ Capital, which is now under Z Venture Capital, hired Doh in February 2020 after almost a decade at e-commerce firm Rakuten, having most recently been a partner at its corporate venturing vehicle, Rakuten Ventures, from 2015, helping manage the \$85m Japan Fund it had launched in 2016. Doh's deals at Rakuten Ventures included ride hailing service Gojek, digital marketing platform From Scratch, office food delivery service

Okan and MakeLeaps, the digital invoicing platform developer purchased by stationery products supplier Ricoh in late 2018.

M12, the CVC subsidiary of US-headquartered software provider Microsoft, announced it has opened an office in Bengaluru, India, adding to locations in the US, UK and Israel. Abhi Kumar, who will lead M12's India office, said: "Typically, we see the greatest hurdles in a startup's journey as they scale from local success to global challengers, and then again when they go on to become category leaders." Formed in 2016 as Microsoft Ventures, M12 generally invests from series A to C stage in disruptive enterprise software developers in areas like applied artificial intelligence, business applications, infrastructure and cybersecurity.

Irad Dor joined M12 as an Israel-based partner. Dor had been a venture partner at Eight Roads, a VC arm of US-based mutual fund manager Fidelity, since 2018 and led investments in FireBlocks, Gloat and ScyllaDB. Momy Hassid, head of M12 in Europe and Israel, said Dor will focus on early-stage investments in cloud infrastructure, cybersecurity and enterprise software. Prior to joining Eight Roads, he had been a director at telecommunications firm SingTel and its corporate venturing subsidiary, Innov8.

Steve Mitzenmacher became senior vice-president for corporate development,



Irad Dor



Steve Mitzenmacher

venture investments and strategic partnerships at US-headquartered cloud computing services provider Rackspace Technology. Mitzenmacher was at NetApp, a Nasdaq-listed storage and data management technology provider, for nine years as vice-president of corporate development and strategy; his investments including Memverge, Portworx, Pensando, SnapLogic, Egnyte and Datas IO, the data management software provider acquired by Rubrik. Between 2009 and 2011, Mitzenmacher spent two years at internet company Yahoo where he spun out its Hadoop Engineering team into a startup funded by VC firm Benchmark before its eventual listing and then acquisition by Cloudera.

Ilya Gelfenbeyn, head of Google Assistant Investments, a corporate venturing unit for Alphabet

focused on voice-activated assistants, left to set up VC firm The.AI Ventures. Gelfenbeyn set up Google Assistant Investments in September 2017, a year after joining the company following its acquisition of Dialogflow, a corporate venture-backed provider of conversational user experience software. The move followed the departure of Google Assistant corporate development lead Brock Huber to StockX in September 2019.

Miles Kirby, former managing director at Allianz-backed VC firm AV8, set up DeepTech Labs as an accelerator and VC fund based in Cambridge, UK. Kirby ran the UK side of AV8, with George Ugras, former head of IBM Ventures, as the US-based managing director



Ilya Gelfenbeyn

of the \$170m fund founded in 2018 with Germany-based insurer Allianz as the sole LP. Kirby had been managing director for Europe at Qualcomm Ventures, the CVC arm of US-listed mobile chipmaker Qualcomm between 2012 and 2015 before advisory work at semiconductor producer ARM and as a director at VC firm Oxford Capital.

Julie Kainz, former senior associate at Salesforce Ventures, joined VC firm Dawn Capital as a vice-president.

Kainz's investments in Europe at Salesforce over the previous two years included Akeneo, Algolia, AppsFlyer, Contentful, Gong, Qatalog, Salto.io, Techsee, Wefox, Whitehat and Zencity.

Creighton Hicks left his partner role at Dell Technologies Capital, the CVC subsidiary of US-based computing equipment provider Dell, to join VC firm LiveOak Venture Partners. Hicks came to the former from VC firm Kleiner Perkins Caufield & Byers in 2017 and concentrated on cloud computing, DevOps and cybersecurity technology deals. His investments included CloudKnox, Datometry and FullStory, taking a board seat at each company. LiveOak has hired Hicks as a principal who will focus on deal sourcing and portfolio management and he will relocate from Silicon Valley to Austin. LiveOak typically leads seed-stage rounds for local IT and technology startups.

Shinji Asada moved on from his position as head of Salesforce Ventures Japan, a CVC subsidiary Salesforce, to co-found venture



Julie Kainz

firm One Capital. The recipient of a GCV Emerging Leaders award in 2020,

Asada's role at the US-listed company involved sourcing new deals, conducting due diligence and providing thought leadership in portfolio companies' board meetings. He began his career at trading group Itochu where he spent more than a decade in different roles ranging from new business development and mergers and acquisitions to system integration and software-as-a-service sales, before joining CVC unit Itochu Technology Ventures in 2012. Salesforce Ventures Japan's current portfolio includes business card management platform Sansan, accounting software producer Freee and human resources technology provider Bizreach.

Jaclyn Kossmann, former senior investment manager at corporate venturing unit Applied Ventures (AV), has joined In-Q-Tel (IQT), the strategic investment vehicle for



Shinji Asada

the US government's intelligence community, as an investor. AV, the cCVC arm of US-listed materials engineering technology provider Applied Materials, hired Kossman, a GCV Rising Star 2021 award winner, in 2017.

Kossman closed and exited some of its notable investments in the broader optics and semiconductor sector, according to AV global head Anand Kamannavar when contributing to her Rising Stars award profile in January. She had worked for two years at Green D Ventures, a VC firm that backs Dartmouth College-affiliated companies, where Kossman invested in more than 30 startups.

Josiane Ishimwe, an analyst at Intel Capital, was promoted to investment manager.

Ishimwe originally worked as an intern in the CVC unit's 2017 programme as part of a diversity initiative for the next generation of VCs.

At the time she was majoring in chemical engineering at Howard University with a minor in computer science, then joined the unit permanently.



Josiane Ishimwe

Magic Leap, a US-based augmented reality device maker, hired experienced corporate

venturers John Doherty and Walter Delph to strengthen its board under new chief executive, Peggy Johnson.

Doherty, who spent five and a half years as senior vice-president (SVP) for corporate development and president and chief investment officer at Verizon Ventures, US phone operator Verizon's corporate venturing unit, became chief financial officer (CFO) at Magic Leap.

Doherty, a GCV Powerlist award winner, had been a CFO at Verizon before his venture work.

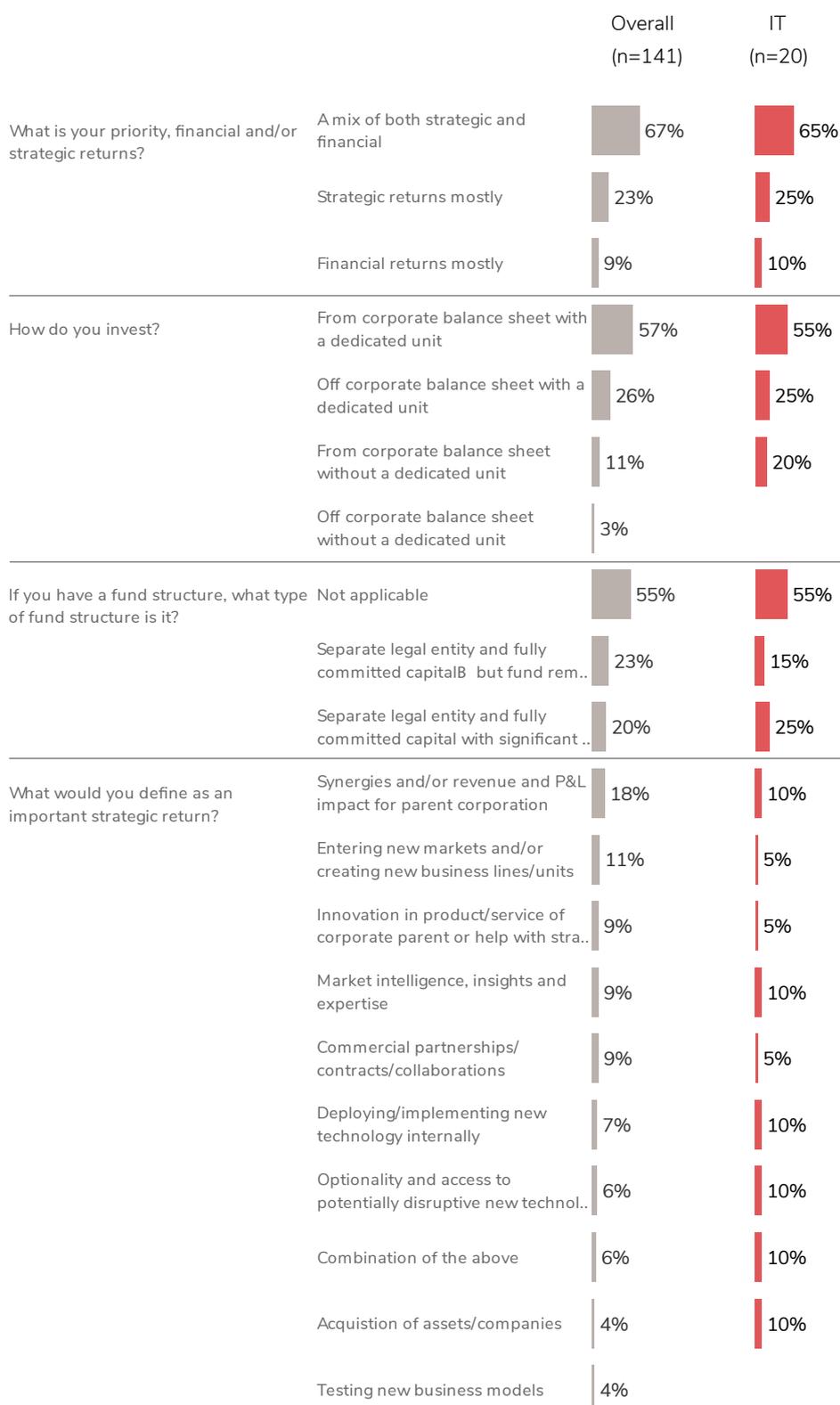
Delph, previously a partner and managing director at BCG Digital Ventures, management consultancy Boston Consulting Group's CVC focused on innovation, product development and early-stage investing, became Magic Leap's SVP and chief business officer, including strategy, marketing, corporate communications, sales, business development, and M&A.

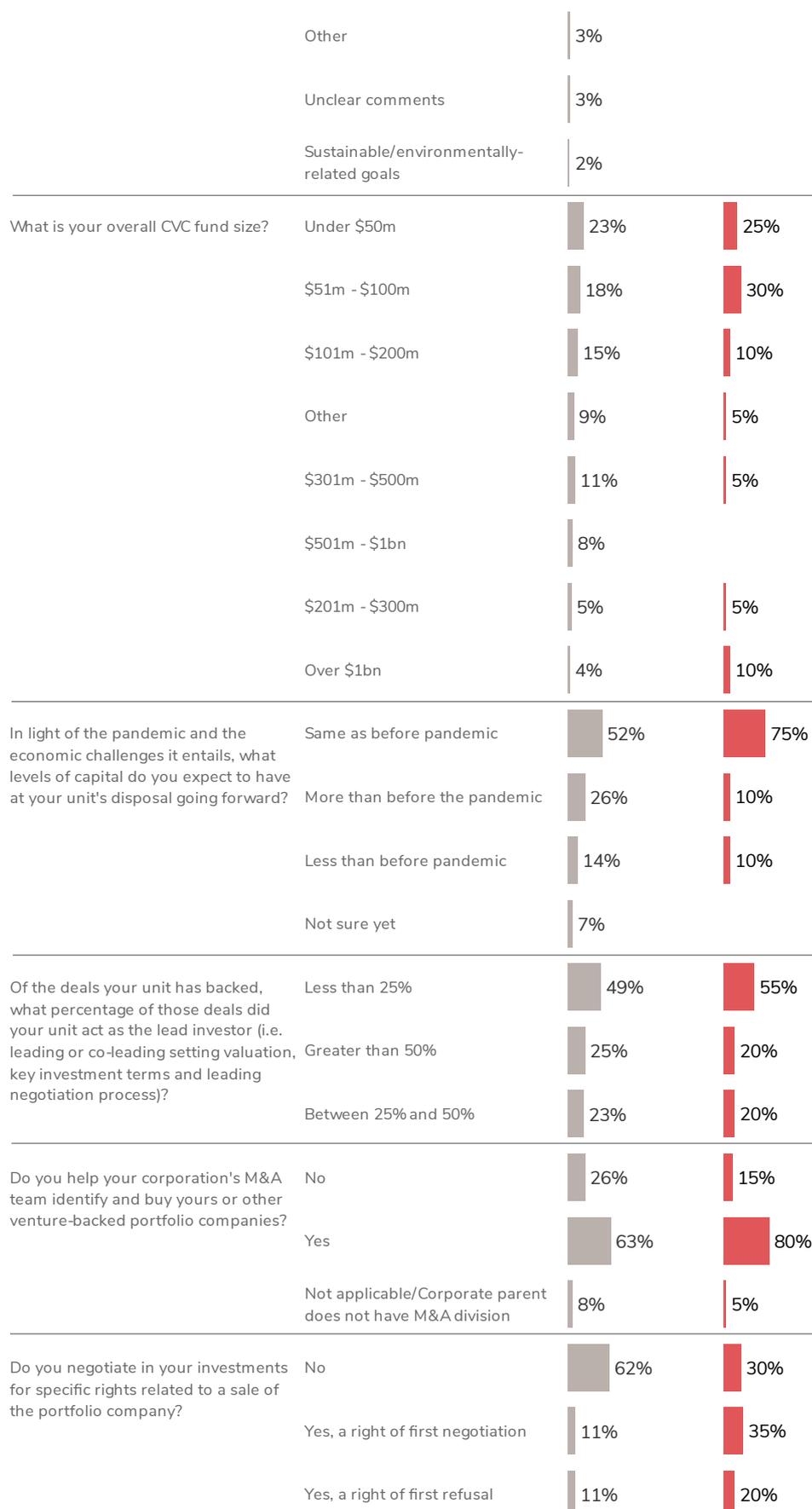


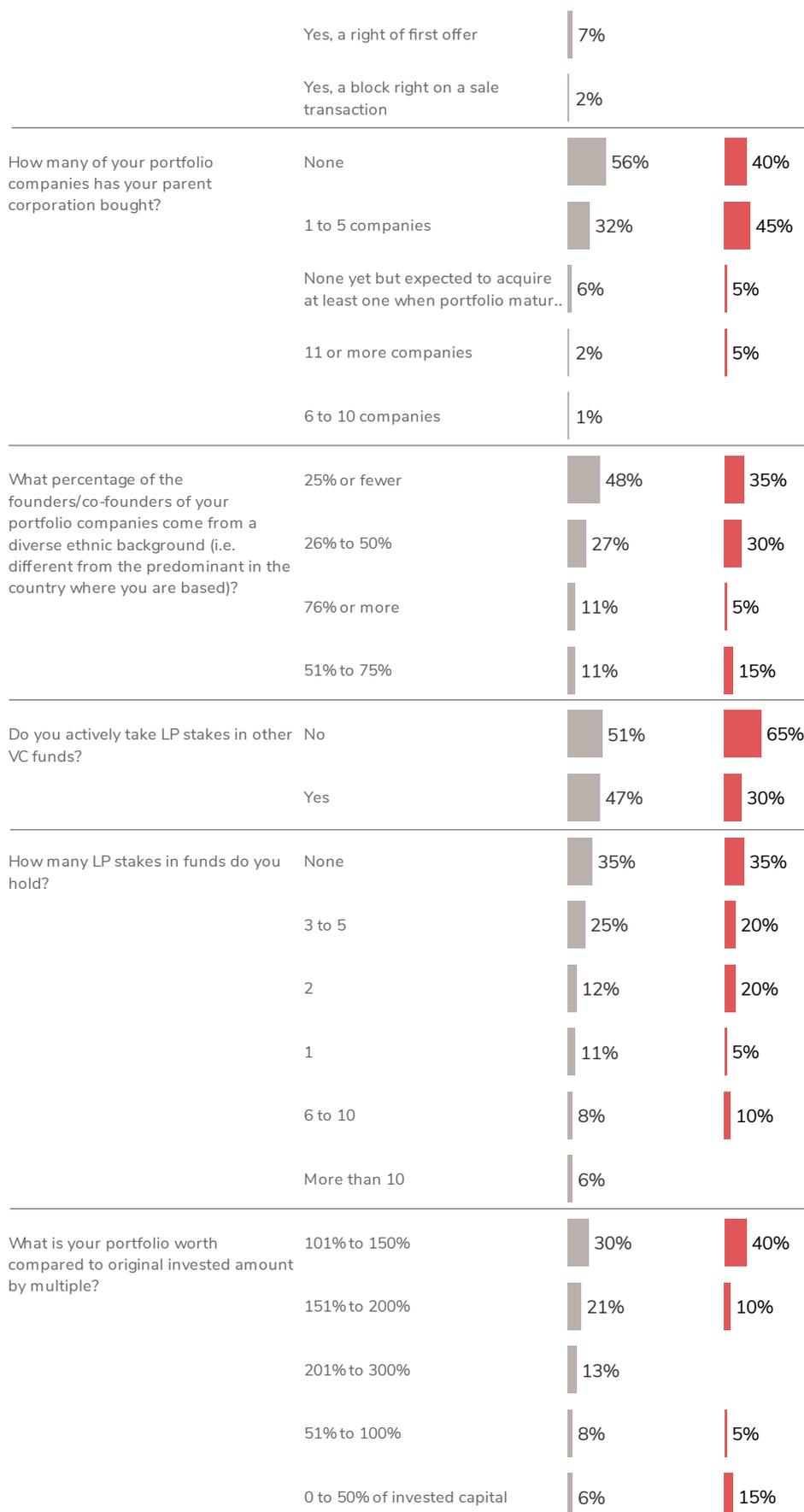
John Doherty

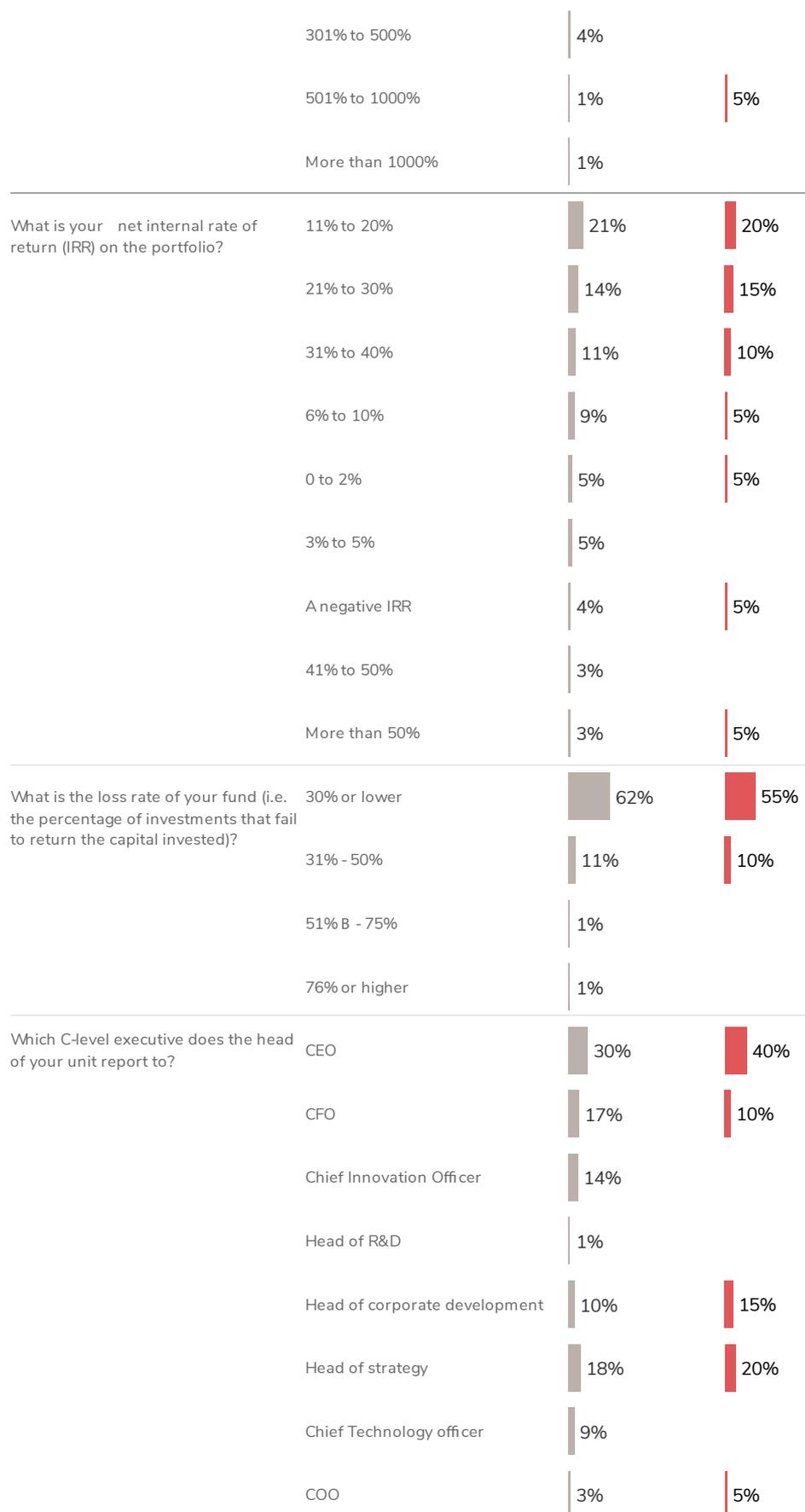
Annual survey results

Every year, Global Corporate Venturing asks the industry questions about investment priorities, strategies and fit with the corporate. We have broken out the IT sector answers and compared them with the overall answers.









	Chief Information Officer	1%	
	Chief Marketing Officer	1%	
In terms of the compensation of all employees, in addition to base salary and cash bonuses, what other incentives are there in your CVC unit/investment department?	Only corporate stock	33%	45%
	None of the above	31%	20%
	Other	5%	
	Shadow/phantom carry only	6%	5%
	Only carried interest ("Carry") shared with the team	6%	
	A combination of corporate parent's stock and carried interest	1%	
	What is the male-to-female ratio in your team?	Majority male	49%
Relatively even		28%	10%
All male		11%	20%
Majority female		4%	
What percentage of your investment unit's employees are from a diverse ethnic background (i.e. different from the predominant in the country where you are based)?	25% or fewer	49%	20%
	26% to 50%	26%	35%
	76% or more	10%	20%
	51% to 75%	7%	10%

For more from this year's edition of the definitive guide to the CVC industry, [click here.](#)

Comment

Structuring a CVC: do not request strategic rights

- > Exclusivity rights restrict business opportunities and exit valuation potential
- > Call-options and matching rights impede a successful exit
- > Asking for strategic rights may lead to an adverse selection problem and complete CVC failure

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

Stephan Bank
Partner, YPOG
[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 1: create a traditional venture capital fund structure](#)

[Guiding Principle 2: define a clear investment focus](#)

[Guiding Principle 3: embrace fast decision-making](#)

[Guiding Principle 4: ensure long-term commitment](#)

[Guiding Principle 5: invest on market terms](#)

Guiding Principle 6: do not Request Strategic Rights

As we pointed out in our last article in connection with guiding principle 5 (“Invest on market terms”), some CVCs tend to overpay. While overpaying may enable them to invest in some companies, not investing on market terms will haunt the CVC unit in the long run.

Some CVC units do not only tend to pay more, they often additionally ask for contractual rights that secure their strategic interests. Examples of such strategic rights

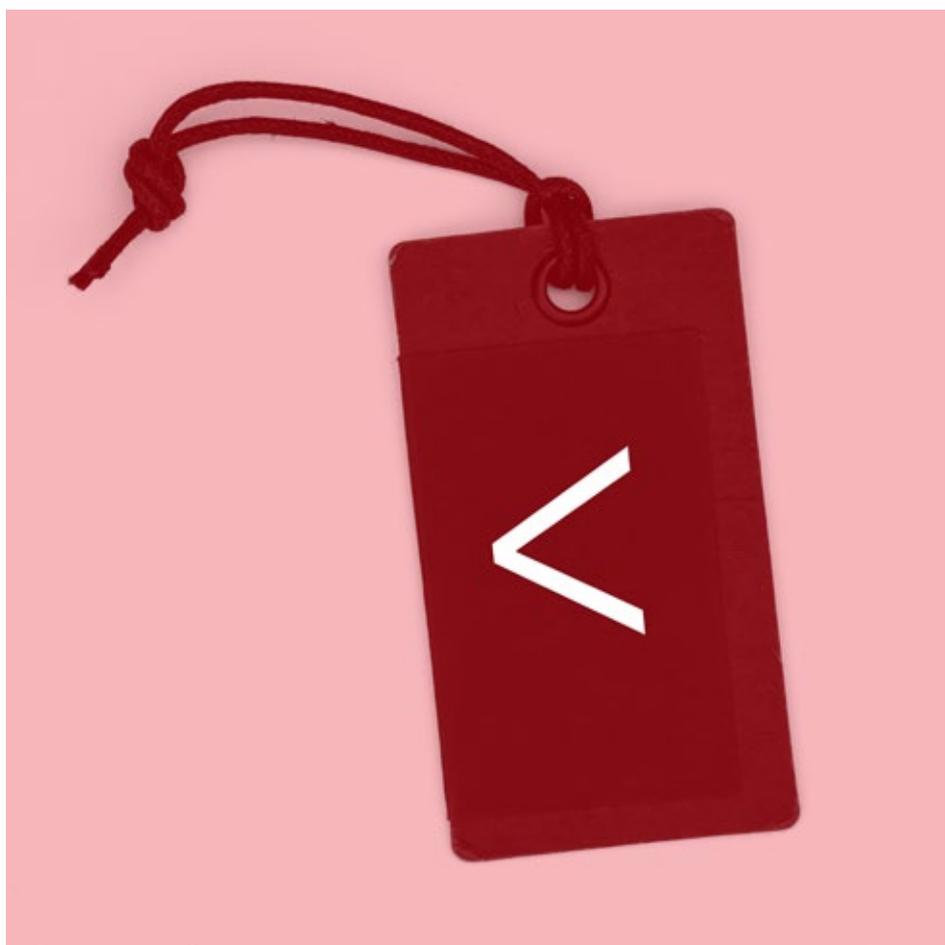
are requests for exclusivity and rights to buy the whole company later on, especially on pre-determined terms (such as call-options, matching rights and rights of first refusal).

The problem with these strategic rights is that they may also have a severe detrimental impact on the likelihood that the startup can be sold for the highest price possible.

Exclusivity requests forbid the startup to cooperate with the corporation’s competitors and thereby naturally restrict business opportunities and the startup’s long-term valuation.

Rights to acquire all shares in the company may have the same effect. They may prevent other potential buyers to engage at all, because such potential other buyers will expect the CVC unit to exercise its rights to acquire the company (less competition on the deal, lower price). Such rights are usually exercised if the startup is successful and if the (pre-determined) purchase price is lower than the market price (lower price). If the CVC unit decides not to buy the company, this usually signals to the market that something may be wrong (less interest, less competition, lower price).

