September 2020

# Global Corporate Venturing

## Telecoms light up the world

## INSIDE

Taiwan’s CVC strengths

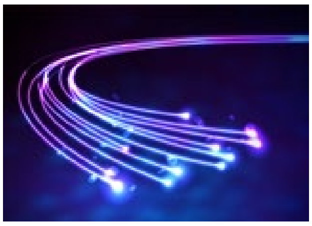
Artificial intelligence in the fight against covid-19

# Contents

**The coronavirus pandemic has thrown the importance of healthcare innovation into sharp relief.**

Callum Cyrus's report examines how artificial intelligence, in particular, is helping the search for a vaccine and breaking boundaries in other parts of the sector.







Boda Gallon



*"I believe CVC will not only stick around, but also be a vital part of the innovation ecosystem going forward"*

**Bill Taranto**




Michael Redding

# Contents



**506**
*Deals in July and August*


**Global Corporate Venturing**
Address: 3 Lower Thames Street London EC3R 6HE





Editor-in-chief: **James Mawson**
Email: **jmawson@mawsoniacom**

News editor: **Robert Lavine**
Email: **rlavine@globalcorporateventuring.com**

Analytics: **Kaloyan Andonov**
Email: **kandonov@mawsonia.com**

Supplements: **Liwen-Edison Fu**
Email: **efu@globalcorporateventuring.com**

Global University Venturing: **Thierry Heles**
Email: **theles@globaluniversityventuring.com**

Reporter: **Callum Cyrus**
Email: **ccyrus@globalcorporateventuring.com**

Managing director: **James Gunnell**
Email: **jgunnell@mawsonia.com**

Managing director for Asia: **Tim Lafferty**
Email: **tlafferty@mawsonia.com**

Production editor: **Julia Lee**

**www.globalcorporateventuring.com**

## Editorial

# World emerges with innovation in mind

**> Tax and regulation are the sixth factor in entrepeneurship**
**> Corporate venturers can play an important advisory role**
**> Collaboration in 'new normal' will drive change**

**James Mawson**
*Editor-in-chief*

**As we emerge out of summer into autumn how people return to work after the American Labor Day holiday seems more significant than usual given the impact of covid-19 on people's health and the economy.**

Entrepreneurs and corporate venturers have been among those leading the way with a growth rather than fixed mindset. There is a new openness to the opportunities as well as awareness of the risks. Stock markets have reached new heights driven by the tech winners but the majority of companies are struggling.

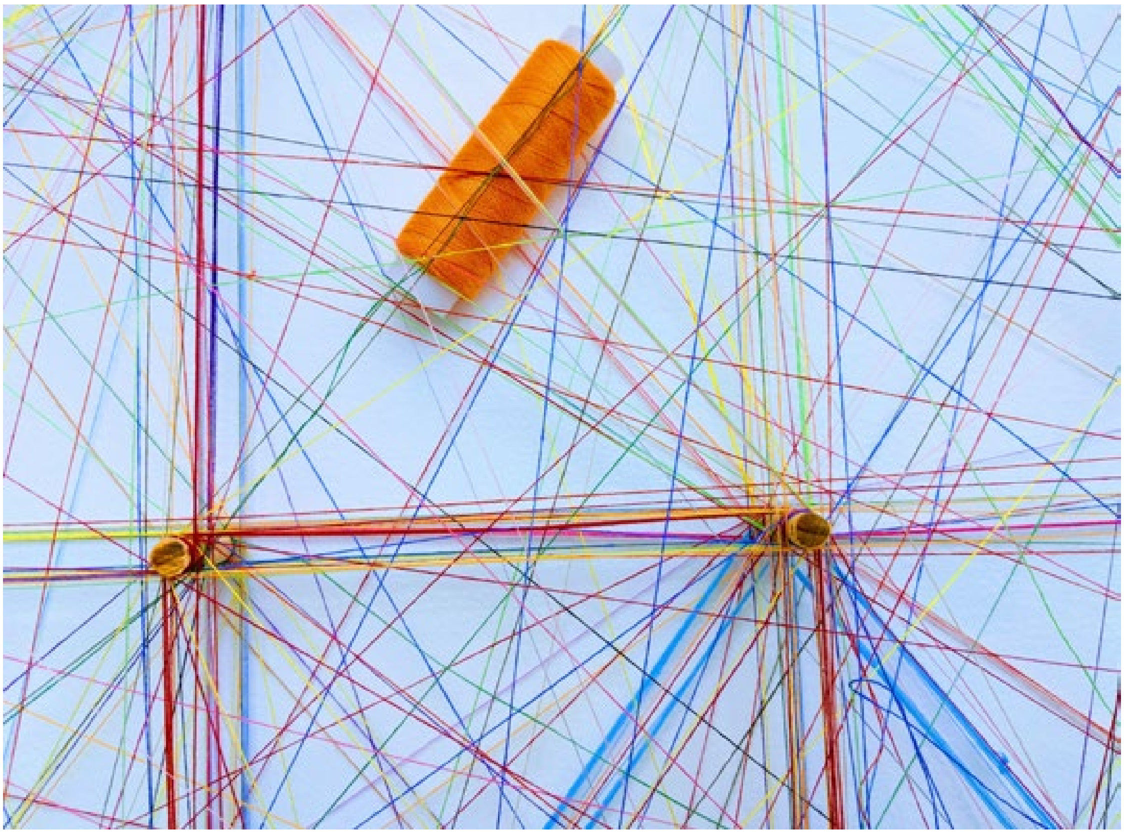
The same is true of populations as a whole – few winners, many strugglers for at least the sort-term.

Grappling with supporting innovation while allowing for redistribution are two primary issues for governments and their responses will create the macro tax and regulatory environment for businesses and entrepreneurs.

This is increasingly the sixth factor entrepreneurs are looking for help with beyond the traditional big five of capital, customers, product development, hiring people and, eventually, an exit.

Corporate venturers can play an important role advising on the geopolitical and regulatory aspects in a way few other investors can.

Bytedance's successful venture and acquisitions strategy for global expansion has been blown up by politicians. Other entrepreneurs will take note as they build their own investor syndicates.



**Networks and collaboration are essential to human advancement**

Geopolitically important countries, such as Taiwan (this month's innovative region), will find themselves trying to navigate these waters as a third factor beyond innovation and equality.

The ease of global communications thanks to the phenomenal reduction in costs and productivity increases from the internet and telecoms industry (this month's sector) over the past 25 years makes these issues both easier and harder thanks to the greater spread of information and data.

When Scientific American looked back "on the past 175 years, the manipulation of matter and energy stands out as a central domain of both scientific and technical advances".

Electricity is the control of the flow of electrons as matter. This control enabled telecommunications: telegraph, telephone, radio and television and eventually the internet, to move information, entertainment and ideas, as Scientific American notes.

Energy and information technologies have always been two of the three primary drivers of human evolution – the third being human health quality and longevity, hence the importance of covid-19, antibiotics and pain relief.

These areas are no longer – if they ever were – mutually exclusive fields of expertise. Ideas work best in conjunction and tested by different perspectives, which is why David Hume's enlightenment philosophy that "truth springs from argument among good friends" remains Global Corporate Venturing's motto.

There are dozens and hundreds, if not thousands, of great research projects and questions still to be tackled. Collaboration and discussion will help them be answered.

Academics' study last year of participants at week-long conferences matched to a set of "control" scientists who do not attend found attendees with no prior collaboration produce about 9% more joint publications after participating in such a conference than the controls – and productivity only increased and a larger impact for more transient meetings.

Other academics looked at the impact of the abrupt cancellation of the 2012 American Political Science Association annual meeting due to Hurricane Isaac. By comparing the extent of new collaboration among those scheduled but unable to attend to actual attendees of the conference in previous years and political science conventions that went ahead in the same year, they can estimate the effect of cancellation on new collaboration. They estimate cancelling the conference reduced the probability potential attendees would collaborate by 16%, with the effect strongest for potential collaborators who are not co-located.

It is reassuring, therefore, to see how many of the community have engaged with the GCV Digital Forums through this covid-induced shock to travel and collaboration – the next forum is 29 September – but there remains the willingness to engage with live events as the GCV Symposium and GCVI Summit return in December and January in London and California, respectively.

But the world continues to evolve and these live – virus-willing– events will be hybrids as new forms of working have emerged and taken root.

And changes in information and energy sharing are continuing.

The next transformation in knowledge sharing and insights will probably come from the applications of artificial intelligence and machine learning allied to societal pressures on sustainable development goals.

To help with our annual survey to share the industry's perspective on the organisation and funding changes for CVCs as well as the technology challenges and focus areas you face, please go to:

https://www.surveymonkey.com/r/GCVSurvey2021

News

# American Family Ventures closes $213m fund

**> Bloomage blossoms with $1.43bn investment vehicle**
**> Corporates hop on Airbus Ventures for Fund III**
**> Blackbird flies high with $356m fund**

**American Family Ventures, the strategic investment arm of US-based insurance group American Family, has closed a $213m third fund after collecting capital from multiple limited partners.**

Founded in 2013, American Family Ventures typically invests $250,000 to $5m in seed to series B-stage deals, backing developers of financial, cybersecurity, data analytics and internet-of-things technology.

The unit has so far allocated a total of $172m to 65 companies including home equity investment platform Hometap, automotive insurance marketplace Clearcover and insurance policy comparison service CoverHound.

### Konka and Yancheng knock out industry fund

China-based consumer electronics manufacturer Konka Group has formed a RMB10bn ($1.45bn) industry fund in partnership with the municipal government of the Chinese city of Yancheng, DealStreetAsia has reported.

Konka is providing 40% of the capital, preliminarily named 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.

The fund is planned to debut with an allocation of RMB3bn and will target investments in developers of semiconductor, artificial intelligence and internet-of-things (IoT) technology as well as advanced machinery and materials.

## Bloomage blossoms with $1.43bn investment vehicle

Diversified conglomerate Bloomage International Group, based in China, has anchored a culture and sports-focused fund with a RMB10bn ($1.43bn) target.

Alan Asset Management Company (Alan AMC), an investment firm formed in 2016 by financial services firm Hana Financial Group's Hana Bank and Hana Financial Investment subsidiaries plus women's apparel brand Lancy, is also a cornerstone investor.

Bloomage was founded in 1989 and operates in two main areas: culture and sports, and cosmetics and healthcare. The vehicle will seek out investment opportunities in top-tier cities in China, leveraging Alan AMC's fund management and fundraising know-how and Bloomage's brand and operational experience in the culture and sports sector.

## Corporates hop on Airbus Ventures for Fund III

France-headquartered aerospace manufacturer Airbus's corporate venturing unit, Airbus Ventures, has secured leasing services Mitsubishi UFJ Lease & Finance and Fuyo General Lease as limited partners for its third fund.

The corporates are being joined by Development Bank of Japan (DBJ), which has provided finance to the country's aviation and aerospace industries for more than 40 years.

Formed in 2016 with $150m of capital and based in Silicon Valley, Airbus Ventures invests in aerospace-related areas including advanced materials, next-generation computing and autonomous mobility.

The contributions by Mitsubishi UFJ Lease, Fuyo General Lease and DBJ – all based in Japan – follows Airbus Ventures' opening of an Asia-Pacific office in Tokyo.

**Airbus's A320 cockpit**

## Blackbird flies high with $356m fund

Australia-based VC firm Blackbird Ventures confirmed it has raised A$500m ($356m) for its fourth fund, from limited partners including Telstra Super, the pension fund for telecommunications firm Telstra.

Founded in 2012, Blackbird focuses on investments in startups in Australia and New Zealand. It now has A$1.24bn ($896m) of capital under management, the largest of any VC firm in the region.

The firm's portfolio includes Australia-based online graphic design platform Canva. It co-led a $60m round for the company in June this year and is its largest shareholder, holding a 14% stake.

## RPA Holdings arranges Open Ventures vehicle

Japan-based robotic process automation technology provider RPA Holdings has formed a corporate venture capital (CVC) subsidiary called Open Ventures.

The unit will back pre-seed and seed-stage startups founded by young entrepreneurs working on technology in areas such as automation, AI , the IoT and regional revitalisation.

In addition to funding, RPA Holdings will provide hands-on support to portfolio companies in areas such as accounting, human resource and legal affairs. Takayuki Ishii will oversee Open Ventures' activities as its president and chief executive, and will be joined by RPA Holdings founder Tomomichi Takahashi.

### ARMG embraces corporate venturing

Advantage Risk Management Group (ARMG), a Japan-based provider of workplace mental health, disability and human resources support, has formed a corporate planning and VC unit.

The size of the fund allocated to the vehicle is undisclosed but it will invest in early to mid-stage startups with a valuation of ¥100m to ¥2bn ($950,000 to $19m), investing roughly between $95,000 and $950,000 per company.

The unit will primarily partner entrepreneurs that are developing digitisation, healthcare and human resources technologies.

### CapitaLand closes C31 Ventures

C31Ventures, the CVC arm of Singapore-based property developer CapitaLand, ceased operations in 2019, DealStreetAsia reported citing two people familiar with the matter.

C31's founding team has left and it has not conducted any deals in the past two years, according to one of the sources. Most recently, Shannon Lee Chaluangco departed from its parent company in August 2019 after more than two years at the unit, first as an investment manager and then as team lead.

CapitaLand formed C31 Ventures in 2016 with approximately $74m of capital, of which roughly 20% had been deployed. The unit had disclosed six direct investments including e-commerce consultancy Ace Turtle, retail sampling service B8ta and Chope, the operator of a restaurant booking management app.

### MDI Ventures impresses with $500m fund

Indonesia-backed, government-owned telecommunications firm Telkom Indonesia has provided $500m for a technology investment fund to be run by its corporate venturing subsidiary, MDI Ventures, DealStreetAsia reported.

MDI Ventures was originally founded in 2014 and officially launched two years later with $100m in capital to be deployed over a four-year period.

The new fund will provide $5m to $30m for late-stage companies located in Indonesia. It will invest in digital advertising and payment technology, cloud computing and big data, mobile apps and e-commerce, the IoT and technologies that can influence the future of communications, offering access to Telkom companies along with capital.

**Confectioner Nestlé invested in Tiantu's first fund**

### Tiantu Capital nets Nestlé as cornerstone investor

Packaged food producer Nestlé has contributed to the first close of a fund for China-based, consumer-focused investment firm Tiantu Capital with a $150m target for its close, DealStreetAsia reported.

Nestlé is the cornerstone investor for the fund, and the deal represents its first commitment to a China-based VC fund. The other limited partners include unnamed listed companies, family trusts and individuals, according to a WeChat post by Tiantu Capital.

Founded in 2002, Tiantu concentrates on investments in consumer product developers. Its portfolio includes Zuoyebang, an online education provider that raised $750m in June, and Aihuishou, the electronics recycler that secured $500m last year.


**Rabobank's strategic fund invested in Greyhound Capital's fund**

## Rabobank helps Greyhound Capital race to $195m

Rabo Frontier Ventures, the strategic fund formed by financial services firm Rabobank, provided an undisclosed amount of capital for UK-based growth equity firm Greyhound Capital's $195m second fund.

Founded in 2015, Greyhound Capital invests in growth-stage technology-focused companies. Its portfolio includes finance-focused N26, the digital bank valued at $3.5bn, and Marqeta, the payment card issuer that most recently raised money at a $4.3bn valuation.

RFV is interested in leveraging its links to investments in the financial, insurance and software technology sectors.

## Sistema seeks $120m for Southeast Asia fund

Sistema Asia Capital, a CVC vehicle for diversified Russia-based conglomerate Sistema, is raising $120m for a fund that will invest in Southeast Asia, DealStreetAsia reported.

The unit invests in India and Southeast Asia but this will be its first fund solely dedicated to the latter area. It appointed Edward Tay as CEO in June this year, and Tay told DealStreetAsia it is seeking capital from limited partners in China and South Korea.

The new fund will target investments below $5m but is prepared to lead funding rounds. It will seek out technologies as well as cybersecurity, computer vision, smart cities, urban mobility and enterprise-focused internet-of-things technology developers.

## UMG Idealab prepares ground for $100m fund

UMG Idealab, the CVC vehicle set up by Mynamar-based conglomerate UMG Group, is preparing to raise a $100m fund, UMG founder and chairman Kiwi Aliwarga told DealStreetAsia.

The unit was formed by UMG in 2015 and has so far predominantly taken part in pre-seed to series A-stage deals, though it announced its intention to expand into later-stage investments in late 2019.

The additional capital is being raised in order to support portfolio companies as they move to growth stage and require additional capital. UMG intends to approach external VC investors to commit to the fund, which it aims to close in 2022.

### Mixi minds digital fund

Japan-based social network operator Mixi intends to form a ¥3bn ($28.4m) digital transformation vehicle in October this year.

Mixi Entertainment Fund will target startups that are working on digitisation technology for use in the live entertainment industry. The company intends to invest up to roughly $95m in this field, including the capital allocated to the latest fund.

In addition, Mixi has invested an undisclosed amount of funding in music, video, publishing and fashion-oriented startup studio Studio Entre, which will help the new fund source investment opportunities and carry out business development.

### Taronga Ventures targets $100m close

Australia-based real estate investment firm Taronga Ventures has secured corporate backing for a real estate technology fund it plans to close at $100m this year, DealStreetAsia has reported.

Real estate services provider CBRE and real estate investment managers Patrizia and Dexus have all contributed to Real Tech Ventures Fund, according to Jonathan Hannam, co-founder and managing director at Taronga.

A further 13 property investment managers, pension funds and sovereign wealth funds are currently conducting due diligence with a view to investing.

Real Tech Ventures Fund will back Asia-based companies developing technologies that can support innovation in the property sector.

### United Ventures calls on Telecom Italia for $175m fund

Italy-based VC firm United Ventures has formed a growth fund with telecommunications firm Telecom Italia (TIM) with a targeted close of €150m ($175m).

TIM is providing approximately $70m in capital for UV T-Growth through corporate venturing unit TIM Ventures. The fund will invest in late-stage domestic and international developers of innovative technology, especially in areas associated with 5G mobile infrastructure.

Sectors the vehicle will target include cloud services, edge computing, the IoT, AI, cybersecurity, mobile payment, and virtual and augmented reality technology. UV T-Growth will be managed by United Ventures and is seeking capital from additional limited partners.

**Two healthcare providers backed a new medtech fund**

### Alive HealthTech Fund gets $150m allotment

Israel-based medical technology fund Alive HealthTech Fund has raised $150m, including $50m from four anchor investors including healthcare provider Carilion Clinics and health maintenance organisation Maccabi Healthcare Service, Calcalist has reported.

The other two were Leumi Partners, the investment banking subsidiary of financial services firm Bank Leumi, which put up $10m, and Consensus Business Group, the investment vehicle for entrepreneur Vincent Tchenguiz. Maccabi Healthcare contributed through its Maccabi Fund.

Alive HealthTech is concentrating on growth-stage investments in medical technology developers and intends to lead 10 to 15 rounds by 2024 sized between $10m and $30m, providing $5m to $10m for each company.

### Eureka proclaims fund's first close

Limited partners including corporates Saes Group and Umbra Group have contributed to the €38m ($44.9m) first close of a fund for Italy-based VC firm Eureka Venture, StartupBusiness has reported.

The vehicle has been set up to invest in materials and engineering spinouts from 22 Italian universities and research centres, across proof-of-concept and seed and series A rounds.

**An UmbraGroup plant**

Eureka Fund I – Technology Transfer has targeted approximately $59m for its final close. It is anchored by ItaTech, the tech transfer-focused investment partnership of the European Union-owned European Investment Fund (EIF) and development bank Cassa Depositi e Prestiti.

Other LPs include philanthropic foundation Compagnia di San Paolo, InnovFin Equity, European Fund for Strategic Investments and unnamed individuals.

### Solvay commits to second China fund

Solvay Ventures, the strategic investment arm of France-based chemicals producer Solvay, has made its second commitment to a China-focused advanced materials fund by backing Richland Capital Fund III.

The unit committed to Richland's third VC fund at its first close alongside Redbud, a China-based fund-of-funds subsidiary of Tsinghua Asset Management, and Nipsea, part of Japan-headquartered Nippon Paint.

The commitment comes after Solvay Ventures contributed to China-based Longwater Investment's advanced materials-focused fund in April 2019.

### SP Ventures spots corporates for $50m fund

Chemicals producer BASF and agribusiness Syngenta have backed the $17.2m first close of an agricultural technology-focused fund being raised by Brazil-based VC firm SP Ventures, AgFunderNews reported.

The fund has a $50m target for its close and its limited partners include undisclosed angel investors and an unnamed US-based fund-of-funds. Syngenta contributed through Syngenta Ventures, its corporate venturing subsidiary.

The vehicle will invest between $100,000 and $6m across seed and series A rounds, targeting the entire agricultural supply chain.

### Corporates join New Community Transformation Fund

US-based non-profit economic development organisation The Right Place has raised capital from investors including healthcare provider Spectrum Health System, Mercantile Bank and Bank of America for a diversity-focused VC fund, MiBiz reported.

Bank of America and consumer rights advocate Consumers Energy Foundation each provided $200,000 to launch New Community Transformation Fund in

January this year. Spectrum Health unit Spectrum Health Ventures and Mercantile Bank have since added $1m each.