Since founders and traditional VCs usually strive for achieving the highest exit price possible, they are reluctant to accept financing from these “strategic investors”, at least if they can easily find investors willing to invest without these strategic strings attached. Requesting

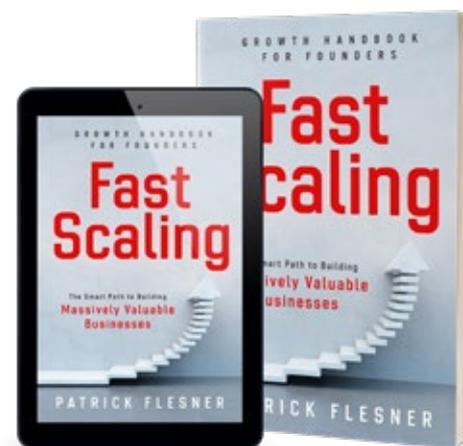


strategic rights may thus lead to an adverse selection where the CVC unit ends up investing only in startups that cannot find other investors willing to further fund the respective venture.

We hence recommend refraining from asking for non-market standard strategic rights at all. If the CVC activities are conducted as a first step towards an acquisition of portfolio companies, being a shareholder in the respective company should always generate an opportunity to acquire the company anyway, although on market terms and not on predefined terms that are beneficial for the corporation but

disadvantageous for founders and co-investors.

Patrick Flesner’s high-growth handbook FastScaling is available [here](#).



The effect of CVCs on performance

- > Analysis of CVC's potential impact on stock price
- > Mean "outperformance" of the index is 28.7%
- > Median is even higher

By Selina Troesch Munster
Senior Associate, Touchdown Ventures

When considering launching a corporate venture capital (CVC) unit, executives at public companies may wonder how analysts and the stock market at large will react to the news of an investment programme.

To help executives at our corporate partners and friends in the CVC community address those concerns, we began studying the stock price of public companies with CVCs. Our 2019 analysis of US-based public corporations on the "GCV 2018 top 100 most active CVC list" showed that within our study, the median corporation's stock price appreciated 21% more than the price of its listing

index from the time of CVC unit establishment through the end of 2018. This year, in the fourth instalment of this series, we refreshed the data as of 28 May, 2021 and found that the stock price of the median US corporation studied appreciated 45.8% more than the price of its listing index from the time of CVC unit establishment through May 2021.

The GCV 2020 top 100 most active CVC list consists of 80 public companies and 20 private entities. It includes 40 US corporations and 60 international businesses.

In this 2021 update, we analysed the 28 public, US-based

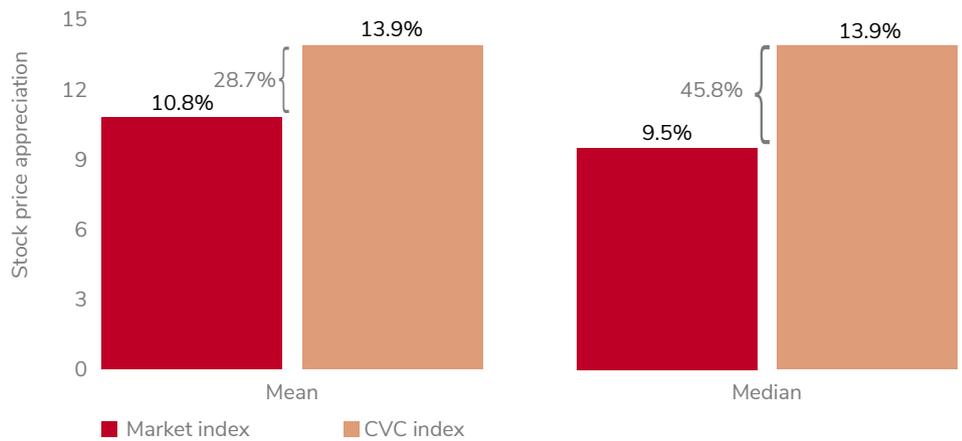
corporations on the list. Of the 28 publicly-traded companies, 15 are based in California, four in New York, two in New Jersey, two in Washington state, and the remainder are distributed throughout the country.

Fifteen of these US companies are listed on the New York Stock Exchange (NYSE), while 13 are traded on the Nasdaq.

The average age of the corporate venture groups in our analysis was 12 years, with a median age of 10 years, which we believe is enough time for a corporate venture capital programme to demonstrate results. This duration also includes business cycle fluctuations and management turnover. Because maintaining a CVC programme during an executive transition can be a challenge, we believe the length of the programmes studied also shows commitment by these organisations.

As of 29 May, 2021, the average compound annual growth rate (CAGR) of these 28 companies' stock prices (measured from the time each corporation launched its

Stock price performance for the US-based GCV 2020 Top 100 CVCs



Source: Touchdown, GCV, Yahoo! Finance, PitchBook

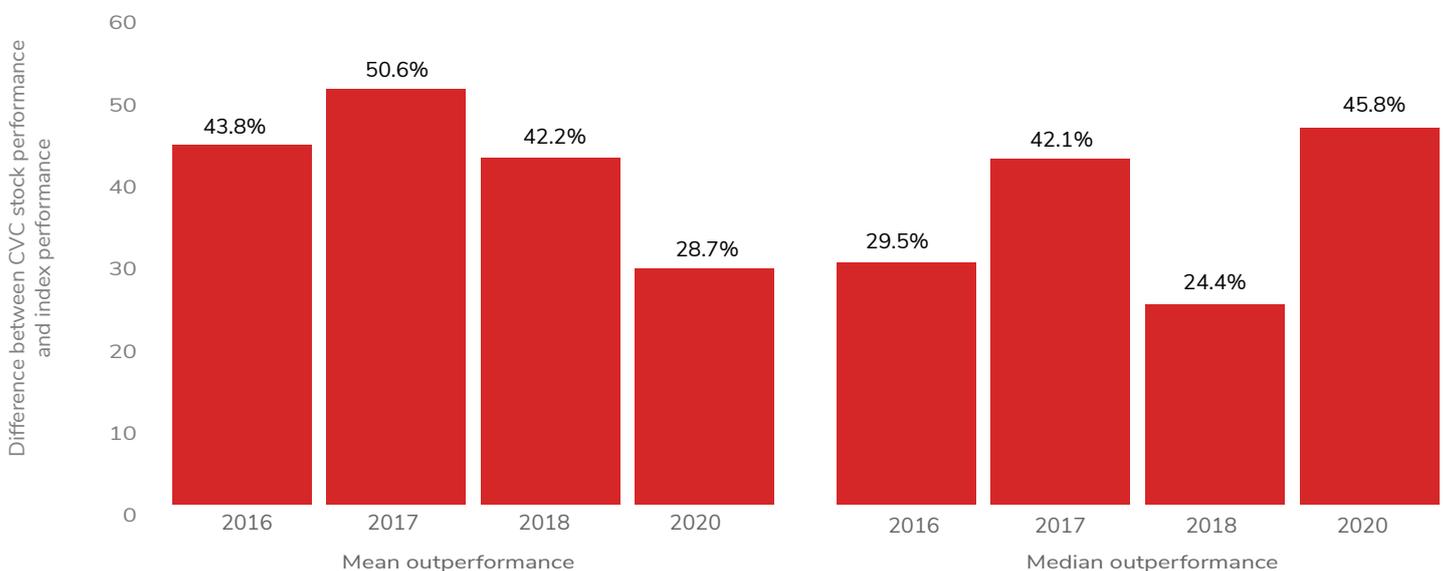
CVC) was 13.9% compared with a time-weighted average exchange growth (measuring the NYSE and Nasdaq) of 10.8% during the same period. This 3.1 percentage point gross difference represents outperformance of the index of 28.7%.

Since the mean can amplify the effect of outliers, we also looked at median performance. The median gross CAGR differential was 4.4 percentage points (13.9% stock price growth at the median versus 9.5% for the exchange),

which represents a 45.8% outperformance. In the first chart on p. 63, each line represents one CVC arm, organised by age. The second chart on p. 63 shows the 28 parent corporations of the CVC units analysed, organised by stock price growth since the launch of each CVC.

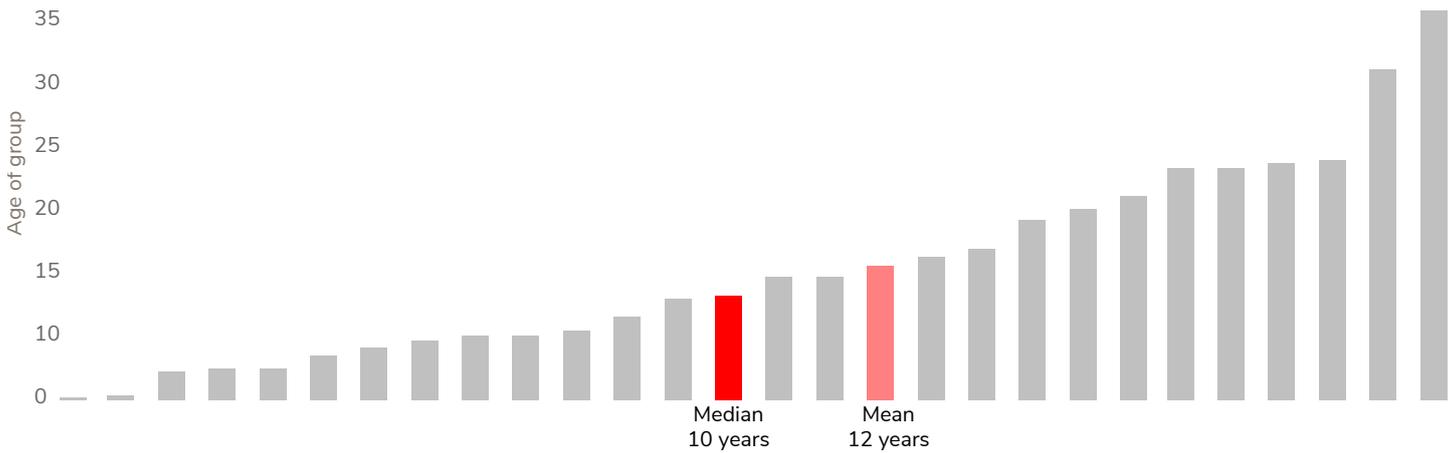
Our methodology included determining the start date of each CVC via its website and its first investment recorded on PitchBook. If the corporation started its CVC before going public, we analysed

Difference between CVC stock performance and index performance in each year of study

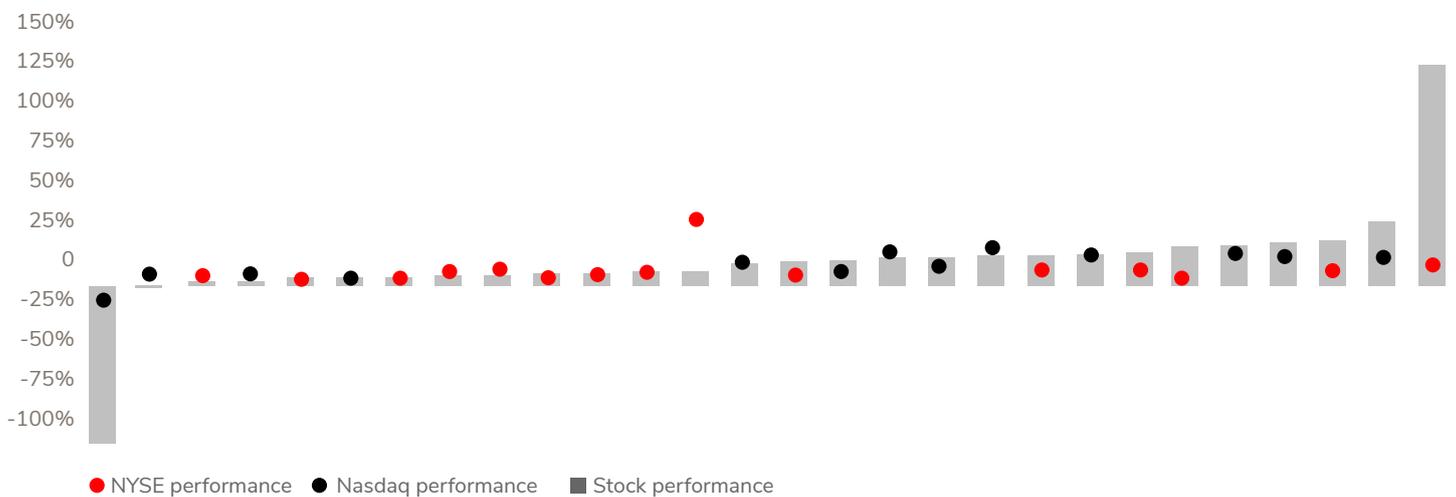


Source: Touchdown, GCV, Yahoo! Finance, PitchBook

GCV 2020 top public company US CVCs by age



GCV 2020 top public company US CVCs by stock performance



Source: Touchdown, GCV, Yahoo! Finance, PitchBook

performance only from the time of the initial public offering to the present. For stock performance, we used the 28 May, 2021 closing price on Yahoo! Finance. The NYSE or Nasdaq performance in this analysis is measured for each CVC separately and is calculated since the programme’s inception. The median compares the average of Intel and Alexandria Real Estate’s stock performance (as they are median performing stocks in the study) with the NYSE since each company’s first investments in 1991 and 2013 respectively. The mean difference is calculated as the mean performance of the individual CVC parent stocks less the weighted

mean performance of the NYSE and Nasdaq since each programme’s inception.

As noted every year, the correlation observed in this data set does not prove that starting a corporate venture unit will cause a company’s stock price to outperform the market. The observed effect could be the result of other factors. With the global pandemic and stock market volatility in 2020, the impact of covid-19 on the industry of each company in our study likely affected short-term stock price performance and these results. The companies we studied were also the most active in a challenging

economic environment, further indicating that underlying strength in these businesses’ fundamentals might also contribute to stock price outperformance.

We plan to continue to expand and revisit this data to test how a CVC capital effort relates to other observable characteristics of publicly traded businesses, like revenue growth and profit margins. We hope to identify additional patterns that demonstrate the potential shareholder value of this increasingly vital innovation function.

Also published on [Medium](#)

Why CVC reduces risk and multiplies rewards in industrial investing

- > The sector is no longer conservative
- > Industry 4.0 is a key driver of change
- > There are “grand” opportunities ahead

By Hank Torbert, president of Alta Max, previously operating partner, Potomac Energy Fund

Industry 4.0 continues to drive tremendous value as we are seeing large industrial enterprises adopt and deploy technologies to position themselves as strong competitors within their respective industry sectors. The convergence of growth across the key elements associated with automation includes the availability of faster networks (that is, 5G), more computing power with quantum capabilities, edge computing options, advanced cybersecurity software and incentives for reducing environmental impact and carbon footprints. With the emergence of these industrial innovations, there is more support

for artificial intelligence (AI) and machine learning, low-latency productivity, quality applications, as well as protecting what industries connect.

Industrial enterprises are more ready than ever to change and compete to secure their future.

Traditionally, the industrial sector has been conservative and industrial giants have generated pleasing steady returns for investors in public and private markets. However, while innovation is happening within these large global enterprises, the corporate venture arms of the world’s most successful

industrial companies are more actively pursuing startups and small to medium-size businesses. The new generation of inventors is increasingly serving as “live laboratories” as they address old problems in new ways.

In some cases, fearless and agile startups constitute a serious threat for some massive industrials. In other cases, they bring new life into old product offerings. For example, embedding sensors and actuators into specialised equipment can enable manufacturers to offer new ongoing services at the time of equipment purchase or lease-back, make remote field service possible, reduce the cost for “truck rolls” if equipment breaks down and speed up mean time to repair.

The potential to gain competitive advantages while driving corporate value in the context of Industry 4.0, has landed corporate venture professionals in a dynamic and exciting time. Corporate venture capitalists (CVCs) have the unique ability to not only fund industrial innovation but also embed technologies into their products and service offerings while reducing risks on both sides of the spectrum. With the right investments or acquisitions, CVCs can transform a small startup into new corporate development and technology DNA. Depending on the scenario, it could generate almost immediate returns.

Alternatively, small companies – especially in the industrial innovation field, are too often impaired by the challenges associated with financing.

Pairing larger firms that have an aggressive investment position and are looking to achieve capital gains with agile startups that have the

most disruptive technologies and are not bogged down by internal forces, brings advantages to every stage of new projects.

The largest and most successful industrials have long-standing customers, highly developed distribution systems, and important business and tech ecosystem networks. They also have the operational and administrative depth to accelerate, launch, and grow the ideas and platforms created by upstarts.

Compared with financing by venture capitalists, financing from “strategics” can make all the difference in the lifespan of smaller startup companies. Here are a few reasons why.



Hank Torbert

For starters, advancements in technology are powering up smarter supply chains, more efficient manufacturing environments and improved products and services for end-customers. They are not only transforming what industrial giants produce and how they produce it – but also future business models.

Automation in the automotive industry has changed everything – from the design and prototyping of new vehicles to testing, manufacturing, customisation,

electric power, battery storage, autonomous or assisted driving and connected services.

Furthermore, innovations in fundamental automotive manufacturing technologies have led to lower production costs, higher performance sensing and data processing, improved worker safety, and accelerated time to market as the connectivity capabilities within an Industry 4.0 framework bring together the entire enterprise, along with supply chain and logistic ecosystems.

Lastly, innovation on the production lines in automotive plants brings real-time visibility and control to manufacturers, providing a massive amount of data that can be converted into business intelligence and lead to a level of continuous improvement that is unlike what the industry has ever seen before.

Why should an automotive CVC invest in supporting technologies like industry of things (IoT) and industrial IoT, and buy these technologies outright, even when they are not directly or traditionally related? The answer is simple. Converging software, compute and connectivity allows manufacturers and marketers to embrace new revenue streams from software, analytics and services that are designed to deliver value to end-customers over a lifetime, compared with “price X units” economics.

These trends and more are making a huge difference in how industrial giants execute strategic roadmaps and acquisitions. The “smart money” CVCs bring to the table comes with opportunities to transform not only their business but the entire industry’s future.



Industrial technology companies used to be thought of as more mechanical than strategic

The very definition of industrial technology is changing

Industrial technology companies used to be thought of as more mechanical than strategic.

Today, the leading industrial technology innovators are increasingly defined by the benefits their solutions enable including actionable intelligence, business insights, more precise automation, more connected hardware and software platforms that generate data that can directly improve top and bottom lines.

Electronics, sensors, cloud-based services and edge computing advancements enable manufacturers to transform what may have been a standalone hardware business for decades into fully automated products

with recurring service revenues “embedded”.

Over the past two decades, at the dawn of Industry 4.0, CVCs have made investments that have enabled more cost-efficient computing, real-time connectivity and increasingly sophisticated sensing into their environments.

Henceforward, there will be no great manufacturing company that is not also a technology company, with their own competitive “technology stacks” bringing together the physical and digital worlds.

We are seeing a blurring of the lines between the information technology (IT) teams, and the operations technology (OT) teams, overcoming internal organisational barriers. New levels of orchestration are forming

across the entire enterprise, from the physical plants to the digitally connected field service centres. This convergence has not been easy to implement. Historically, the IT and OT teams were either not collaborating or were competing for internal resources.

Fortunately, this is rapidly changing. CVC groups are bringing new ideas, people, and tech solutions into the culture, from product development to manufacturing, marketing and customer experience.

Together, IT/OT leaders are making additional services possible. Developments like basic remote monitoring, predictive maintenance and advanced AI capabilities improve how customers engage, interact and generate data that informs future product innovation.

The sensibility of strategic investing: CVC's grand opportunities ahead

The proliferation of new technology in the industrial sector is not slowing down – it is speeding up. Driving new energy into creative and collaborative investment is the next “big thing.”

The financial profiles of industrial technology companies reflect their focus on increasing importance in driving productivity and profitability enhancements for manufacturers.

According to a William Blair study, as recently as 2015 “industrial technology companies typically generated gross profit margins of about 40% and Earnings before interest, taxes, depreciation and amortisation (EBITDA) margins of about 20%. Today, those benchmarks have risen to 50%-plus for gross profit margins and 25%-plus for EBITDA margins at leading industrial technology businesses that have incorporated substantial software- and subscription-based revenue streams into their solution offerings”.

The report goes on to say these results vary “depending on how well-positioned the company’s business model is to capitalise on the convergence trends that are driving much of the industry’s growth and the macro tailwinds described above that are elevating the financial profiles of companies across the industrial technology sector”.

CVC today has become one of the most adopted forms of financing for startups in industrial innovation. As another form of venture capital that has changed dramatically since the practice began in the late 1930s, it has gradually become one of the most successful ways to fund and grow smaller companies as part of larger enterprises.

Leaders have proven that by investing in highly innovative firms within or adjacent to their core business, industrial groups can not only keep track of industry innovations but can become the innovators themselves. This involves less risk and expense compared to relying solely on internal R&D that has proven

risky and expensive, especially when large projects fail while more nimble competitors and challengers succeed.

The best CVCs I have had the opportunity to work with throughout my career are skilled, external risk-takers. They impact the strategic vision of the company by constantly studying and interacting with innovators. They develop progressively successful strategies that lead to ongoing investments that lead to multiples in financial gains.

They are “innovation activists” who advocate for brilliant new combinations, at times helping to accelerate existing strategies, while simultaneously influencing those strategies.

They are “creative geniuses” who do the work and engage with the smartest minds inside and outside their industries to put together new combinations which protect competitiveness and lead to long-term relevance and value.

First published on Forbes

CVC: a risk and an opportunity for Latin America's "orange economy"

- > The region's cultural sectors are an untapped resource
- > Finance is a leading obstacle to achieving scale
- > CVC could provide a good solution

By Alejandra Luzardo

Leader in innovation and creativity, Inter-American Development Bank

The dynamic cultural and creative sectors of Latin America – recognised as part of the “orange economy” – are an untapped global resource in need of investment.

The corporate capital venture (CVC) model could be a solution.

CVC is the direct investment of corporate funds in new companies.

This type of investment has typically focused on sectors such as the internet, new technologies, health and telecommunications. Some parts of the orange economy, such as the audiovisual sector, have also benefited from this model.

ViacomCBS is a case in point. One of the world's largest producers of entertainment content, for more

than 20 years it has been able to innovate by acquiring countless companies and developing co-productions with them.

The analysis of more than 300 creative startups presented in *Launching an Orange Future*, an Inter-American Development Bank publication, found that financing was one of the leading obstacles to achieving scale, given that investors are frequently unaware of the economic and social impact of the creative sectors. For their part, creative entrepreneurs have often not developed their business skills, leaving them unable to pitch the benefits of their projects, particularly those of intangible

value, such as video games, film and animation.

Another significant obstacle – particularly in the covid-19 pandemic – is the liquidity that is vital for many startups to survive and to continue growing in the long term. Finding new clients, adapting to new technologies and forming partnerships with businesses that dominate distribution in global markets will be key for smaller businesses to survive and move ahead. Large corporations will also have to innovate, enter new markets and reconnect their products and services with more demanding and knowledgeable consumers. This is where the model of CVC can benefit enterprise both small and large.

In the lockdowns of the pandemic, we consumed a greater amount of digital content. Bill Gates's 1996 prediction that "content is king" has never looked more prescient.

Today's exploding demand for content has created an opportunity to rethink how independent producers or small businesses collaborate with each other. Meanwhile, the large content conglomerates are dedicated to finding new creators of unique stories – talents that abound in Latin America. A notable example is how Netflix transformed its model from pure distribution, becoming a co-producer of original local content to attract and retain subscribers and enter new markets. Netflix quickly learnt that combining its role as curator of existing productions with investing to co-produce content is a model that works.

Working with large companies has been key for emerging producers such as Matt and Ross Duffer, the North American brothers who are

the executive producers of *Stranger Things*. Netflix decided to bet on them when they had no experience as showrunners. Another example is *La Casa de Papel* (Money Heist), a Spanish series that ran for two seasons on national television, but which, after being acquired by Netflix, attracted the largest global audience of any non-English-language series ever.

Martin Haemmig, an academic researcher who specialises in innovation and international markets, emphasises the importance of collaborative innovation among startups and corporations. He describes the impact this type of collaboration has had in markets such as Asia, where international inflows and outflows have been critical to the region's transformation into a global innovation leader. Attracting

the CVC model to Latin America would bring great benefits to creative sectors, enabling co-production of new projects, putting vast networks of international contacts at the service of creative talents, allowing for the leveraging of funds, luring new investors, improving distribution and increasing the potential for new products or services.

Some pillars of the CVC model would need to be adapted to the specific needs of the creative sector. One such pillar is acquisition – in the case of filmmaking, for example, the asset acquired would be a percentage of the rights of a movie, rather than a percentage of a startup or a production house. Another issue is the allocation of royalties to creators, since today's deals with large companies do not always provide the best terms



for small producers. One of the most well-known examples comes from the music industry, where the various streaming platforms have seen more people consume music, but this has not necessarily led to increased pay for artists. While more work must be done to balance the need for investment with fair deals for creators, there is no doubt that the ecosystem needs more investors focusing on the cultural and creative sectors.

Daniel Chuba, the Hollywood investor, producer, director and author, believes a significant growth market is short-form content for the educational sector. Edutainment could be a significant beneficiary of the post

covid-19 reality, presenting a vast opportunity for the creative sectors to add value. Connecting the two sectors of entertainment and education will also represent another opportunity to bring corporate venture capital and impact investing to the creative sectors.

Latin America needs a strategic focus on public-private sector coalition. Such a coalition would allow the creation of alliances with big corporations, so that the creative sector could access other investment models such as CVC, enabling local producers to offer original, entertaining and educational content to the global market. Regulatory frameworks

that can attract international investment to fund local creative talent will be indispensable in the coming years, allowing the survival and growth of creative sectors that, at this time, have no market demand. The fact that large content conglomerates are now opening their doors in Latin America is an opportunity that we cannot let go by if we are to maximise the economic and social impacts of creativity.

This post was part of Creativity, Culture & Capital: Impact investing in the global creative economy, a collection of essays edited by Nesta's Arts & Culture Finance, Fundación Compromiso and Upstart Co-Lab.

Feature

Electric grid girds itself for tense decades ahead

- > Generators and grid struggle to keep up with demand
- > Production, transmission and storage changing
- > Corporations increasing work with startups

By James Mawson
Editor-in-chief

The global electricity market is worth around \$3 trillion a year and is only likely to get bigger. But if electricity power generation fails to keep up with demand securely and flexibly, what trade-offs need to be made for which devices gets what level of allocation?

These are some of the questions keeping politicians, regulators and the industry awake as people look to electrification to help resolve the global climate challenge.

But, first, the industry has to get through immediate challenges from another hot summer in the northern hemisphere and incipient threats from cyberattacks and solar

storms that could put utilities out of business and leave consumers without power.

As the Economist noted, Pacific Gas & Electric (PG&E), whose customers suffered blackouts as wildfires raged in northern California in the past two years, may need to pay fines and legal-settlement fees of nearly \$150m for alleged mishandling of those outages. Utilities in New York are threatened with \$140m in penalties for alleged failures in responding to storms and demand spikes.

The International Energy Agency (IEA), a France-based oil watchdog, has mapped out a pathway that it

says is “narrow but still achievable” if the world is to cut carbon dioxide emissions to nearly zero and limit global warming to 1.5°C, according to the Financial Times.

Total energy consumption in 2050 would be less than it is today because of improvements in efficiency, even though the global economy will be 40% larger than it is now.

Most of the energy would come from renewable sources, including nuclear, marine, solar and wind, but electricity use would also grow. Currently, about 20% of total energy consumption is electric, according to the IEA. By 2050, this would rise to 50% to meet the watchdog’s pathway to sustainability. Total capital investment in the energy sector would need to rise to \$5 trillion a year, including investment in transmission and distribution grids of \$820bn in 2030 from its current \$260bn.

Electric utilities are tackling the issues in three ways: bringing on more production across a wider

geographical area for transmission, using distributed energy storage and developing demand management software with customers to smooth peak periods.

The UK and US have generally spent less than their peers on research and development in these fields, according to IEA data supplied to the Economist, but relied on market forces and openness to new entrants to meet the changing environment.