The fund will initially target $5m from investors based in western Michigan as it works towards a $25m final close by exploring prospective contributions across the rest of the United States.

## Tau Ventures taps Wilson Sonsini for $17m fund

Law firm Wilson Sonsini Goodrich & Rosati has contributed to the $17m debut vehicle for US-based VC fund Tau Ventures, according to TechCrunch.

Tau Ventures plans to make early-stage investments in companies developing machine learning technology for use in automation, healthcare and enterprise spaces. Co-founders and partners Amit Garg and Sanjay Rao were previously at VC firm Norwest Venture Partners.

The law firm was joined by family offices and private investors, and it closed in May, Garg told TechCrunch. Tau Ventures has 10 portfolio companies according to its website, including medical services portal RubiconMD.

## Boryung forms digital health fund

South Korea-based pharmaceutical company Boryung Pharmaceutical has put KRW1bn ($840,000) into a digital healthcare fund called Boryung D:HealthCovery, Korea Biomedical Review has reported.

Boryung will invest in and help develop digital health startups through the scheme, which will collaborate with accelerator Invention Lab. Portfolio companies will also be able to collaborate with affiliates of the corporate.

The moves comes after Boryung committed about $2m to a corporate venturing programme for its US subsidiary, Hayan Health Network, in July 2020.

## Flipkart makes Leap for accelerator

India-based e-commerce marketplace Flipkart has launched a startup accelerator with US-headquartered management consulting firm Zinnov, the Economic Times reported.

Flipkart Leap is targeting startups developing India-focused consumer products, innovative digital commerce technology, supply chain management and logistics systems, retail enhancement software and deep tech-equipped applications.

Participants will need a working prototype and early adoption metrics. They will be eligible to win a potential $25,000 equity-free grant through the scheme, with future funding a possibility.

**Retail is one of Flipkart Leap's focuses**

## Nippon Steel Kowa chips in for DNX Ventures' third fund

Real estate developer Nippon Steel Kowa Real Estate committed ¥1bn ($9.5m) to Japan-based VC firm DNX Ventures' third fund.

DNX is targeting about $280m for the fund's close and has so far also secured corporates JXTG Holdings, Mizuho Bank, JCB, Hitachi, Kyocera Communication Systems and Hitachi Solutions as limited partners along with First Brothers and Japan's Organisation for Small & Medium Enterprises and Regional Innovation.

## Huawei ignites Spark accelerator

China-headquartered telecommunications equipment provider Huawei has launched a Singapore-based deep tech accelerator called Huawei Spark to target the Asia-Pacific region.

It is a partnership with government agencies Enterprise Singapore and Startup SG and its target areas include 5G, machine learning, the IoT and edge computing technology.

The corporate's Huawei Cloud subsidiary will provide participants in the accelerator with up to $100,000 in development funding and up to $125,000 in cloud credits.

**Online fashion retailer Fabric Tokyo has launched a direct-to-consumer scheme**

## Fabric Tokyo weaves together Original Lab

Japan-based online fashion retailer Fabric Tokyo is about to launch the first cohort of its three-month direct-to-consumer (D2C) support scheme.

Original Lab by Fabric Tokyo is scheduled to begin on September 23 and 15 participants will take part in the initiative.

Partner entities for Original Lab include Pola Orbis Capital, the corporate venturing arm of cosmetics producer Pola Orbis Holdings, as well as D2C marketing agency Fracta, design studio Takram and retailers Sogo & Seibu and Marui Group, the latter through its D2C&Co subsidiary.

## DIP studies fourth Gakucelerator cohort

Japan-based recruitment firm DIP's student-focused accelerator scheme, Gakucelerator, has held a demonstration day for its fourth edition and opened the application period for a new group.

Formed in April 2019, the three-month Gakucelerator programme supports startups founded by students from primary to graduate level. Participants can access resources in areas such as mentoring, data, public relations, human resources and fundraising.

DIP will invest up to ¥100m ($940,000) in total in participants after the demo day, providing millions to tens of millions of yen per company through the initiative, which has already supported more than 100 student entrepreneurs.

## AMR Action Fund attracts nearly $1bn

Switzerland-based investment fund Antimicrobial Resistance (AMR) Action Fund has launched with almost $1bn in capital from biopharmaceutical companies to invest in developers of new antibiotics.

AMR Action Fund is intended to operate as a partnership between 23 biopharmaceutical companies with the aim of bringing two to four new antibiotics to market by 2030.

Pfizer, Merck & Co and Johnson & Johnson have each pledged $100m while Boehringer Ingelheim is providing $50m and Daiichi Sankyo and Shiniogi are putting up $20m each.

Novo Nordisk, Leo Pharma, Lundbeck and Novo Nordisk Foundation are combining to jointly invest about $76m. Novartis, Almirall, Bayer, Roche, Amgen, GlaxoSmithKline, Eli Lilly, Merck Group, Takeda, Eisei, Chugai, Menarini, Teva and UCB are also backing the fund.

## Alphabet allocates $10bn to Indian investments

Internet and technology group Alphabet intends to invest some $10bn in India over the next five to seven years through a vehicle called Google for India Digitisation Fund.

The capital will be deployed through equity investments in India-based companies, and partnerships and investment in operations, infrastructure and the technology ecosystem.

Alphabet intends to target digital technologies that can be beneficial for India in particular. Its fields of interest include artificial intelligence products in areas like education, health and agriculture as well as language diversification and companies looking to boost their own digitisation.

Adrian Daste/Safran

**Aerospace firms, including Safran, have contributed to a VC fund**

## Corporates swoop into Ace Aero Partenaires

Aerospace technology manufacturers Airbus, Safran, Thales and Dassault Aviation have all contributed to the €630m ($739m) initial close of France-based VC fund Ace Aero Partenaires.

Ace Aero Partenaires will invest in civil aviation technology developers and midcap enterprises badly hit by the pandemic-related economic.

The vehicle's original ceiling was $590m ceiling and it is expected to hold a $1.2bn final close.

## Novo to open Asian investment activities

Denmark-based pharmaceutical firm Novo unveiled plans to open an office in Singapore to oversee investments in Asia.

The office will support corporate venturing subsidiary Novo Ventures, growth-stage unit Novo Growth and Novo Principal Investments, which provides larger sums for established life sciences companies. It will be headed by Amit Kakar as Novo Holdings' head of Asia.

Although Novo Holdings, the holding company for the Novo Group, is an active investor in Europe and the United States, it has yet to participate in Asian deals. The move is intended to support deals in Singapore, China, Japan and Southeast Asia.

## B Capital captures $820m for second fund

B Capital Group, the US-based venture capital 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 stage, and its areas of interest include enterprise software as well as financial, healthcare, consumer, transportation and logistics technology.

## Nippon Life tips $280m to impact investments

Japan-based insurance firm Nippon Life plans to invest a total of ¥30bn ($280m) in companies and funds that are addressing social and environmental issues, Nikkei reported.

Sectors under consideration for the funding include food, healthcare and technologies intended to mitigate climate change.

The firm was expected to kick off with a commitment of roughly $19m to an impact investment fund run by private equity group TPG that is concentrating on deals for medical technology developers

It intends to begin making impact investments directly by 2023 and plans to provide more than $90m per year.

### CoinEx issues $50m fund

China-based cryptocurrency exchange operator CoinEx launched a $50m Ecosystem Development Fund to invest in companies developing products and services relevant to its business.

Portfolio companies will also receive advice on product design, technology development, branding and marketing.

CoinEx hopes the fund will allow it to drive innovation within the blockchain industry. It has already made its first investment in OneSwap, a China-based decentralised exchange protocol developer, though details were not disclosed.

**Enterprise Singapore's VC arm Seeds Capital is investing S$50m**

### Seeds Capital seeks corporates for $36m voyage

Seeds Capital, a VC arm of government agency Enterprise Singapore, has agreed to partner with institutions including three corporate venturing units to co-invest S$50m ($36m).

Innoport, the investment vehicle for ship operator Schulte Group, is one of the three corporates, as are KSL Maritime Ventures, a subsidiary of conglomerate Kuok Group, and PSA Unboxed, representing port manager PSA International.

In addition to investing, Schulte will allow startups to pilot digitalisation-focused products across its businesses, and PSA International is also interested in technology for use in the maritime, ports and logistics supply chain.

KSL Maritime Ventures is concentrating on vessel, renewable energy and financial technology.

### GPW sets up agriculture fund

GPW Ventures, a corporate venturing subsidiary of the Warsaw Stock Exchange, signed an investment agreement with Poland's National Centre for Agricultural Support (KOWR).

The two have agreed to work together to invest in developers of technology that can support innovation in rural areas, renewable energy and the food and agricultural industries.

GPW Ventures will set up and run an investment fund dedicated to KOWR, which will be the sole investor. The KOWR Ventures Fund will manage PLN25m ($6.6m) initially.

### Forbion fetches $210m for growth fund

Netherlands-based venture capital firm Forbion has reached the €185m ($210m) first close of its latest fund with backing from limited partners including pharmaceutical companies Eli Lilly and Horizon Therapeutics.

The fund has a €250m target for its final close, which Forbion expects to reach by the end of 2020. It will back between eight and 12 portfolio companies investing up to €30m per deal.

Founded in 2006, Forbion invests in life sciences technology developers based in Europe. Its latest vehicle will provide late-stage funding for undervalued public companies as well as those with mature developmental assets and those planning an initial public offering in the short term.

### Fosun RZ finds $186m for latest fund

Fosun RZ Capital, the VC affiliate of diversified China-based conglomerate Fosun, has raised RMB1.3bn ($186m) for the first close of its latest fund, DealStreetAsia reported, citing PEdaily.

The vehicle, described by DealStreetAsia as a "sci-tech innovation fund", has a RMB2bn target for its close and has secured undisclosed companies and government-led funds as limited partners.

Founded in 2013, Fosun RZ maintains offices in the United States, India, Israel and Singapore as well as in its home country of China and has more than $1.4bn of funds under management.

### One Capital calls on corporates

Japan-based venture capital firm One Capital has announced its first fund, having secured capital from limited partners including corporates Eisai, Japan Asia Group, Sansan and Yahoo Japan.

Pharmaceutical firm Eisai, engineering consulting firm Japan Asia Group and business networking platform developer Sansan contributed to the fund directly while internet company Yahoo Japan participated through its corporate venturing arm, YJ Capital.

Financial services firms Mizuho Bank and Fukuoka Financial Group also committed capital, the latter through its FFG Venture Business Partners subsidiary. PeopleFund, Harris Family Foundation and Darhan Investment Corporation filled out the LPs.

### Eir Ventures achieves $86m first close

Sweden-based VC firm Eir Ventures raised €76m ($86m) for the first close of a life sciences-oriented fund backed by pharmaceutical firm Novo.

The fund's limited partners also include the EU-owned European Investment Fund, Swedish government-founded VC firm Saminvest and Danish Growth Fund, the state-owned investment fund also known as Vækstfonden.

Eir Ventures will seek out innovative university research and intends to work alongside Nordics-based incubators. More broadly, it anticipates participation in deals across the region as well as the rest of Europe and the United States.

**Novo has backed Eir Ventures' healthcare fund**

### CU seals $50m Healthcare Innovation Fund

University of Colorado (CU)'s Anschutz Medical Campus closed a $50m healthcare-oriented fund that was backed by its hospital system, UCHealth, and fellow healthcare provider Children's Hospital Colorado.

The vehicle will invest in early-stage healthcare startups with a link to at least one of its partners, with a focus on digital health, healthcare IT, drug development and medical devices.

It has built a portfolio of eight companies including remote patient monitoring platform BioIntelliSense, prescription decision support system developer

RxRevu and clinical trial digitisation service ClinOne.

## Euglena enhances investment activities

Japan-headquartered biofuel supplier Euglena has formed a startup investment and partnership scheme dubbed Euglena Sustainable Ventures.

The initiative will target companies in sectors including bioinformatics, direct-to-consumer and healthcare technology, as well as other strategic areas relevant to the company.

Euglena Sustainable Ventures has made its first investment, providing an undisclosed amount for Bace, the Japan-based owner of chocolate brand Minimal, which uses fair trade-sourced cacao beans to produce its confectionery.

**Euglena Sustainable Ventures' first investment was in Bace, whose Minimal brand uses fair-trade cacao**

## BP books $70m for Green Growth Equity Fund

UK-based oil and gas company BP intends to provide $70m for India and UK-focused cleantech investment vehicle Green Growth Equity Fund (GGEF).

GGEF was formed to invest in India-based technology developers operating in fields such as renewable energy, energy efficiency, energy storage, electric mobility and resource conservation. It has a target size of $700m and BP's investment is set to close later this year.

The government of India's National Investment and Infrastructure Fund and the UK Department for International Development are anchoring the vehicle, having each made a £120m ($170m) commitment at its April 2018 launch.

## HealthQuad lands AvH and Merck commitments

India-based venture capital firm Quadria Capital has raised $68m for the first close of its second HealthQuad fund, including commitments from pharmaceutical company Merck & Co and conglomerate Ackermans & van Haaren (AvH).

Other commitments came from Teachers Insurance and Annuity Association of America (TIAA) and state-owned investment agencies Sidbi and Swedfund. Quadria made its initial close of its first fund at just under $10m in June 2016.

The firm's portfolio includes Medikabazaar, Technology Healthcare Big Data Analytics, Strand Asian Institute of Nephrology and Urology, Neurosynaptic Communications, Regency Healthcare and Hi Impact.

## Essity announces corporate venturing unit

Sweden-based health and hygiene technology provider Essity has unveiled a strategic venture capital unit headed by Marie-Laure Mahé.

Essity Ventures said: "By partnering with startups, we aim to develop new business models, digital solutions and digitally enabled products, while accelerating our journey towards circularity and sustainability."

### Money Forward goes ahead with corporate venturing

Japan-based accounting software developer Money Forward's corporate venturing arm, Money Forward Venture Partners, reached a ¥1.23bn ($11.7m) first close for its seed and early-stage vehicle.

Hirac Fund's limited partners (LPs) included enterprise chat platform operator Chatwork, design technology developer Goodpatch, printing services provider Raksul, software testing company Shift and The Guild, the operator of a graphic design agency.

### Hyundai Mobis mobilises $20m for VC funds

Hyundai Mobis, the automotive components arm of South Korea-headquartered carmaker Hyundai, has provided a total of $20m in capital for two US-based venture capital funds.

The recipients are ACVC Partners, an early-stage investment firm focusing on millennial-driven technology products, and Motus Ventures, a VC fund and business accelerator focused on transportation, intelligent infrastructure and the internet of things.

Hyundai Mobis has already made direct investments, in a $27m series B round for autonomous driving software developer StradVision and in 3D mapping technology producer Velodyne Lidar.

### Real Madrid gets FundingBox on the team

Real Madrid Next, the open innovation arm of Spanish football team Real Madrid, formed a VC partnership with Spain-based VC firm FundingBox.

FundingBox will invest up to €4.5m ($5.3m) in 30 startups over the next three years through the scheme, with Real Madrid matching that with resources and project management expertise valued at the same size.

Real Madrid Next was launched in January to strengthen the club's activities on and off the pitch.


**Real Madrid's Santiago Bernabeu stadium**

### Google partners with Indico for Portugal

Portugal-based venture capital firm Indico Capital Partners and US-headquartered internet and technology group Alphabet's Google for Startups unit have picked six companies for their Lisbon accelerator.

Indico is launching a €12m ($13.7m) pre-seed fund to further invest in participants in the scheme. They will receive an initial €100,000 investment and start a six-month programme followed by an incubation period lasting until June 2021.

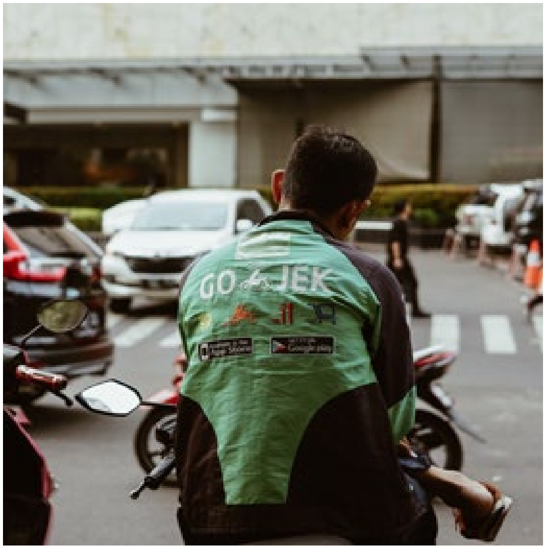
Stephan Morais, Indico's chief executive and founder, said: "The number of exceptional startups that have applied to our accelerator reveals the lack of capital available to the development of startups in their initial (and often, most critical) phases of development."

### Exelon targets climate change

Nasdaq-listed energy provider Exelon and its non-profit foundation have chosen 10 startups to receive a combined $1m in direct funding to develop new technologies to mitigate and build resiliency to the impacts of climate change.

The application process for year two of the company's $20m Climate Change Investment Initiative (2c2i) is now open.

The first-round startups that each received $100,000 from the Exelon Foundation included solar and battery storage developer Amidus Resilience, biomass plastic feedstock producer ATP-MD and urban energy surveyance software company BlocPower.




**Gojek is a ride-hailing service**

### Gojek Xcelerate goes for finalists

Gojek Xcelerate, an accelerator scheme jointly run by Indonesia-based ride hailing service Gojek and accelerator operator Digitaraya, has selected three finalists at its Gojek Xcelerate Xcellence event.

The startups have a social impact angle and were chosen from 35 teams that joined four six-month programmes. The latest graduates contained 11 direct-to-consumer technology developers.

Food supply chain marketplace Etanee, carbon neutrality platform operator Jejak.in and Qlue, the operator of an online platform that lets citizens flag up issues to specific local government departments, made up the list.

### Venus Medtech takes care with fund partnership

China-based medical device maker Venus Medtech has agreed to form an investment fund with private equity firm DCP Capital and VC firm Qiming Venture Partners, DealStreetAsia reported.

Ascendum Capital Partners will target medical technology developers working on devices to treat cardiovascular and lung disease. It will combine the institutional investors' experience with Venus Medtech's technology expertise.

Venus Medtech went public in December 2019, about 18 months after it received an undisclosed amount from DCP Capital. Its other investors included Qiming as well as Goldman Sachs and Sequoia Capital China.

### Nissay Capital announces 50M's third batch

50M, the accelerator run by Japan-based insurer Nippon Life's investment unit, Nissay Capital, has revealed the seven emerging businesses that will make up its third cohort.

The startups will each have the possibility of receiving up to ¥50m ($470,000) of seed funding.

The selection includes D-Box, the operator of a photography equipment rental store, as well as electric vehicle, drone and micromobility services provider Mobi Stop and Noiab, which runs an e-commerce platform focusing on musical instruments.

### Minami drives forward with corporate venturing

Japan-based driving school chain operator Minami Holdings has formed a corporate venture capital subsidiary called Minami Incubate.

The company did not disclose the amount of capital allocated to the vehicle but said it will target startups at seed-to-later stage, mainly in the education, mobility and regional revitalisation sectors.

## Shuiesha shoots for manga accelerator

Japan-based comic publisher Shueisha has formed an incubator and accelerator scheme dubbed Shueisha Startup Accelerator Program – Manga Tech 2020.

The four-month initiative will accept applications until September 30 before announcing the finalists in November. The top submission will win a ¥1m ($9,400) prize to carry out the idea while those who come in second and third will receive $4,700 and $940.

## BCA signs up third batch for Synrgy

Indonesia-based financial services firm Bank Central Asia (BCA) announced the latest lineup for Synrgy, the accelerator it runs with GK – Plug and Play.

The third Synrgy batch is made up of 11 startups in sectors such as data analytics, augmented and virtual reality, enterprise, blockchain, insurance, mortgage and property technology. They will be able to work with BCA and its venture capital unit, Central Capital Ventura.

The cohort includes crowdfunded property investment platform InvesProperti, business intelligence software provider Moodah, consumer blockchain token marketplace Vexanium, health insurer Aman, business lending marketplace Bangku and Sales1, a developer of customer relationship software.

## Code Republic programmes eighth cohort

The eighth edition of Code Republic, an accelerator co-run by Japan-based internet company Yahoo Japan's corporate venturing unit, YJ Capital, and venture capital firm East Ventures, began accepting applications.

The four-month initiative was founded in 2016, and targets seed-stage startups that are developing data-driven projects and technologies that can disrupt existing social and industrial structures.

Each team will receive ¥7m ($67,000) of capital at the beginning of the programme, which will also offer pitch events and mentoring from advisers including YJ Capital CEO Shinichiro Hori.

## Creek & River seeks applicants for incubator

Japan-based multimedia services and creative agency Creek & River (C&R) has teamed up with startup incubator and accelerator operator 01Booster to launch an incubation scheme.

The Business Idea Commercialisation Program will fall under the auspices of Fukushima Tech Create, which promotes entrepreneurship in Fukushima, Japan.

Startups and individuals based in the city and the broader Tōhoku region of Japan were eligible to apply to the four-month programme, which was due to start in July.