First, in adding more power production capacity, utilities are especially targeting renewables, such as solar and wind, in the hope modular nuclear reactors might develop sufficiently to be used based on existing fission technology. Longer-term, even nuclear fusion could output more power than it consumes.

The US’s solar capacity has more than doubled in the past four years to 100 gigawatts (GW). But solar and wind power are intermittent sources that require a mix of long and short-duration energy storage

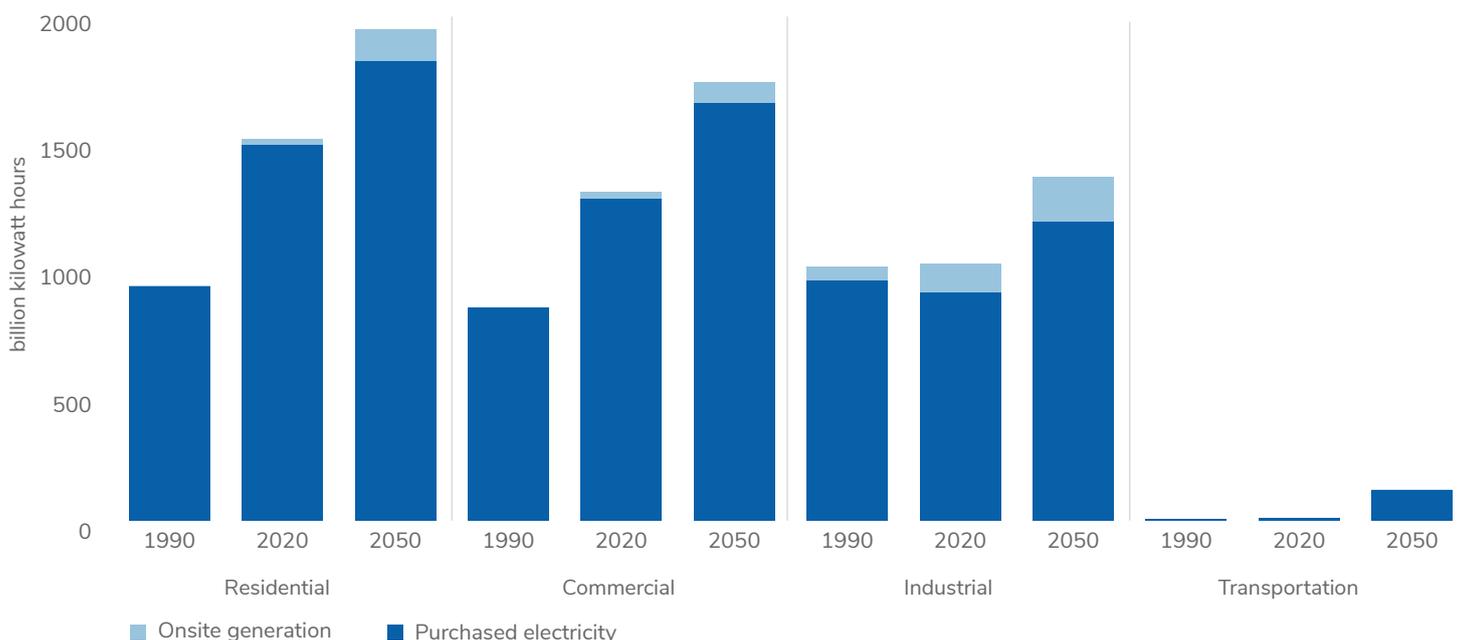
mechanisms as well as “firm energy production”, such as natural gas with carbon capture technologies, to meet demand spikes and therefore reach net zero.

The Economist noted Southern California Edison, a utility serving the Los Angeles area, added 1.4GW of battery capacity last year. The state as a whole could have more than 2.8GW of storage on its grid before September, nearly five times more than in 2020. Similarly, Texas could have about 1.4GW, an eightfold increase.

But long-duration energy storage is proving complicated to achieve at suitable cost and efficiency, according to a recent paper in Nature by a Massachusetts Institute of Technology team (thanks to David Roberts’s Volts blog for the tip).

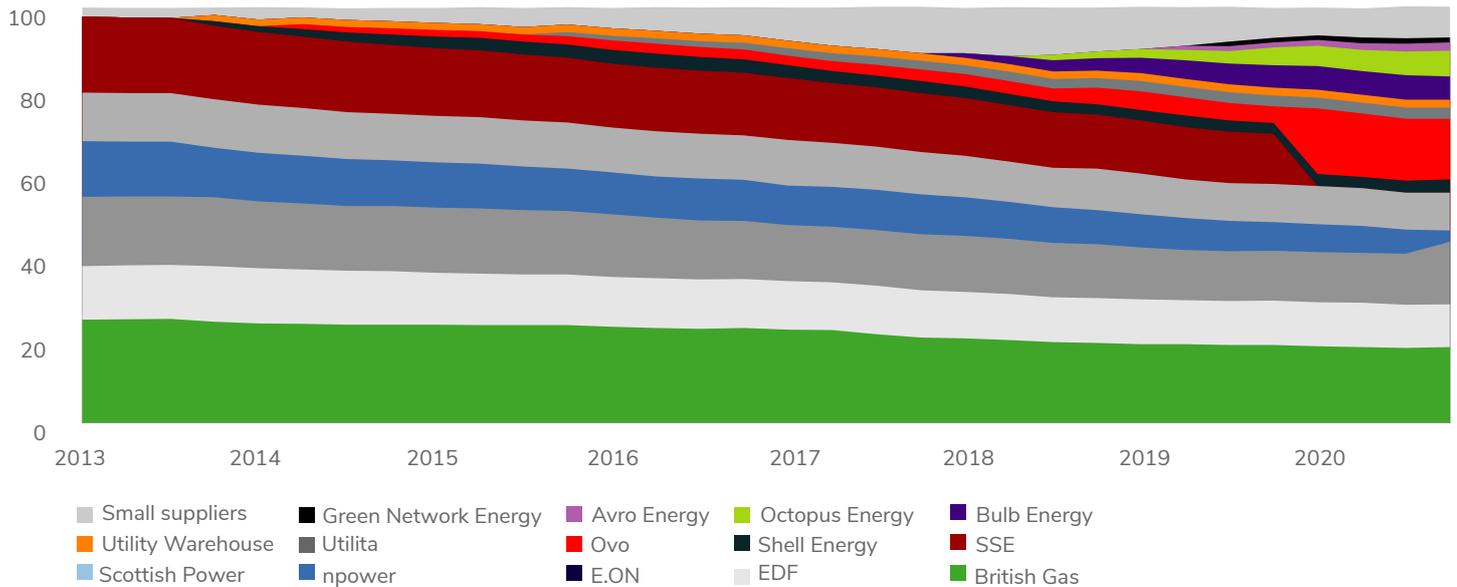
This pushes energy storage for the grid to shorter-term solutions, such as lithium-ion batteries used in electric vehicles. Tesla, an electric-car maker, has been secretly developing a 100-megawatt grid

US electricity use by end-use case



Source: US Energy Information Administration

Share of the British electricity supply market



*SSE sold its British business to OVO in January 2020. Source: Ofgem

battery project outside Houston (code-named Gambit), the Economist added.

Tesla intends to produce three terawatt-hours of battery capacity within a decade, more than 12 times the goal of Germany-based carmaker Volkswagen. Besides bringing the cost of cars down to \$25,000, the batteries will also go towards Tesla’s home-energy-storage business.

Tesla’s home power storage device, along with people using their car batteries to store electricity, means power supply is closer to demand and offers potentially more resiliency to the grid.

The growth in electricity sales from vendors is lessened by significant growth in onsite generation in the residential, commercial, and industrial sectors. Installation of rooftop photovoltaic (PV) systems, primarily on residential and commercial buildings, and combined-heat-and-power systems in industrial and some commercial applications, will

account for more than 7% of total electricity generation by 2050, almost doubling the 2020 share of onsite power generators, according to the US Energy Information Administration (EIA).

Managing demand

Using software to control and manage demand brings opportunities for startups. Venture capital firm Westly Group has 15 of the world’s larger energy and auto companies as limited partners. Danny Cotter, a partner there, said when his firm backed WeaveGrid, which supplies vehicle power to the grid: “Every automotive manufacturer is moving all-electric. Energy utilities need a way to support this transition without significant impact to their infrastructure.”

OhmConnect, a California-based startup backed by Alphabet gives away smart thermostats and aggregates the energy saved by remotely turning down thermostats and otherwise cutting demand when the grid nears overload. OhmConnect

can then sell the electricity at peak prices to utilities and share the gains with consumers, while Leap creates a “virtual power plant” by aggregating output from distributed power.

In the UK, electricity tariffs allow customers using “vehicle-to-grid” chargers to top up their batteries when electricity consumption is low and sell it back at a profit when demand is higher. “Best performing customers are making a net benefit of over £500 a year and the extreme examples quite a bit beyond that,” Conor Maher-McWilliams, head of flexibility at energy supplier Ovo’s technology arm Kaluza, told the Financial Times.

UK-based Ovo and Octopus Energy are the biggest of the new energy suppliers whose “intelligent” software platforms now control more than a fifth of the market, according to the local regulator Ofgem, and are now attracting unicorn valuations.

In December, Japan-listed energy utility Tokyo Gas invested \$200m in

Octopus Energy Group at a \$2.1bn valuation and said it would license the UK company's technology platform, Kraken. Another utility, Australia-based Origin Energy, agreed in May last year to pay approximately \$327m over four years for a 20% stake in Octopus.

In 2019, Japan-listed conglomerate Mitsubishi paid \$256m for a 20% stake in Ovo Energy, which planned to use the funding as the basis for an expansion from Germany and its home country of the UK into markets such as France, Australia and Spain. In March, Ovo also announced an agreement with Australia-based AGL to provide access to the UK group's Kaluza technology platform.

A series of market reforms to improve competition in the UK household supply market since 2010 has helped Ovo and Octopus but other startups have been winnowed away.

Toby Ferenczi, director of Ovo's international business, told the FT the UK market had become a test bed for energy technologies because it was one of the first in the world to liberalise. "There has been a few companies like Ovo and Octopus that have had the time to build up the scale and the technology necessary... to enable this [energy] transition to happen."

Smoothing supply

But as well as internal liberalisation, countries and states are working on connecting their grids to smooth supplies.

The world's longest undersea electric cable was switched on this summer for testing. The 720km interconnector that will trade power between the UK and Norway, according to the FT.

The €2bn North Sea Link between the UK's National Grid and Norway's Statnett is due to begin formal operations in October, two years before a similar one between the UK and Denmark becomes operational. Even bigger interconnector projects, such as the Sun Cable between Australia and Singapore and the IceLink between Iceland and the UK, are under development.

Nigel Williams, construction director of the North Sea Link, told the FT the cable would allow the UK to "maximise the use of renewables and the extensive hydro power network in Norway", replacing electricity from fossil fuels.

The cable can carry as much as 1.4GW of power. On windy days when the UK has excess power from offshore wind, the cable will allow it to export power to Norway. Interconnectors supplied about 8% of UK power in 2019, a figure that could more than double to 19% within the next five years and could require 18GW of capacity by 2030.

Beyond the challenges of laying these cables under water, there

are other hurdles to jump to deliver green power the cities where two-thirds of people are expected to live over the next few decades.

"There will be no renewables without networks," says Armando Martínez, who leads the grid business of Iberdrola, a big utility, told the Economist. The IEA said annual spending on electricity grids should more than triple by 2030.

One of the hardest challenges is disagreement over the siting of transmission lines from wind farms. In the US, for example, a transmission line must receive approval from each state it crosses and, in some states, approval from each county. This might slow US president Joe Biden's plan for decarbonisation of key sectors, such as power and agriculture.

Biden has been seeking \$2.3 trillion from Congress for legislation that would go to electric charging stations, laying out an efficient new national electrical grid and capping abandoned oil and gas rigs and coal mines. This focus on spending and tax could see "\$7.5bn on electric-vehicle infrastructure,



Octopus Energy is attracting investment from corporates

\$73bn in overhauling the electrical grid, and nearly \$50bn in making infrastructure resilient to climate change”, according to the Wall Street Journal.

Ultimately, the White House wants 80% of retail power to come from zero-emission sources by 2030 and has promised \$8bn to build transmission lines to help effect this.

But this is just a fraction of the expected \$100bn in costs and so the government wants to crowd in private capital. In particular, the Clean Energy for America Act could consolidate current energy tax incentives into emissions-based provisions, available to all energy technologies such as transmission rather than just wind or solar.

The promised \$8bn will go on high-voltage direct-current systems to connect offshore or midwestern wind plants by using infrastructure located along railroad and highway routes with the lines running underground. To get around planning permissions, Transportation Secretary Pete Buttigieg said the use of public highways and other transportation rights-of-way would speed siting and permitting of transmission lines.

The White House has also announced 22 shovel-ready transmission projects to spur \$33bn in investment, create 600,000 jobs and help update much of the country’s transmission infrastructure built in the 1950s and 1960s.

As former California governor Arnold Schwarzenegger once said: “You could have all the renewable energy in the world. But if you do not have the transmission lines, you have nothing.”

In Vietnam the growth of solar power in recent years has



Solar power has overwhelmed transmission in Vietnam

overwhelmed the country’s ability to transmit it to consumers, while in Germany disagreements over the transmission of clean energy between north and south has kept coal-fired plants open longer than expected. The national elections coming up this autumn will turn in part on which party is seen as more capable of carrying out the Energiewende, the policy to decarbonise Germany’s energy consumption, according to the FT.

Coal and nuclear turbines provide this stability because they have large rotating masses that, connected to the grid, resist power fluctuations with “inertia”, the FT noted. The German Greens’ parliamentary energy spokesperson, Ingrid Nestle, acknowledged this problem. “The current government could have been more proactive in providing alternatives for grid security. Security of supply cannot be a question.”

This is creating optimism for startups in transmission, such as Veir, which uses high temperature superconductors for electricity transmission and in March raised \$10m from VCs

Breakthrough Energy Ventures, Congruent Ventures and The Engine; WeaveGrid, a developer of software solutions for the scalable deployment of electric vehicles on the electric grid that in May raised \$15m from Coatue, Breakthrough Energy Ventures and others; and Smart Wires, which in late 2019 raised \$75m for its modular power flow control solutions to help electric utilities and grid operators.

Most recently, Mainspring Energy, a US-based power generation company, raised \$95m in its series D round from corporations including Chevron Technology Ventures, AEP and Equinor.

In April, LineVision, a US-based provider of power line sensor technology, completed a \$12.5m series B round that included National Grid Partners (NGP), the corporate venturing arm of electricity provider National Grid, while car parts maker Toyota Tsusho invested in electricity trading platform Digital Grid in 2019 and Schneider Electric’s SE Ventures backed distributed grid software provider Autogrid the previous year.

To protect the infrastructure, NGP has also been investing in CNIGuard, an internet-of-things cloud sensor provider for utility-critical infrastructure.

And organisations are working more closely together through the Global Power System Consortium to speed progress toward a carbon-free power system by 2035.

Reliable, abundant energy has powered the world’s growth and development. Its successful transition to a lower-carbon footprint will help underpin the next generation’s challenges of responsible innovation.

Innovative region

Corporates united in the US ecosystem

- > Numerous and diverse technology sectors
- > CA, NY, MA and TX with most CVC activities
- > Universities help deliver tech entrepreneurship

By Liwen-Edison Fu
Supplements editor

The United States hosts various leading global innovation ecosystems including Silicon Valley, New York, Houston and Boston, as well as Seattle, Austin and Los Angeles. The country ranked third after Switzerland and Sweden in the Global Innovation Index compiled by Cornell University's SC Johnson College of Business, Insead and the World Intellectual Property Organisation.

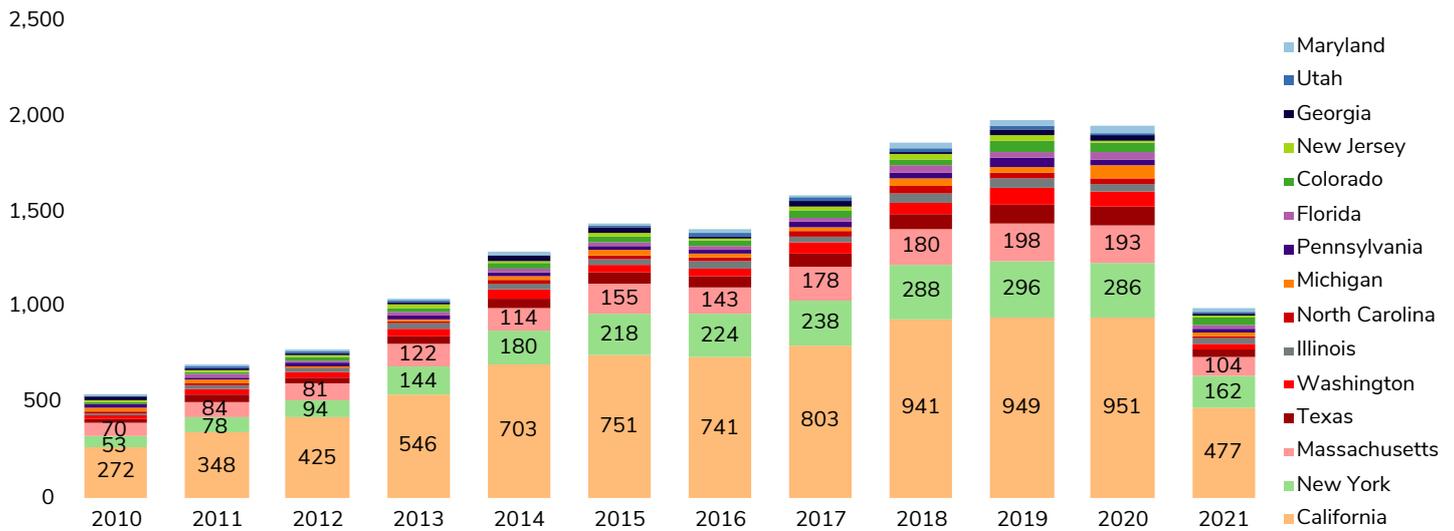
The US has some of the world's most valuable brands, such as e-commerce group Amazon, internet technology provider Google, electronics producer Apple, software supplier Microsoft, social media platform Facebook,

big-box retailer Walmart, wireless network operator Verizon and telecoms firm AT&T.

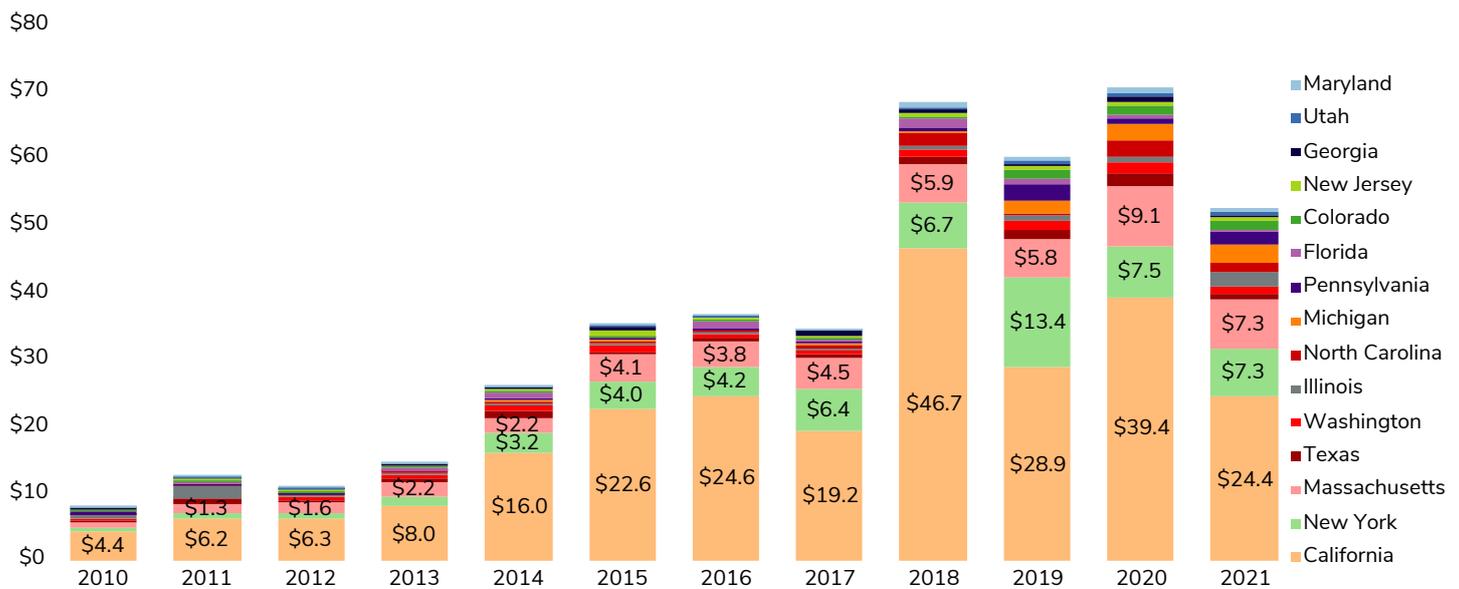
Many of these corporations have attempted corporate venturing, either through direct investments or fund-of-funds strategy. Amazon operates the Alexa Fund while Google's parent firm Alphabet has various vehicles: Gradient Ventures, GV and CapitalG.

Facebook began investing in emerging technology developers through its New Product Experimentation subsidiary. Walmart invests directly and runs Store No 8 incubator while Disney owns Disney Accelerator

VC deal count with corporate investment involvement



VC deal activity (\$bn) with corporate investment involvement



Source: PitchBook

in addition to participating in funding rounds directly. Verizon Ventures represents Verizon in the innovation ecosystem, and AT&T and The Home Depot conduct corporate venturing without dedicated vehicles.

Only about a sixth of 1% of new businesses raise venture capital funding in the US, according to Steven Kaplan, a research associate at University of Chicago, and Josh Lerner, director of the productivity,

innovation and entrepreneurship programme and a research associate at Harvard University. However, its impact is considerably greater – roughly 60% of the US-based companies that listed publicly in the last two decades had VC backing, according to University of Florida's Warrington College of Business finance professor Jay Ritter's IPO Database.

California, New York and Massachusetts spearhead the

country in corporate investment involvement in terms of deal count and deal value. Texas, despite the considerable number of corporate venture capital (CVC) transactions, represents the lower end of activity with fewer disclosed dollars invested in the ecosystem.

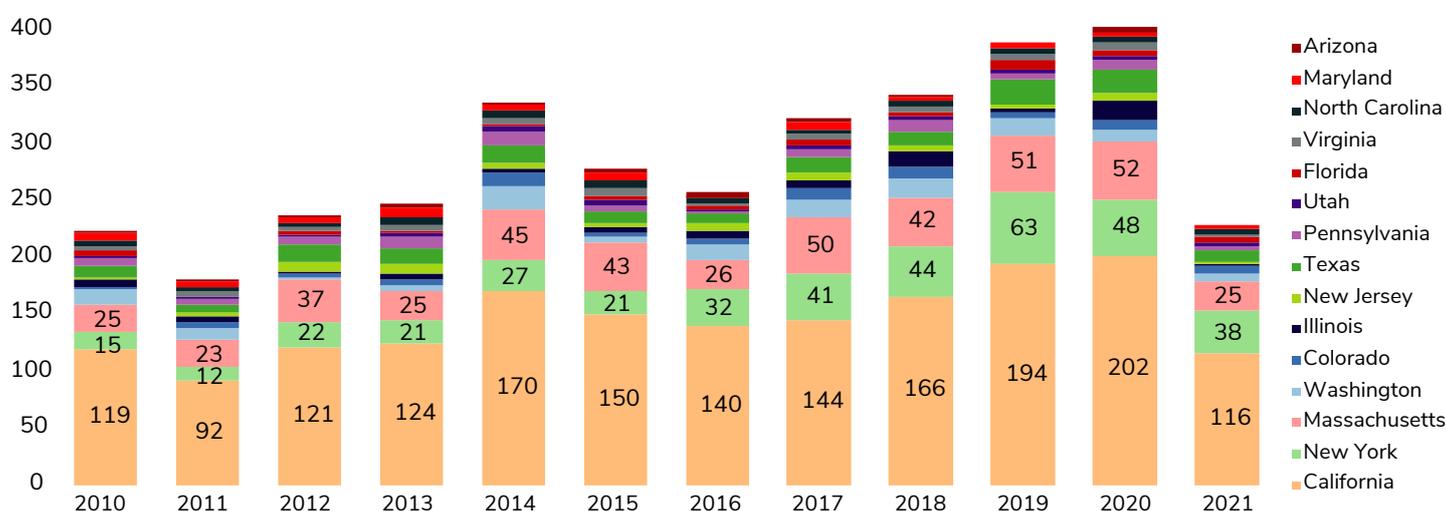
Alphabet's GV unit leads the US and is joined by CVC investors including Intel Capital, Comcast Ventures, Qualcomm Ventures, Alexandria Venture Investments,

Samsung Venture Investment, GE Ventures, Vulcan Capital and Cisco Investments, which invest on behalf of chipmaker Intel, mass media group Comcast, mobile semiconductor producer Qualcomm, life sciences real estate investment trust Alexandria Real Estate Equities, electronics manufacturer Samsung, industrial and power technology producer General Electric, conglomerate Vulcan and networking technology provider Cisco, respectively.

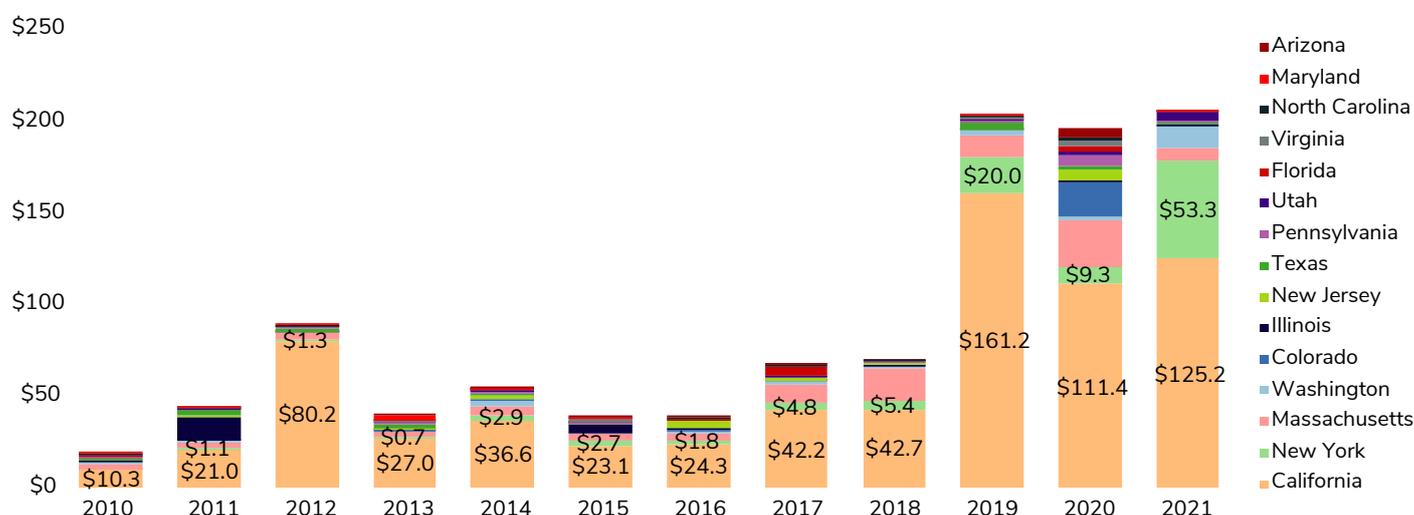
Top US CVC investors in CVC deals since 2011

Investor Name	Deal Count
GV	807
Intel Capital	486
Comcast Ventures	298
Qualcomm Ventures	231
Alexandria Venture Investments	202
Invest Detroit Ventures	184
Samsung Venture Investment	173
GE Ventures	171
Vulcan Capital	166
Cisco Investments	155

VC exit count with corporate investment involvement



VC exit activity (\$bn) with corporate investment involvement



Source: PitchBook



California

Silicon Valley is the mecca of the tech industry, with research universities such as Stanford University and University of California, Berkeley and abundant VC, helping the state produce successful high-tech entrepreneurs.

Los Angeles is also a notable

ecosystem. The latter's labour costs are much lower than those of the Bay Area, and its augmented and virtual reality-enhanced digital media business is thriving owing to the film industry behind companies such as Disney and Warner Bros.

Similar to the national level, GV, Intel Capital, Qualcomm Ventures,

Comcast Ventures, Samsung Venture Investment and Cisco Investments take the lead in California, and they are joined by computing equipment provider Dell's Dell Technologies Capital unit, GE Ventures, software provider Microsoft's M12 subsidiary and workplace collaboration platform Slack's Slack Fund.

Top CVC investors in California CVC deals since 2011

Investor Name	Deal Count
GV	496
Intel Capital	304
Qualcomm Ventures	173
Comcast Ventures	138
Samsung Venture Investment	121
Cisco Investments	107
Dell Technologies Capital	102
GE Ventures	88
M12	84
Slack Fund	61

Source: PitchBook

Top California VC deals with CVC investor involvement

Company Name	Deal Size (\$m)	Round	Investor(s)	Industry Group	City
JUUL	\$12,800.00		Altria Group	Consumer Durables	San Francisco
Uber	\$5,600.00	Series G	Bank of America Merrill Lynch, Caspian Venture Capital, Didi Chuxing Technology, Fort Ross Ventures, Government of Singapore Investment Corporation (GIC), Hartford Financial Services Group (Mutual Fund Business), Himel Capital, John Hancock Investments, L1 Technology, LetterOne, Morgan Stanley, NextEquity Partners, Principal Asset Management, Saudi Arabia's Public Investment Fund, Sberbank of Russia, Shumway Capital, SoftBank Group, Sway Ventures, T. Rowe Price, The Vanguard Group, Tiger Global Management, Toyota Motor, TrueBridge Capital Partners, USAA Corporate Development, Variable Annuity Life Insurance Company	Transportation	San Francisco
Waymo	\$3,000.00	Series A	Alphabet, Andreessen Horowitz, AutoNation, Canada Pension Plan Investment Board, Fidelity Management & Research, Magna International, Mubadala Capital-Ventures, Perry Creek Capital, Silver Lake, T. Rowe Price	Transportation	Mountain View
Faraday Future	\$2,000.00	Series A	Evergrande Health Industry Group	Transportation	Los Angeles
Snapchat	\$1,808.56	Series F	Access Technology Ventures, Benchmark (San Francisco), Binary Capital, Brookside Equity Partners, CapitalG, Coatue Management, Comcast Ventures, DST Global, Dragoner Investment Group, Fidelity Investments, G Squared, General Atlantic, General Catalyst, Geodesic Capital, Glade Brook Capital Partners, Graphene Ventures, Grupo Arcano, HDS Capital, IVP, John Affourtit, Kleiner Perkins, LaunchCapital, Lightspeed Venture Partners, Lone Pine Capital, Man Capital, Meritech Capital Partners, Michael Cheung, MicroVentures, New Enterprise Associates, Principal Asset Management, Sequoia Capital, Spark Capital, Swordfish Investments, T. Rowe Price, Technology Opportunity Partners, Telstra Ventures, Transmedia Capital, University Growth Fund, Variable Annuity Life Insurance Company, Vayner/RSE, Yahoo, York Capital Management, Yorkville Capital Management	Software	Santa Monica
Lyft	\$1,700.00	Series H	AllianceBernstein, Apeiron Ventures, Baillie Gifford, CapitalG, Chromo Invest, Decacorn Capital, Fidelity Management & Research, Fisher Capital Investments, Ford, Glade Brook Capital Partners, Graphene Ventures, Hudson Sustainable Investment Management, JUMP Investors, Janus Henderson Investors, Kohlberg Kravis Roberts, Magna International, Oceanic Partners, Odum Capital, Olympus Partners, Ontario Teachers' Pension Plan, Rakuten, Rancilio Cube, Schechter Private Capital, StraightPath Venture Partners, UTA Ventures, Valia Ventures	Transportation	San Francisco
Uber	\$1,600.48	Series E	ACE & Company, Baidu, General Atlantic, Glade Brook Capital Partners, Goldman Sachs Investment Partners, Hadi Partovi, Lauder Partners, Norwest Venture Partners, Reimagined Ventures, Square Peg Capital, Times Internet, Wynsun Capital Management	Transportation	San Francisco
Airbnb	\$1,600.00	Series E	3Spoke Capital, ACE & Company, ADIT Ventures, AglaÃ© Ventures, Baillie Gifford, China Broadband Capital Partners, Fidelity Investments, FirstMark Capital, GGV Capital, General Atlantic, Geodesic Capital, Hillhouse Capital Group, Horizon Ventures, Kleiner Perkins, Lakerstar, Late Stage Management, Man Capital, Principal Financial Group, Sequoia Capital, Sequoia Capital China, Slow Ventures, T. Rowe Price, The Hartford Financial Services Group, The Vanguard Group, Tiger Global Management, Variable Annuity Life Insurance Company, Wellington Management	Media	San Francisco
Uber	\$1,250.00	Series G	137 Ventures, Aeon Family of Funds, Alexander Capital Ventures, All Blue Capital, Alpha Square Group, Archer Venture Capital, Black River Ventures, Delk Enterprises, FG2 Capital, G Squared, GC1 Ventures, Jeffrey Wernick, Late Stage Management, MSA Capital, Mastry, MicroVentures, NALA Investments, Plus Capital, Polyvalent Capital, Quantum Global Partners, Rafael A Pinedo, Sixty Degree Capital, Smith Family Circle, SoftBank Investment Advisers, StraightPath Venture Partners, Syren Capital Advisors, The Strand Partners, Times Bridge, Troy Capital Partners, Valor Equity Partners, Vulcan Capital, Xplorer Capital	Transportation	San Francisco
JUUL	\$1,235.00	Series C	Applied Biosciences Corp, Bracket Capital, Darsana Capital Partners, E Squared Capital Management, Fidelity Investments, Sand Hill Angels, Tiger Global Management	Consumer Durables	San Francisco

Source: PitchBook

New York and New Jersey

Active CVCs in New York include GV, Comcast Ventures, telecoms and internet group SoftBank's SoftBank Capital unit, Intel Capital, media group Bertelsmann's Digital Media Investments vehicle, cryptocurrency holding company Digital Currency Group, Alexandria Venture Investments, advertising holding company MDC Partners' MDC Ventures unit, payment services firm American Express's American Express Ventures subsidiary and SoftBank Group.

New York – especially New York City – is dominated by “hyphen tech”, namely fintech, martech, fashiontech and mediatech, among

others. NYC's massive and diverse consumer market is also ideal for test marketing of new products and services – many startups originating from the west coast set up their sales bases there for this reason.

Nearby New Jersey, which forms part of the New York metropolitan area, hosts wide-ranging CVC groups including pharmaceutical group Astellas Pharma's Astellas Venture Management unit, oil and gas group BP's BP Ventures vehicle, chemicals producer BASF's BASF Venture Capital subsidiary, healthcare consortium Kaiser Permanente's Kaiser Permanente Ventures fund and ServiceNow

Ventures, part of enterprise software producer ServiceNow.

Networking technology producer Juniper Networks, GV and pharmaceutical firm Celgene and corporate joint venture Rafael Development Corporation follow these groups, and they are joined by other ecosystem players including Consensus Mesh, a VC firm spun out of blockchain software provider ConsenSys's Consensus Ventures unit; Evonik Venture Capital, the corporate venturing arm of speciality chemicals provider Evonik Industries; and IT services firm Wipro, which also invests through its Wipro Ventures arm.

Top US CVC investors in New York CVC deals since 2011

Investor Name	Deal Count
GV	106
Comcast Ventures	84
SoftBank Capital	74
Intel Capital	47
Bertelsmann Digital Media Investments	42
Digital Currency Group	37
Alexandria Venture Investments	26
MDC Ventures	24
American Express Ventures	24
SoftBank Group	21

Top US CVC investors in New Jersey CVC deals since 2011

Investor Name	Deal Count
Astellas Venture Management	8
BP Ventures	6
BASF Venture Capital	4
Kaiser Permanente Ventures	4
ServiceNow Ventures	3
Juniper Networks	3
GV	3
Celgene	3
Rafael Development Corporation	3
Consensus Mesh	3
Evonik Venture Capital	3
Wipro	3

Source: PitchBook

Top New York VC deals with CVC investor involvement

Company Name	Deal Size (\$m)	Round	Investor(s)	Industry Group	City
WeWork	\$5,000.00		SoftBank Group	Other	New York
WeWork	\$1,700.00	Series G	All Blue Capital, Alpha JWC Ventures, Catalyst Investors, Primary Venture Partners, SoftBank Group, SoftBank Investment Advisers, StraightPath Venture Partners, Syren Capital Advisors	Other	New York
WeWork	\$1,500.00		SoftBank Group	Other	New York
WeWork	\$690.00	Series F	Benchmark (San Francisco), China Oceanwide Holdings Group, Fidelity Management & Research, Glade Brook Capital Partners, Goldman Sachs Growth Equity, Harvard Management Company, Hony Capital, JPMorgan Chase, Janvest Capital Partners, Legend Holdings, Mortimer Zuckerman, Proioxis Ventures, Shanghai Jin Jiang International Hotels (Group) Company, Silvertech Ventures, T. Rowe Price, The Goldman Sachs Group, Troy Capital Partners, Wellington Management	Other	New York
Peloton	\$550.00	Series F	All Blue Capital, Balyasny Asset Management, Felix Capital, Fidelity Investments, Fitness Ventures, Franklin Templeton, G Squared, GGV Capital, Kleiner Perkins, NBCUniversal, Narrative Fund, Platform Ventures, QuestMark Partners, Reimagined Ventures, Schechter Private Capital, SciFi VC, TCV, Tiger Global Management, True Ventures, Wellington Management, Winslow Capital Management	Consumer Durables	New York
Compass (Real Estate Services)	\$550.00	Series E	Fidelity Investments, IVP, Lead Edge Capital, SoftBank Group, SoftBank Investment Advisers, Wellington Capital Management	Services	New York
Noom	\$540.00	Series F	Oak HC/FT, RRE Ventures, Samsung Venture Investment, Sequoia Capital, Silver Lake	Media	New York
Letgo	\$500.00		Bonsai Venture Capital, Naspers	Services	New York
Better	\$500.00		SoftBank Group	Services	New York
VICE Media	\$500.00		A&E Television Networks, InterMedia Partners, TCV, Times Bridge	Media	Brooklyn

Top New Jersey VC deals with CVC investor involvement

Company Name	Deal Size (\$m)	Round	Investor(s)	Industry Group	City
BlockFi	\$350.00	Series D	Akuna Capital, Bain Capital Ventures, Bracket Capital, Breyer Capital, CMS Holdings LLC, Castle Island Ventures, Gaingels, Hudson River Trading, Jump Capital, Kenetic Capital, Morgan Creek Digital Assets, PJC, Pacific Century Group, ParaFi Capital, Paradigm (Crypto Fund), Plexo Capital, Pomp Investments, Raptor Group, Susquehanna Government Products, The Venture Collective, Third Prime, Tiger Global Management, Valar Ventures	Software	Jersey City
Jet	\$350.00	Series B2	Advisors.Fund, Alibaba Capital Partners, Bain Capital Ventures, Fidelity Investments, GV, Norwest Venture Partners, Palm Drive Capital	Retail	Hoboken
Celularity	\$250.00	Series A	Alumni Ventures Group, Andrew Von Eschenbach, Celgene, Chestnut Street Ventures, Genting Berhad, Health Nucleus, Heritage Group, John Sculley, Section 32, Sorrento Therapeutics, United Therapeutics	Pharmaceuticals and Biotechnology	Florham Park
Valeritas Holdings	\$180.00	Series C	Abingworth Management, Advanced Technology Ventures, Agate Medical Investments, CHL Medical Partners, Kaiser Permanente Ventures, MPM Capital, ONSET Ventures, Pitango Venture Capital, The Family Office Company, Tullis Health Investors, Welsh, Carson, Anderson & Stowe	Pharmaceuticals and Biotechnology	Bridgewater
Legend Biotech	\$150.50	Series A	Blackwell Partners, Hudson Bay Capital Management, Johnson & Johnson Innovation - JJDC, Lilly Asia Ventures, RA Capital Management, SMALLCAP World Fund, The Capital Group Companies, Vivo Capital	Pharmaceuticals and Biotechnology	Piscataway
Edda Technology	\$150.00		3W Partners Capital, Orbimed, SoftBank Investment Advisers, VisionFund International	Healthcare Devices and Supplies	Princeton
Impulse Dynamics	\$140.25	Series D	Abiomed, Acorn Biosciences, Amzak Capital Management, Amzak Health, China Resources Capital Management, Kennedy Lewis Investment Management, Minth Group, Perceptive Advisors, Redmile Group, Wellington Management, ZOLL Medical	Healthcare Devices and Supplies	Marlton
Jet	\$140.00	Series B1	Accel, Alibaba Capital Partners, Bain Capital Ventures, Citi Ventures, Coatue Management, David Spector, Fidelity Investments, Forerunner Ventures, GV, General Catalyst, MentorTech Ventures, New Enterprise Associates, Norwest Venture Partners, Silicon Valley Bank, Temasek Holdings, The Goldman Sachs Group, Thrive Capital	Retail	Hoboken
Cross River Bank	\$100.00	Series B	Andreessen Horowitz, Battery Ventures, CreditEase, Kohlberg Kravis Roberts, LionTree Partners, Ribbit Capital	Commercial Banks	Fort Lee
AeroFarms	\$100.00	Series E	AllianceBernstein, Cibus Fund, GSR Ventures, Ingka Group, MissionPoint Partners, Wheatshaf Group	Agriculture	Newark

Source: PitchBook



Credit: MIT

Massachusetts

Massachusetts, and especially its capital city of Boston and its surrounding area, is home to many research and development (R&D)-heavy startups, covering areas such as life sciences, biotechnology, pharmaceutical and medical companies, thanks to Massachusetts Institute of Technology (MIT), Harvard University, Lesley University and Hult International Business School in Cambridge. Cambridge's Kendall Square has an active tech

scene that was dubbed “the most innovative square mile on the planet” by MIT.

Startups based in greater Boston concentrate their efforts on artificial intelligence, big data and robotics technologies that can be applied in the pharmaceutical and healthcare industries. GV, which has an interest in life sciences, leads the region and is joined by the similarly focused Alexandria Venture Investments, as well as SR One, the VC firm spun off by pharma firm GlaxoSmithKline.

Other pharmaceutical groups such as Novartis, Pfizer, Sanofi and Johnson & Johnson and their specialised CVC units Novartis Venture Fund, Pfizer Ventures, Sanofi Ventures and Johnson & Johnson Innovation – JJDC are among the most prolific corporate investors in the state, as are hospital operator Brigham and Women's Hospital's Mass General Brigham Innovation as well as Intel Capital, Astellas Venture Management, Celgene and GE Ventures.

Top US CVC investors in Massachusetts CVC deals since 2011

Investor Name	Deal Count
GV	113
Alexandria Venture Investments	76
SR One	41
Novartis Venture Fund	40
Intel Capital	34
Pfizer Ventures	33
Astellas Venture Management	32
Mass General Brigham Innovation	25
Celgene	25
Sanofi Ventures	24
GE Ventures	23
Johnson & Johnson Innovation - JJDC	23

Source: PitchBook

Top Massachusetts VC deals with CVC investor involvement

Company Name	Deal Size (\$m)	Round	Investor(s)	Industry Group	City
EQRx	\$570.00	Series B	ARCH Venture Partners, Alexandria Venture Investments, Andreesen Horowitz, Arboretum Ventures, Bain Capital Life Sciences, BlueCross and BlueShield Association, Casdin Capital, Dubai International Finance Centre, EXOR Seeds, GV, Intermountain Healthcare, Mubadala Investment Company, Nextech Invest, Premji Invest, Section 32	Pharmaceuticals and Biotechnology	Cambridge
ElevateBio	\$525.00	Series C	Citadel (Hedge Fund), EDBI, EcoR1 Capital, Emerson Collective, F2 Ventures, Fidelity Management & Research, Itochu, MPM Capital, Matrix Capital Management, Redmile Group, Samsara BioCapital, SoftBank Investment Advisers, The Invus Group, Vertex Ventures HC	Pharmaceuticals and Biotechnology	Cambridge
Moderna Therapeutics	\$500.00	Series G	ADS Ventures, Alexandria Venture Investments, ArrowMark Partners, BB Biotech, BB Pureos Bioventures, Banque Pictet & Cie, EDBI, Fidelity Investments, Flagship Pioneering, Julius Baer Group, Premji Invest, Sequoia Capital China, T. Rowe Price, The Abu Dhabi Investment Authority, Viking Global Investors	Pharmaceuticals and Biotechnology	Cambridge
Indigo Agriculture	\$500.00	Series F	Aberdare Ventures, FedEx, Flagship Pioneering, Lian Group, MicroVentures, Olive Tree Capital, Olive Tree Growth, Riverstone Holdings, Saltwater Capital, SchindlerAM Ventures	Agriculture	Boston
Moderna Therapeutics	\$474.00	Series F	AstraZeneca, Vertex Pharmaceuticals	Pharmaceuticals and Biotechnology	Cambridge
Moderna Therapeutics	\$450.00	Series E	Alexion, AstraZeneca, Fidelity Investments, Merck Capital Ventures, RA Capital Management, The Hartford Financial Services Group, The Invus Group, Viking Global Investors, Wellington Management	Pharmaceuticals and Biotechnology	Cambridge
GreatPoint Energy	\$420.00	Series D	Advanced Technology Ventures, Fairbridge Venture Partners, NGP Energy Technology Partners, TriplePoint Capital, Wanxiang Group	Exploration, Production and Refining	Beverly
Toast	\$400.00	Series F	9Yards Capital, Alta Park Capital, American Express Ventures, Bessemer Venture Partners, Counterpart Advisors, Durable Capital Partners, G Squared, Glynn Capital, Greenoaks Capital Partners, Light Street Capital Management, T. Rowe Price, TCV, TPG, Tiger Global Management	Software	Boston
Relay Therapeutics	\$400.00	Series C	Alexandria Venture Investments, BVF Partners, Boxer Capital, Casdin Capital, EcoR1 Capital, Foresite Capital Management, GV, Perceptive Advisors, SoftBank Investment Advisers, Tavistock Group	Pharmaceuticals and Biotechnology	Cambridge
Adagio Therapeutics	\$335.50	Series C	Adimab, ArrowMark Partners, Bain Capital Life Sciences, Federated Hermes, Fidelity Management & Research, Foresite Capital Management, GV, Mithril Capital Management, Omega Funds, OrbiMed, Polaris Partners, Population Health Partners, Premji Invest, RA Capital Management, Redmile Group	Pharmaceuticals and Biotechnology	Waltham

Source: PitchBook



Texas

In the south, Austin, Houston and Dallas form part of the Texas Triangle that count university partnerships, energy and healthcare as their forte. University of Texas at Austin's IC² Institute, dubbed the institution's "think-and-do tank", has built a cleantech and cybersecurity ecosystem.

University of Texas at Dallas helps founders grow with its Institute for Innovation and Entrepreneurship, while public-private partnership Dallas Innovation Alliance is helping execute a smart city strategy using AI.

Houston has a robust energy industry, with oil and gas majors

playing a significant role in the venture scene. Chevron Technology Ventures, Equinor Ventures, Shell Ventures, Saudi Aramco Energy Ventures, Total Carbon Neutrality Ventures and ConocoPhillips Technology Ventures are examples of such CVC outfits.

Intel Capital and Qualcomm Ventures and another semiconductor technology producer Applied Materials' Applied Ventures unit are among the most productive players in the state, alongside M12, GE Ventures, financial services and investment firm Citigroup's Citi Ventures vehicle, industrial equipment manufacturer Holt Cat's Holt Ventures subsidiary,

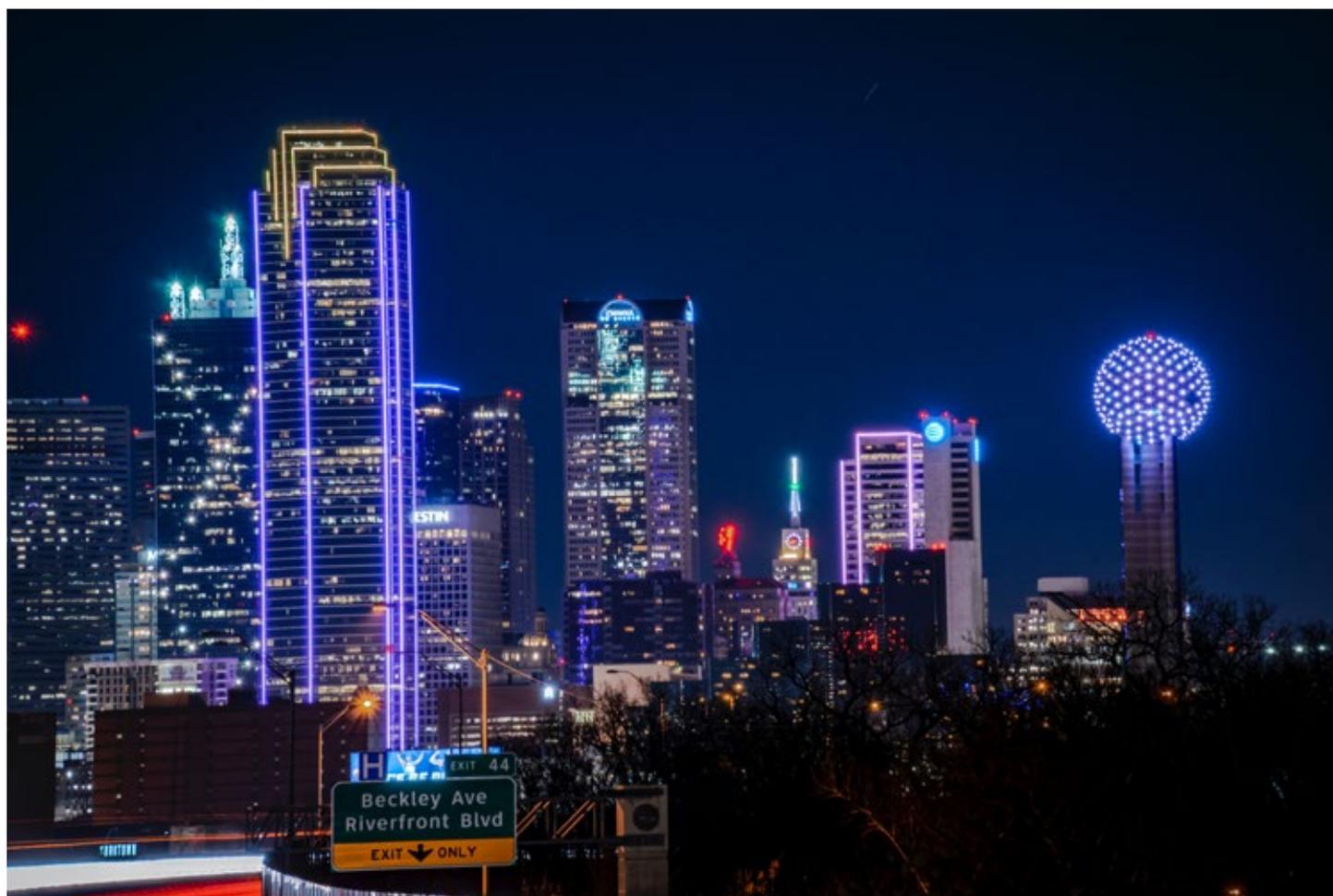
pharmaceutical group Merck's Global Health Innovation Fund and Northwestern Mutual Future Ventures, part of financial services group Northwestern Mutual.

Houston's Texas Medical Center is situated next to Rice University and has the largest medical complex in the world with more than 60 medical institutions under the nonprofit Texas Medical Center Corporation that include hospitals, universities and other academic and research institutions. National Aeronautics and Space Administration's Johnson Space Center is located in Houston and helps foster an aerospace ecosystem.

Top US CVC investors in Texas CVC deals since 2011

Investor Name	Deal Count
Chevron Technology Ventures	12
Intel Capital	11
Cathexis Ventures	11
Equinor Ventures	10
Shell Ventures	9
HOLT Ventures	9
Upslope Ventures	8
Saudi Aramco Energy Ventures	7
McCombs Partners	7
Qualcomm Ventures	7
Merck Global Health Innovation Fund	6
Total Carbon Neutrality Ventures	6
Northwestern Mutual Future Ventures	6
M12	6
GE Ventures	6
Applied Ventures	6
ConocoPhillips Technology Ventures	6
Citi Ventures	6

Source: PitchBook



Top Texas VC deals with CVC investor involvement

Company Name	Deal Size (\$m)	Round	Investor(s)	Industry Group	City
Genband	\$343.47		Intel Capital, Kinetic Ventures, One Equity Partners, Sevin Rosen Funds, Venrock	Communications and Networking	Plano
Reata Pharmaceuticals	\$299.96	Series H	AbbVie	Pharmaceuticals and Biotechnology	Plano
StackPath	\$216.00	Series B	Cox Communications, Juniper Networks	IT Services	Dallas
Fundbox	\$200.00	Series C	9Yards Capital, Allianz X, Arbor Ventures, Battery Ventures, Bezos Expeditions, Blumberg Capital, Cathay Innovation, Emil Michael, Entrée Capital, GMO Internet Group, General Catalyst, Hamilton Lane, HarbourVest Partners, Healthcare of Ontario Pension Plan, Jay Mandelbaum, Khosla Ventures, MUFG Innovation Partners, Recruit Strategic Partners, SEB Private Equity, SV Angel, Shlomo Kramer, Spark Capital, Synchrony Ventures, Thomas H. Glocer, Vikram Pandit	Software	Plano
Mozido	\$185.00	Series B	Eric Schmidt, Julian H. Robertson, MasterCard, Sheikh Nahyan, Wellington Management	Software	Austin
Peloton Therapeutics	\$150.00	Series E	BVF Partners, Casdin Capital, Curative Ventures, Driehaus Capital Management, EcoR1 Capital, Eventide Asset Management, Foresite Capital Management, Nextech Invest, Orbimed, RA Capital Management, The Column Group, Tichenor Ventures, Topspin Consumer Partners, Vida Ventures (Boston)	Pharmaceuticals and Biotechnology	Dallas
The Zebra	\$150.00	Series D	Accel, Ballast Point Ventures, Daher Capital, Floodgate Fund, KdT Ventures, Keith Melnick, Koch Disruptive Technologies, Silverton Partners, Weatherford Capital	Insurance	Austin
Preventice Solutions	\$137.00	Series B	Boston Scientific, Merck Global Health Innovation Fund, Novo Holdings, Revelation Partners, Samsung Catalyst Fund, Vivo Capital	Healthcare Devices and Supplies	Houston
HighRadius	\$125.00	Series B	Citi Ventures, ICONIQ Capital, Susquehanna Growth Equity, Susquehanna Private Capital	Software	Houston
Shattuck Labs	\$118.00	Series B	Avidity Partners, EcoR1 Capital, Emerson Collective, Fidelity Management & Research, Gray Ventures, Hatteras Venture Partners, JSR, Janus Henderson Investors, MBL Venture Capital, Partner Fund Management, Piper Sandler, Redmile Group	Pharmaceuticals and Biotechnology	Austin

Source: PitchBook



CytoSeek is on a quest for cell therapy's holy grail

- > Bristol spinout is adapting its work to solid tumours
- > 4-Day MBA programme instrumental in founding
- > Startup could have exceeded its £3.6m seed round

By Thierry Heles
Editor, Global University Venturing

Adam Perriman, professor of bioengineering at University of Bristol, is every tech transfer professional's dream faculty member. He gained his PhD from Australian National University in 2007 – not long before the global financial crisis threw the world's economies into turmoil – and immediately began pondering the benefits of spinouts, which were still a rarity at the time.