## People

# Brooks leaves Intel

**> Chung charges into Hyundai**
**> Redding relocates from Accenture Ventures**
**> Kirk leaves Cisco for ServiceNow**

**Wendell Brooks, senior vice-president at US-listed chipmaker and data technology provider Intel and president of its corporate venturing unit, Intel Capital, has resigned after six years.**

Anthony Lin, who has been leading mergers and acquisitions (M&A) and international investing for Intel, will lead Intel Capital while a search is conducted for a permanent successor. He is already part of the unit's equity investing committee.

Intel postponed its rollout of next-generation chips in late July 2020, and organisational changes were predicted by blogs such as Digits to Dollars after its share price fell.

### GV opts for staff cuts

GV, a corporate venturing subsidiary of US-based internet and technology conglomerate Alphabet, has laid off seven members of its investor operations team, Axios reported.

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 equate 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."

### Cook becomes new chef at BP Ventures

Stephen Cook, chief commercial officer for group technology at UK-based oil and gas supplier BP, has been promoted to senior vice-president of its Launchpad and Ventures unit.

The move follows the retirement of David Gilmour, who had set up Launchpad as a private equity-style investment unit to complement the corporate venturing team at BP Ventures.

Cook said on his LinkedIn profile he would be "discovering, building and scaling new digital and physical energy businesses for a net-zero carbon future. Leading and integrating BP's venture capital, business building, incubation and technology thought leadership capability to create a world-class innovation engine".


**Henry Chung**

### Chung charges into Hyundai

Henry Chung, vice-president of corporate venture capital in California for electronics manufacturer LG Electronics, has moved to head carmaker Hyundai's Cradle Silicon Valley unit.

Chung will also take a senior vice-president position. He spent 10 years at LG Electronics and led teams responsible for VC activities in North America and engaging in open innovation activities with venture-backed startups, top universities, accelerators and national laboratories.

He also spent four years as a director of SVB Capital's direct investment team.

### Redding relocates from Accenture Ventures

Michael Redding has left US-based Accenture after 29 years at the management consulting firm including five years as founder and head of corporate venturing unit Accenture Ventures.

Redding said: "I am ending my run at Accenture as the time is right to pass the mantle on to an exciting leadership team that will take our programme to new heights. After a break 29 years in the making (such as covid-19 will accommodate), I am looking forward to a new adventure building on my experience in technology innovation and corporate venturing."

### Kirk leaves Cisco for ServiceNow

Philip Kirk has 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 comes after Kirk spent 13 years in the same role at the networking technology producer, 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 included investments in Platfora, which was acquired by Workday in 2016, and Piston Cloud Computing.

### Illumina Ventures promotes Meuleman to partner

US-based genomics technology producer Illumina's corporate venturing subsidiary, Illumina Ventures, has promoted Wouter Meuleman from principal to partner.

Part of the initial Illumina Ventures team when the unit was formed in 2016, Meuleman had been director of corporate and business development for

Illumina since 2015 and held the post until March 2019.

Meuleman has led investments in Biota Technology and Fluent Biosciences, where he holds board seats, in addition to Delfi Genomics and Ribometrix.

### UBX calls on Kolling for CIO role

Financial services firm Union Bank of the Philippines has appointed Matthew Kolling as chief investment officer for its corporate venturing arm, UBX Philippines, Back End News reported.

Kolling will oversee UBX's corporate venturing activities and raising capital for the vehicle, in addition to helping in areas including joint ventures and mergers and acquisitions.

He joined diversified conglomerate Aboitiz Equity Ventures, the majority shareholder of Union Bank, in August 2019 as head of venture investments, following two decades conducting technology deals in the US, the Philippines and across Southeast Asia.

### Steen swings from Syngenta to Legacy Seed

Colin Steen has left Switzerland-based agribusiness Syngenta's corporate venturing unit, Syngenta Ventures, to become CEO of US-headquartered seed producer Legacy Seed Companies.

Steen had been managing director at the unit for more than two-and-a half years following the departure of Derek Norman to Bayer.

China government-owned ChemChina bought Syngenta for $43bn in 2017 in the largest overseas acquisition by a Chinese company.

### Raiffeisen shuffles ventures and lab roles

Austria-based financial services firm Raiffeisen Bank International (RBI) has effectively separated its corporate venture capital and partnerships units.

Maximilian Schausberger had managed RBI's fintech partnership programme, Elevator Lab, and corporate VC unit Elevator Ventures. He has become managing director of Elevator Ventures, which invests in early and growth-stage developers of financial and adjacent technologies in Central and Eastern Europe.

Christian Wolf, former head of group transformations at RBI, has stepped up to head of strategic partnerships and ecosystems, equating to Elevator Lab's activities.

**Jules Miller**

### Miller leaves IBM for Mindset Ventures

Jules Miller has left computing technology group IBM's blockchain accelerator to become a partner at Israel-based venture capital firm Mindset Ventures.

Mindset has hired Miller as US lead and she will be investing in seed-to-series B enterprise tech startups. She had co-founded IBM Blockchain Ventures, launched and ran two IBM Blockchain Accelerators with Columbia University and was head of the IBM Blockchain Garage for North America.

## Kostka joins Altana as corporate venturing head

Thomas Kostka departed from chemicals and consumer products provider Henkel to become head of corporate venturing at Germany-based specialty chemicals producer Altana.

Kostka had spent more than a dozen years at Germany-based Henkel, most recently as senior investment manager for its adhesive technologies corporate venturing unit.

Altana hired Kostka after Florian Loebermann, the previous head of corporate venturing at the company, left in late 2019 to become managing director of 3D printer manufacturer DP Polar.

## Kiba promoted to head UMI

Shosuke Kiba has been promoted to managing partner of multi-corporate-backed venture capital firm Japan-based United Materials Incubator (UMI).

Kiba had been a partner at UMI for four years after moving from Innovation Network Corporation of Japan (INCJ), the Japan state-supported investment holding company that founded UMI in 2016 to back advanced chemicals and materials technology developers.

INCJ made an initial strategic limited partner commitment of up to ¥6bn in the UMI No 1 fund, which raised ¥10bn ($85m) and which was also backed by Asahi Glass, Ube Industries, Sekisui Chemical, Dexerials, DIC and Nippon Shokubai.

## CyberAgent Capital secures new team members

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

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

## Todorova leaves Sumitomo to plough own furrow

Albena Todorova, head of agriculture and food technology ventures at Japan-based trading group Sumitomo’s European subsidiary, left temporarily for a summer sabbatical.

Todorova had spent nearly three years as a director on the project after initially working as a business development executive for Sumitomo.

In a blog post, Todorova said: “Just wanted to say a very big thank you to everyone who supported our small but brave team in the last years — colleagues, partners, co-investors, entrepreneurs, everyone — your passionate and heartfelt support is amazing, and even the little we have done would have not been possible without you.”

## Analyses

# Corporates scoring exits in fintech IPOs

**> $250m nCino IPO and $319m Lemonade float show strength of sector**
**> Exits have shot up in 2020**
**> Fintech may be entering a phase of profitable exits**

**Robert Lavine**
*News editor*

**Kaloyan Andonov**
*Analyst*

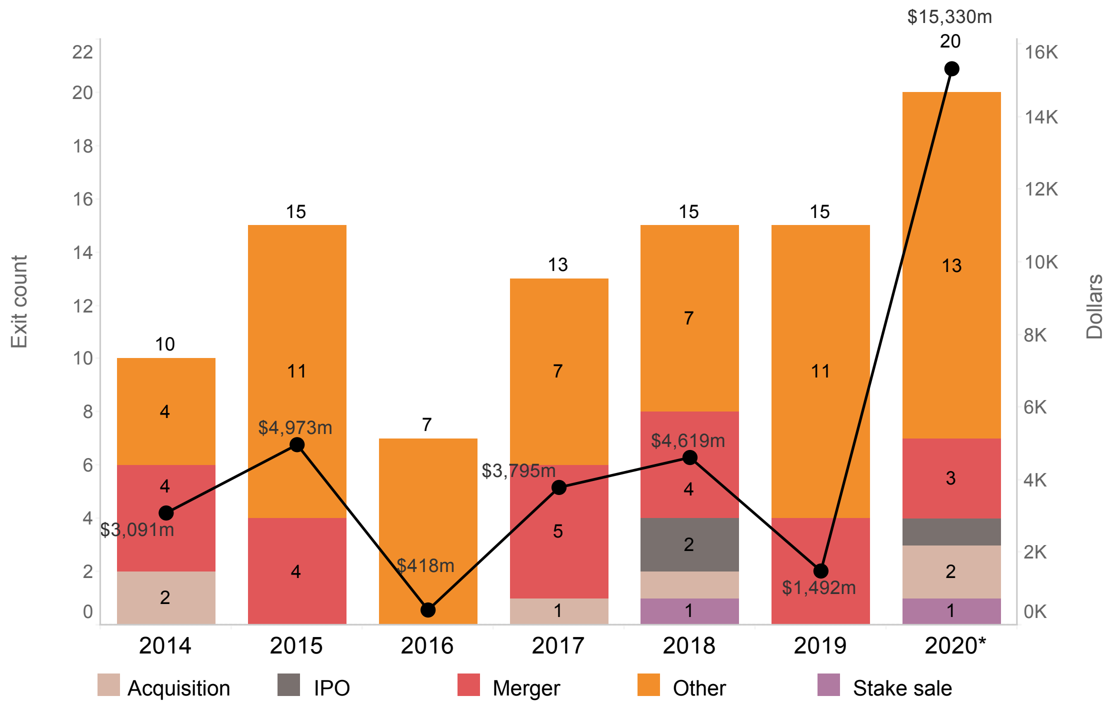
**Two fintech companies floated in early July 2020, giving an exit to corporate backers in what has been a good year for the sector.**

US-based banking software producer nCino went public in a $250m initial public offering (IPO) on the Nasdaq Global Select Market, providing an exit for enterprise software provider Salesforce's corporate venturing unit, Salesforce Ventures. The offering comprised 8.06 million shares, priced at $31.00 each, above the $22 to $24 range the company had set. On the first day of trading, the price per share almost tripled to $91.59, valuing the business at more than $8.2bn.

Founded in 2012, nCino has developed an operating system used by more than 1,100 financial institutions. The system streamlines banking practices and provides banks with detailed analytics on their data. The company had increased revenue more than 50% to $138m for the year ending January 31, 2020, while registering a $27.7m loss.

US-based online insurance provider Lemonade, which counts a host of corporate investors, went public in a $319m IPO on the New York Stock Exchange. The corporate backers include internet conglomerate Alphabet, telecoms conglomerate SoftBank and insurance firms Allianz and XL Catlin. The offering consisted of 11 million shares priced at $29.00 each, significantly higher than the range of $23 to $26 it had first set before subsequently upping it to a range between $26 and $28. The IPO price valued the company at over $1.9bn.

## Exits of corporate venturers from fintech enterprises




*as of June 30

Source: GCV Analytics

Launched in 2015, Lemonade sells property and casualty insurance via an online platform that uses bots instead of human brokers. Lemonade relies on artificial intelligence and behavioural economics to combat fraud. Lemonade takes a fixed percentage as a fee and donates a portion of any unclaimed premiums to non-profit organisations. The company operates in the US, UK and Germany.

Both Lemonade and nCino are part of the broader fintech space, which has received much attention from corporate venturing investors.

The number of exits from such businesses appears to have been somewhat flat in numbers over recent years. However, this year we have already reported 20 exits – considerably higher than in previous years – worth an estimated $15.33bn. This may indicate that fintech is entering a different phase of development and yielding profitable exits. These two IPOs may just back that up.

# Coty gives off $200m to KKW Beauty

**> Brand owned by Kim Kardashian West valued at $1bn**
**> Coty takes 20% stake**
**> Valuations are rising in the beauty space**

**Robert Lavine**
*News editor*

**Kaloyan Andonov**
*Analyst*

**Celebrity Kim Kardashian West's beauty brand raised $200m at a $1bn valuation from beauty brand Coty.**

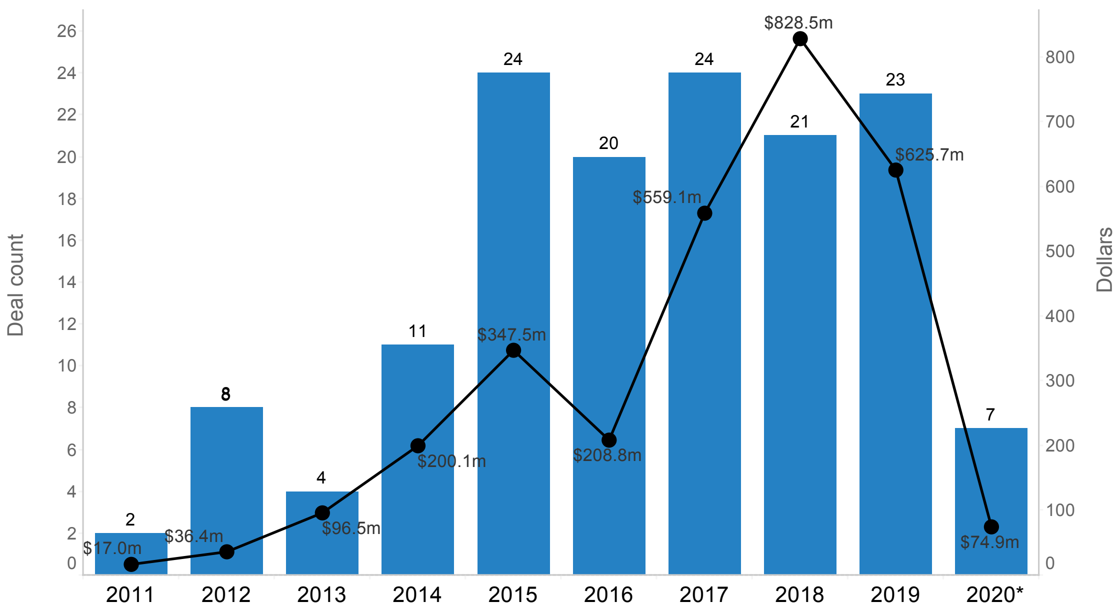
The beauty product and fragrance group agreed to acquire a 20% stake in KKW Beauty. The deal also reportedly gives Coty the option to acquire a majority stake. Coty had already closed the acquisition of a 51% stake in Kylie Cosmetics, Kardashian West's half-sister Kylie Jenner's brand.

In the case of KKW, the investment came with a commercial partnership where the company's current team will retain control of production strategy and communications, while Coty will oversee product development.

Launched in 2017, KKW develops and commercialises skincare and make-up products. The celebrity's brand also markets fragrances via a subsidiary, KKW Fragrance, and has begun producing shape-enhancing undergarments under its Skims brand.

The deal forms part of the broader beauty and hygiene space which has been on the radar of corporate venture investors. Over the past five years, we have tracked at least 20 corporate-backed rounds a year in this space. The evolution of the total estimated capital suggests valuations in this space have been rising, though the sub-sector has not seen many unicorns.

**Corporate-backed deals in beauty and hygiene startups**




*as of June 30

Source: GCV Analytics

# Perfect Day with a $300m series C round

**> Second tranche raises $160m**
**> Food and beverage deals soared last year**
**> Figures suggest downward pressure on valuations**

**Robert Lavine**
*News editor*

**Kaloyan Andonov**
*Analyst*

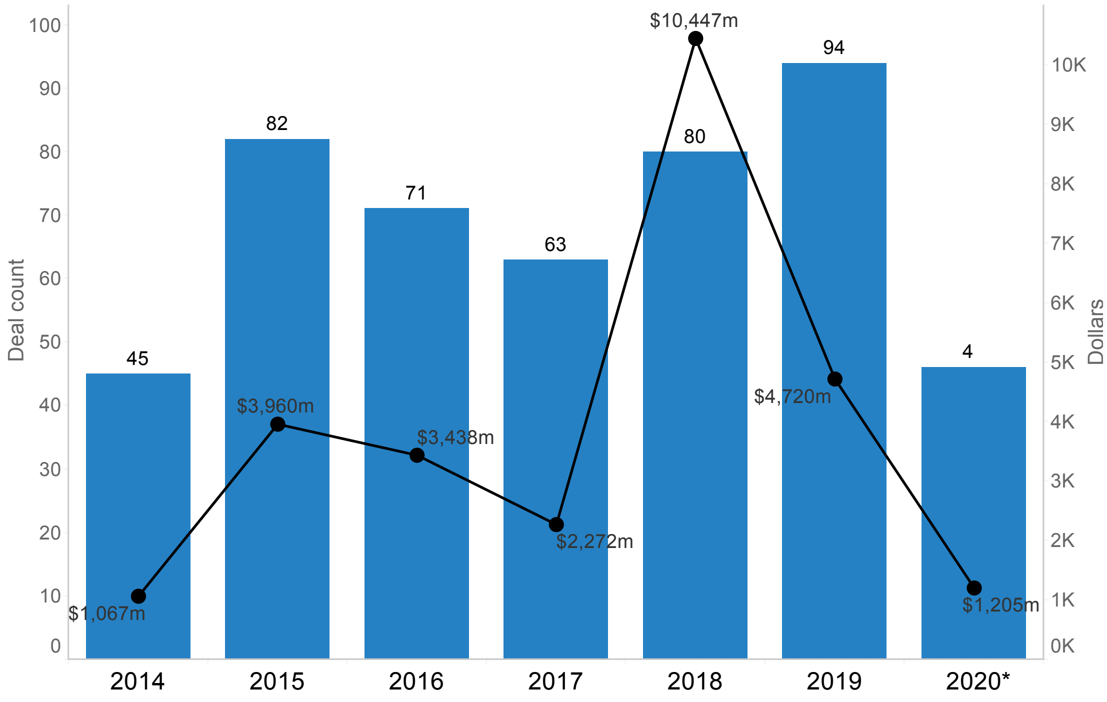
**Continental Grain-backed vegan food producer Perfect Day has raised $160m, increasing its series C round to $300m.**

The US-based vegan dairy protein producer had raised $140m from Singaporean state-owned investment firm Temasek, venture capital firm Horizons Ventures and several unnamed existing investors in the first tranche. The second tranche came from Canada Pension Plan Investment Board's Thematic Investing group (leading with $50m) and unnamed investors. This latest round came after the company doubled its production capacity in recent months, while cutting costs.

The company is part of an emerging segment, alternative proteins, in the food and beverages space. The number of corporate-backed deals in food and beverages reached an all-time high last year at 94 rounds, while the total estimated dollars suggests there may be some downward pressure on valuations, as they have gone from $10.44bn in 2018 to $4.72bn.

Vegan food producers have been backed on the public markets, with Beyond Meat's stock rising from $66.79 to $234.90 in the two months after its initial public offering.

## Corporate-backed deals in food and beverages




*as of June 30

Source: GCV Analytics

# Hippo gets $150m

> **Comcast Ventures invests in home insurance provider**
> **Round values business at $1.5bn post money**
> **Corporate-backed deals in insurtech doubled between 2016 and 2019**

**Robert Lavine**
*News editor*

**Kaloyan Andonov**
*Analyst*

**US-based online home insurance provider Hippo Enterprises raised a $150m series E round, which featured corporate backers including mass media group Comcast, home maintenance services provider Standard Industries and home builder Lennar, all previous investors. Comcast invested via its corporate venturing arm, Comcast Ventures.**

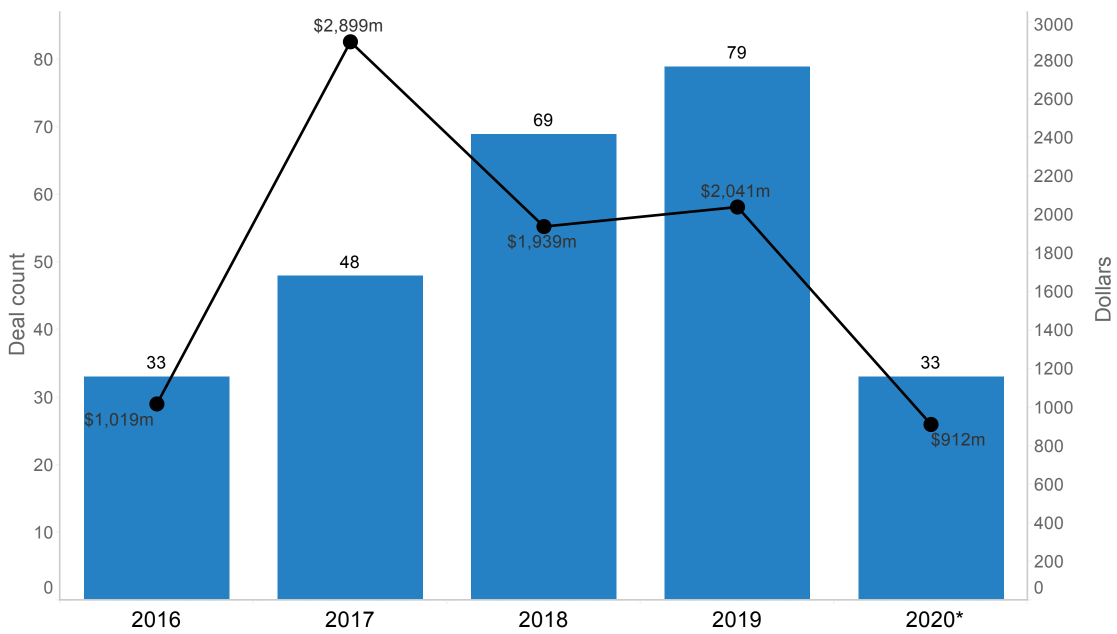
The round valued the business at a $1.5bn post-money and included Propel Venture Partners, the venture capital firm backed by Spain-based financial services firm BBVA, also a previous investor. Other investors include a host of venture firms, unnamed hedge funds and family offices.