“Things were looking rough in 2008,” he told sister publication Global University Venturing. “I was looking at the world and realised that the West does not really have anything left. If we do not start commercialising all this science –

and very little was making it out beyond publishing at the time – then where does the value lie?”

Although long proven right, with spinouts an increasingly important component of knowledge transfer across the world, it would take almost a decade before Perriman found his own perfect opportunity in 2017: CytoSeek. He came up with the name when he participated in University of Bristol's 4-Day MBA programme with a view of launching a business, he disclosed.

CytoSeek's technology, he said, “is centred on artificial membrane binding proteins. We design these

protein constructs, which comprise an anchor domain that binds to the plasma membrane of cells and a functional domain that is the moiety we use to introduce added functionality to a cell.

“The functionalities that we introduce are associated with the challenges of treating solid tumours with cell therapies. For example, we can augment the cells to improve their performance in hypoxic environments – think of it as little scuba tanks we put on the cell. We can switch them on or off, which you want, for example, for T-cells.

“In practice, what we do is have the cells in vitro and put them in with a media, leave it on for 15 minutes, take it off and they are good to go.”

Initially, Perriman’s interest lay in stem cell therapies for the treatment of postmyocardial infarction, and CytoSeek’s original intellectual property was about modifying stem cells for treatment after a heart attack. But a consultant – hired at the behest of Bristol’s senior research commercialisation manager Andrew Wilson – cautioned the market opportunity for cardiac cell therapies was not worth pursuing because there were no approved treatments and nobody really understood how they might work.

However, Perriman said, CAR T cell therapy did have “one approved product and a second was just being approved but it did not work

for solid tumours, so that gave us a clear industry focus. We also had a clear problem that we could address with our technology.”

The focus on solid tumours, Perriman explained, was because these accounted for around 85% of deaths by cancer. CAR T cell therapy also already worked for certain types of leukaemia.

“Our approach is a bit of a holy grail,” he added. “If we can adopt cell therapy to solid tumours, it is going to have a massive impact. This made it a good market with an unmet challenge, and our technology is extremely flexible and could address many different components.”



Perriman works on artificial membrane binding proteins

Carolyn Porter, chief executive of CytoSeek, clarified there remained an opportunity for improving cell therapies in liquid tumours, adding: “Although our preclinical programme is focusing on proving the technology works in the context of solid tumours that does not mean that we might not do a partnership in the field of haematological malignancies in the future.”

She stressed that CytoSeek did not see itself turning into a company such as Autolus, the cancer-focused biopharmaceutical spinout from University College London that collected \$150m in an initial public offering in 2018 and that has invested large sums into building its own manufacturing capabilities.

“We anticipate that we will be executing what is a classical biotech hybrid model where we prove the technology by developing valuable products, engage in partnerships and then get acquired as our products move towards late-stage clinical trials,” she said.

When that time comes, it might not be completely the end of CytoSeek’s journey, Perriman noted. “The other opportunity for our technology is in regenerative therapies. It could well be that, as we have a platform technology, we carve these sections off. We have an amazing team and that is worth as much as the science.”

The technology also had applications in exosomes, Porter added, and there were underserved areas that the team might pursue in future under a different business model. For now, however, the eyes remained firmly on the price at hand and, following the spinout’s £3.6m (\$5m) seed round last month, CytoSeek has an 18-month to two-year runway to



Porter was ready for something outside the golden triangle

prove its technology and build its preclinical pipeline.

An immediate goal following the round was to double CytoSeek’s headcount, Porter said. The team was five full-time members of staff, with another two due to join in June, and Perriman on a half-time basis. The spinout also continues to rely on external consultants, Porter said.

The seed round’s size was impressive in a UK biotech context, but CytoSeek actually had offers for £4.5m on the table – having set out to raise only £3m. Porter noted that this gave the company the luxury of choice: “It was important to bring on board investors with the capability to follow, like Parkwalk Advisors. Science Creates Ventures (SCV) has ambitions to follow, but also Luminous Ventures. We were surprised by existing angel investors exercising pre-emption rights as well.

“Going forward, we will be looking for either corporate VCs or strategic investors to join our existing investor group. We have proof of principle, but we really want to build our preclinical package to

excite those types of investors as part of the next round.”

Of CytoSeek’s shareholders, Harry Destecroix is one of the most intriguing. In 2018, Destecroix sold his Bristol spinout Ziylo, which was working on next-generation insulin, to pharmaceutical firm Novo in a deal that, with milestone payments, exceeded \$800m. In a more unusual move, Destecroix licensed back some rights as part of the acquisition and launched Carbometrics, which is working on non-therapeutic applications such as continuous glucose monitoring products.

He also went on to become a champion for the Bristol ecosystem, first launching pre-seed incubator Unit DX with support from the university and, in December last year, expanding with seed to series A-stage incubator Unit DY and a £15m venture fund called Science Creates Ventures. Together, Unit DX, Unit DY and the fund run under the Science Creates brand.

At the time of Science Creates’ launch, Destecroix said: “Where a discovery is made has a

huge bearing on whether it is successfully commercialised. While founding my own startup, Ziylo, I became aware of just how many discoveries failed to emerge from the lab in Bristol alone.

“No matter the quality of the research and discovery, the right ecosystem is fundamental if we are going to challenge the global 90% failure rate of science startups and create many more successful ventures.”

CytoSeek became SCV’s inaugural investment but already, Porter said, Destecroix had personally invested in the spinout’s £1.19m pre-seed round in November 2019, when Parkwalk-managed University of Bristol Enterprise Fund, UKI2S and angel investors affiliated with Bristol Private Equity Club also injected capital.

Porter said: “Destecroix has phenomenal energy. When I was doing diligence on the role of CEO, I met him and his passion for the

community and for CytoSeek was apparent. And he has obviously been through an exit, which brings a network and an understanding of what you need to do help prepare a business do that.”

Porter was keen to underline Destecroix was not the only notable figure CytoSeek managed to sign up. They also included Clive Stanway, the former chief scientific officer of Cancer Research Technologies, and Keith MacDonald, who has a banking background and is the chairman of Unit DX and was chairman of Ziylo.

Parkwalk installed investment director Cassie Doherty on the board of directors. Doherty had spent more than 11 years with Parkwalk’s parent firm, IP Group, specialising in life sciences before her move in June 2019.

Porter added: “I should also mention Damian Marron, who joined our board as chairman just before the raise. He is a serial

entrepreneur who has exited a number of cell therapy companies both through M&A and IPO transactions.”

Destecroix’s support however was critical not just for the expertise and capital, but also for that aforementioned Unit DX incubator. Porter noted that, when the pandemic began, CytoSeek had been based within the university and had intended to eventually move into Unit DY – due to open later this year.

Covid threw a spanner in the works. She recalled: “We faced either mothballing the company or finding alternative facilities because I felt it would be extremely difficult to raise capital if we had not got onward progress with the science.”

CytoSeek did have a small foothold in Unit DX, renting office space for admin purposes, and that connection proved a godsend. “One company was furloughing its staff and another was moving



Harry Destecroix (fifth from left) and the Science Creates team

back into the university to help with the covid effort, and we sublet space from both of them. Other space came up that we took on permanently,” Porter noted.

Illustrating the absurdity of the early pandemic days, Perriman recollected: “We hired a big van and moved our equipment in one day. It was incredible teamwork, but you have got to do what you have got to do.”

It meant CytoSeek was able to continue working throughout lockdowns. The spinout rented more space than was needed to guarantee social distancing in the lab, and Perriman noted Unit DX quickly enacted safety measures. “There was impact, as everywhere else,” he said, “but we mitigated a lot of the stress.”

Plans to move to Unit DY remained in place, Porter said, and the spinout was staying in the Bristol ecosystem long-term. To a certain extent, the pandemic played into CytoSeek’s hand because of London-based researchers now looking for opportunities elsewhere, Perriman stated.

Porter expanded: “There is a nucleus of expertise growing in the cell and gene therapy sector in the southwest, centred around Bristol, which is great for us as a company. We are actively trying to develop those relationships.

“Bristol – not just because of the investment and the energy of people like Destecroix and the team at Science Creates, but also for us specifically in the cell and gene therapy sector – has a growing network and expertise that will keep us here and hopefully continue to enable us to attract people from London.”



Even with Perriman’s and Porter’s clear enthusiasm, CytoSeek would not have come to be without the initial grant funding it received from Innovate UK. The 4-Day MBA programme ended with a demo day, where Perriman met investors like Destecroix. But, Perriman remarked, “I did not want to take anyone’s money until I really knew what I was doing. The first Innovate UK grant, which was only £100,000, really was a point where we could spend some money and I wrote another handful of successful small grants to build the company up slowly.”

The grant, he stated, “forces you to get started, which is important, and to put in place some structure. We had an amazing monitoring officer – I got more out of the him than he got out of me.

“We ran the company without a CEO for the first year and a half. That was intentional – I could have named myself CEO, but we really wanted to hold that position open.”

Innovate UK then also took part in the pre-seed and seed rounds through UKI2S, managed by Midven – since acquired by long-

time GUV partner Future Planet Capital.

Perriman cautioned: “You have to be careful with grants though, you can get trapped by their work programmes because it is milestone driven. You need to make sure that relationship is well established with your monitoring officer – if you are open and honest with them and you do need to pivot, they are generally pretty good. But if you are not careful it can be extremely laborious.

“Once the company is moving along, most grants – unless you are writing for over £500,000 or close to £1m – are almost not worth writing unless it is strategic.”

It was a good programme, Perriman and Porter agreed and it ought to have a bigger budget. The Bioindustry Association continued to lobby the government both for more non-dilutive and equity funding, Porter said. “For companies like us, outside the golden triangle, it is really important,” she added.

It is very easy to forget, when talking to Perriman and Porter, that

this is the first time for both leading a company as chief scientific officer and chief executive, respectively. Porter began as an academic, before moving into business development and corporate finance at companies like Novartis and Ernst & Young. She then joined Oxford University Innovation, where she spun out companies like Evox and Vaccitech, which developed the technology underlying the Oxford/AstraZeneca covid vaccine.

“What attracted me to tech transfer and why I ended up here was that I had big company experience, but I was really interested in early-stage companies,” Porter revealed. “When working in Novartis, we licensed in early-stage technologies and I was at that interface. I thought it would be cool to work in the spinout community and like many people who join tech transfer organisations it was my goal to get that experience of starting new companies and then jump into one, which is what I did eventually.

“The reason I chose CytoSeek is Perriman. He was a phenomenal salesperson and I felt we could have a lot of fun. At the end of the day, and one of our investors said this, if you do not have a team that works together effectively you can have a really good technology not go anywhere.”

She continued: “We have a great working relationship and we

balance each other. That is true for the rest of the team as well, like our chief operating officer Ben Carter, who was one of Perriman’s PhD students. Perriman and Carter had already pushed the business significantly forward before I came on board.”

Porter was also interested in the Bristol ecosystem, she remarked: “I was ready for something outside the golden triangle. In addition to working on CytoSeek, I have been talking to other companies in the ecosystem and trying to set up a cell and gene therapy network.”

Would Perriman do it all again? Yes, he replied, after all CytoSeek’s creation was an intentional career move. “It is extremely exciting. I have that personality type; I am not the introverted professor in his lab and I am also practical.

“I am also really fortunate to be a UKRI Future Leaders fellow and in fact I have been on fellowships all the way through professorship, so almost all of my time is focused on research and development with little admin and a few lectures throughout the year. That is extremely important because otherwise something would have to give.

“Looking at clinical translation – taking a concept all the way through to, hopefully, a treatment – is really rewarding. At the same time, I also like the raw creativity

within a university research group. You can pursue the really mad ideas and the things that pop out from that are really innovative and almost certainly have legs for commercialisation.”

Of course, the focus remained on CytoSeek for now but, he added: “I am certainly not jaded from the process and I could definitely work with Porter again.”

The bigger question, he pondered, was balancing the company workload with his academic position. “Sometimes I am asked by investors if I would be willing to walk away from my job. But universities are really dynamic places and help with idea generation, so I do not see a way where I would have to walk away from that. But you never know.”

It was not a decision he would face anytime soon anyway, Perriman concluded: “We are really excited about the developing the next generation of cell therapies for oncology and solving the solid tumour problem.”

Both Porter’s and Perriman’s passion for and pride of CytoSeek, its team and their Bristol ecosystem clearly shines through and with the resources in place to now build its preclinical pipeline, there is little doubt CytoSeek will have a great impact. It is hardly surprising that seed round was oversubscribed.



G2 Venture Partners closes \$500m Fund II

- > Backing from Shell, Mitsui, Daimler and ABB
- > Fund focuses on sustainability in traditional industries
- > G2VP is a spinoff from Kleiner Perkins' Green Growth

By Jordan Williams
Reporter

Shell Ventures has re-upped in G2 Venture Partners' sophomore fund, which was also backed by Mitsui, Daimler and ABB Switzerland.

US-based venture capital firm G2 Venture Partners (G2VP) has closed its Fund II at \$500m with commitments from oil supplier Shell, diversified conglomerate Mitsui, carmaker Daimler and industrial technology producer ABB Switzerland.

The McKnight Foundation and John Doerr, chairman of VC firm Kleiner Perkins, also committed to the fund, according to a TechCrunch report citing a spokesperson.

Shell contributed through its corporate venturing arm, Shell Ventures. It was also a limited partner in G2VP's inaugural fund, which was sized at \$350m.

G2VP was founded in 2017 as a spinoff from Kleiner Perkins'

Green Growth fund. It focuses on companies developing emerging technologies that could accelerate sustainable transformation in traditional industries.

Robert Linck, chief investment officer of Shell Ventures, said: "This team has consistently shown vision and taken action that is ahead of the curve on many aspects of the digital industrial transition the world is in the midst of."

"The knowledge at this firm will be a significant asset to the new generation of technology leaders and pathbreakers that is emerging today."

Its portfolio companies include Proterra, the electric bus producer that agreed a \$1.6bn reverse takeover in February, computer vision software provider Scandit and autonomous commercial vehicle developer Seegrid.

Monthly data

Big rise in June

- > Higher deal numbers and dollars
- > Higher number of exits versus same month last year
- > Funding initiatives also up in number and dollar value

By Kaloyan Andonov
Analyst

The world started 2021 with the hope it could leave the covid-19 pandemic behind, thanks to vaccines. This optimism has pervaded the investment world and investing is in full swing. The

record rise in capital raised in June, following encouraging progress since March, shows how sustained this bullishness appears to be. Exits and funding initiatives also made significant inroads.

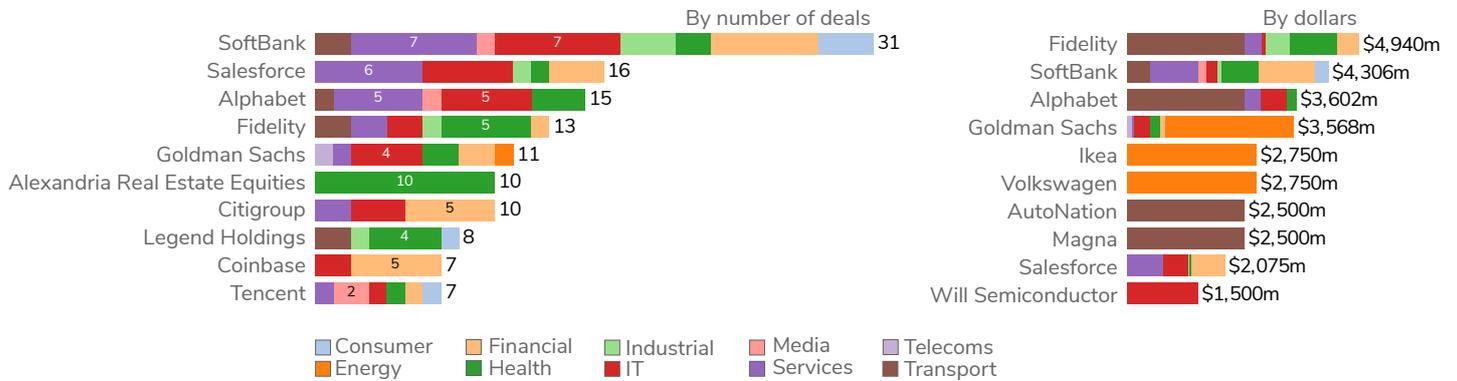
Deals
520

Exits
79

Funding
initiatives
29

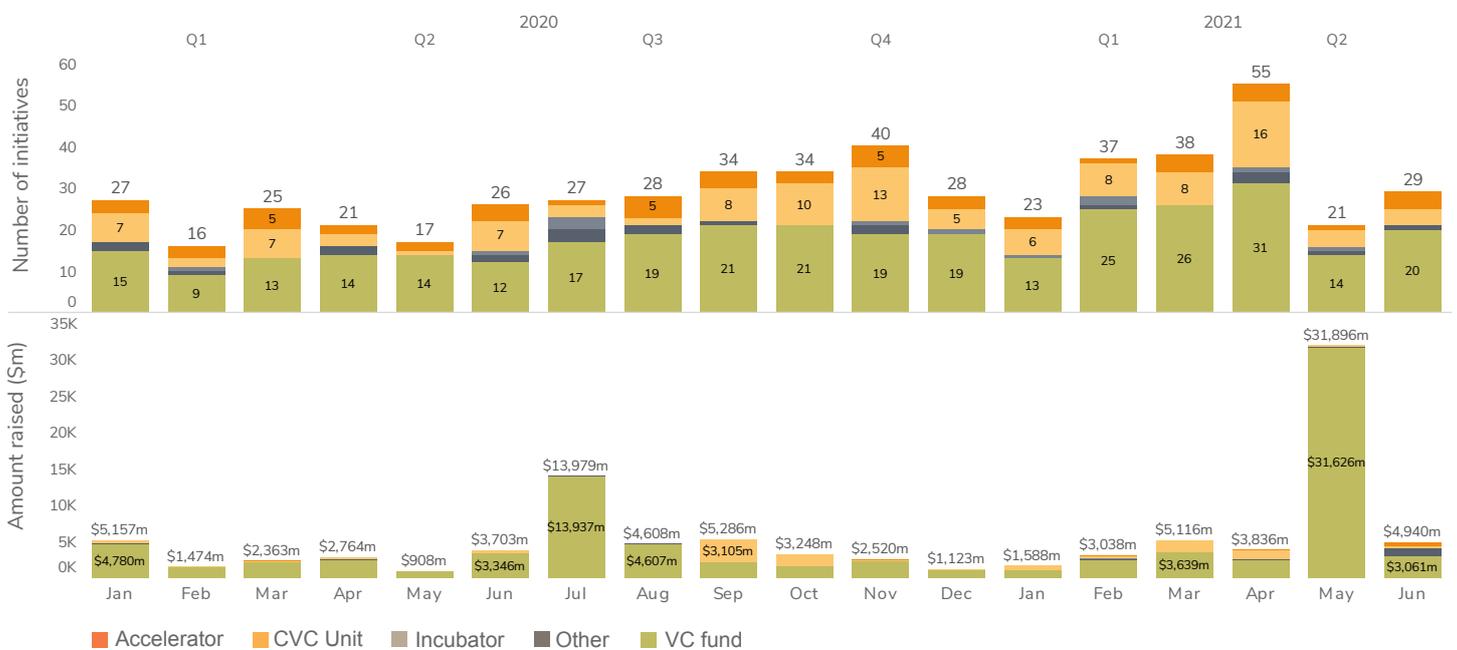
Top investors

The leading corporate investors by number of deals were telecoms and internet conglomerate SoftBank cloud enterprise software provider Salesforce and diversified internet conglomerate Alphabet. In terms of involvement in the largest deals, financial services firm Fidelity was on the top of the list along with Softbank and Alphabet.



Funding initiatives

GCV Analytics reported 29 corporate-backed funding initiatives, including VC funds, new venturing units, incubators, accelerators and other. This figure was comparable with the one from May 2020, which registered 26 initiatives. The estimated capital stood at \$4.94bn, nearly 34% up from \$3.70bn from the same month last year.

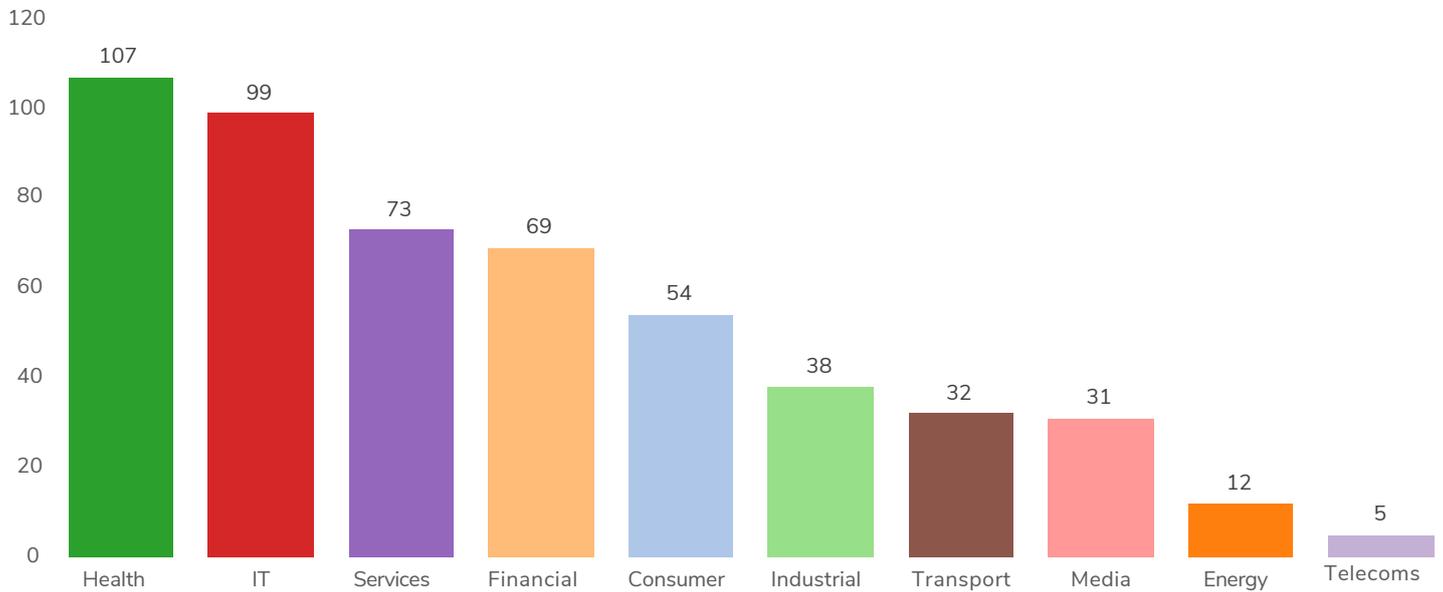


Source: GCV Analytics

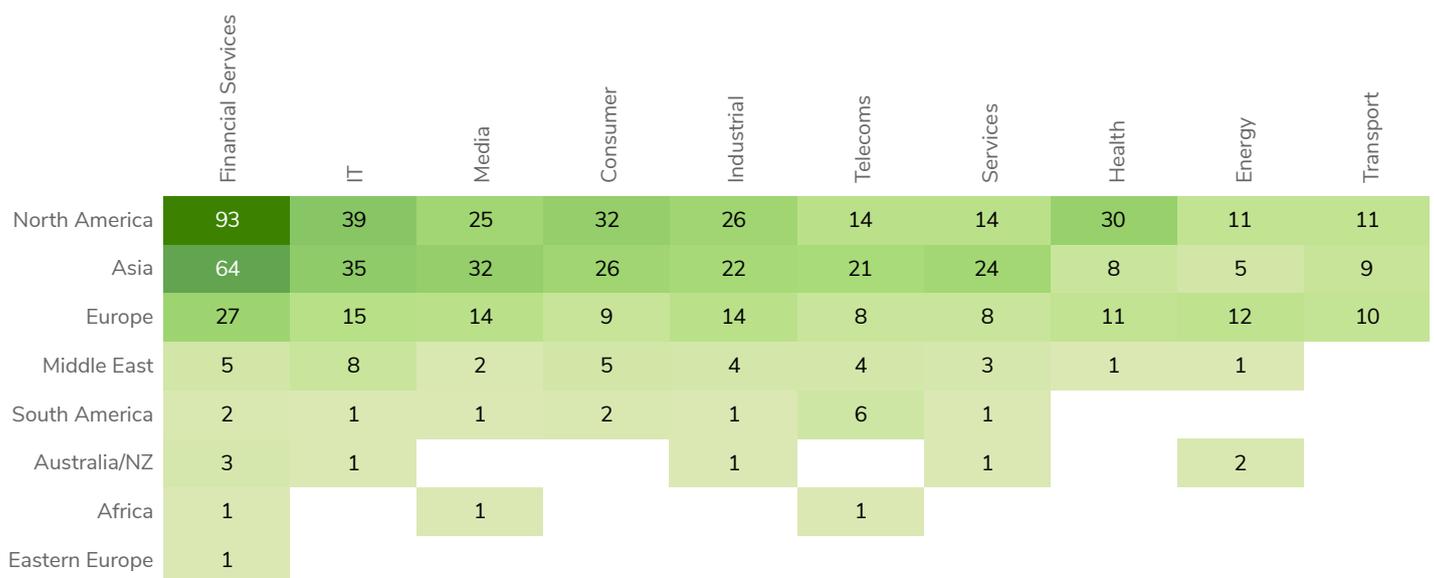
Deals

By sector

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



Heatmap



Source: GCV Analytics

Top 10 deals

Portfolio company	Location	Sector	Round	Round size (\$m)	Co-Participant List
Northvolt	Sweden	Energy	Undisclosed	\$2.75bn	AMF AP1 AP2 AP3 AP4 ATP Baillie Gifford Baron Capital Group Bridford Investments Compagnia di San Paolo EIT InnoEnergy Goldman Sachs Ikea Norrskan Foundation Omers PCS Holding private investors Stena Metall Volkswagen
Waymo	USA	Transport	Undisclosed	\$2.5bn	Alphabet Andreessen Horowitz AutoNation Canada Pension Plan Fidelity Magna Mubadala Perry Creek Capital Silver Lake T Rowe Price Temasek Tiger Global Management
Horizon Robotics	China	IT	C	\$1.5bn	BOE Technology Group Will Semiconductor
Nubank	Brazil	Financial Services	E and beyond	\$750m	Absoluto Partners Advent International Berkshire Hathaway Canada Pension Plan MSA Capital Sands Capital Verde Asset Management
WeFox	Germany	Financial Services	C	\$650m	Alma Mundi Ventures CreditEase Eurazeo FinTLV G Squared GR Capital Horizons Ventures LGT Group Merian Ventures Mountain Partners Mubadala Omers Partners Group Salesforce Seedcamp Sound Ventures SpeedInvest Target Global Ventures Victory Park Capital (VPC)
Klarna	Sweden	Financial Services	Undisclosed	\$639m	Adit Ventures Honeycomb Asset Management SoftBank Westcap Investment Partners
CMR Surgical	UK	Health	D	\$600m	Cambridge Innovation Capital Chimera Investments General Electric LGT Group PFM Health Sciences SoftBank Tencent UK Railways Pension Scheme (RPMI Railpen) Watrium
OneWeb	USA	Telecoms	Undisclosed	\$500m	Bharti Enterprises
Circle	USA	Financial Services	Undisclosed	\$440m	Atlas Merchant Capital Breyer Capital Digital Currency Group Fidelity FTX Intersection Fintech Ventures Marshall Wace Pillar private investors Valor Capital Willett Advisors
Trulioo	Canada	Services	D	\$394m	American Express Blumberg Capital Citigroup Santander TCV

Source: GCV Analytics

1 Automotive manufacturers Volkswagen invested \$620m to co-lead a \$2.75bn private placement for Sweden-headquartered battery producer Northvolt that also featured commercial vehicle producer Scania.

The round was co-led by investment bank Goldman Sachs' Asset Management subsidiary, pension funds AP1, AP2, AP3, AP4 and Omers Capital Markets, a vehicle for pension fund manager Omers, among other investors.

Northvolt manufactures lithium-ion batteries for use in electric vehicles, portable electronics products such as drones and renewable energy storage. The financing will support the expansion of the company's Gigafactory from a capacity of 40 GWh per year to 60 GWh per year. The company is considering building another two facilities by 2030 to handle a projected increase in demand.

2 Waymo, the autonomous driving technology developer spun off by US-based technology group Alphabet, raised \$2.5bn in funding from investors including its former parent company. Automotive retailer AutoNation and automotive component manufacturer Magna International took part in the round, as did Fidelity Management & Research, among other investors.

Waymo is developing an autonomous driving system called Waymo Driver for use in driverless taxis, package delivery vehicles and freight trucks. It has launched an autonomous taxi service in the US city of Phoenix and has a logistics offshoot dubbed Waymo Via. The funding will be used to enhance Waymo Driver, which has powered test drives in some 25 US cities, in addition to upping headcount.

3 China-based semiconductor technology developer Horizon

Robotics raised \$1.5bn in series C7 funding from electronic parts manufacturer BOE Technology and chipmaker Will Semiconductor. The round was secured at a \$5bn valuation, and came after a \$300m series C6 round at an unspecified time that included Legend Capital, the venture capital firm formed by conglomerate Legend Holdings, investment firm Huangpu River Capital and unnamed other entities.

Founded in 2015, Horizon is working on artificial intelligence (AI) algorithm-equipped chips for applications in areas including autonomous mobility, security cameras and internet-of-things devices.

4 Brazil-based digital bank operator Nubank secured \$750m in an extension led by conglomerate Berkshire Hathaway to increase its series G round to \$1.15bn. Absoluto Partners, Advent's Sunley House Capital, Canada Pension Plan

Investment Board, MSA Capital, Sands Capital and Verde Asset Management also took part in the extension, which reportedly valued the company at \$30bn. The round's \$400m first close took place in January and featured internet group Tencent. It was co-led by Singaporean sovereign wealth fund GIC and investment advisers Whale Rock and Invesco at a \$25bn valuation, investing alongside Dragoneer, Ribbit Capital and Sequoia Capital.

Founded in 2013, Nubank provides online bank accounts that come with a no-fee credit card and which are accessible through a mobile app. It initially catered to customers in its home country and has since expanded into other Latin American countries including Mexico, Colombia and Argentina.

5 Germany-based digital insurance provider Wefox completed a \$650m series C round that included online lending platform developer Creditease and Salesforce Ventures, the investment arm of Salesforce. The round was led by VC firm Target Global and included Omers Ventures, Gsquare, Merian and its Jupiter subsidiary, Horizons Ventures, Eurazeo, Mubadala, Speedinvest, LGT, Alma Mundi Ventures, Victory Park Capital, GR Capital, Mountain Partners, Seedcamp, Sound Ventures, Partners Group and FinTLV.

Wefox has built a digital insurance platform which offers coverage through intermediaries and which it says is already profitable. The round valued it at \$3bn post-money and hiked its overall funding to roughly \$940m. It is the largest

series C round by an insurance technology provider.

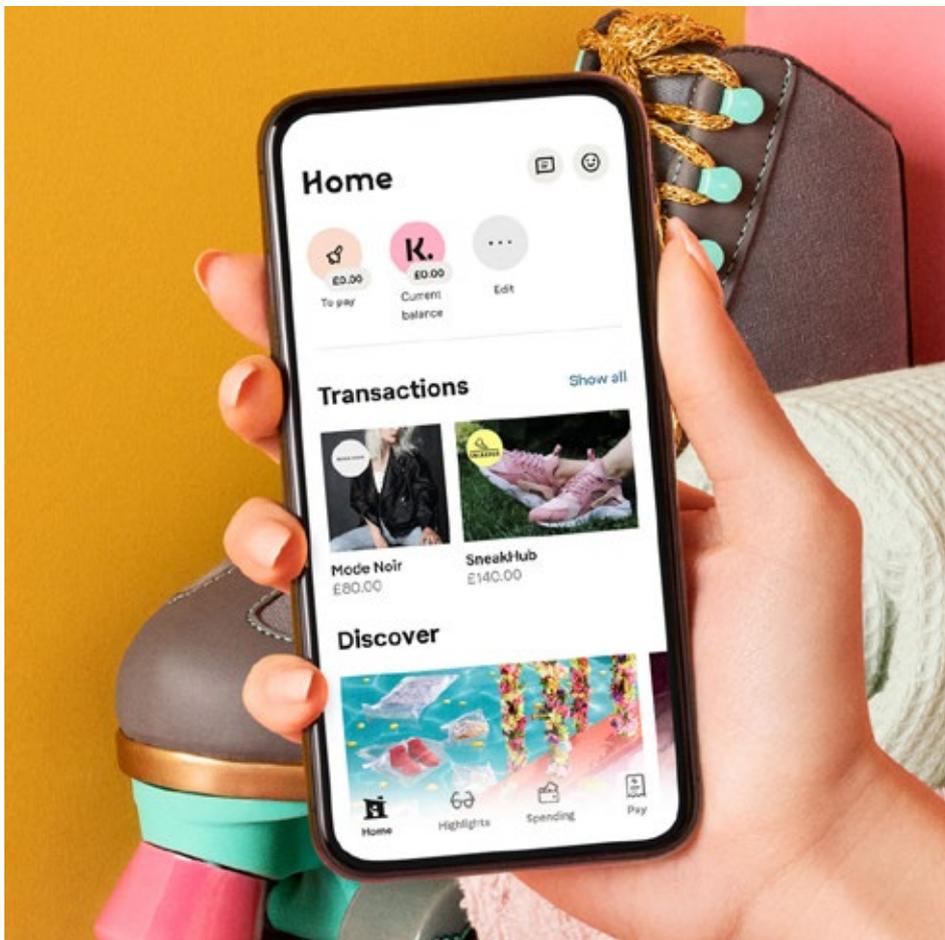
6 Sweden-based payment software provider Klarna secured \$639m in a round led by SoftBank's Vision Fund 2. Adit Ventures, Honeycomb Asset Management and WestCap Group filled out the round, which valued the company at about \$46bn.

Founded in 2005 as Kreditor, Klarna runs a payment scheme that enables e-commerce customers to pay per month after their purchase. It will use the cash for global expansion, having recently opened a branch in France.

7 SoftBank's Vision Fund 2 co-led a \$600m series D round for UK-headquartered surgical robotics technology developer CMR Surgical, along with healthcare investment group Ally Bridge. GE Healthcare, a subsidiary of power and industrial technology conglomerate General Electric, also took part in the round, which valued the company at \$3bn, as did Tencent. RPMI Railpen and Chimera filled out the consortium with existing backers including LGT and its Lightrock affiliate, Watrium, Cambridge Innovation Capital (CIC) and PFM Health Sciences.

CMR is the creator of Versius, a surgical robotics system intended to make keyhole surgery possible for a significantly wider range of patients. The cash will support the commercialisation of its technology.

8 UK-headquartered low earth orbit satellite technology developer OneWeb secured \$500m from diversified conglomerate Bharti Enterprises, which exercised a call option from a shareholder's



Klarna operates a buy-now-pay-later scheme



CMR surgical robot in use

agreement to increase its stake to 38.6%. The company is developing a constellation of 650 low earth orbit satellites through which it intends to offer global broadband connectivity. The financing preceded the launch of 36 OneWeb satellites. The company filed for bankruptcy in March 2020 after failing to secure new funding in the wake of the pandemic.

Bharti and the UK government bought OneWeb's assets for \$1bn in July 2020. OneWeb has since raised funding from pre-bankruptcy investors including fellow satellite operator Eutelsat Communications, which agreed to invest \$550m in exchange for approximately 24% of its shares in April 2021.

9 US-based blockchain payment platform developer Circle closed

a \$440m round that included cryptocurrency exchange FTX. It was reportedly the largest round so far for a crypto-focused company.

Financial services and investment groups Fidelity and Digital Currency Group also took part in the round, as did Atlas Merchant Capital, Breyer Capital, Intersection Fintech Ventures, Marshall Wace, Pillar VC, Valor Capital Group, Willett Advisors and Michael J Price and Friends.

Founded in 2013, the blockchain platform provides peer-to-peer financial software which helps users invest, transfer and trade virtual and traditional currencies. It claims to have supported more than 100 million transactions that total tens of billions of dollars altogether.

10 Canada-based identity authentication technology producer Trulioo secured \$394m in a series D round valuing it at \$1.75bn that included payment services provider American Express and financial services firm Citi. Growth equity firm TCV led the round, which included VC firms Blumberg Capital and Mouro Capital – the latter sponsored by financial services firm Santander. American Express and Citi invested through American Express Ventures and Citi Ventures respectively.

Founded in 2009, Trulioo has built a software tool that helps organisations such as banks to verify their clients' identity to avoid money laundering and other financial frauds.

Top 10 exits

Portfolio company	Location	Sector	Exit type	Acquirer	Exit size (\$m)	Co-Participant List
Didi Chuxing	China	Transport	IPO		\$4.44bn	Alibaba Apple Bank of Communications BlackRock Booking Holdings CDC Capital International Chia Life China Investment Corporation China Merchants Bank Citic Coatue DST Global eHi Car Rental GSR Ventures Matrix Partners Mubadala New Horizon Capital Ping An Bank Silver Lake Sina SoftBank Temasek Tencent Tiger Global Management Toyota Uber
Tink	Sweden	Financial Services	Acquisition	Visa	\$2.1bn	ABN Amro Creades Dawn Capital Eurazeo Heartcore Capital HMI Capital Insight Partners Nordea Nordnet Opera PayPal Poste Italiane private investors SEB Sunstone Capital
Iora Health	USA	Health	Acquisition	One Medical	\$2.1bn	.406 Ventures Alphabet Cox Enterprises Devonshire Investors Fidelity Flare Capital Partners General Electric Humana Khosla Ventures Polaris Venture Partners PremjiInvest Rice Management Company Temasek
Depop	UK	Consumer	Acquisition	Etsy	\$1.62bn	Balderton Capital Creandum General Atlantic Georg von Holtzbrinck H-Farm Lumar Octopus Ventures private investors Red Circle Investments TempoCap
Manbang Group	China	Services	IPO		\$1.57bn	Advanced Technology Investment Company (ATIC) All-Stars Investment Alphabet Baidu China Structural Reform Fund Corporation DCM Fidelity Genesis Capital GSR Ventures Hillhouse Capital Management International Finance Corporation (IFC) Lightspeed China Partners Lightspeed Venture Partners Ontario Teachers' Pension Plan Board Permira Sequoia Capital SoftBank Tencent Tiger Global Management Ward Ferry YF Capital Zhongding Capital
Marqeta	USA	Financial Services	IPO		\$1.41bn	83North Coatue Commerzbank CreditEase Geodesic Capital Goldman Sachs Granite Ventures IA Capital Iconiq Capital Lone Pine Capital Mastercard private investors Spark Capital Visa Vitruvian Partners
MessageMedia	Australia	IT	Acquisition	Sinch	\$1.3bn	Essex Investment Management Company Kingdon Capital Pequot Ventures Pogue Capital Management SoftBank undisclosed investors Van Wagoner Capital
SentinelOne	USA	IT	IPO		\$1.22bn	Accel Partners Anchorage Capital Data Collective Granite Hill Capital Partners Insight Partners NextEquity Partners Qualcomm Redpoint Ventures Samsung Sequoia Capital SineWave Ventures Sound Ventures Third Point Ventures Tiger Global Management undisclosed investors Vista Equity Partners Westly Group
Nutmeg	UK	Financial Services	Acquisition	JP Morgan Chase	\$980m	Convoy Goldman Sachs Schroders
Kanzhun	China	Services	IPO		\$912m	Banyan Capital Capital Today Ceyuan Ventures Coatue CTG Evergreen Investment Delicate Master Gaorong Capital GGV Capital Goldman Sachs Heyu Capital Hina Group Huaxing Capital Partners Inspiring Link Meridian Capital MSA Capital Shunwei Capital Sunshine Life Tencent

Source: GCV Analytics

1 China-headquartered ride hailing service provider Didi Global went public in a \$4.44bn IPO on the New York Stock Exchange. The company has been backed by multiple corporates, including SoftBank, Tencent, e-commerce company Alibaba, insurance firms China Life and Ping An, electronics producer Apple, online travel agency Booking Holdings, car rental service eHi and social media company Sina Weibo. Didi increased the number of shares in the offering from 288 million to approximately 317 million American Depositary Shares (ADSs), with four

ADSs equalling one class A share, pricing them at the top of the IPO's \$13 to \$14 range.

Formed by the merger of peers Didi Dache and Kuaidi Dache in 2015 and formerly known as Didi Chuxing, Didi runs an on-demand ride service spanning its home country but has presence in Russia, Africa, Latin America, Central Asia and the Asia Pacific regions as well. It also offers food and package delivery in addition to automotive and financial services.

2 Payment services firm Visa agreed to acquire Sweden-based open banking

software provider Tink for €1.8bn (\$2.1bn), facilitating an exit for a host of corporates – postal service Poste Italiane, banking firms SEB, Nordnet, ABN Amro, BNP Paribas, Nordea as well as digital payment services provider PayPal.

The company has built an open banking platform that enables financial services companies to share customer data and build new features such as personal finance management tools.

It has integrated its application programming interface with more than 3,400 banks and financial services organisations.



An Iora Health doctor speaks to a patient

3 Primary care provider One Medical agreed to buy Iora Health, a US-based peer backed by health insurer Humana and automotive and media group Cox Enterprises, in a \$2.1bn all-share deal. The deal will give Iora's shareholders a 26.1% stake in the merged business. One Medical floated in January 2020 in a \$245m initial public offering giving it a valuation of roughly \$1.7bn following venture funding from investors including Alphabet's GV unit. Founded in 2010, Iora runs a network of 47 clinics offering healthcare to recipients on federal health insurance scheme Medicare, many of whom are senior citizens. Its activities will complement One Medical's customer base, most of whom are privately insured.

4 E-commerce marketplace Etsy agreed to acquire Depop, the UK-headquartered social commerce platform developer backed by consultancy group Lumar, for more

than \$1.62bn. The deal came after roughly \$100m in funding for Depop since it was founded in 2011. In 2016, it had raised \$8.25m round, which featured Lumar. Depop operates a mobile platform with 30 million registered users – 90% of whom are under 26 years of age – who can buy and sell secondhand and new fashion items in addition to offering styling services. It generated \$70m in revenue in 2020.

5 China-headquartered trucking services platform developer Full Truck Alliance, also known as Manbang Group, secured almost \$1.57bn in an IPO, giving an exit to corporates SoftBank, Alphabet, Baidu and Tencent. The offering consisted of 82.5 million ADSs, each representing 20 ordinary shares, issued on the New York Stock Exchange and priced at the top of its \$17 to \$19 range.

Ontario Teachers' Pension Plan

Board and an affiliate of Mubadala Investment Company bought \$100m of shares each through a private placement. Full Truck Alliance operates a digital freight platform that gives shippers access to a network of some 2.8 million trucks, utilising artificial intelligence to increase efficiency. The company made a \$532m net loss in 2020 from just over \$395m in revenue.

6 Marqeta, a US-headquartered card-issuing platform developer backed by financial services firm CommerzBank, online lending marketplace CreditEase and payment services providers Visa and Mastercard, closed its IPO at approximately \$1.41bn. The company raised an initial \$1.22bn in the offering, issuing 45.5 million class A shares on the Nasdaq Global Select Market priced at \$27 each. The underwriters also took up the option to buy more than 6.8 million more shares. The IPO followed more than \$526m

in funding for the company, which had raised an undisclosed amount from Mastercard in October 2020.

Founded in 2010, Marqeta has built a technology platform that enables businesses issue physical or virtual payment cards as well as settle payment transactions. It made a \$47.7m net loss in 2020 from \$290m in revenue.

7 Customer engagement software developer Sinch agreed to acquire Australia-based mobile messaging platform developer MessageMedia in a \$1.3bn transaction facilitating an exit for SoftBank. The deal consisted of \$1.1bn in cash, with the remainder to be supplied in the form of 1.1 million new Sinch shares. It followed reports publicly listed Sinch had raised \$1.1bn from investors including SoftBank and Singaporean state-owned investment firm Temasek. MessageMedia has built an online messaging platform that helps small and medium-sized businesses communicate and interact with their customers over mobile. It processes more than 5 billion mobile messages each year and is used by more than 60,000 customers.

8 SentinelOne, a US-based cybersecurity technology producer backed by mobile chipmaker Qualcomm and

consumer electronics manufacturer Samsung, raised more than \$1.22bn in an upsized IPO. The offering consisted of 35 million shares issued on the New York Stock Exchange, increased from an initial allocation of 32 million, priced at \$35.00 each, above its \$31 to \$32 range. Existing SentinelOne investors Tiger Global Management, Insight Partners, Third Point Ventures and Sequoia Capital had agreed to acquire \$50m more shares through a concurrent private placement. The IPO price valued the company at approximately \$8.92bn. Founded in Israel, SentinelOne provides extended detection and response services through a cybersecurity software platform that works across endpoints, containers, cloud workloads and connected devices.

9 Financial services group JPMorgan Chase agreed to buy UK-headquartered digital wealth manager Nutmeg, enabling financial services firm Fubon Financial Holdings and investment banks Goldman Sachs and Schroders to exit. Although the companies did not officially disclose the size of the transaction, a source close to the deal told Reuters it was sized at nearly £700m (\$980m).

Nutmeg operates a digital platform which manages

investments for some 140,000 customers, offering a range of products including passively managed exchange-traded funds powered by JP Morgan Chase's asset management business, JPMorgan Asset Management. The company is being bought to be the centrepiece of JPMorgan Chase's international retail digital wealth management activities as it prepares to launch Chase as a digital bank in the UK.

10 Kanzhun, a China-based online job portal operator backed by Tencent and insurance firm Sunshine Life, floated in a \$912m IPO on the Nasdaq Global Select Market. The company issued 48 million American depositary shares (ADSs), each representing two ordinary shares, priced at the top of the IPO's \$17 to \$19 range. The subsequent price action giving the company a market capitalisation of over \$15bn. Founded in 2014, Kanzhun is the developer of a big data-equipped social recruitment platform called Boss Zhipin which focuses on corporate reviews, employer branding and employee information sharing.

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



Analytics

Quarterly data

Corporate venturing keeps strong momentum in Q2

- > Record number of deals and dollars
- > Highest level of exits and exit dollars
- > Unparalleled amount of funds and capital

By Kaloyan Andonov
Analyst

At the end of the second quarter last year most of us were still in shock from the covid-19 pandemic and in a lockdown. Few at the time could have imagined the momentum public and private markets would gain a year later.

The second quarter of 2021 seems to be just another page in this

bullish story, with virtually every metric reaching a record high.

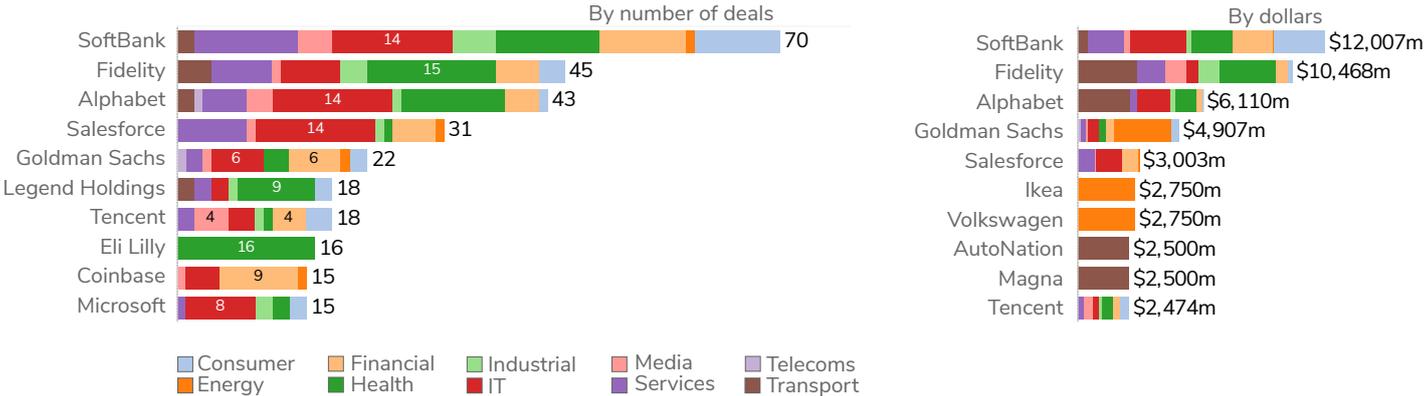
The number of rounds was 49% higher than in Q2 2020, with capital up 161%. Corporates piled \$40.67bn into funding initiatives, though this is skewed by SoftBank committing \$30bn to its second Vision Fund.

Deals
1,263

Exits
193

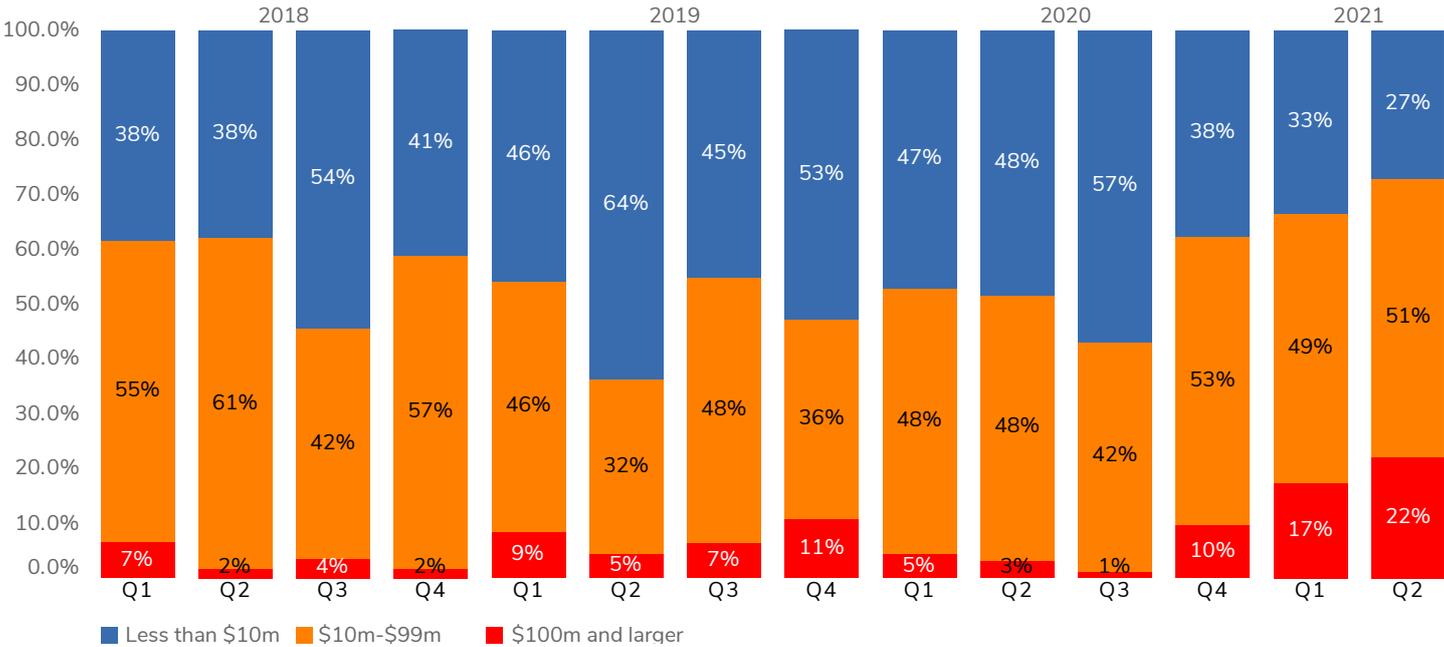
Funding initiatives
105

Top investors



The leading investors by number of deals were diversified telecoms and internet conglomerate SoftBank, financial services firm Fidelity, internet conglomerate Alphabet and cloud enterprise software provider Salesforce. The list of corporate venturers involved in the largest deals by size was headed also by SoftBank, Fidelity and Alphabet.

Corporate-backed deals by size



Source: GCV Analytics

Another interesting indicator is the relative proportions of small (>\$10m), medium (\$11–\$99m) and large (>\$100m) deals. In Q1 and Q2, the relative share of large deals increased significantly versus the previous year. It is higher even than the last quarter of 2020, when we first detected such an increase. This implies valuations of more and more corporate-backed companies are surging. Are private markets getting a little too frothy?

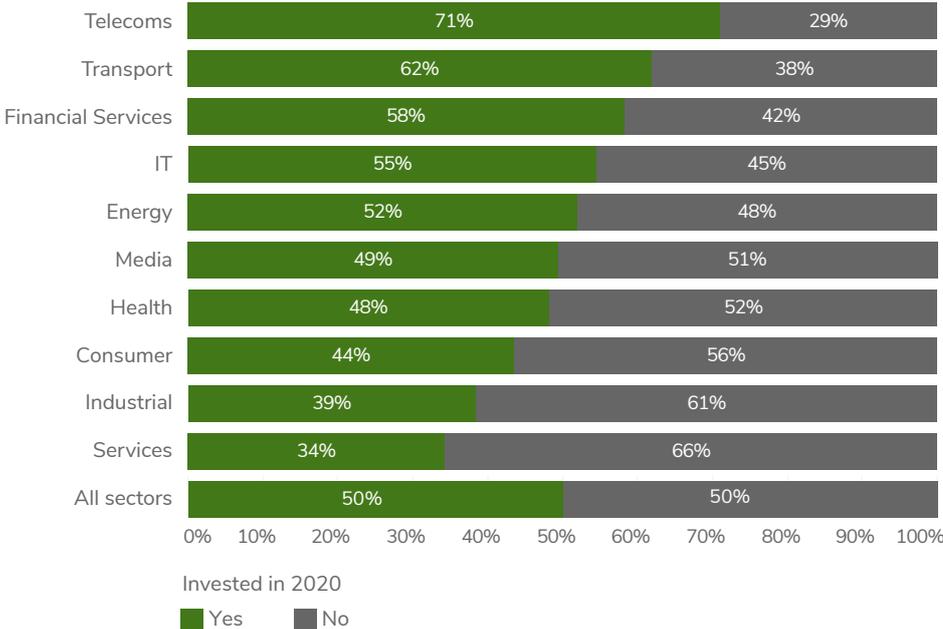
Whether this is a “good” or “bad” development is debatable. One possible interpretation is corporates have been able to position themselves in promising emerging businesses that are now becoming leaders in their space, which is reflected in valuations and may translate into juicier exits down the road. The opposite view is that corporates have deliberately jumped on the bandwagon of overpriced venture-backed private companies, as their investment mandates are partly strategic in nature. Another interpretation would be that the liquidity flood from central banks in connection with the pandemic is causing bubbles across various asset classes, including venture capital, and that these bubbles may eventually burst, painfully.