Founded in 2015, Hippo runs an online platform that allows homeowners to assess insurance quotes in less than a minute and buy policies in four, with savings of up to 25%. The company also offers free smart home devices to improve home security and prevent accidents. It has also installed smart sensors into new builds to lower maintenance costs.

Hippo plans to use the series E funds to increase headcount and improve its technology as it looks to extend its reach to 95% of US households.

Hippo is part of the broader insurtech space, which has received much attention by corporate investors in recent years. The number of corporate-backed deals in this space has more than doubled from 33 in 2016 to 79 reported last year. This year we have reported 33 rounds by mid-July.

## Corporate-backed deals in insurtech




*as of June 30

Source: GCV Analytics

# A look at first-time corporate investors

**> Nearly a quarter of investors were making their first deal**
**> That proportion remained the same over lockdown**
**> Figures suggest CVC extends beyond the big players**

**Kaloyan Andonov**
*Analyst*

**Over the past four quarters, almost one of every four corporate investors seems to be new, even in lockdown.**

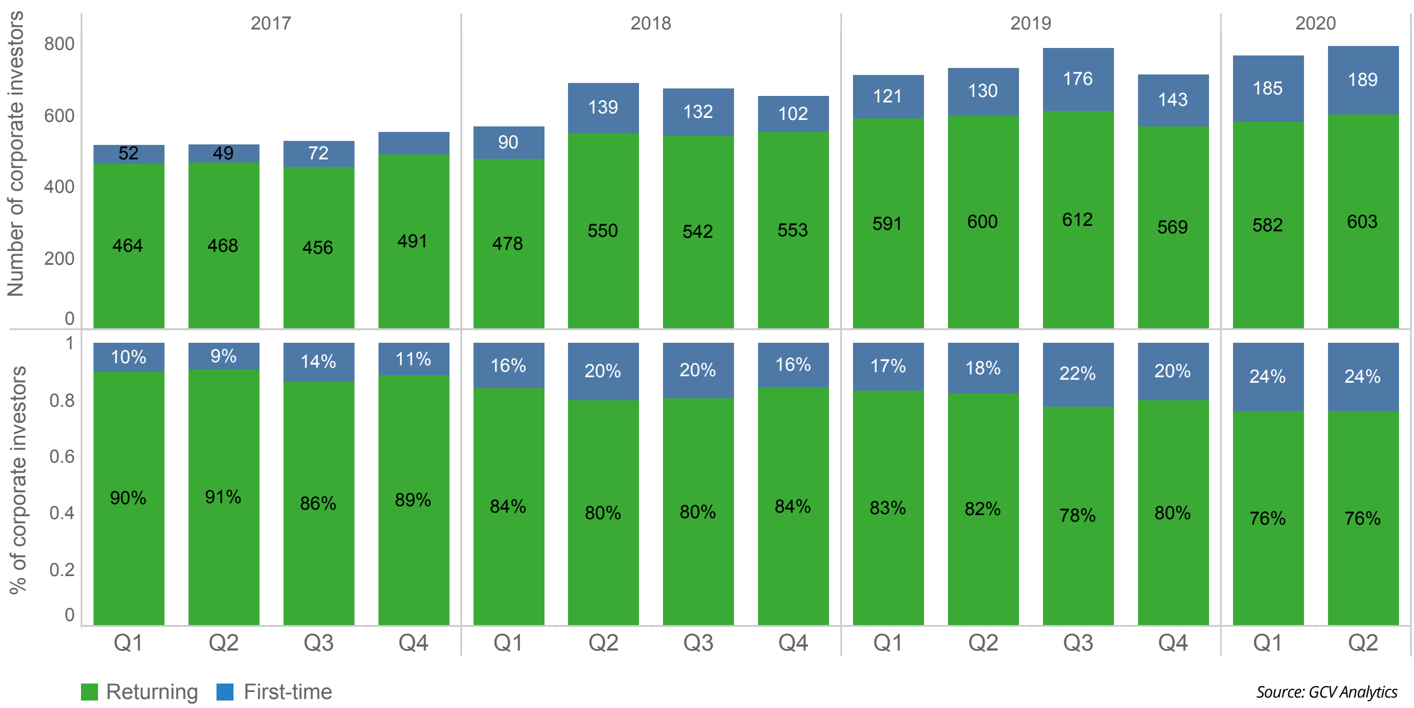
Most of the corporate investors participating in minority stake deals in the tumultuous second quarter of 2020 were investors that had done at least one deal before (76%). So nearly one out of every four (24%) corporates was disclosing their first minority stake deal last quarter. The proportion of these "first-timers" appears to have stayed at around 20%-25% over the past year.

In previous years, the proportion of first-time corporate investors was consistently lower than 20%. However, it is hard to estimate how many are actual newcomers to the corporate venturing playground, as some of them may have done other minority stake deals in startups but not publicised them.

Corporate venturing appears to have become an innovation tool to be employed by more corporations around the globe, rather than by a few global leaders, even in a pandemic.

While some of these newcomers may be occasional investors in startups or, conversely, more frequent than the data suggest, this is very unlikely to be accidental when industry incumbents are increasingly fearful of disruption.

## First-time vs repeat corporate investors




*Source: GCV Analytics*

# Corporate-backed businesses going public

**> Drop in number of CVC-backed companies going public**
**> Capital raised also down**
**> But IPOs are effective exits for early investors when cashflow is weak**

**Kaloyan Andonov**
*Analyst*

**The number of corporate-backed companies going public declined in 2019, despite some major IPOs like those of Uber, Lyft and Slack.**

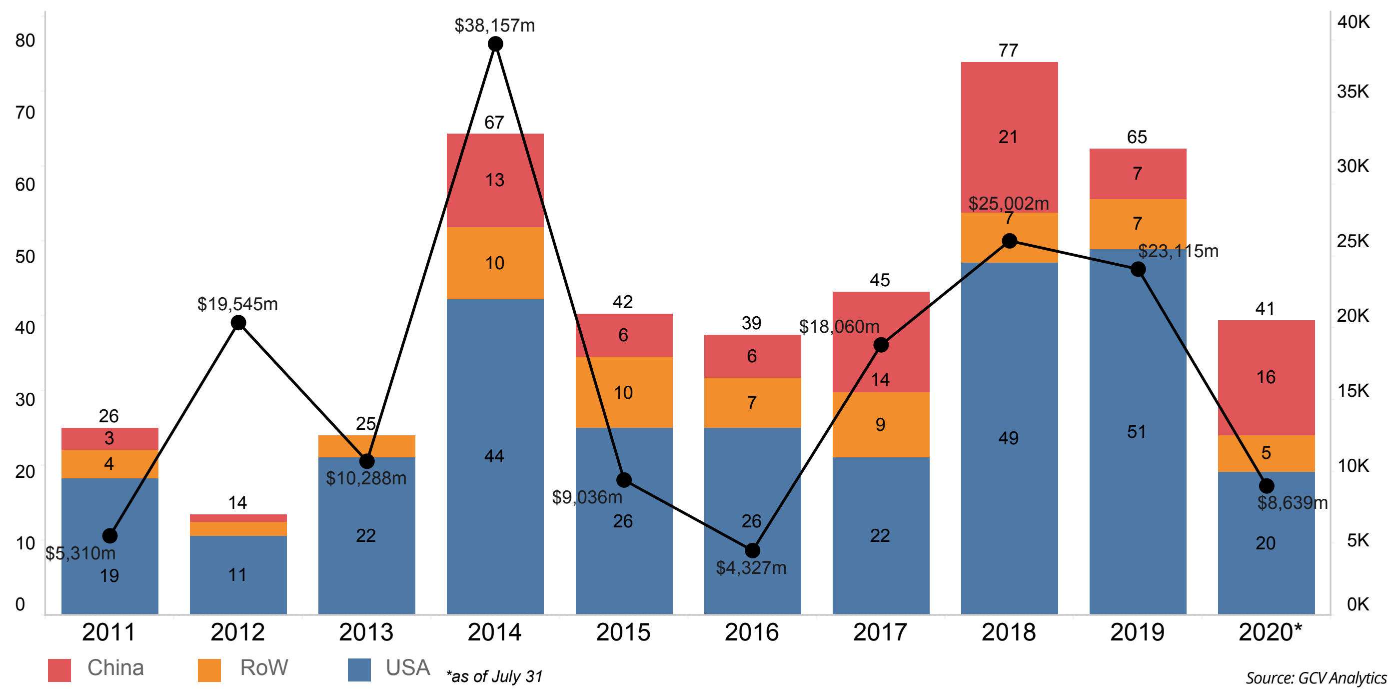
We have seen many large corporate-backed rounds ($100m and above) in recent years driven by high valuations but what proportion of the businesses go public? IPOs can provide a lucrative exit for backers despite the extended lead times.

In 2019, we tracked 65 IPOs of corporate-backed businesses, where a total of $23.1bn in capital was raised. These figures were down compared with 2018, with 77 offerings with an estimated $25bn of capital.

Public markets appear to be a source of liquidity for earlier investors in companies that do not yet have positive cashflows from operations.

According to Zacks Investment Management, nearly 40% of US-listed companies reported losses over the past year – the highest level since the late 1990s, excluding recessions. That has not stopped investors from bidding up the prices of their stocks – for example Tesla, which was trading at just above $200 in October and traded for nearly $1,600 before the recent stock split. It does appear venture capital-style valuations have migrated to public markets, despite the covid-19 shock.

## IPOs of corporate-backed enterprises



*Source: GCV Analytics*

# AmEx eats up Kabbage

**> Valuation has dropped to $850m from $1.2bn, reports suggest**
**> Alternative lending deals have doubled between 2014 and 2019**
**> Wide variation in total estimated dollars**

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

**Kaloyan Andonov**
*Analyst*

US-based business finance provider Kabbage, which has a host of corporates as backers, will be acquired by payment processing firm American Express.

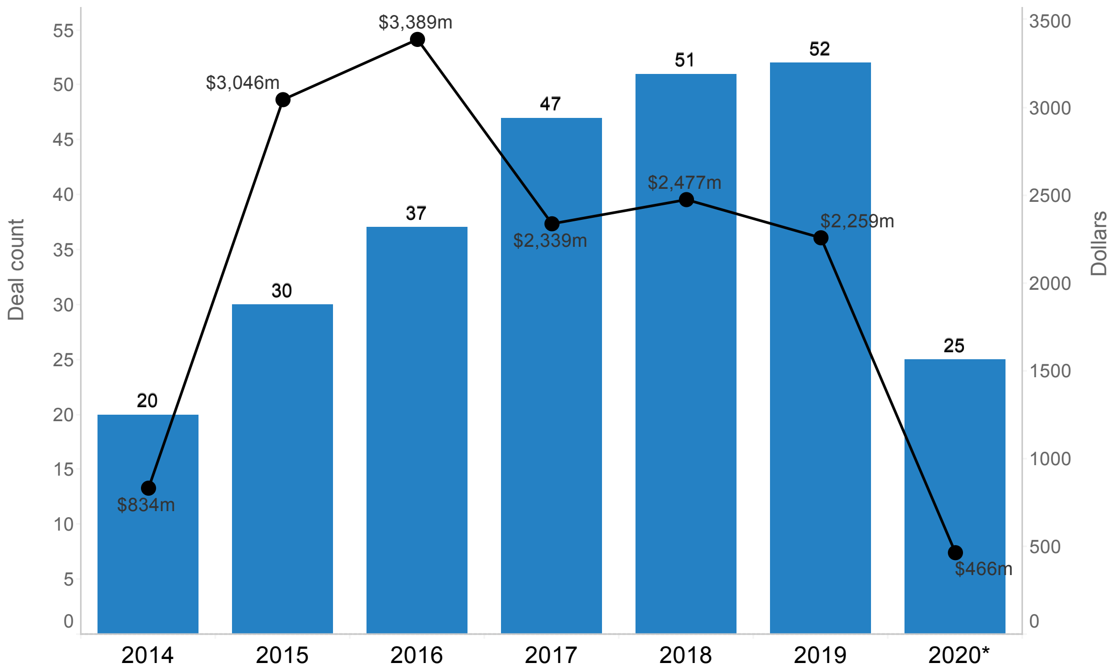
Corporates that are expected to exit include e-commerce firm Recruit, financial services firms Santander, ING, Scotiabank telecoms conglomerate SoftBank and logistics services provider UPS.

The acquisition size is undisclosed and covers the company's workforce, technologies and intellectual property, though not its pre-existing loan portfolio. Some reports suggested American Express would pay up to $850m for Kabbage, lower than its previously reported valuations of the company. Kabbage received $250m from SoftBank in 2017 at a reported valuation above $1.2bn.

Launched in 2009, Kabbage has developed an automated online lending platform that provides small businesses with up to $250,000 in working capital loans to meet short-term needs. Its products are expected to help American Express more effectively cover small businesses' financial needs.

Kabbage is part of the alternative lending space , which has caught the attention of corporate venturers. The number of deals in this area more than doubled from 20 in 2014 up to 52 in 2019. We have reported 25 corporate-backed rounds so far this year. The fluctuation in total estimated dollars most likely points to how difficult it is to assess the long-term viability of young businesses that have only operated in a low-interest rate environment.

## Corporate-backed deals in alternative lending




*as of July 31

Source: GCV Analytics

# Life sciences deals continue to rise

**> Pandemic is driving interest**
**> Three recent transactions show strength of the sector**
**> Number of deals has risen since the beginning of the pandemic**

**Robert Lavine**
*News editor*

**Kaloyan Andonov**
*Analyst*

Amid the covid-19 pandemic, interest in life sciences is now perhaps at its highest. This is true in corporate venture capital and three of the multimillion-dollar stories we reported in mid-August corroborate this.

US-based primary care provider Oak Street Health, which counts health system owner Humana among its backers, closed its initial public offering at approximately $377m.

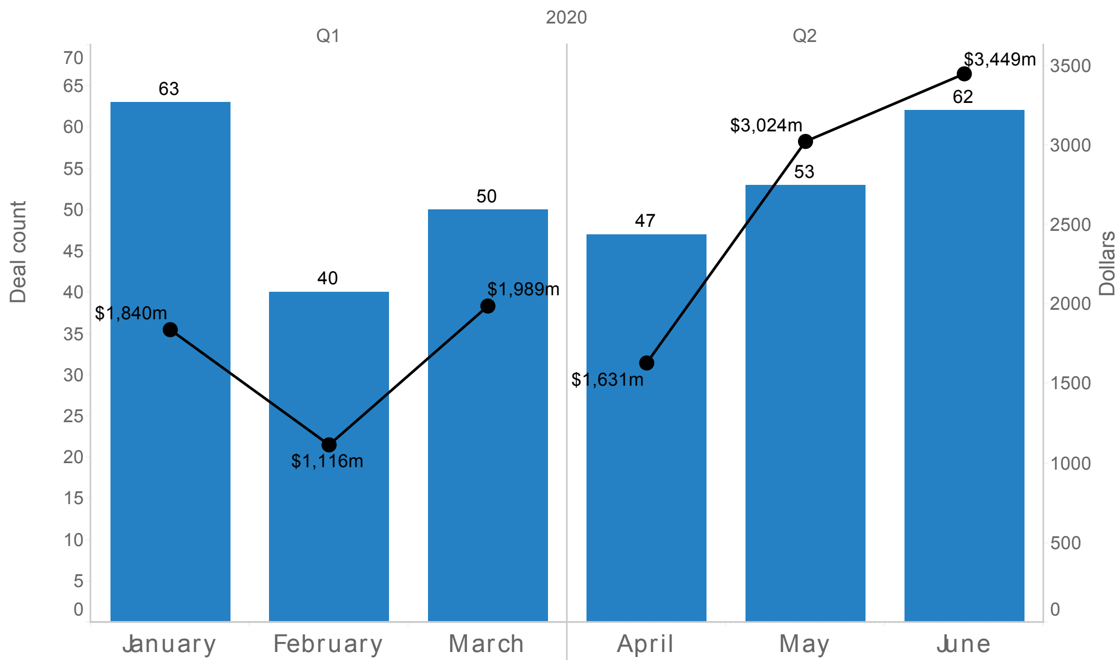
The company initially priced more than 15.6 million shares on the New York Stock Exchange at $21 each to raise $328m and its underwriters purchased over 2.3 million additional shares through the over-allotment option.

Founded in 2012, Oak Street runs more than 50 primary care centres across various US states for patients using government health insurance scheme Medicare.

US-based drug discovery technology provider Atomwise completed a $123m series B round that featured internet group Tencent as well as two undisclosed insurance firms in the syndicate.

Venture capital firm B Capital Group and the Saudi state-owned Sanabil Investments co-led the round, which also featured DCVC (also known as Data Collective) and Y Combinator, among other investors.

## Corporate-backed life sciences deals




Source: GCV Analytics

Atomwise has created a system called AtomNet that uses artificial intelligence to help researchers design and develop therapeutic treatments for disease targets previously thought to be undruggable.

On the other side of the Pacific, China-based healthcare insurance and crowdfunding platform Waterdrop, backed by corporates Meituan Dianping and Tencent, raised approximately $200m in a transaction valuing the company at $2bn. The round was reportedly led by an undisclosed large international insurance provider. Also known as Shuidi, Waterdrop offers three services through Tencent's messaging, mobile payment and social media app, WeChat: a healthcare insurance brokerage, a cancer-focused mutual aid offering and a healthcare crowdfunding service. The app claims to have attracted more than 250 million users.

GCV Analytics has tracked a growing number of corporate-backed deals in the life sciences space since the beginning of the year, particularly since the outbreak of the pandemic in February.

Comment

# The impact of covid-19 – an investor's view

**> Pandemic has broken down walls between health and social care**
**> Providers have proven their resilience**
**> The sector is now attractive to long-term investors**

**Boda Gallon**
*Health & social care consultant*

**Before the covid-19 pandemic, people from all sectors and political backgrounds accepted that the current health and social care system was not fit for purpose, nor was it sustainable.**

It is an organisationally, culturally and financially fragmented system at odds with itself. It lacks whole system integration, and is often frustrating for people with neurological conditions and their families as they navigate their new lives after hospital. It is a challenging and conflicted maze for neuro rehab professionals and providers delivering the best possible services and outcomes for patients and their service commissioners.

NHS Strategy has been in place for several years, and has attempted to address many of these issues. It creates sustainability and transformation partnerships (STPs) to bring local health and care leaders together to plan around the longterm needs of local communities across England.

In some areas, STPs have evolved to become Integrated Care Systems, a new form of closer collaboration between the NHS and local councils. The NHS Long Term Plan states that all of England will be covered by an integrated care system by 2021, replacing STPs but building on their good work.

Guidance clearly acknowledges that the independent sector needs to play a key role in helping individual footprints meet the requirements for STPs and ensure the plans are effectively delivered. The support required from the independent sector was broken up into the main pillars of the three Cs: capital, capacity and capability.

> Capital: helping to access and secure external investment

> Capacity: providing additional, flexible capacity to meet demand and patient need

> Capability: enabling learning and dissemination of good practice from independent providers.

However well-intentioned and essential this opportunity is for the independent sector, the NHS and social care, it has been perceived as a threat, primarily due to the significant cultural barriers existing between and within sectors. The perceived threat of the NHS being privatised has generated significant resistance, many fearing care and rehabilitation will be delivered for profit.

Significant commissioning barriers and budget conflicts still exist along patient pathways, blocking service integration and improved patient outcomes. It is no surprise, then, that social care still considered a 'Cinderella' service; a poorly funded, ticking timebomb that is been swept under the carpet for future governments to address.

The impact of the covid-19 pandemic, however, has been multi-layered. Health and social care has been hit hard, but everyone across the system has pulled together. Private and NHS providers have collaborated to scale-up services and support patient flow and bed capacity. Trust has been deepened, barriers have been broken down, and relationships and trust have been built.

This time has demonstrated the importance of collaboration, how the independent sector complements the NHS, statutory and third sectors, and how they should not be perceived as being in competition with each other.

There has been even more public goodwill for the sector, contributing to an enhanced public profile and significant support in the parity of esteem for the social care sector and its workforce. Hopefully, there is now the political will required for transformation and integration of the whole sector.

**Boda Gallon**

There have, however, also been many challenges emerging from covid-19 for independent sector providers. Costs have significantly increased, and services have been challenged by staff shortages and the initial search for PPE. There have been issues delivering hands-on support for some services, and, in turn, generating income.

Regulator advice has been slow and fragmented, with the future still uncertain, and the various organisations designed to support the system often weighing it down. Primary care in many cases effectively stopped supporting social care, leaving many providers to deliver services as best they could. Government funding for social care providers has been very slow or non-existent, with funds held up in local authority bottlenecks.

Residential service providers have been forced to address the perception that clients and workers have not been following government guidance around social distancing within their services. In conflict with long-term NHS and social care strategy, there have even been calls by some for a National Care Service.