First-time vs repeating investors



Most of the corporate investors taking minority stakes during the second quarter were investors that have done at least one deal before (73%). However, one out of every four (27%) corporates were disclosing their first minority stake deal during this quarter. There appears to be a trend of newcomers to venturing – whether having a specific venturing unit or not – comprising roughly a fifth to a fourth of all corporate investors from 2018 onwards. Previously, the proportion of first-time corporate investors was consistently lower than 20%.

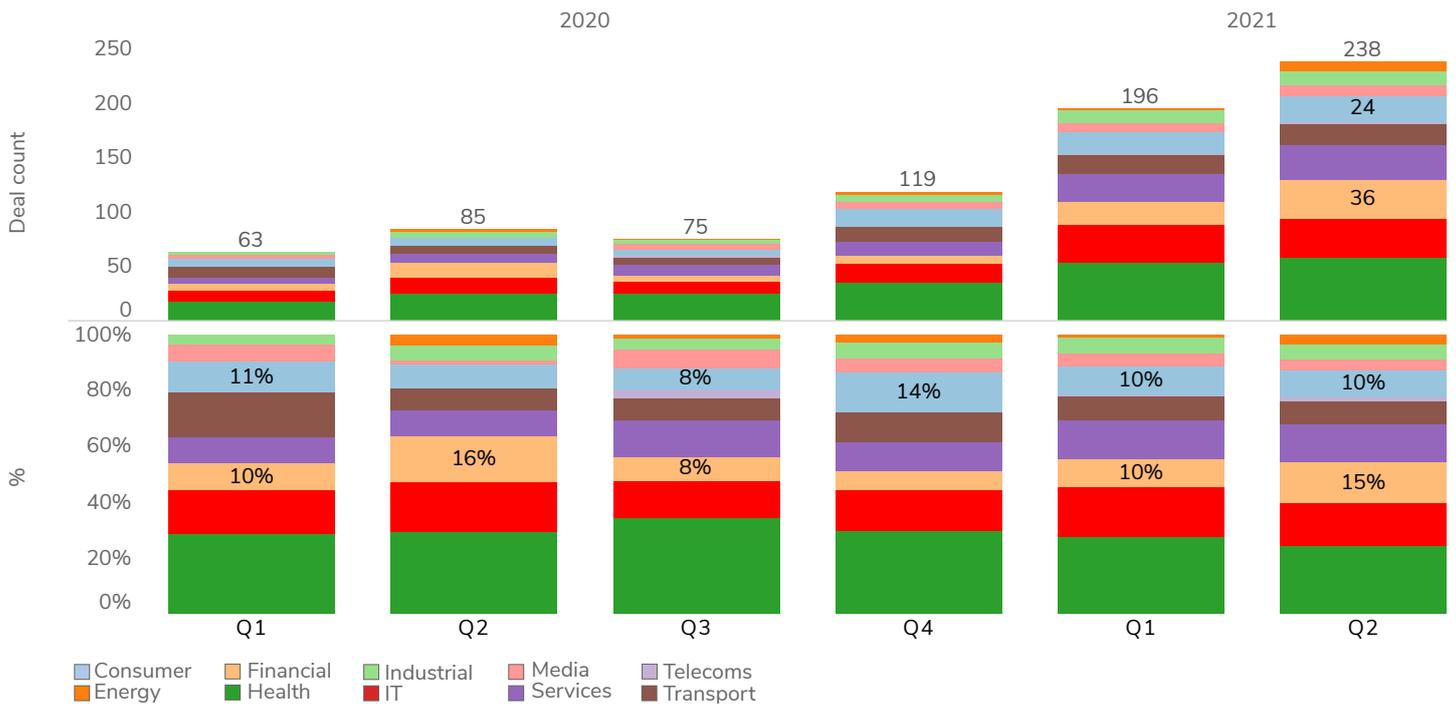
Returning investors from 2020



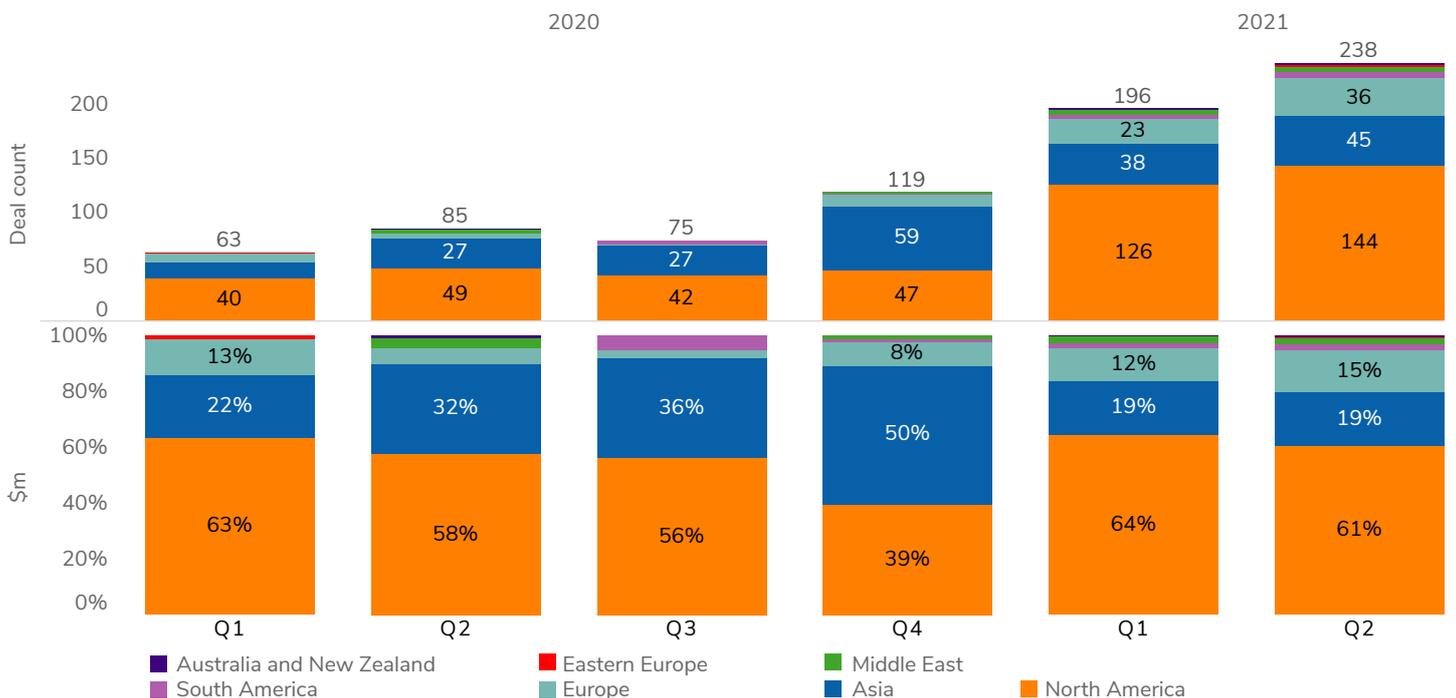
Our data also suggest half of the corporate investors that had participated in at least one minority stake round last year have already returned as investors during the first six months of 2021. In some sectors, notably, the proportion of returning investors is considerably higher – telecoms (71%), transport (62%), financial services (58%) and IT (55%).

Source: GCV Analytics

Top deals by sector (\$100m or larger)



Top deals by geography (\$100m or larger)

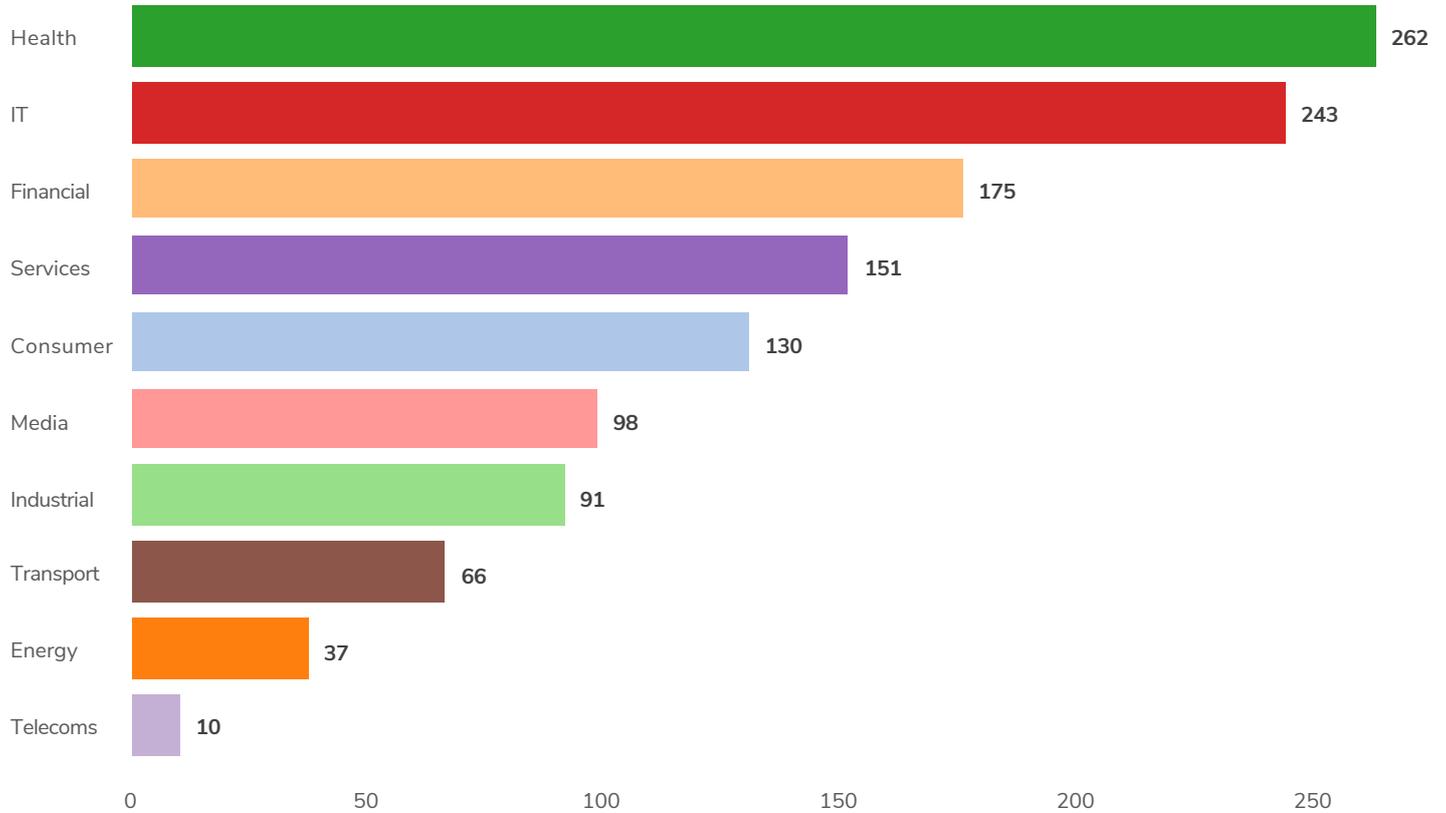


Source: GCV Analytics

While we cannot predict the future, we can analyse the spread of this expansion across sectors and geographies. The surge appears to have started in the last quarter of 2020 and accelerated in the first half of this year. Geographically, it is concentrated in North America, particularly in the United States, which accounts for slightly more than 60% of all large deals in H1, compared with less than 60% in most previous quarters. There does not seem to be a specific concentration of large deals in a particular sector, as most sectors have retained their relative share, except for deals in financial services. Fintech startups have increased their relative share of the total in the second quarter of 2021 (15% versus 10% in Q1 of this year).

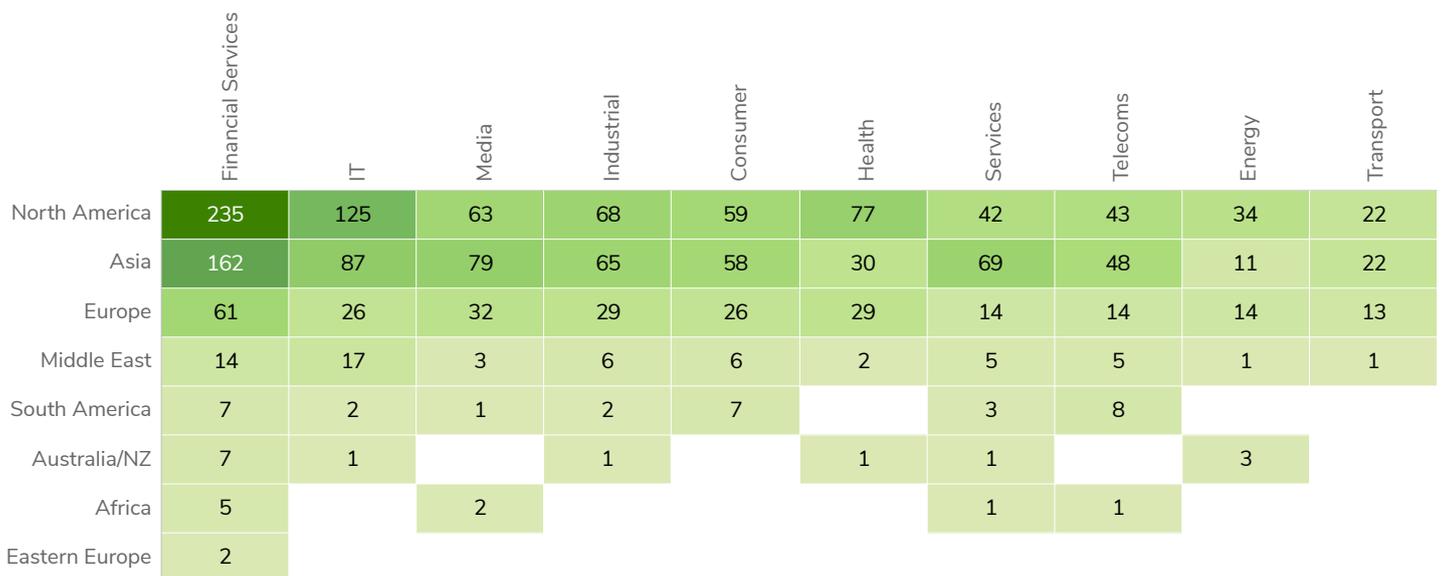
Deals

By sector



Heatmap

The most active corporate investors came from the financial services, IT, media and industrial sectors.



Source: GCV Analytics

Top deals

Company Name	Location	Sector	Round	Round Size	Investors List
Northvolt	Sweden	Energy	Undisclosed	\$2.75bn	AMF AP1 AP2 AP3 AP4 ATP Baillie Gifford Baron Capital Group Bridford Investments Compagnia di San Paolo EIT InnoEnergy Goldman Sachs Ikea Norrskan Foundation Omers PCS Holding private investors Stena Metall Volkswagen
Waymo	USA	Transport	Undisclosed	\$2.5bn	Alphabet Andreessen Horowitz AutoNation Canada Pension Plan Fidelity Magna Mubadala Perry Creek Capital Silver Lake T Rowe Price Temasek Tiger Global Management
Horizon Robotics	China	IT	C	\$1.5bn	BOE Technology Group Will Semiconductor
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
Perch	USA	Consumer	A	\$775m	SoftBank Spark Capital Victory Park Capital (VPC)
Nubank	Brazil	Financial Services	E and beyond	\$750m	Absoluto Partners Advent International Berkshire Hathaway Canada Pension Plan MSA Capital Sands Capital Verde Asset Management
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
WeFox	Germany	Financial Services	C	\$650m	Alma Mundi Ventures CreditEase Eurazeo FinTLV G Squared GR Capital Horizons Ventures LGT Group Merian Ventures Mountain Partners Mubadala Omers Partners Group Salesforce Seedcamp Sound Ventures SpeedInvest Target Global Ventures Victory Park Capital (VPC)
Trax	Singapore	IT	E and beyond	\$640m	BlackRock Omers SoftBank Sony
Klarna	Sweden	Financial Services	Undisclosed	\$639m	Adit Ventures Honeycomb Asset Management SoftBank Westcap Investment Partners
WealthSimple	Canada	Financial Services	Undisclosed	\$610m	Alkeon Capital Allianz Base10 Partners Dragoneer Investment Group DST Global Greylock Partners Iconiq Capital iNovia Capital Meritech Capital Partners Plus Capital Redpoint Ventures Sagard Holdings Steadfast Venture Capital TCV TSV undisclosed investors
CMR Surgical	UK	Health	D	\$600m	Cambridge Innovation Capital Chimera Investments General Electric LGT Group PFM Health Sciences SoftBank Tencent UK Railways Pension Scheme (RPMI Railpen) Watrium
OneWeb	USA	Telecoms	Stake purchase	\$550m	Eutelsat

Source: GCV Analytics

Emerging enterprises from the health, IT and fintech sectors proved the most attractive for corporate venturers, accounting for more than 175 deals each. The top funding rounds by size, however, were raised by companies from a variety of sectors. Most of the funding from the biggest rounds reported in the first quarter went to emerging enterprises from the fintech, IT, transport and consumer sectors. Four of the top 10 rounds stood above \$1bn.

1 Carmaker Volkswagen invested \$620m to co-lead a \$2.75bn

private placement for Sweden-headquartered battery producer Northvolt, which also included commercial vehicle producer Scania. The round was co-led by a host of other institutional investors.

Founded in 2016, Northvolt produces lithium-ion batteries for use in electric vehicles in addition to portable electronics products such as drones, and the storage of renewable energy. The new financing will support the expansion of the company's Gigafactory from a capacity of 40 GWh a year to 60 GWh a year.

2 Waymo, the autonomous driving technology developer spun off by Alphabet, raised \$2.5bn in funding from investors including its former parent company. Automotive retailer AutoNation and automotive component manufacturer Magna International also participated in the round.

Initially launched in 2009, Waymo develops an autonomous driving system dubbed Waymo Driver for use in driverless vehicles in the taxi, package delivery and freight industries. It has launched an autonomous taxi service in the US

city of Phoenix. The funding will be used to enhance Waymo Driver.

3 China-based semiconductor technology developer Horizon Robotics secured \$1.5bn in series C7 funding from electronic parts manufacturer BOE Technology and chipmaker Will Semiconductor at a \$5bn valuation.

The extension came after a \$300m series C6 round at an unspecified time that featured Legend Capital, the VC firm formed by conglomerate Legend Holdings, as well as investment firm Huangpu River Capital and unnamed entities.

Founded in 2015, Horizon is developing an artificial intelligence (AI) algorithm-equipped chips for applications in areas including

autonomous mobility, security cameras and internet-of-things devices.

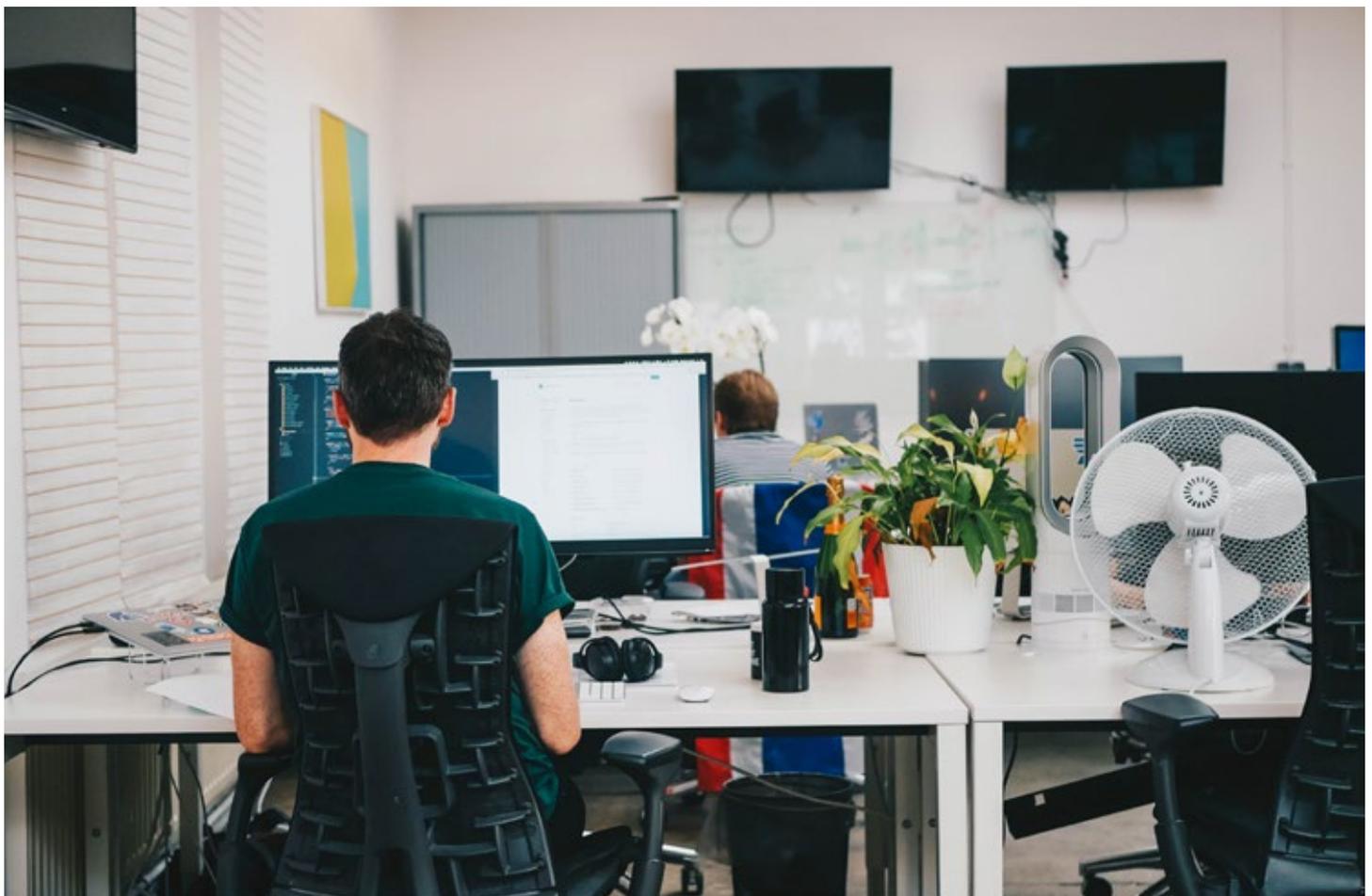
4 Video game developer Epic Games raised a \$1bn funding round, which included a \$200m commitment by Sony. The round valued the US-headquartered company at \$28.7bn. Sony was joined by Fidelity, among many other investors.

Founded in 1991, Epic Games has specialised in multiplayer online games using its Unreal Engine. The company's most famous titles include battle royale game Fortnite and first-person shooter series Gears of War. Epic 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 Fall Guys.

5 Netherlands-headquartered customer service software provider Messagebird raised an additional \$800m for a series C round, which featured media group Bonnier, expanding its total to \$1bn. Bonnier joined a host of institutional and venture investors in the extension, which was made up of 70% equity financing and 30% debt.

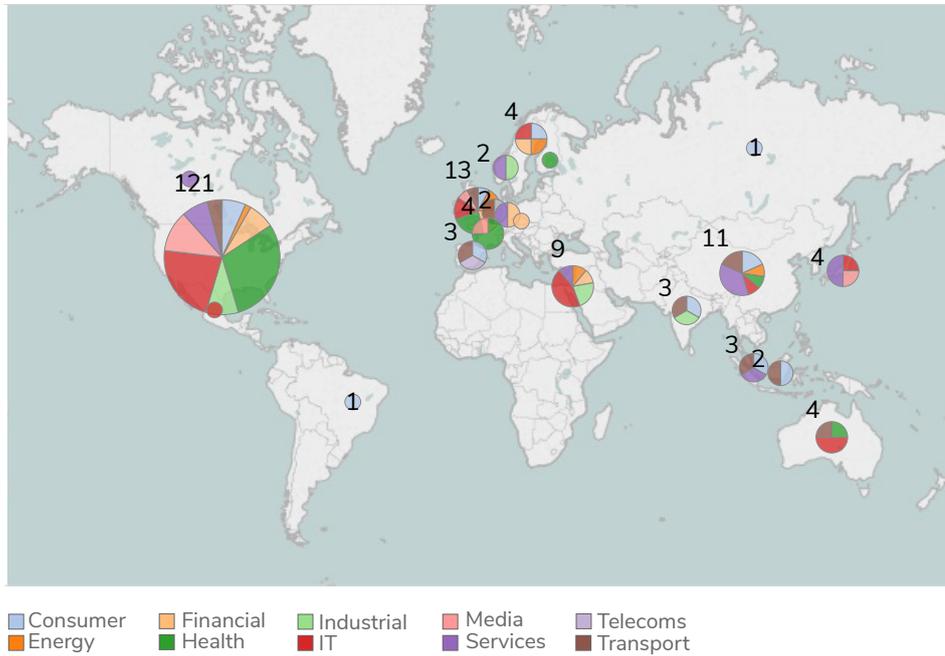
Founded in 2011, Messagebird offers a range of customer service tools across a variety of channels including email, phone, WhatsApp, text messaging and push notifications.



Messagebird has raised a series C round, with investors including media group Bonnier

Exits

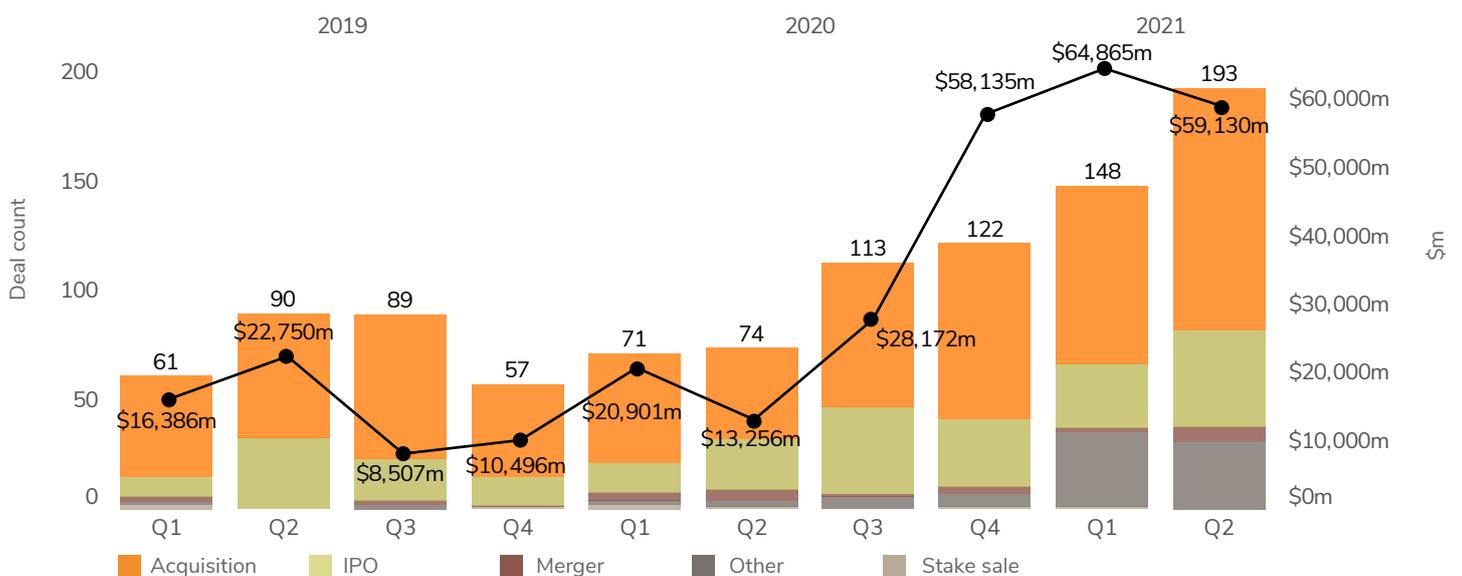
Global view of exits



GCV Analytics tracked a record 193 corporate-related exits during the second quarter of 2021, including 111 acquisitions, 44 initial public offerings (IPOs), 31 other transactions (mostly reverse mergers with special purpose acquisition companies) and seven mergers.