*"This increased interest in deals and funding should hopefully drive creativity, opportunity, competition, productivity and efficiency across the sector"*

From an investment perspective, this uncertainty has led to many taking a breath to assess the situation. There have been delays in progressing deals, and the full due diligence required could not progress under lockdown conditions. However, health and social care providers have demonstrated incredible resilience in the face of extreme adversity and have remained operational in the face of a global pandemic while other sectors have struggled.

As a result, health and social care is now very attractive to investors looking for long-term income, with many already looking for new opportunities. This will probably lead to existing investment funds redirecting an extra percentage of their funds into the sector, and several new investment funds entering the market. Values are already holding up well, despite the wider economic pressures, with envisioned increased demand potentially driving values upwards.

Residential and community services operating within the specialist health and social care marketplace have been impacted far less than elderly care, and as a result, are an even more attractive proposition to potential investors, providing an opportunity for specialist care organisations to review their plans and potentially take their businesses to market for a potential exit.

This increased interest in deals and funding should hopefully drive creativity, opportunity, competition, productivity and efficiency across the sector, delivering positive change and improved services for patients, their families and their professional support teams.

In the face of apparent adversity, uncertainty and a gloomy economic outlook, there is a positive outlook for investment, service development and redesign within neuro rehab and the wider specialist healthcare marketplace. This positive outlook, however, comes with a need to embrace change, break down cultural barriers and focus on opportunity planning, which is much easier said than done.

# The virtual state of corporate venture today

**> Less travel means more productivity**
**> Replace physical conferences with virtual ones**
**> Continue to think like a CVC**

**Bill Taranto**
*Founder and president, Merck Global Health Innovation Fund*

**When the going gets tough, it is common for some corporate VCs to head for the hills.**

Today, it is a narrative that is emerging again amid the covid crisis. Global corporate venture deals fell from a total of 580 in April and May 2019 to 486 in the same period this year according to Global Corporate Venturing. However, institutional VC deals are also headed for a decline, with PitchBook anticipating a drop in transaction volume over the next several quarters, as well as a downturn in valuations.

It remains to be seen how it will play out this time, but I believe CVC will not only stick around, but also be a vital part of the innovation ecosystem going forward.

I know that Merck Global Health Innovation Fund (MGHIF) remains fully committed to "doing" venture. First, because we know that now, more than ever, health innovation is vital. Second, we understand that many of today's most successful companies were funded in times of uncertainty. In fact, to put our money where our mouth is, we have recently completed two spinouts, three follow-on investments and two new deals in 2020 – all since covid hit. And we intend to increase that pace going forward in 2020 and beyond.

It has not been easy. It is hard to do venture when you cannot venture out into the world, meet founders and do diligence the way we did in the past. But it is possible, if you do some innovating of your own and set up a smoothly functioning system to do CVC virtually.

Here is how we have done it.

## Finding real benefits in virtual CVC

Are people who work virtually more productive? The question has long been debated and now, as most people are working virtually, we have an answer: yes. Research shows the majority of remote workers are more productive.

Indeed, here at GHIF, we have found that less travel has brought more open calendars and more interaction, not less. In the past, our work entailed a lot of travel. Now that this has been restricted, our calendars have freed up and we are enjoying greater access to internal Merck business partners. We are also more available to our portfolio companies and chief executives. I personally had more than a thousand meetings last year and I had to fly to many of them. Since covid hit, I have not flown to any meetings. Now I spend those hours of travel time talking with people. That is wonderful.

**580**
Corporate venture deals April-May 2019

**486**
Corporate venture deals April-May 2020

*Source: GCV Analytics*

But what about conferences, meeting people and networking in person? This is a valuable part of our business, and some of these key interactions may inevitably be lost. However, many conferences like Global Corporate Venturing are now taking place virtually, so we are still able to develop relationships and source deals. We are also finding that virtual conferences are more productive, since we are not spending half the time on planes just to get to them. But, we will not be able to connect serendipitously, and after thinking more strategically about it, serendipity is not a highly effective strategy for making and developing relationships. So, we are developing a more targeted and curated approach to this networking need.

We have established a centralised, coordinated way to manage face-to-face meetings, workshops and collaborations to maintain our innovation efforts. We have discovered that this approach increases our "return on time", brings the right stakeholders to every meeting and expedites a process that is often delayed by real-world obstacles.

Another immediate concern when covid first hit was board meetings and how we conduct them going forward. Sure, they are not the same these days, but they do still work virtually. Especially in cases where there are established relationships and the situation is relatively stable, board meetings can be conducted effectively via the app of your choice.

## Challenges to virtual corporate venture

All that said, we do realise virtual corporate venture presents difficulties. Perhaps the worst is the absence of personal interaction in the diligence process. But what I have found is hardest to do without face-to-face contact, is research on a new investment. To do diligence properly, it is very important to read the room – see body language, observe interpersonal exchanges, have spontaneous conversations and talk to administrators. This sort of investigation can still be done, but you have to figure out a way around the challenges. That's why for us references have become even more important than they were before covid. We take the time to gain very deep insights into the people or companies we are vetting.

Internal connections at your firm could weaken. If your firm is like ours, you once did a lot of management by walking around the office to take the pulse of the organisation, stopping for an impromptu conversation or to meet a new task force member, say hello and tee up a future meeting. It is important to keep in mind that these interactions are vital – and you should find ways to continue them virtually.

Another challenge is the generational divide. It is not an overgeneralisation to say that VCs tend to be older people who are most comfortable working more face-to-face and founders tend to be younger people who are more comfortable with virtual work of all types. Founders today often are known for their use of social media and virtual communication, rather than physical gatherings, to broadcast ideas, establish viewpoints and take action.

No matter what, to get the most out of all your meetings, you will have to invest in virtual creative tools. Yes, whiteboarding and collaborative-design efforts are limited on virtual platforms, but they do exist. They are what you have to work with right now.

A final point here: remember that work-life balance will be further tilted when everyone works virtually. Your team, like ours, is no doubt accustomed to a 24/7 business environment. See to it that your team takes regular breaks and ensure that all the people you interact with are not suffering from isolation or overwork.

## Getting the best returns

Even if you follow all these steps, you will still face challenges amid the new normal. Implement the following strategies to ensure the best returns for your firm.

> Kill deals early and often. Decide quickly on what not to pursue so that you can devote more time to your most promising deals.

> Triage your portfolio. Among your existing companies, spend more time on the potential winners.

> Move quickly. Remember, there is still a need for speed. A lot of corporate processes have slowed down amid the pandemic. But do not let that mindset creep into your own work. We would rarely get a deal done if we moved at corporate speed.

> Avoid analysis paralysis. Perfect information is an illusion. Know the unknowns, address the risks and adjust from there as better information becomes available.

> Deploy a situational approach. Trusted relationships and stable situations require less effort and can be handled virtually. But new relationships and unstable situations will still require face-to-face interaction, even today.


**Bill Taranto (right) with James Mawson at the Global Corporate Venturing & Innovation Summit**

## Preparing for the future

When will corporate venture go back to "normal"? We do not know. Nobody does. In the meantime, we are taking measures to make sure that we will continue to be successful under any circumstances.

We are normalising remote work. Our team is comfortable working remotely and they do not expect to come into the office other than for management updates or key meetings. We have found that, we do not need offices at all, just hotel space for those occasions when we need to be together.

We are virtualising more operations. Most of our board meetings, diligence efforts and pipeline development will be different in the future. We think portfolio company board meetings will be done virtually from now on. As for diligence, we will cut our face-to-face diligence meetings from three or four to one or two.

We will do face-to-face when necessary. As the world reopens and travel restarts, some situations will of course call for face-to-face interactions to drive deeper relationships, address creative processes and solve critical issues. In those cases, we will be travelling.

The coronavirus pandemic has taught a lot of lessons to everyone in our partnership. It has reinforced the absolutely vital nature of our work – driving innovation in healthcare technology. And it has taught us that this work can and will continue successfully, whatever challenges the world brings our way.

# 11 truths: lessons from 30 years of innovation

**> Accenture alumnus Michael Redding shares his experiences**
**> He highlights the importance of "proof of value"**
**> How to get everyone on board: power of story**

**Michael Redding**
*Former managing director, Accenture Ventures*

**As I prepare to close the book on my nearly 30-year adventure at Accenture, I have started to reflect on the people, the experiences and the technology that have shaped my journey.**

So much could be said about 30 years at one dynamic company! What I do know is that I have learned many things along the way, much of it through the proverbial "school of hard knocks," learning the dos and do nots of successfully innovating at scale in a large enterprise. I thought I would share my 11 truths of innovation – the guiding principles I use to lead my teams and help large companies innovate quickly and successfully.

## 1 Context is crucial

It does not matter how awesome, sexy, or cool the tech; if you do not put it in the audience's context – what they need and want to experience – you lose them and miss the opportunity! Articulate to the audience why the technology matters to them (regardless of what you are showing), and you will get them to engage, which is the first step on the journey to innovation.

## 2 Interest is not money

Too many new innovators get excited or falsely satisfied from interest. No matter how sincere they seem, until there is money, interest is just talk. Do not be satisfied with a "first down", keep pushing until you score!

## 3 Patience pays

So, you have a compelling idea and a commitment for money.

Boom – instant corporate success? Wrong. As an innovator focused on the enterprise, the seeds you plant today will not be full-grown by tomorrow. Be patient, be agile, play the long game, understand that impactful change takes time.

## 4 Proof of value

Stop saying "proof of concept" and start saying "proof of value" – and make sure to actually provide the evidence, do not just claim it. No stakeholder can justify leaving money on the table if the results show meaningful value. Leaders will embrace change if they understand and believe the value that will come from the change. Make the juice worth the squeeze, and make sure everybody knows it.

## 5 Do not fail fast. Learn fast

There is no such thing as a "fast fail" in a corporate culture that rewards achievement, expansion and success. So, do not fail fast, learn fast. Commit just enough research, effort, innovation and capacity for a hypothesis, and test it. Keep an agile, experimental mindset. Keep trying. Everyone will remember the one that does work, not all those you intentionally set aside because you learned that they would not work.

## 6 Find your future

How does a large, established organisation consistently succeed at innovation? Innovators and entrepreneurs pivot. Companies strive to change but struggle to do so on more than a one-off basis. Get outside of your four walls and see what others are doing. Source the tech you need to match your new-found inspiration and aspirations. It will expand your horizons more than you thought possible.

## 7 Local heroes and global champions

They say all politics is local. Innovation should be local too. Enterprises will succeed at innovation with a two-tier strategy, what I like to call local heroes and global champions. Those who operate on both levels get the richness of local talent but cherry-pick the world's best as needed. Local heroes and global champions are the winning formula. Not one or the other. Both.


**Michael Redding talking at the Global Corporate Venturing & Innovation summit**

## 8 Invention vs innovation

Invention is filled with bright ideas. True innovation, which is actually implementing the idea, is hard. Do not get so organisationally starry-eyed over invention that you miss innovation. An innovator will find the value in the idea (regardless of whose it is) and then drive it forward until turns it into an actual outcome.

## 9 Power of story

To get everyone on board, describe how a change will improve their world. Once people believe in your mission, suddenly they will run through the brick walls to help you make it happen. A compelling mission allows all people – the analytical, the emotional, and the in-between – to make difficult changes. Why? Because you have shared with them a bright future and shown them their path. Do not undersell the power of a good story.

## 10 Not Mine. Ours

No matter how big the company, no one has enough to do it all. Imagine the wealth of research and development dollars among your partners, clients, venture capitalists, universities and governments. Do not think in isolation. Build a coalition of willing people who want to travel together and invest in that shining summit, and you will get a thousand-to-one kicker on dollars. Think broader, think "other people's money".

## 11 You are only limited by imagination and ambition

Achieving repeatable innovation over time is rare and hard. Be ready for the breakthrough moment when value exceeds the risk and cost. Challenge yourself to test and learn and so that when the moment is finally right, deploy and reap the reward! Rinse, wash, repeat and you have become a serial innovator!

I am so proud of the work I have done with the talented team of innovators at Accenture. Together, we brought to market many breakthrough technologies that have helped shape business and society.

My learning journey will continue as I take my own advice to get outside the four walls of my organisation and write my own next chapter of enterprise innovation born from disruptive technology.

# How to eagle-eye a star VC fund

**> AC Ventures' six-step analysis for venture capital funds**
**> Aligning with your strategy**
**> Examining the fund's skills and performance**

**Gonzalo Soriano and Héctor Shibata Salazar**
*AC Ventures*

**Do you know how to analyse any venture capital fund correctly and accurately? Our 'eagle eye' approach and six-step analysis will help you do just that.**

There are several investment opportunities within financial markets, such as alternative investments. Among these are those of venture capital.

We can classify investments within the VC industry as: direct, if you invest directly in startups (controlling the underlying asset), or indirect (when you do not have control of the underlying asset) by investing in other VC funds.

Alternating between these two types of investments allows risk diversification and access to higher returns.

## Eagle eye approach

Like investments in startups, investing in funds involves a pre-established process that must be fully followed.

This process begins with the approach we call "eagle eye", which involves:

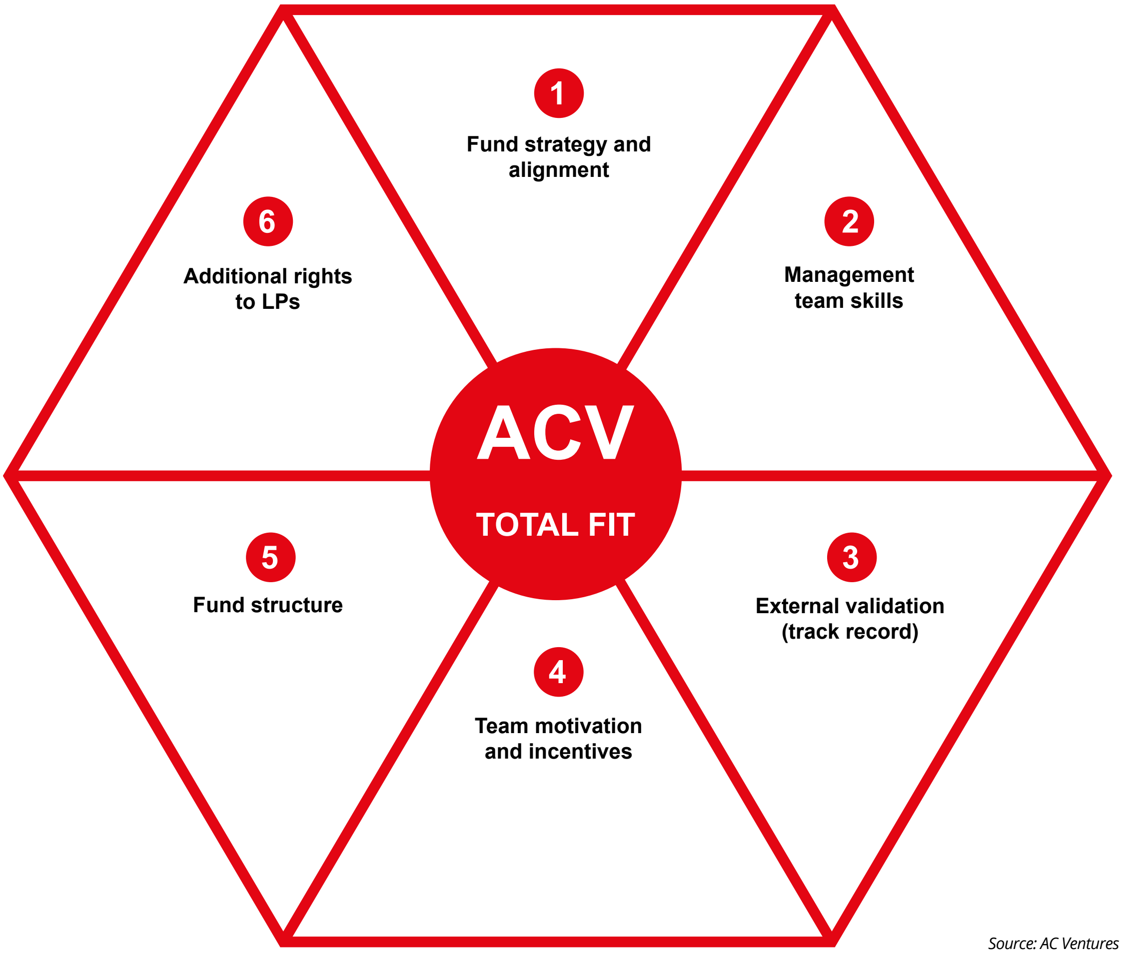
> **Telescopic vision:** to detect good venture capital funds

> **Panoramic view:** to establish points of comparison between venture capital funds

> **Acute vision:** to analyse in detail and calibrate the investment

## Six-step methodology

Continuing with this process, we will




*Source: AC Ventures*

complement the eagle eye approach with the six-step methodology.

## 1 First step: fund strategy and alignment

The first thing to do is to understand the type of fund in which you want to invest, so it is convenient to keep in mind the risk and return profile of the portfolio you are going to manage.

You must find a fund with a close alignment to your investment strategy. So be sure to check out the following items:

> **Vintage:** determine the year the fund was raised to make it comparable with other funds

> **Investment stage:** validate if they invest in seed, early, growth, etc. (that is pre-Series A, Series A, B, C and so on)

> **Investment ticket in startups:** understand the amount of initial investment and the subsequent investment amount (follow-on) per investment and as a portfolio

> **Sector:** identify the verticals where the vehicle focuses. For example: AI, deep-tech, retail technology, fintech, logistics, distribution, supply chain.

> **Geography:** know in which territories the fund will seek to invest (for example the US or Asia). On some occasions, VC funds will seek to invest according to the nationality of the entrepreneur (such as companies established by Israeli founders).

> **Size of the fund:** it must be aligned to the geography and the investment stage. Not necessarily the smallest or largest funds are the best for your portfolio as an investor

> **Other elements to consider:** where you get investment opportunities from, strategy aligned to macro factors,

competition with other funds, active or passive role when making investments, geographies where the fund operates

## 2 Second step: management team skills

The team is the one that executes the strategy, makes things happen and takes care of the return on your investment. Some considerations are:

> **Relevant investment experience:** look for teams that have experience making investments, it may be within the same fund that you plan to invest, in other funds or as angel investors

**Héctor Shibata Salazar**

> **Relevant sectorial experience and education:** look for a team with relevant experience in the sector you plan to invest, and make sure that their investment thesis is consistent with their experience

> **Wide network of connections between the geographies and verticals of the fund:** look for a team that has superior strategic and complementary connections to other funds

> **High capacity to originate investment opportunities (dealflow):** this is one of the main elements within any team. Without a broad origination channel, the ability to select relevant opportunities is greatly reduced

> **Team stability and cohesion:** evaluate if the team members have worked together before and if the team has stayed together through time and different economic cycles

> **Interaction and support to companies in their portfolios:** understand if they support startups, not only with money but with other variables (for example: with introductions to corporations, investors, associations, mentors). In addition, it is important to understand if they support all the companies in its portfolio or only those that are on the right track.

> **Other elements to consider:** team size, complementary skills, clear functions, responsibilities, decision-making, succession planning, brand recognition, implementation of analytics in their investment processes.

## 3 Third step: external validation (track record)

Although past performance does not ensure future returns, do research on the historical performance of previous funds managed by the same team or other individual partners related. This is essential. For this you must consider:

> **History of previous funds or of partners' portfolios:** try to ensure that they have had a positive or superior net return to other comparable funds (internal rate of return, cash-on-cash). If the fund has a comparative analysis with the entire industry, make sure it is in the first decile and that the returns have been real; that is, with outflows (sales of portfolio companies or initial public offerings) of their investments and not just paper returns.

> **Continuity of the partners in the fund:** make sure that the partners that generated the returns of the fund are still part of the investment team and have not switched to another fund.

> **Quality and recurrence of fund investors (limited partners):** having institutional investors (who belong to

a recognised organisation) is a way to validate the quality of the fund. The recurrence of these investors is a good reference of a good and continuous performance of the venture capital fund.

> **Validate investments:** review the quality and performance of the fund's previous portfolios, as well as the quality of the co-investors (which are those other individuals or institutions that have invested in the same portfolio companies). Also take into account the subsequent investments (follow-ons) they made in these companies and understand the write-offs (companies that failed) that they have had historically. Validate if there are red flags in their previous portfolios.

*"Validate if there are red flags in the fund's previous portfolios"*

> **Other elements to consider:** size of the funds and growth over time, consistency in the investment thesis (for example, VC vs private equity, type of investment: equity vs venture debt, industrial sector), references of other funds and startups in which they have invested (preferably those startups that have failed since they will have a more critical perspective), vision of the entire ecosystem (that is, determine if they are legendary funds, tier one, two, three, etc), main investors or participants in syndicated transactions.

## 4 Fourth step: team motivation and incentives

It is important to understand the culture, motivation and incentives of the team as the duration of a venture capital fund is usually around 10 years and the expected returns are in your hands. The main elements are:

> **GP commitment percentage:** usually the fund manager (general partner or GP) contributes to the fund with a percentage of the total (1% to 5%), in this way their money is at stake too. This helps to align expectations with investors (limited partners or LPs).

> **Incentive structure (management fee and carried interest):** the management fee (ranges from 2% to 2.5%) allows the fund to pay salaries, office rent, travel and per diem. The members of the fund usually go for the carried interest (around 20%), which is the benefit that the investors of the fund (LPs) share with the GPs and is directly related to the financial performance of the vehicle (profit of the fund).

> **Fund-related activities:** understand what percentage of their time GPs use in other activities not related to the vehicle.

> **Other elements to consider:** Define if there is a key-person in the fund (key-man provision), team independence, external activities, possible conflicts of interest, division of carried interest by partner, culture of the fund (aggressive, passive and so on), team energy, among others.

## 5 Fifth step: fund structure

As in any other type of investment, the structure and terms of the fund must be considered. Some of the considerations are:

> **Fund size**

> **Term:** 10 years (divided into: five years of investment and five years of exit)

> **Jurisdiction:** usually the fund is established in the country where you are going to invest. For foreign investors you can make pre-established vehicles domiciled in the US, Canada, the Cayman Islands, the Netherlands, Holland and Singapore, among others.

> **Waterfall:** defines the guidelines for the contributions and distributions that the fund will make to all its participants.

> **Economics:** management fee, carried interest, average commitment of GP and LPs.

> **Other elements to consider:** expected investment portfolio, expected closure, investment committee, among others.

## 6 Sixth step: additional rights for the investor

Usually, the financial return is the main objective of the investor; however, other rights can be sought when analysing and negotiating with a VC fund, for example:

> **Fund governance:** establishes whether the investor can seek to have a seat on the investment committee or at least have an observer seat.

> **Co-investment rights and generation of investment opportunities (dealflow):** defines the investor's opportunity to invest additional money in the investment opportunities of the fund and receive additional opportunities where the investor could invest independently.

> **Information and consulting rights:** establishes access to the fund's databases; specific portfolio reports; from industries or technologies; consulting on particular topics.

> **Access to the fund's network:** establish whether you will have access to the different interest groups in the fund such as startups, investors, allies, other funds. Usually through fund events (for example: annual meetings, demo days, showcases, executive education programmes).

### Find the total fit

These six elements must be completely intertwined to achieve a perfect fit, when this happens the result will be the fund where you could invest. Each item must have at least a minimum desirable rating for you to advance in the process. Each element is relevant by itself, but it is not the only consideration for a final decision. Always keep in mind that it will be difficult to find a fund that is 100% aligned with your goals.

### Additional tips

> **The momentum of fundraising:** When did the survey start, when was the first closing, when is the final closing, the hard cap and what is the minimum ticket?

> **Marketing:** do not be intimidated by the appearance, branding or scared by the pressure they may exert on investing, focus on the content and the hard data during the analysis.

*"Consider that you are going to establish a long-term relationship"*

> **Face-to-face meetings:** physically visit their offices, talk to the different team members, assistants, analysts, associates and partners, together they demonstrate the culture of the fund. These characteristics are essential for investment.

> When the fund is managed by a friend of yours or someone you know: be stricter in the due diligence and always do a comparative thorough analysis to avoid biases.

> Entrepreneur funds do not have higher returns than traditional funds. Each fund has its own merits.

In summary, consider that you are going to establish a long-term relationship (10 years), so follow the dynamics of the eagle eye and use the six-steps methodology calibrating the speed and detail of your analysis to ensure a successful hunt.

# Sector report: Telecoms
## State of the market

> **Optimism about opportunities thanks to the 5G rollout**
> **Increase in deals and exits by telecoms corporates**
> **Largest deals and most people moves linked to Vision Fund**

**Kaloyan Andonov**
*Reporter and analyst*

**Liwen-Edison Fu**
*Supplements editor*

**Telecoms are the connecting tissue of today's digitised world.**

Developments in this sector are expected to facilitate the digitisation of everything. For that and other reasons, the sector is unsurprisingly one of the most highly competitive industries. Its companies see themselves forced to continually make significant outlays of capital and innovate so they can stay competitive and relevant. The telecoms business is a capital-intensive one.

With its high levels of competition and high capital requirements, telecom is possibly the most technologically disrupted sector. Core services for telecoms carriers – such as voice or texting (SMS) – have been long replaced by over-the-top (OTT) providers of instant messaging and social media like WhatsApp, WeChat and Facebook Messenger that operate via internet connection. This disruption has a palpable impact on telecoms' revenue streams.

The trend is likely to deepen with the rollout of 5G and the range of connected technologies that may fuel. The sector's incumbents are likely to look for synergies and partnerships with other service providers that benefit from mobile connectivity.

These conditions explains why telecom carriers' corporate venturing units have been sought third parties as limited partners (LPs) to back their fund and deals. Examples abound – from SoftBank with its near-$100bn first Vision Fund to Swisscom, Telstra and Deutsche Telekom. Over the past few years, the sector has developed structures and strategies to be able to incorporate such third-party LPs.

**GCV Analytics' definition of the telecoms sector encompasses telecoms service providers and wireless technologies as well as other telecoms-related emerging businesses.**

*"The telecoms business is a capital intensive one"*

With the impact of the covid-19 pandemic and its economic downturn, these practices are likely to be adopted by corporate venturers from other sectors. While demand for capital by emerging enterprises is virtually unceasing, the supply of venture capital funding requires that a broader range of investors see potential for exceptional financial returns.

However, established companies generally feel optimistic about business opportunities, thanks the potential of 5G technologies which lies in 5G's higher speed. The last major network upgrade, 4G, was rolled out in 2009 and mobile devices reached a peak speed of almost 10 Mbps. This pales in comparison with what 5G is set to deliver – speeds between 10 and 20 Gbps.

This would drive network latency from 30ms to about 1ms, making it apt for a wide range of services and devices that require ultra-low latency.

Consulting firm Deloitte surveyed 415 US-based executives responsible for connectivity at organisations during the first quarter of this year. The surveyed executives were from companies planning to adopt 5G and (or) Wifi 6 technology in the next three years. A majority of the surveyed (79%) thought advanced wireless would transform their industry within the next three years. Three-quarters of them believe 5G would be "critical" in the upcoming years, with 87% believing it could even create a competitive advantage. According to the survey, organisations expected to invest an average of nearly $116m in wireless technologies in the next three years.

As 5G takes over developed markets, telecom carriers are expected to successfully roll out and scale 3G and 4G connectivity in developing economies, where the subscription base is already mature. According to The Economist, Sub-Saharan Africa already has an average of 104 mobile service subscriptions per 100 people, comparable with Latin America (107) and even North America (109).

## Sector specialist

Chris Bartlett is senior vice-president of corporate development at US-based telecoms firm Verizon and head of its corporate venturing unit, Verizon Ventures.

Verizon focuses on improving its 5G and related technology following the idea of "5G network built right", which encompasses areas including mixed reality, the internet of things (IoT), advanced robotics, 3D printing, wearable tech and other emerging technologies.

Verizon Ventures has therefore been targeting developers of 5G-related technologies such as connected devices and hardware, media and entertainment, commerce and advertising, infrastructure and networking, as well as data and analytics.

Bartlett oversees joint ventures, strategic investment activity, acquisitions and divestitures. The unit has invested in more than 70 companies to date across industries and technologies since it was launched in 2000.

**Chris Bartlett**

At the Global Corporate Venturing & Innovation Summit in January, Bartlett highlighted the unit's new focus on 5G. Its impact would be larger than previously believed, he said, adding that Verizon is already building a network to help devices and networks to connect.

Bartlett predicted 5G would start gaining traction in 2021 and the following year would be even more important for the technology. Verizon Ventures had already been investing in companies with foundation tech for 5G, and it is a strategic topic for many CEOs and chief innovation officers across the telecoms industry.

Verizon Ventures' investment activities could be a proxy, enabling more efficient connections, initially in the industrial sector, but increasingly more on the enterprise and supply chain sides, according to Bartlett, who added: "5G would enable industrial IoT, real-time analytics and faster decision-making."

### Sector specialists

Guenia Gawendo and Irene Gómez head Telefónica's two innovation groups.

Gawendo is the director of Telefónica Innovation Ventures (TIV), a corporate venturing vehicle for Spain-based telecommunications firm Telefónica. Her mission is to identify new business opportunities and foster strategic partnerships aligned with the firm's global strategy by scouting and investing in technological startups directly or through a network of leading venture capital funds in key markets in which TIV participates as a limited partner. TIV has 10 active portfolio companies invested directly and more than 80 startups invested through nine VC funds in key markets for Telefónica.


Guenia Gawendo


Irene Gómez

Gómez is the director of Telefónica's Connected Open Innovation, an open innovation network formed in January 2020 by the firm. She previously concentrated on big data and artificial intelligence for nearly four years for the Telefónica's AI platform, Aura, having spent more than a decade at the group in various roles.

According to another report by Deloitte, "2020 Telecommunications Industry Outlook", this is set to be the year of 5G. The report states that the telecoms sector and other adjacent industries are still in search of the "killer apps", emphasising that yet unknown technologies and services are likely to emerge: "In reality, 5G is very much in the 'build' phase right now. However, as people come to truly understand its capabilities and limitations, we can expect to see the next generation of solutions based on 5G. The transition to 5G is expected to generate a windfall for network, infrastructure and equipment vendors." The report cites a forecast from market research firm Gartner which expects global network infrastructure revenues for the technologies to reach $4.2bn by the end of 2020.

From a consumer standpoint, 5G is expected to deliver massive broadband capacities enabling high-speed communication for a host of applications and services from IoT and robotics through AI-powered vehicles and smart homes to live TV. Previous editions of the Deloitte report have cited US surveys, which state 37% of respondents have unlimited data plans, increased from 25% in 2017. As providers strive to offer lower prices of data plans paired with other services, the average revenue per user tends to decrease.

This decline has compelled telecom providers to seek new opportunities. These naturally come from partnerships in the content space, as more than half of US households, (55%, according to Deloitte's Digital Media Trends survey in 2019) subscribe to paid video streaming services. The figure is likely to have increased even more during the covid-induced lockdown this year. Telecom companies may also find other opportunities related to the industrial applications of 5G in manufacturing, health services such as telemedicine, transport and smart vehicles, retails and e-commerce, in education as well as in rise of edge computing. According to some forecasts, 45% of IoT-spawned data will be stored and processed near or at the edge of networks.

Deloitte's report also identifies some of the fields which, if powered by 5G, may open new growth opportunities, such as sports betting. The report notes: "In many ways, 5G technology and sports betting are made for each other. 5G is designed to support low-latency, high-volume communications – precisely the kind of connections that real-time sports bettors are likely to desire. And, 5G is already being deployed in sports stadiums, sports bars and other venues where such betting might take place."

As the telecoms sector is a highly regulated one, it is important to bear in mind political and legal developments. According to the report, the primary concerns are heightened regulatory scrutiny and the burden related to data privacy and security, as well as potential antitrust backlash against technology companies. It even states: "General Data Protection Regulation was the first significant regulation that challenged US technology companies to re-examine how they conduct business and store consumers' data. However, since then, there have been a flurry of actions by global regulators against US tech companies. Global regulators cite the EU's example for their own laws and investigations against big tech."

While political and regulatory conditions for telecoms vary greatly, there have been examples of how deeply they could influence the directions of the industry. In the US, tax reduction domestic businesses and rescinding net neutrality, have had an undoubtedly positive for telecoms' top and bottom lines. In contrast, the EU's obligatory removal of roaming charges across member states has exerted more pressure on already squeezed margins of telecom carriers. Finally, allegations of security threats and espionage have led to the banning of devices and network equipment from China-based electronics manufacturer Huawei in the US and other countries.

**The telecoms sector will change completely with the introduction of 5G**

**James Mawson**
*Editor-in-chief*

## Entangled in quantum communications

Telecoms' last transformative business model changes were the development of mobile phones and voice-over-internet protocol. These have transformed the world, powering the technology revolution as surely as the chips that process the information.

Another seismic disruption beckons. A quantum internet promises a truly unhackable way to communicate, allied to artificial intelligence to process the reams of near-instantaneous data flows. It will be effectively a world of magic.

This month, researchers have demonstrated the first city-wide quantum network moving beyond tests between two people, according to blog SingularityHub.

A team at the University of Bristol in the UK has developed a quantum communication network that can simultaneously connect at least eight users across a distance of 17 kilometres. In a paper in Science Advances, they demonstrated that the network can simultaneously and securely connect all 28 possible pairings of eight users across existing fibre optic networks in the city.

Lead author Siddarth Joshi said in a press release: "Until now, building a quantum network has entailed huge costs, time, and resources, as well as often compromising on its security which defeats the whole purpose. Our solution is scalable, relatively cheap and, most important of all, impregnable."

UK quantum photonics startup AegiQ has also this month secured £1.4m ($1.8m) from UK government research agency InnovateUK to develop secure quantum communications for fibre-optic and satellite based applications.

Led by CEO and co-founder Max Sich, AegiQ is a spin-out of the University of Sheffield and part of the UK government's £70m funding initiative to secure the UK's position as a world-leader in quantum technology.

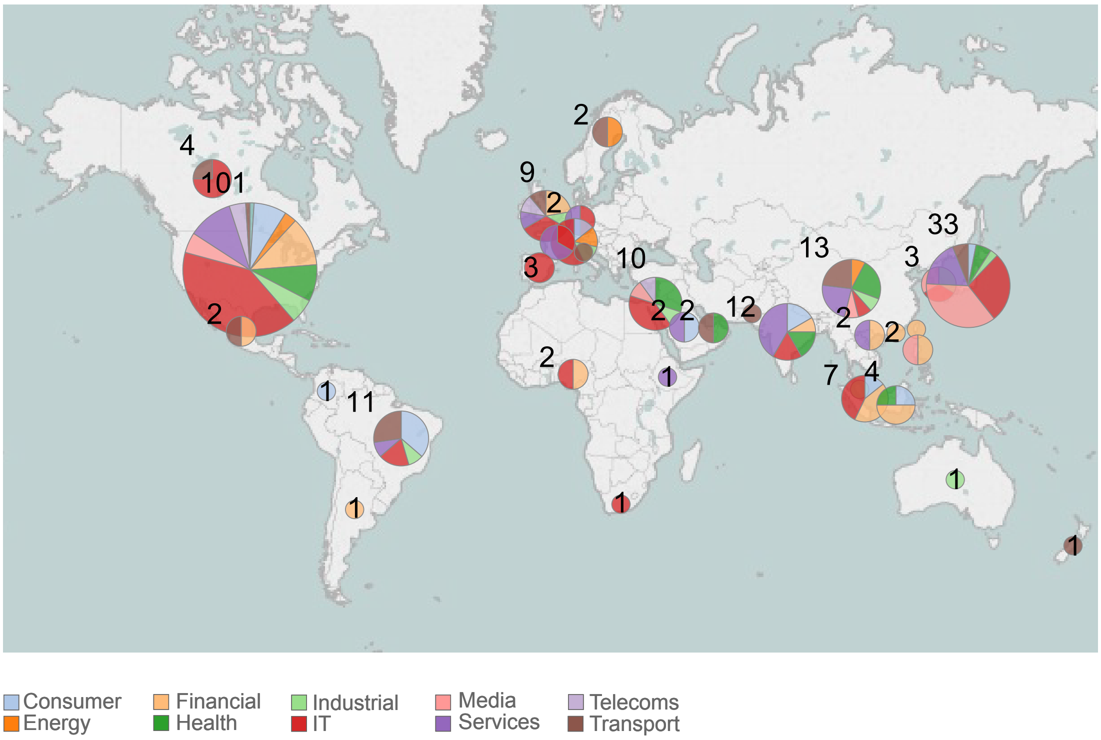
Rather than binary code where numbers are either one or zero, quantum's ability for an atom to be in either state means it makes its messages harder to decipher just as the processing power of its chips accelerates the ability of quantum computers to crack traditional messages' encryption.

This promise of truly unhackable communication is driving a global push to build a quantum internet, with China previously in the lead.

In June, Chinese researchers demonstrated a practical way to share security keys over 1,120 kilometres using entangled photons – particles tied together by the strange laws of quantum mechanics – sent and received by satellites.

# The sector in charts

## Deals in telecoms with corporate investors




For the period between August 2019 and July 2020, we reported 246 venturing rounds involving corporate investors from the telecoms sector. Many of them (101) took place in the US, while 33 were hosted in Japan, 13 in China and 12 in India.

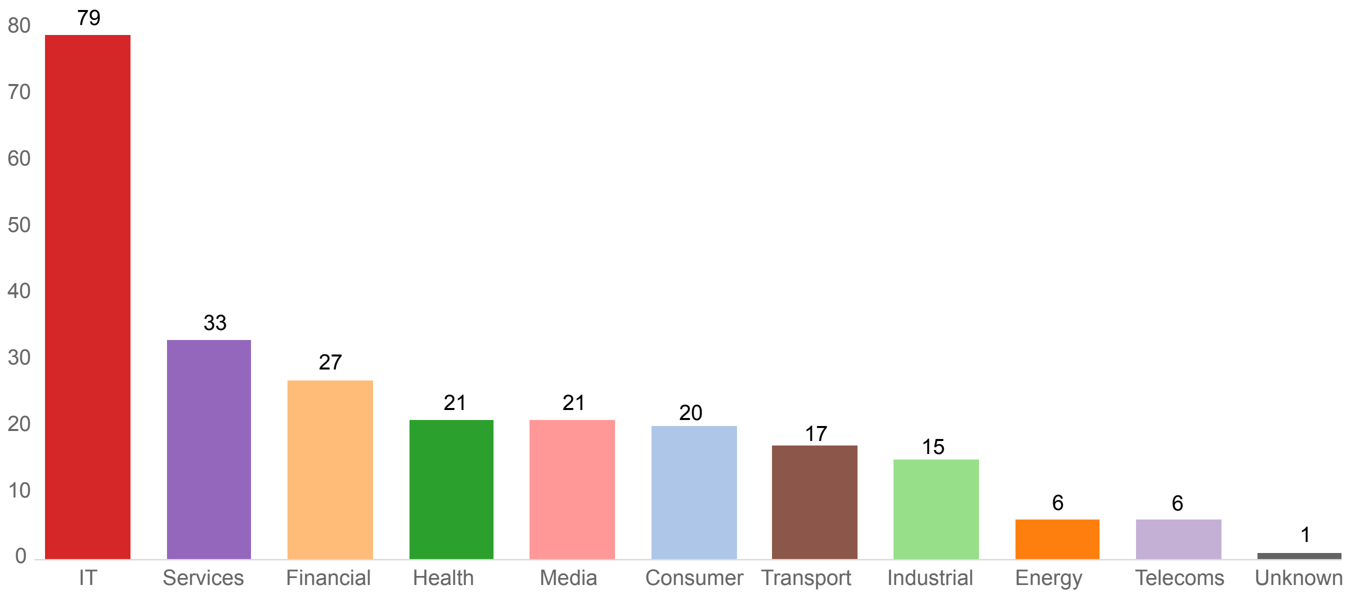
## Where telecoms investors put their money – by sector

**IT 79**
Enterprise software, cybersecurity and big data

**Services 33**
Accommodation and travel, logistics, edtech, other

**Financial 27**
Payment technology and alternative lending

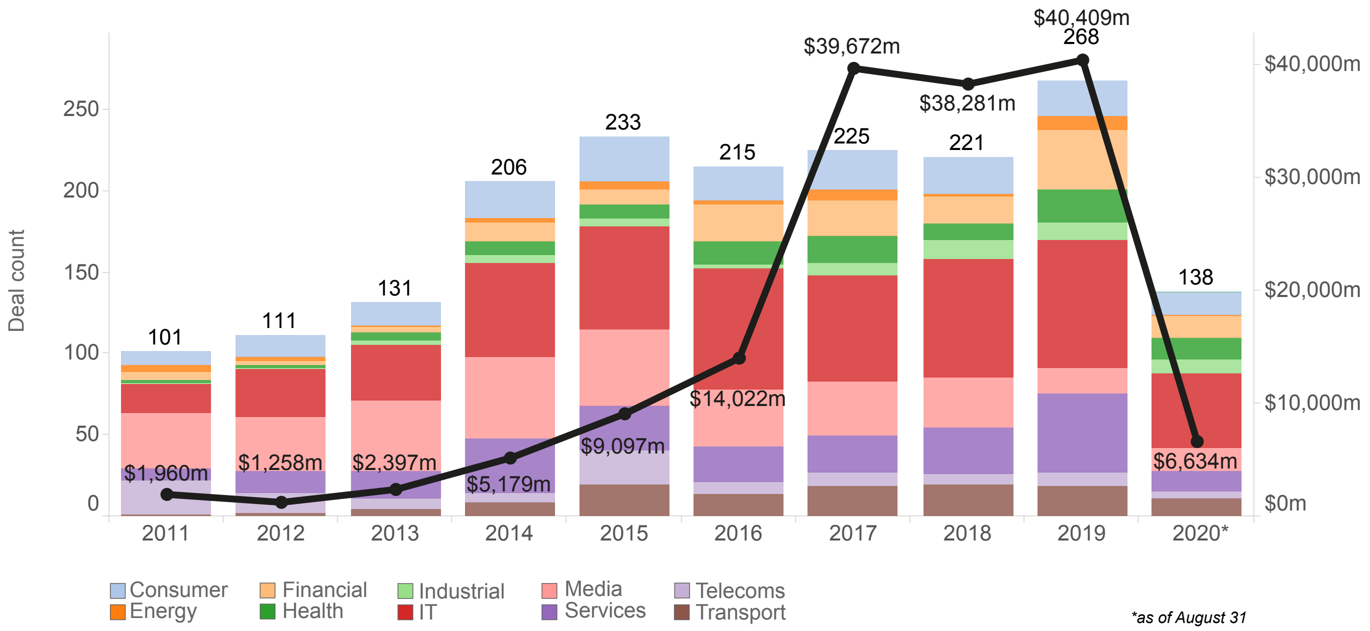
**Health 21**
Medical devices and diagnostics, healthcare IT