Quarterly view of exits

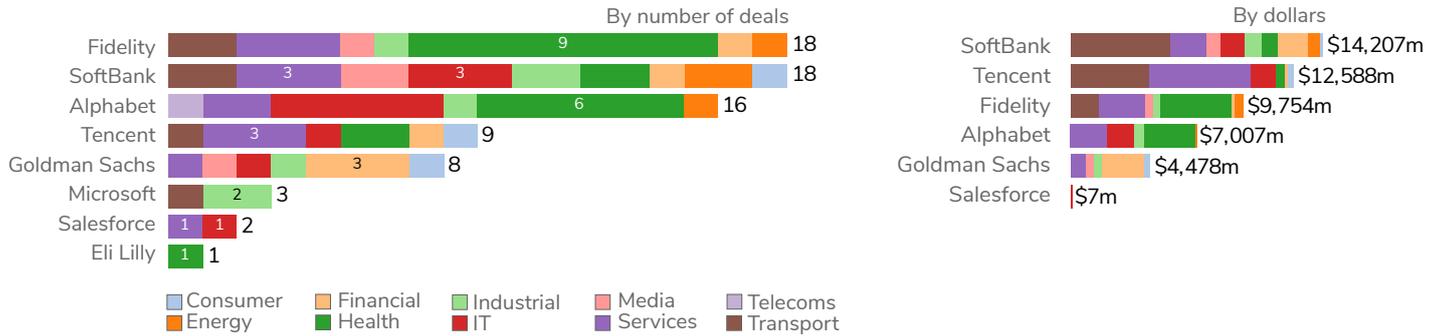
The total estimated amount of exited capital in Q2 2020 was \$59.13bn, considerably higher than the \$13.26bn in Q2 of the previous year but slightly lower than the record figure from the first quarter this year (\$64.87bn). Eight of the top 15 reported exits stood above the \$1bn mark.



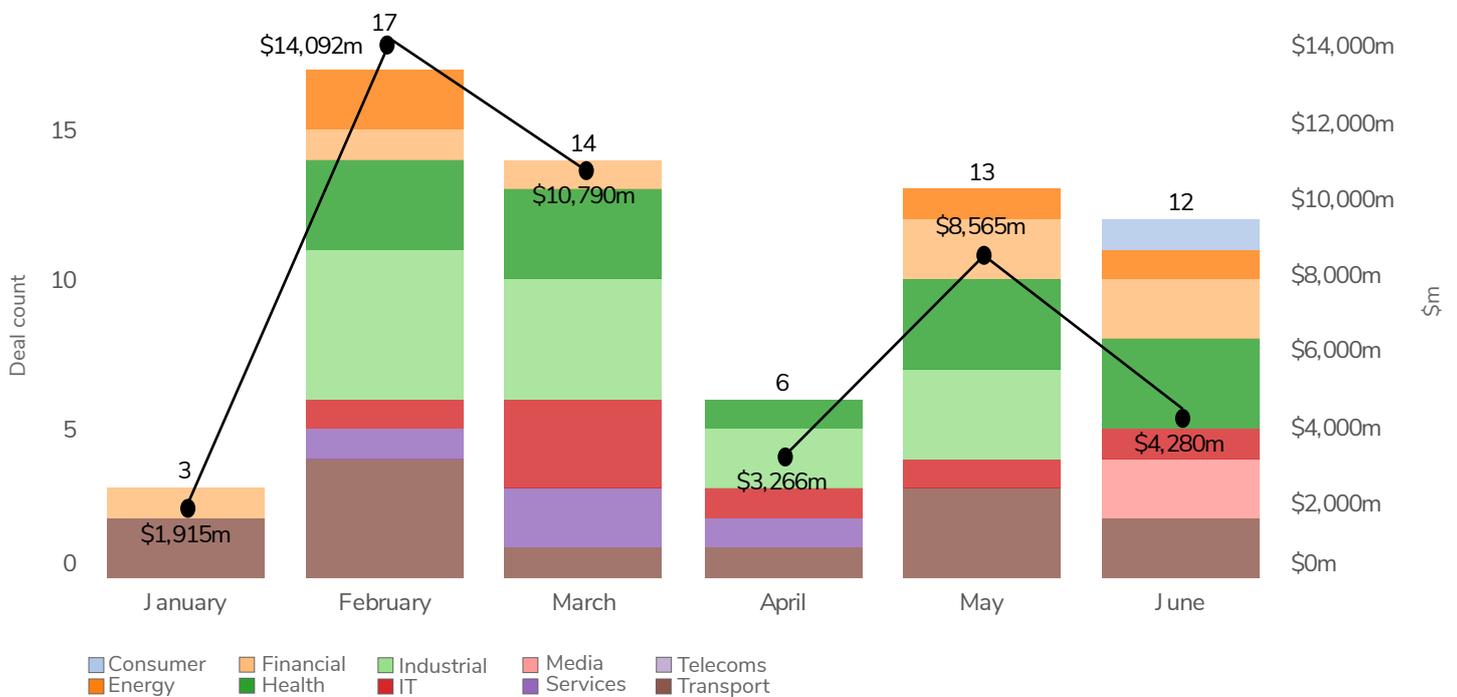
Source: GCV Analytics

Top exiting investors

Top exiting corporates this quarter included Salesforce, Fidelity and Alphabet.



Exits via SPAC in H1



Source: GCV Analytics

A notable trend for the first half of 2021 is the increasing number of reverse mergers with special purpose acquisition companies (SPACs), which has become something of a frenzy in public markets. To put things in perspective, SPACs – also popularly referred to as “blank cheque companies” or “poor man’s private equity” – already constitute a significant chunk of all IPOs in US public markets. The latter was true in 2020, when 61% or 248 of a total of 407 IPOs were SPACs. Similarly, the first half of 2021 saw 56% or 311 SPACs out of a total of 558 IPOs by late June, according to data aggregator Statista.

Vehicles that make it easier for certain companies to go public are obviously providing exits for many private investors and corporate venturers have been no exception, according to GCV Analytics. Each of the first six months of this year has exceeded any previous figures for reverse mergers (until recently a rare way to score an exit). These fall under our category of “Other exits” – that is, exits that are neither acquisitions nor IPOs. None of the top five exit transactions for the second quarter were reverse mergers, however.

Top exits

Company	Location	Sector	Exit type	Acquirer	Exit Size	Exiting investors
Didi	China	Transport	IPO		\$4.44bn	Alibaba Apple Bank of Communications BlackRock Booking Holdings CDC Capital International Chia Life China Investment Corporation China Merchants Bank Citic Coatue DST Global eHi Car Rental GSR Ventures Matrix Partners Mubadala New Horizon Capital Ping An Bank Silver Lake Sina SoftBank Temasek Tencent Tiger Global Management Toyota Uber
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MessageMedia	Australia	IT	Acquisition	Sinch	\$1.3bn	Essex Investment Management Company Kingdon Capital Pequot Ventures Pogue Capital Management SoftBank undisclosed investors Van Wagoner Capital
SentinelOne	USA	IT	IPO		\$1.22bn	Accel Partners Anchorage Capital Data Collective Granite Hill Capital Partners Insight Partners NextEquity Partners Qualcomm Redpoint Ventures Samsung Sequoia Capital SineWave Ventures Sound Ventures Third Point Ventures Tiger Global Management undisclosed investors Vista Equity Partners Westly Group
Nutmeg	UK	Financial Services	Acquisition	JP Morgan	\$980m	Convoy Goldman Sachs Schroders
Kanzhun	China	Services	IPO		\$912m	Banyan Capital Capital Today Ceyuan Ventures Coatue CTG Evergreen Investment Delicate Master Gaorong Capital GGV Capital Goldman Sachs Heyu Capital Hina Group Huaxing Capital Partners Inspiring Link Meridian Capital MSA Capital Shunwei Capital Sunshine Life Tencent
Confluent	USA	IT	IPO		\$828m	Altimeter Capital Management Benchmark Coatue Data Collective Franklin Templeton Index Ventures Sequoia Capital
Monday.com	Israel	Services	IPO		\$631m	Entrée Capital Genesis Partners Hamilton Lane HarbourVest ION Crossover Partners Sapphire Ventures Stripes Group Vintage Investment Partners
Babylon Health	UK	Health	Other		\$530m	Alkuri Global Acquisition Corp AMF Centene Corporation Kinnevik Munich Re Ventures Palantir Technologies Sectoral Asset Management Swedbank Robur's Ny Teknik VNV Global
Solid Power	USA	Energy	Other		\$515m	A123 Systems BMW Decarbonization Plus Acquisition Corporation III Ford Motor Hyundai Koch Industries Neuberger Berman Private Equity Funds Riverstone Samsung Sanoh Industrial Solvay Van Eck Associates Corporation
Dave Inc	USA	Financial Services	Other		\$435m	Capital One Chernin Group Corbin Capital Partners JP Morgan Kraft Group Tiger Global Management VPC Impact Acquisition Holdings III Wellington Management Wells Fargo

Source: GCV Analytics

1 China-based ride hailing service provider Didi Global went public in a \$4.44bn IPO on the New York Stock Exchange. The company counted by multiple corporates among its backers, including internet company Tencent, SoftBank, e-commerce company

Alibaba, insurance firms China Life and Ping An, electronics producer Apple, online travel agency Booking Holdings, car rental service eHi and social media company Sina Weibo.

The company issued about 317 million American Depository

Shares (ADSs), pricing them at the top of the IPO's \$13 to \$14 range.

Formed with the merger of peers Didi Dache and Kuaidi Dache in 2015 and formerly known as Didi Chuxing, Didi runs an on-demand ride service, food and package delivery, automotive and financial

services. Its business spans China but it is also present in Russia, Africa, Latin America, Central Asia and Asia-Pacific.

Almost immediately after the IPO, the Cyberspace Administration of China ordered the company to stop signing up users and take down its app from app stores in China due to failure to comply with data security regulations.

2 Payment services firm Visa agreed to buy Sweden-based open banking software provider Tink for €1.8bn (\$2.1bn), giving an exit to several corporates – postal service Poste Italiane, banking firms SEB, Nordnet, ABN Amro, BNP Paribas, Nordea as well as digital payment services provider PayPal.

Tink runs an open banking platform with which financial services companies can share customer data and build new features such as personal finance management tools. Tink has integrated its application programming interface with more than 3,400 banks and financial services organisations.

3 Primary care provider One Medical agreed to acquire Iora Health, a US-based peer backed by health insurer Humana and automotive and media group Cox Enterprises, in a \$2.1bn all-share deal.

The deal would give Iora's shareholders a 26.1% stake in the merged business. One Medical floated in January 2020 in a \$245m IPO, giving it a market capitalisation of approximately \$1.7bn.

Founded in 2010, Iora operates a network of 47 clinics offering healthcare to recipients on federal health insurance scheme

Medicare, many of which are senior citizens. Its activities will complement One Medical's customer base, most of which are privately insured.

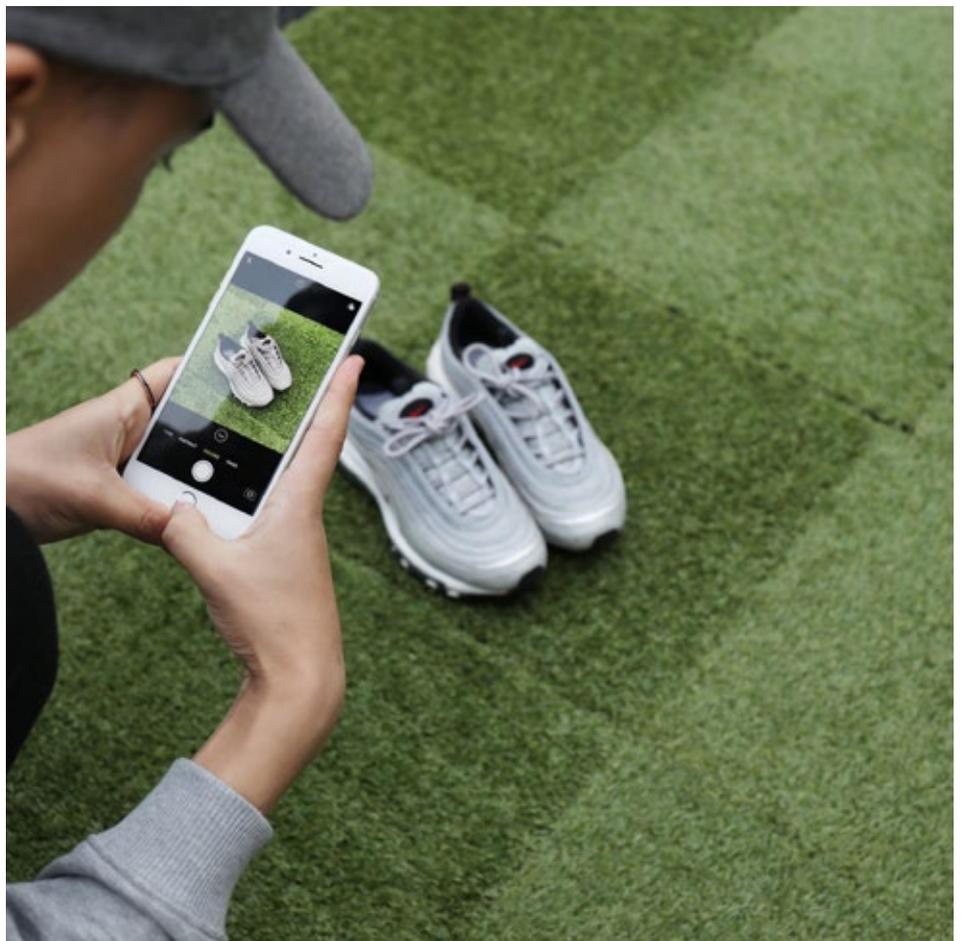
4 E-commerce marketplace Etsy agreed to purchase Depop, a UK-headquartered social commerce platform developer backed by consultancy group Lumar, for over \$1.62bn. In 2016, the company raised a \$8.25m round, which featured Lumar.

Founded in 2011, Depop operates a mobile platform with 30 million registered users – 90% of whom under 26 years of age – who can buy and sell second-hand and new fashion items in addition to offering styling services. Depop claims to have generated \$70m in revenue during 2020.

5 China-headquartered trucking services platform developer Full Truck Alliance, which is also known as Manbang Group, secured almost \$1.57bn in an IPO and gave an exit to conglomerates SoftBank, Alphabet, Baidu and Tencent.

The offering consisted of 82.5 million ADSs, each representing 20 ordinary shares, which were issued on the New York Stock Exchange and priced at the top of its \$17 to \$19 range.

Full Truck Alliance runs a digital freight platform that gives shippers access to a network of some 2.8 million trucks, using AI to increase efficiency. The company reportedly made a \$532m net loss in 2020 from just over \$395m in revenue.

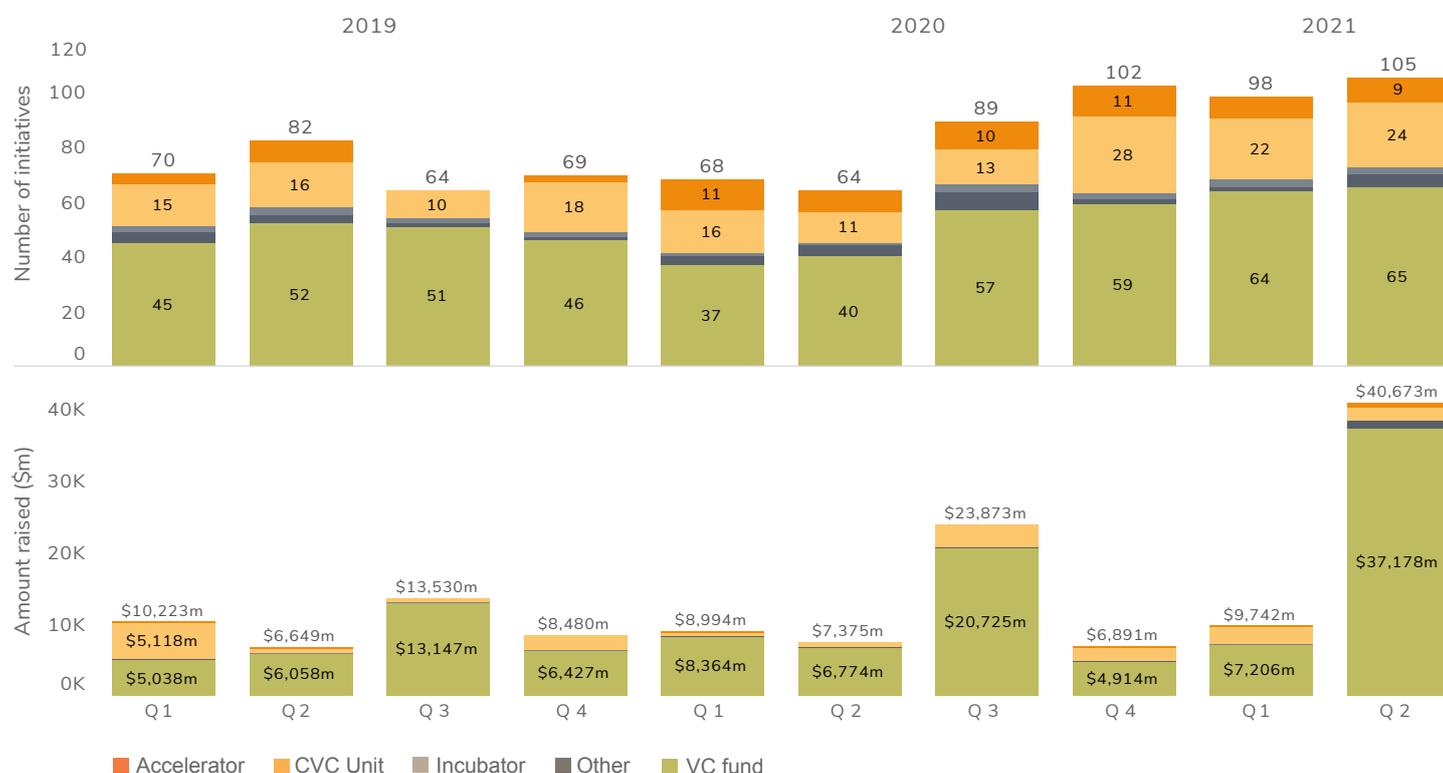


Depop, a social app for selling items, was bought by Etsy

Funding initiatives

LP funding initiatives by volume and value

Corporate venturers supported 105 fundraising initiatives in the second quarter, up from 64 during the same period in 2020 and more than the 82 reported in 2019. The estimated total capital raised surged to \$40.67bn, due to the effect of SoftBank committing \$30bn to its second Vision Fund.



Top funding initiatives

Name	Type	Capital Raised (\$m)	Location	Targeted sector(s)	Backers
SoftBank Vision Fund II	VC Fund	\$30bn	Japan	Telecommunications	Apple Dai-Ichi Life Daiwa Securities Hon Hai Microsoft Mitsubishi UFJ Financial Mizuho Financial Mubadala National Investment Corporation of National Bank of Kazakhstan Saudi Arabia's Public Investment Fund SoftBank Standard Chartered Sumitomo Mitsui
Project AsiaForward	Other	\$1bn	China	IT	Alibaba
Chuanghong Fund	VC Fund	\$858m	China	Unspecified/Sector-agnostic	Century Golden Resources Group China Merchants Bank Country Garden Holdings Fortune Capital Hunan Broadcasting System Joyoung Ping An Bank Wuhu Gopher Asset Management Zero2IPO Group
Sustainable Impact Fund (SIF)	Accelerator	\$507m	Netherlands	Energy	ABN Amro
Ince Capital Fund II	VC Fund	\$500m	China	Health	Ince Capital Partners Mayo Clinic
G2 Venture Partners Fund II	VC Fund	\$500m	USA	Unspecified/Sector-agnostic	ABB Daimler G2 Venture Partners McKnight Foundation Mitsui private investors Royal Dutch Shell
Tuya Unnamed Unit	CVC Unit	\$400m	China	IT	Hillhouse Capital Management Tuya (IoT)
Toyota Ventures III	VC Fund	\$300m	USA	Transport	Toyota
Blockchain Capital V	VC Fund	\$300m	USA	Financial services	Blockchain Capital PayPal Visa
AVP Growth Fund II	VC Fund	\$295m	France	Financial, Health, Consumer	Axa

Source: GCV Analytics

The 105 initiatives in question included 65 announced, open and closed VC funds with corporate limited partners (LPs), 24 new corporate venturing units and nine accelerators, among other.

1 SoftBank increased the size of its Vision Fund 2 from \$10bn to \$30bn. The company's original Vision Fund closed at \$98.6bn in 2017 with contributions from corporate LPs and sovereign wealth funds, but it has so far been unable to secure backing for its successor, instead committing the capital itself, though it is reportedly mulling external contributions.

The first Vision Fund booked a \$16.8bn net loss for 2019 due to bankruptcies for portfolio companies OneWeb and Brandless, the failure of the workspace provider WeWork's float and lacklustre share performance for others such as ride hailing service Uber.

However, the coronavirus pandemic has caused tech stocks in several industries to skyrocket while also driving the pre-IPO funding market, leading to a considerable turnaround in the corporate's fortunes. SoftBank's latest full-year results revealed the values of its holdings in several portfolio companies have increased sharply, giving the Vision Funds a \$37bn paper profit.

2 Alibaba Cloud, the cloud services subsidiary of e-commerce group Alibaba, pledged \$1bn to an initiative to support tech startups and developers. Project AsiaForward is intended to support some 100,000 recipients over the next three years while also providing training for prospective software developers

and linking entrepreneurs to VC investors. Jeff Zhang, Alibaba Cloud's president, said: "We are seeing a strong demand for cloud-native technologies in emerging verticals across the region, from e-commerce and logistics platforms to fintech and online entertainment."

3 China-based VC firm Fortune Capital's yuan-denominated vehicle, Chuanghong Fund, reached a RMB5.5bn (\$858m) first close with backing from LPs including several corporate investors. Mass media group Hunan TV & Broadcast Intermediary, soy milk machine producer Joyoung and property developers Century Golden Resources Group and Country Garden all made commitments to the fund.



Soy milk machine producer Joyoung backed a Fortune Capital fund

Financial services providers China Merchants Bank and Ping An Bank also contributed to the vehicle, as did the firm's management team, funds of funds run by Gopher Asset Management and Zero2IPO Group, and unnamed family offices and government-backed asset management firms. Hunan TV &

Broadcast Intermediary is Fortune Capital's majority shareholder and injected over 10% of the capital for Chuanghong Fund's first close. The fundraising efforts began in Q3 2020 and it is targeting roughly \$1bn for a final close.

4 Netherlands-based financial services firm ABN Amro announced a €425m (\$507m) impact investment vehicle that will back companies developing products supporting sustainability and inclusiveness. Sustainable Impact Fund will invest between €500,000 and €4m per company across three areas: the circular economy, energy transition and social impact. It is seeking financial returns as well as social results and is targeting companies with a proven concept.

The first two Netherlands-based recipients of funding through the vehicle included Envision, a creator of smart glasses software that raised \$1.8m in a round also backed by Impact Ventures, existing backer 4impact and various angel investors.

5 Ince Capital, a China-based VC firm backed by medical researcher and care provider Mayo Clinic, was reportedly close to raising \$500m for its second fund. The firm had secured \$352m for its debut fund in late 2019 from LPs including Mayo Clinic and endowments from institutions including the University of Pittsburgh, Duke University and Carnegie Mellon. It is targeting \$350m to \$500m for its second vehicle. Gan Jianping and Steven Hu, who had been managing directors at VC firm Qiming Venture Partners, co-founded Ince Capital with Paul Keung, a former chief financial officer for online education provider iTutor Group.

6 US-based venture capital firm G2 Venture Partners (G2VP) closed its Fund II at \$500m with commitments from oil supplier Shell, diversified conglomerate Mitsui, carmaker Daimler and industrial technology producer ABB Switzerland. The McKnight Foundation and John Doerr, chairman of VC firm Kleiner Perkins, also committed to the fund. Shell contributed through its corporate venturing arm, Shell Ventures. It was also an LP in G2VP's inaugural fund, which was \$350m.

G2VP was founded in 2017 as a spinoff from Kleiner Perkins' Green Growth fund. It focuses on companies developing technologies that could accelerate sustainable transformation in traditional industries. Shell portfolio companies include Proterra, the electric bus producer that agreed a \$1.6bn reverse takeover in February, as well as computer vision software provider Scandit and autonomous commercial vehicle developer Seegrid.

7 China-headquartered internet-of-things (IoT) technology producer Tuya formed a \$400m strategic investment fund with hedge fund manager Hillhouse Capital. 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. Hillhouse traditionally focused on growth and late-stage deals but has been active in earlier-stage investments through subsidiary GL Ventures since early 2020.

8 Japan-headquartered automotive manufacturer Toyota committed another

\$300m in capital to its corporate venturing unit, also rebranding it from Toyota AI Ventures to Toyota Ventures. Toyota AI Ventures had been launched under the auspices of the company's Toyota Research Institute in 2017 with \$100m in capital. Toyota provided a further \$100m for its Fund II in late 2019.

The capital will be divided evenly between two funds. One of those, Toyota Ventures Climate Fund, will concentrate on developers of innovative technologies to promote carbon neutrality, such as renewable energy and hydrogen production. Toyota Ventures Frontier Fund will invest in developers of technology in areas like artificial intelligence, cloud computing, autonomy, mobility, robotics, smart cities, digital health, advanced materials, energy and financial technology.



Shell backed G2VP Fund II

9 US-based venture capital firm Blockchain Capital closed its Blockchain Capital V fund at \$300m with commitments from digital payment

processor PayPal and payment services firm Visa. Other LPs committed to the fund include undisclosed strategic investors, pension funds, university endowments and family offices. Some of the LPs, including Visa and PayPal, will participate in Blockchain Capital's strategic partnership programme.

Founded in 2013, Blockchain Capital invests in companies and projects based on blockchain technology. It has backed more than 110 companies to date, investing both through equity and cryptocurrency assets. The firm will now focus on blockchain infrastructure, decentralised finance, non-fungible tokens and emerging applications for blockchain-based technology.

10 Axa Venture Partners (AVP), a CVC subsidiary of France-based insurer Axa, reached a €250m (\$295m) first close for its latest growth equity vehicle, dubbed AVP Growth Fund II. Formed in 2015 as Axa Strategic Ventures, AVP has \$1bn under management. It invests in seed and early-stage startups through its AVP Early Stage Fund II.

Growth equity investments are made by AVP Capital's Growth Funds. AVP secured €150m from Axa for its early growth-focused AVP Growth Fund I in 2016 that has now been fully deployed, with exits such as One, a developer of insurance claim management software. AVP Growth Fund II will target growth equity 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 by the end of the year.



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