*Source: GCV Analytics*

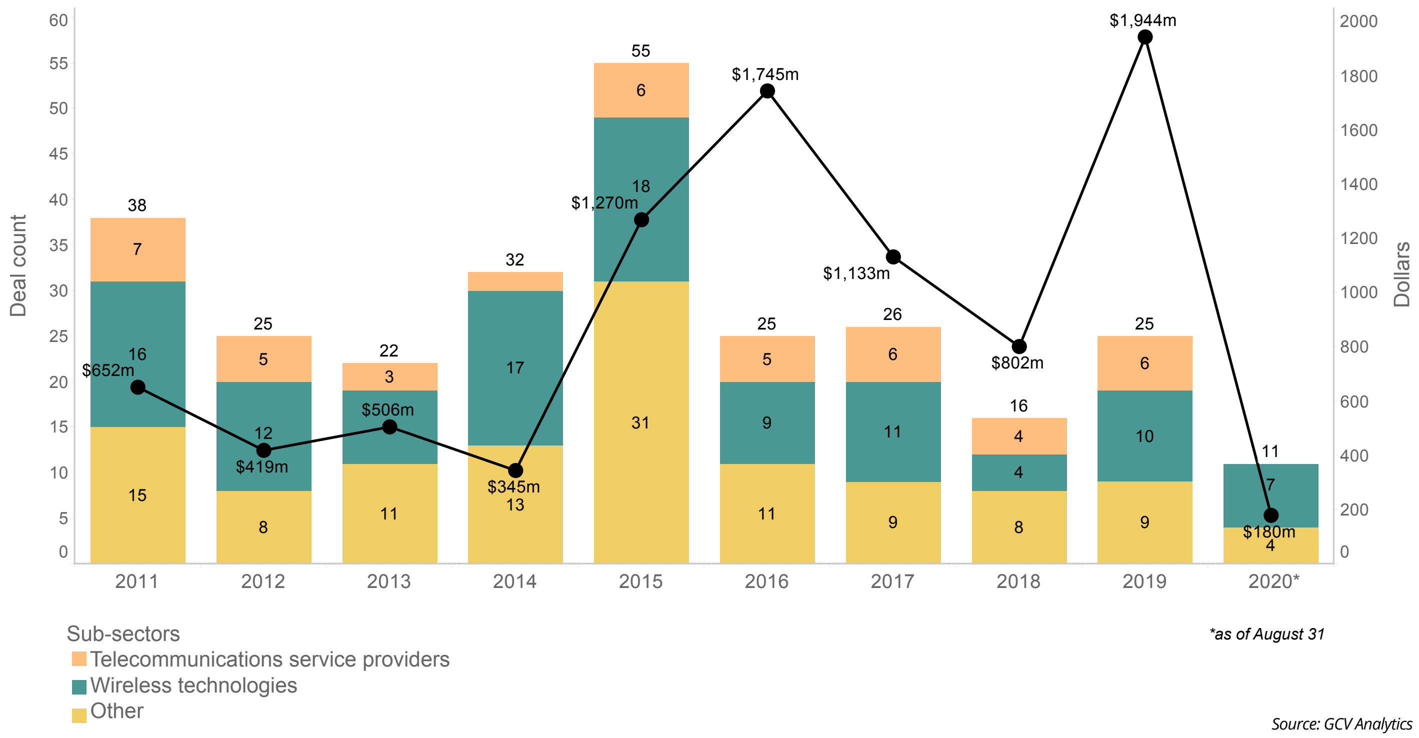
## Year-on-year breakdown of corporate-backed rounds

On a calendar year-on-year basis, total capital raised in corporate-backed rounds rose from $38.28bn in 2018 to $40.4bn in 2019, representing a 6% increase. The deal count also registered an increase, with 268 deals last year compared with the 221 tracked in 2018, a 21% increase.



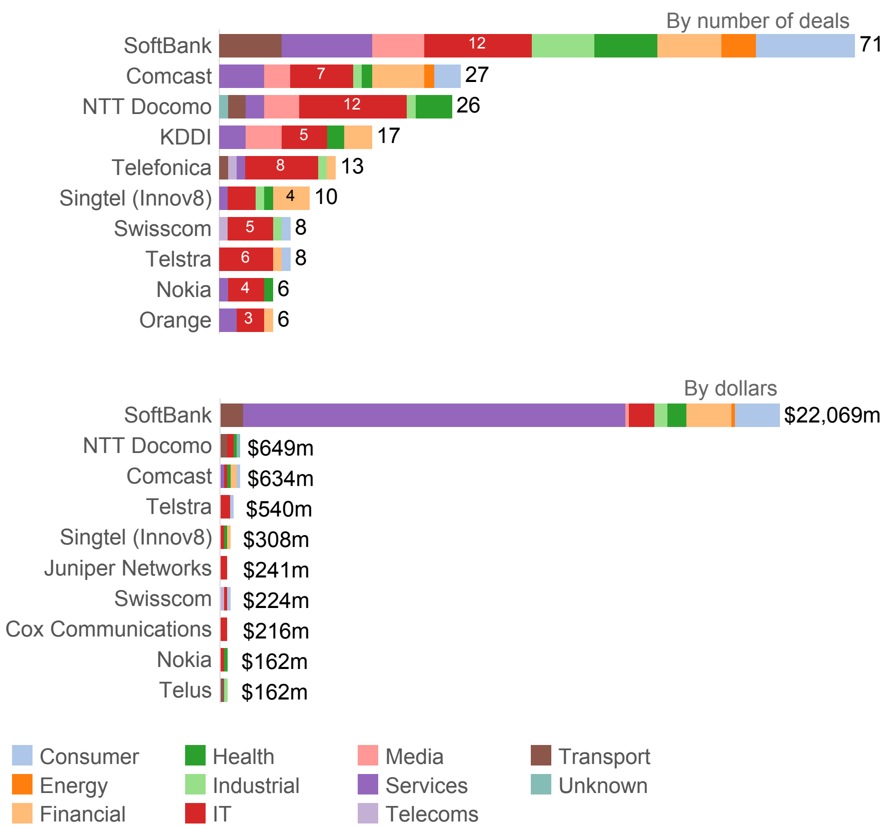

## Investments into telecoms startups

Overall, corporate investments in emerging telecoms-focused enterprises went up from 16 rounds in 2018 to 25 by the end of 2018, suggesting a 56% increase. The estimated total dollars in those rounds more than doubled from $802m in 2018 to $1.94bn last year.



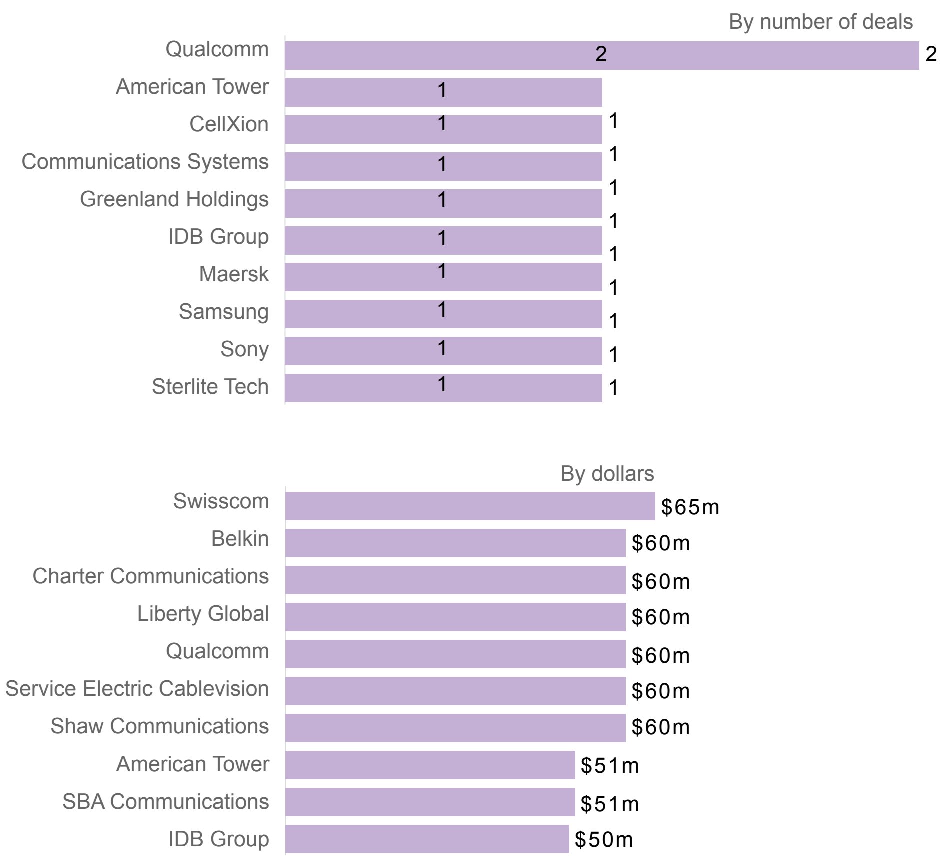

Source: GCV Analytics

## Top telecoms investors, August 2019-July 2020




Telecoms and internet company SoftBank, cable and media conglomerate Comcast and telecoms carrier NTT Docomo were the leaders in largest number of deals and in capital invested.

## Top investors in telecoms, August 2019-July 2020

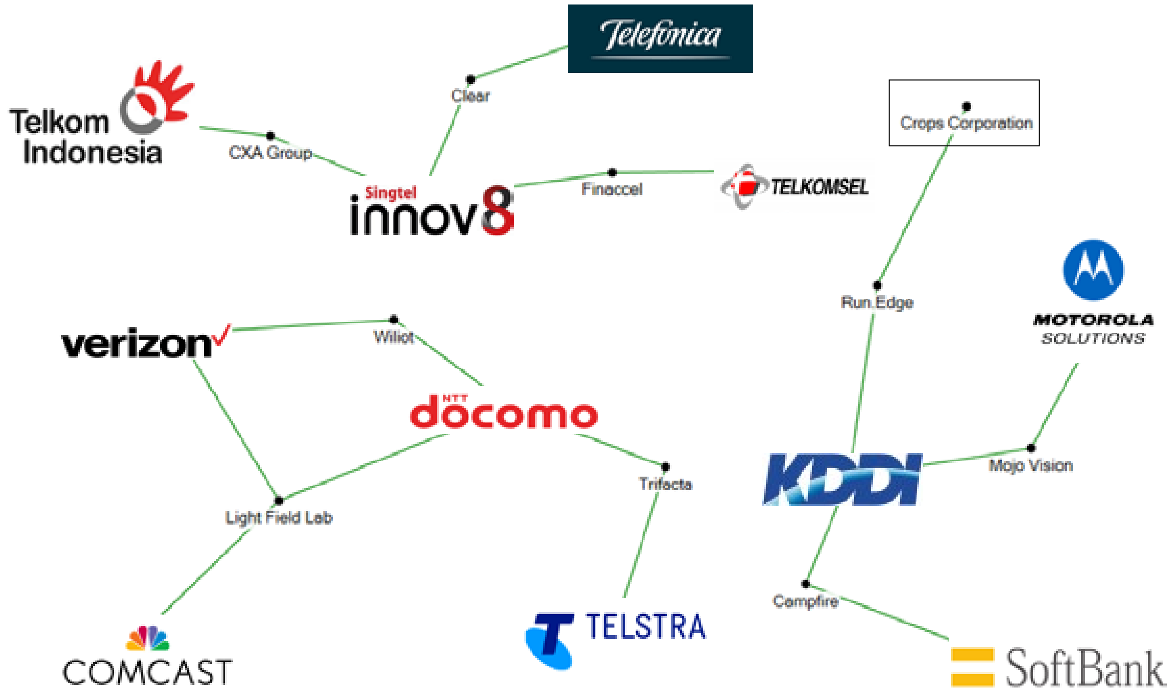



The most active corporate venture investor in the emerging telecoms businesses was semiconductor producer Qualcomm.

*Source: GCV Analytics*

## Key co-investments of telecoms corporates

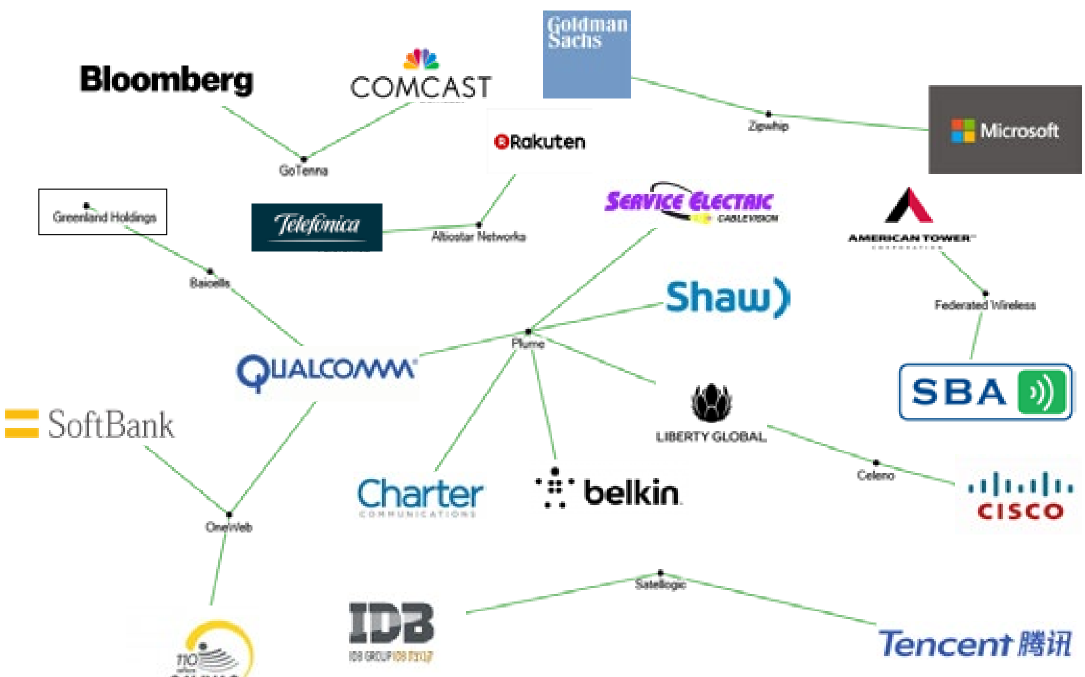
> Fintech and insurtech (Clear, Finacel, CZA Group)
> Crowdfunding (Campfire)
> Data analysis (Trifacta)
> Video analysis (RunEdge)
> Holography and augmented reality (Ligh Field Lab, Mojo Vision)
> Fabless semiconductors (Wiliot).




*January 1, 2019-August 31, 2020*

## Emerging telecoms businesses in CVC portfolios

> LTE network equipment, mesh networks and chipset tech (Baicells, Altiostar, Plume, Celeno)
> IoT networks (GoTenna)
> Business texting services (Zipwhip)
> Satellites and satellite data providers (OneWeb, Satellogic).




*January 1, 2019-August 31, 2020* Source: GCV Analytics

# Deals

## Top 10 deals by telecoms corporate investors, August 2019-July 2020

| Portfolio Company | Location | Sector | Round | Round size | Investors List |
|---|---|---|---|---|---|
| WeWork | USA | Services | Stake purchase | $9.5bn | Hony Capital \| Legend Holdings \| Shanghai Jin Jiang International Hotels \| SoftBank |
| Ke.com | China | Services | D | $2.41bn | Hillhouse Capital Management \| Sequoia Capital \| SoftBank \| Tencent |
| Oyo Rooms | India | Services | Undisclosed | $1.5bn | RA Hospitality Holdings \| SoftBank |
| Paytm | India | Financial Services | Undisclosed | $1bn | Alibaba \| Discovery Capital \| SoftBank \| T Rowe Price |
| GoPuff | USA | Consumer | Undisclosed | $750m | Accel Partners \| SoftBank |
| Zuoyebang | China | Services | E and beyond | $750m | FountainVest Partners \| Qatar Investment Authority \| Sequoia Capital \| SoftBank \| Tiantu Capital \| Tiger Global Management \| Xiang He Capital |
| Greensill | UK | Services | Undisclosed | $655m | SoftBank |
| Automation Anywhere | USA | IT | B | $290m | General Atlantic \| Goldman Sachs \| New Enterprise Associates \| Salesforce \| SoftBank \| Workday, Inc. \| World Innovation Lab |
| Berkshire Grey | USA | Industrial | B | $263m | Canaan Partners \| Khosla Ventures \| New Enterprise Associates \| SoftBank |
| QuintoAndar | Brazil | Services | D | $250m | Dragoneer Investment Group \| General Atlantic \| KaszeK Ventures \| SoftBank |

*Source: GCV Analytics*

Corporates from the telecoms sector invested in large multi-million-dollar rounds, raised by enterprises from the consumer, media, transport, services and other sectors. Four of the top 10 deals were above the $1bn mark and all top deals featured SoftBank as an investor.

**1** SoftBank agreed to provide $9.5bn for a rescue package for US-based workspace provider and portfolio company We Company, whose valuation dropped from $47bn to less than $10bn. The deal included $3bn in a tender offer allowing all the other investors to sell their shares, a $1.5bn funding commitment and $5bn in debt financing. The corporate was also to buy about $1bn of the shares held by founder and former chief executive Adam Neumann. WeWork runs over 530 shared workspaces in cities across 30 countries.

**2** China-based real estate platform operator Beike Zhaofang received roughly $2.41bn in a series D-plus round which featured a $1bn investment from SoftBank. Internet group Tencent also joined the round, which reportedly valued Beike at slightly more than $14bn. Launched in 2017 by Lianjia and known as Ke.com, Beike has developed an online platform which provides users with access to apartments for rent that span almost 100 Chinese cities. The platform uses 3D modelling to enhance online viewings and is looking to build a 200 million-strong customer base in 300 Chinese cities. It also offers services such as interior decoration, property management and real estate financing.

**3** India-based short-term accommodation platform Oyo received $1.5bn in funding from investors including the $98.6bn first Vision Fund. The Vision Fund entity SVF India Holdings supplied $807m, while the other $693m came from RA Hospitality Holdings, an investment vehicle formed by Oyo founder and CEO Ritesh Agarwal. The round valued the company at $10bn. Oyo provides access to short-term accommodation through its online platform. It partners hotel and guest house owners and rebrands their outlets while ensuring they meet minimum standards. The company's network features more than 23,000 hotels spanning more than 80 countries.

4 India-based mobile payment platform Paytm received $1bn in a series G round featuring the Vision Fund and Ant Financial, the financial services affiliate of e-commerce firm Alibaba. Asset management firm T Rowe Price led the round, which valued Paytm at $16bn. Ant Financial contributed $400m to the round, while Vision Fund supplied $200m.

SoftBank invested on the proviso that Paytm goes public within five years. If an initial public offering does not occur, SoftBank will have the right to sell its shareholding to a third party. Paytm has built a mobile wallet enabling consumers in India and Japan to pay in stores, add credit to smartphones and settle utility bills. It has also entered the e-commerce, gaming and ticketing sectors and increased its focus on signing up merchants in small Indian cities and towns.

**$1bn**

*Size of the fourth largest deal with a telecoms investor, for Paytm*

5 The Vision Fund led a $750m funding round for US-based snack delivery service GoPuff. VC firm Accel, which was reported as an existing investor, also participated in the round. Vision Fund retained an option to invest a further $250m in the company. Founded in 2013 while its co-founders were at university, GoPuff runs an online platform where users can order more than 2,500 products ranging from snacks and beverages to more widespread groceries and household goods. It is present in 150 US markets and is open 24 hours a day in its larger markets.

6 China-based online tutoring service Zuoyebang closed a $750m series E round that included  Vision Fund. Private equity firm FountainVest Partners and investment firm Tiger Global Management co-led the round, which also featured the Qatar Investment Authority. Formed by internet group Baidu in 2014 and spun off the year after, Zuoyebang operates a platform where users can access online courses and homework assistance plus live tutoring through video. It claims 170 million monthly active users, 50 million daily active users and roughly 12 million paying subscribers.

7 Vision Fund also invested $655m in UK-based business finance provider Greensill. It was a returning investor, having invested $800m last year, reportedly at a $3.5bn valuation. That valuation had reportedly risen to $4bn. SoftBank's Vision Fund had already invested $800m earlier last year, reportedly at a $3.5bn valuation.

Founded in 2011, Greensill provides supply chain finance to clients across North America, Europe, Africa and Asia, working with financial services firms and institutional investors to supply the capital. Greensill has extended more than $150bn in financing to date, covering more than 8 million clients across 60 countries.

8 Customer relationship management software provider Salesforce led a $290m series B round for US-based robotic process automation (RPA) technology producer Automation Anywhere through its Salesforce Ventures subsidiary. The round valued Automation Anywhere at $6.8bn and also featured SoftBank Investment Advisers, the division of SoftBank that manages its Vision Fund, as well as investment banking firm Goldman Sachs. Founded in 2013, Automation Anywhere has created an intelligent automation platform that enables organisations to automate

repetitive or manual processes using software bots. The product combines RPA with analytics tools and artificial intelligence (AI) and machine learning technology. The company has also built a version tailored for Salesforce users called Automation Anywhere Salesforce Connector, which is available through the latter's AppExchange marketplace.

9 US-based robotic fulfilment systems developer Berkshire Grey secured $263m in a series B round led by SoftBank. Khosla Ventures, New Enterprise Associates and Canaan also contributed. Berkshire Grey has developed technology that combines robotics and artificial intelligence (AI) to automate retail, e-commerce and logistics fulfilment. Applications include sorting small packages for online businesses and just-in-time stock replenishment for stores. The funding will support global expansion efforts and drive recruitment. The company will also look to make acquisitions.

10 SoftBank led a $250m series D round for Quintoandar, the Brazil-based operator of an online marketplace for rental properties. The round also featured investment firm Dragoneer, growth equity firm General Atlantic and venture capital firm Kaszek Ventures, and it reportedly valued the company at more than $1bn. Quintoandar runs an online platform where users can search for rental properties and book viewings. The company oversees communication between prospective tenants and landlords, processes payments and retains a digital copy of the rental agreement. It has also created a credit analysis tool that lessens the needs for references, insurance or large deposits.

## Top 10 telecoms deals backed by investors from outside the sector, August 2019-July 2020

| Portfolio Company | Location | Sector | Round | Round size | Investors List |
|---|---|---|---|---|---|
| Aircall | USA | Telecoms | C | $65m | Adams Street Partners \| Balderton Capital \| Deutsche Telekom \| Draper Esprit \| eFounders \| NextWorld Capital \| Swisscom |
| Plume | USA | Telecoms | D | $60m | Belkin \| Charter Communications \| Liberty Global \| Qualcomm \| Service Electric Cablevision \| Shaw Communications |
| Federated Wireless | USA | Telecoms | C | $51m | Allied Minds \| American Tower \| GIC \| Pennant Investors \| SBA Communications |
| Satellogic | Argentina | Telecoms | Undisclosed | $50m | IDB Group \| Pitanga Fund \| Tencent \| undisclosed investors |
| Tarana Wireless | USA | Telecoms | Undisclosed | $24m | 1010 Holdings \| EchoStar \| Khosla Ventures |
| Metanoia Communications | Taiwan | Telecoms | Undisclosed | $19.3m | Elan Microelectronics \| National Development Fund of Taiwan \| Taiwania Capital |
| SignalWire | USA | Telecoms | A | $11.5m | AME Cloud Ventures \| Private Investor \| Samsung \| Sequoia Capital \| Storm Ventures |
| Lynq Technologies | USA | Telecoms | Seed | $6m | Chetrit Group \| ff Venture Capital \| Plus Eight Private Equity \| Sony |
| Zoox | Brazil | Telecoms | Undisclosed | $5m | 2A Investimentos \| HDI Seguros |
| Altiostar Networks | USA | Telecoms | Undisclosed | $4m | Telefonica |

*Source: GCV Analytics*

1 Deutsche Telekom Capital Partners, the corporate venturing arm of Deutsche Telekom, led a $65m series C round for US-based customer support software provider Aircall. Swisscom Ventures, the corporate venturing arm of the telecoms firm, also participated in the round, as did Adams Street Partners, eFounders, Draper Esprit, Balderton Capital and NextWorld. Aircall provides cloud software that integrates with an enterprise's existing applications, including customer relationship management platforms Zendesk and Salesforce, to allow customer service staff to provide better service during phone calls.

2 US-based wifi technology developer Plume completed a $60m series D round co-led by telecoms firms Charter Communications, consumer electronics manufacturer Belkin, Qualcomm and cable television provider Service Electric Cablevision. The equity round, secured with $25m in debt financing from Silicon Valley Bank and WestRiver Group, also included telecoms firm Shaw Communications and mass media group Liberty Global. Qualcomm and Liberty Global invested through their venture units. Founded in 2015, Plume has created a mesh technology – a type of network designed to provide sustained wifi coverage throughout a house – which uses AI to adapt signal strength in real time.

3 Federated Wireless, a US-based provider of phone spectrum-sharing technology, extended a series C round featuring telecoms infrastructure providers SBA Communications and American Tower to $64.7m. Allied Minds and Pennant Investors provided $13.7m having participated in the $51m first tranche in September 2019 alongside SBA, American Tower and Singaporean sovereign wealth fund GIC. Founded in 2012, Federated Wireless offers shared spectrum technologies which enable mobile network operators to more efficiently allocate specific US radio frequencies for small enterprise communication networks. The funding will support a wireless network-as-a-service offering, targeting businesses through an integration with cloud computing platforms Amazon Web Services and Microsoft Azure.

4 US-based geospatial analytics provider Satellogic collected $50m in funding from investors including Tencent. The round also featured venture capital fund Pitanga Fund; IDB Lab, the innovation arm of IDB Group, which comprises financial institutions Inter-American Development Bank, Multilateral Investment Fund and Inter-American Investment Corporation; and unnamed existing investors. Founded in 2010, Satellogic manufactures low-orbit microsatellites that capture images to facilitate geospatial analytics by clients such as governments and large enterprises. The capital will enable the company to cope with demand. IDB Lab's investment has been specifically earmarked for monitoring crops and plagues affecting small and medium-sized farms in Latin America and the Caribbean.

5 US-based broadband technology developer Tarana Wireless received $24m in funding from investors including satellite technology and services provider EchoStar as part of a round with a $60m targeted close. Venture capital firm Khosla Ventures and family office 1010 Holdings also contributed to the tranche.

The company said it had secured commitments for the remaining $36m to be supplied between by the end of October 2020. Founded in 2009, Tarana has developed a fixed wireless access network that boasts gigabit speeds. Its radio signals are impervious to obstructions, interference, spectrum scarcity and changing weather conditions. It is expected to be particularly useful for suburban broadband. The funding will support pre-commercialisatuion as Tarana prepares for the mass rollout of its residential broadband service.

6 Taiwan-based broadband chipset manufacturer Metanoia Communications completed a $19.3m funding round featuring its founder, semiconductor and computer touchpad manufacturer Elan Microelectronics. The round was co-led by the Taiwanese government's National Development Fund and venture capital firm Taiwania Capital. Formed in 2004, Metanoia provides chipsets

and programmable software for use in network communications infrastructure and specifically systems that support higher-speed broadband. The company initially focused on wired connectivity but plans to put the funding towards diversifying into 5G.

**7** US-based secure telecoms technology developer SignalWire completed a $11.5m series A round backed by Samsung Next, the early-stage investment fund owned by consumer electronics producer Samsung. VC firm Storm Ventures led the round and was joined by peer Sequoia Capital's Sequoia Scouts scheme, among other investors. Founded in 2017, SignalWire has created a technology platform that can be programmed by enterprise clients to facilitate secure communications through media including telephone calls, internet voice calls and text messages. The series A cash will allow the company to accelerate the development of a product called SignalWire Cloud that provides a more intuitive user experience for its clients.

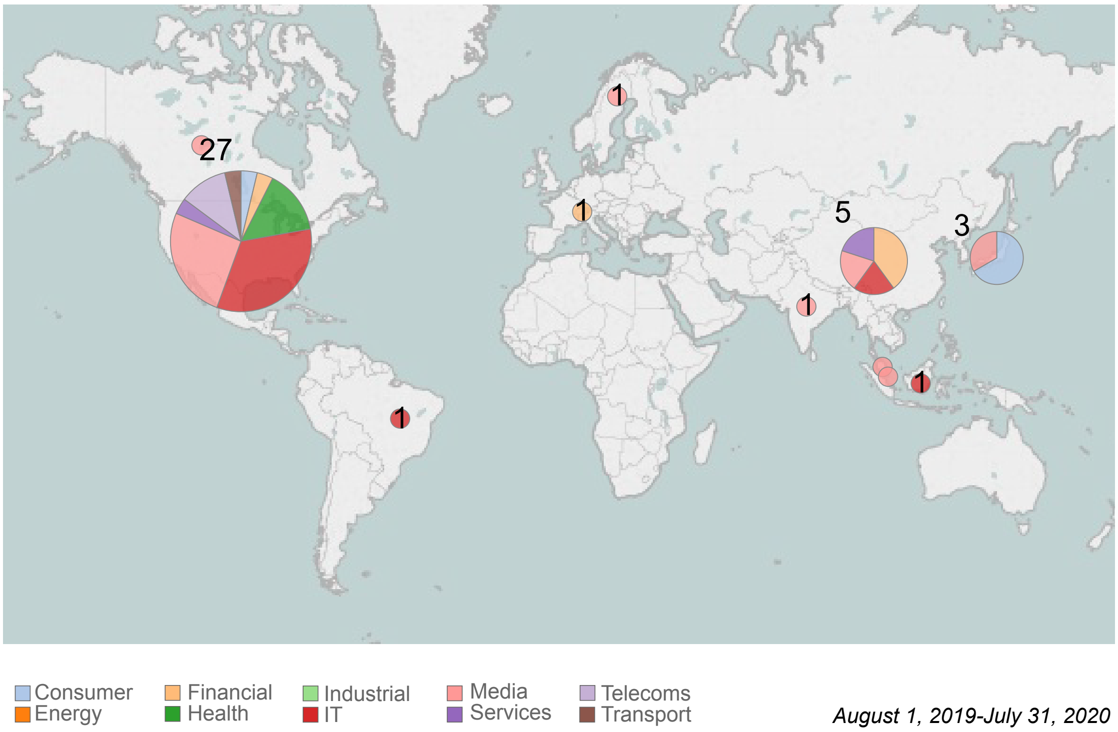
**8** Lynq Technologies, a US-based developer of a communication software platform for low-bandwidth data, secured $6m in a seed round featuring Sony Innovation Fund, a corporate venturing vehicle for consumer electronics producer Sony. The round also included FF Venture Capital, Chetrit Ventures and Plus Eight Equity Partners, and came after a $1.7m crowdfunding campaign on Indiegogo. It will be used to increase headcount. Founded in 2014, Lynq has developed a decentralised, private, secure and portable network for transmitting location data, enabling communications for miles without infrastructure. The company claims it has created unique methods of frequency-hopping that allows user to transmit location data without being detected or intercepted.

**9** Zoox, a Brazil-based provider of a public wifi system that generates data from its users, secured R$27m ($5m) in a funding round led by insurance firm HDI Seguros. The round included corporate VC firm 2A Investimentos and the capital has been earmarked for product development.

**10** US-based virtual radio access network technology provider Altiostar Networks raised $4m in a series C round by telecoms conglomerate Telefonica. Founded in 2011 as Radio Mobile Access, Altiostar produces virtual radio access network technology that allows telecoms firms to deploy outdoor and indoor mobile phone networks, with operators managing interference and scaling coverage through a software interface.

# Exits

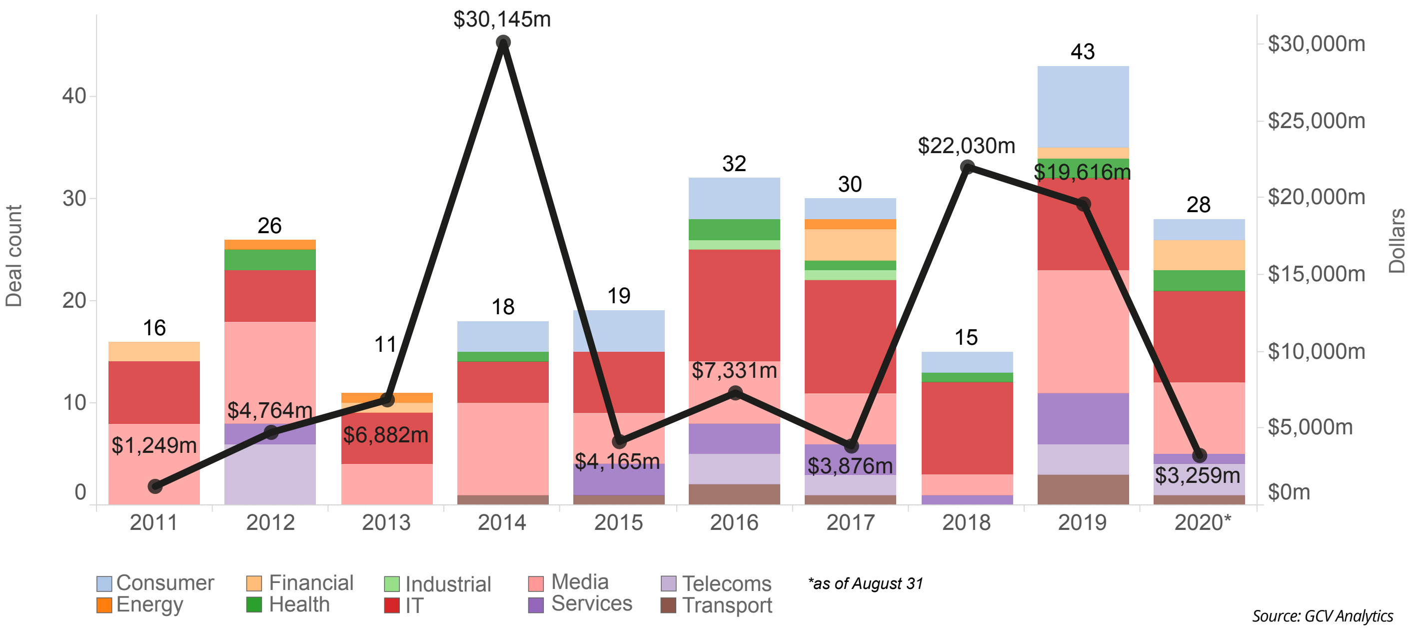
## Exits by telecoms sector corporates over the past year




Corporate venturers from the telecoms sector completed 43 exits between August 2019 and July 2020 – 31 acquisitions, nine initial public offerings (IPOs) and two other transactions.

## Exits over time

Year-on-year, GCV registered an increase in the number of exits by telecoms corporates in 2019, which reached 43, up 187% from 15 the previous year. The total estimated capital in those exits stood at $19.62bn, 11% down from the $22.03bn in 2018.




Source: GCV Analytics

## Top 10 exits by IT corporate venturers, August 2019-July 2020

| Portfolio Company | Location | Sector | Exit size ($m) | Exit type | Acquirer | Exiting investors |
|---|---|---|---|---|---|---|
| Peloton Cycle | USA | Consumer | $1.16bn | IPO | | Balyasny Asset Management \| Comcast \| Fidelity \| GGV Capital \| Grace Beauty \| Kleiner Perkins \| L Catterton \| Questmark Partners \| TCV \| Tiger Global Management \| True Ventures \| Wellington Management |
| Shape Security | USA | IT | $1bn | Acquisition | F5 Network | Allegis Capital LLC \| Alphabet \| Baseline Ventures \| C5 Capital \| EDBI \| Epic Ventures \| Focus Ventures \| Hewlett-Packard (HP) \| JetBlue \| Kleiner Perkins \| Northern Light Venture Capital \| Private Investor \| Raging Capital \| Sierra Ventures \| Singtel (Innov8) \| Tomorrow Ventures \| Top Tier Capital Partners \| VenRock \| Wells Fargo |
| Moovit | USA | Transport | $840m | Acquisition | Intel | Bernard Arnault Group \| BMW \| BRM Group \| Gemini Israel Ventures \| Hanaco \| Intel \| Keolis \| Nokia \| Satterfield Vintage Investments \| Sequoia Capital \| Sound Ventures \| Vaizra Investments |
| Kony Solutions | USA | IT | $559m | Acquisition | Temenos | Delta-V Capital \| Georgian Partners \| Hamilton Lane \| Insight Venture Partners \| SoftBank \| Telstra \| undisclosed investors |
| Relay Therapeutics | USA | Health | $400m | IPO | | Alexandria Real Estate Equities \| Alphabet \| BVF Partners \| Casdin Capital \| DE Shaw \| EcoR1 Capital \| Foresite Capital \| Perceptive Advisors \| Section 32 \| SoftBank \| Tavistock Group \| Third Rock Ventures |
| Guardant Health | USA | Health | $377m | Other | | SoftBank |
| OneConnect | China | Financial Services | $347m | IPO | | China Oceanwide USA Holdings \| Ping An Insurance \| SBI Group \| SoftBank |
| Packet | USA | IT | $335m | Acquisition | Equinix | Battery Ventures \| Dell \| JA Mitsui Leasing \| Samsung \| SoftBank \| Third Point Ventures \| undisclosed investors |
| Lemonade | USA | Financial Services | $319m | IPO | | Aleph \| Allianz \| Alphabet \| General Catalyst \| OurCrowd \| Sequoia Capital \| SoftBank \| Sound Ventures \| Thrive Capital \| Tusk Ventures \| XL Catlin |
| UCloud Information Technology | China | IT | $284m | IPO | | Bertelsmann \| China International Capital Corporation \| China Mobile \| DCM \| GX Capital \| Legend Holdings \| Oriza Holdings \| VMS Legend Investment Fund |

*Source: GCV Analytics*

1 Peloton Interactive, the exercise equipment and class provider backed by mass media group Comcast NBCUniversal and cosmetics distributor Grace Beauty, went public in a $1.16bn IPO. The company floated on the Nasdaq Global Select Market after pricing 40 million class A shares at the top of the IPO's $26 to $29 range. Founded in 2012, Peloton sells exercise bikes and treadmills with video screens that broadcast gym classes, available through a paid subscription plan. The company has 1.4 million members, and it more than doubled revenue to $935m in the first half of 2019, though its net loss also increased, from $47.9m in the first half of 2018 to nearly $196m a year on.

2 App delivery services provider F5 Networks agreed to acquire US-based anti-fraud technology developer Shape Security in a $1bn deal that will enable telecoms firm SingTel, internet conglomerate Alphabet, enterprise IT company Hewlett Packard Enterprise and airline JetBlue to exit. Shape's software uses artificial intelligence, machine learning and analytics helps protect businesses from online attacks and fraud made by bots that can bypass conventional barriers. The company targets business users across the financial services, airline, retail and government sectors.

3 Israel-based urban mobility app developer Moovit confirmed an acquisition by its existing shareholder, Intel, for a total consideration of $900m. The semiconductor manufacturer paid $840m, net of the equity gain of its corporate venturing unit Intel Capital.

Founded in 2012, Moovit has built a real-time transit data app for users that pulls in public traffic data and user-generated updates to calculate the most efficient routes. It also offers third-party business access for clients such as municipalities or ride-sharing apps such as Uber. The service covers 3,100 cities in 102 countries, where it has attracted more than 800 million users,  a sevenfold increase over two years. Intel will integrate Moovit's enterprise platform into its autonomous driving technology subsidiary Mobileye.

**Israel-based mobility app Moovit will be integrated into Intel's automated driving technology subsidiary**

**4** Banking software producer Temenos agreed to pay at least $559m to acquire Kony, a US-based mobile banking software developer backed by telecoms firms SoftBank and Telstra. The deal consisted of $559m upfront and a $21m earn-out.  Founded in 2008, Kony operates a cloud-based platform that allows enterprise clients to develop and deploy applications that enable customers to perform functions such as signing up for accounts, accessing loans and making payments at any time of day. The company's offering includes Kony Quantum, an app development tool for financial services providers that requires minimal coding.

**5** Relay Therapeutics, a US-based cancer drug developer backed by SoftBank and Alphabet, went public in a $400m IPO. The company increased the number of shares in the offering from 14.7 million to 20 million and priced them at $20.00 each, above the IPO's $16 to $18 range. The shares closed at $35.05 on their first day of trading on the Nasdaq Global Market, giving it a market cap of more than $3bn.

Founded in 2016, Relay is using insights into protein motion to develop small molecule drugs intended to treat cancer. Up to $155m of the IPO proceeds will go to a phase 1 clinical trial for one of its lead product candidates, RLY-4008, in small tumours and to  part of the phase 2/3 trials.

**6** SoftBank's Vision Fund sold approximately $377m of shares in US-based, publicly-listed oncology diagnostics technology developer Guardant Health. It sold 4.9 million shares at $77 each, more than four times the price at which Guardant floated in October 2018. SoftBank and its affiliates held almost 27.9 million shares as of the IPO. Guardant is developing blood tests to detect early signs of cancer in high-risk populations or returning cancer in existing patients. The tests are personalised for each patient based on the molecular profile of their tumours, and the company is using the technology to develop tests for early-stage and recurring cancers.

**7** OneConnect Financial Technology, the Singapore-based financial technology platform developer spun off by insurer Ping An, closed its IPO at approximately $347m. Previous backers of the company include SoftBank, real estate developer Oceanwide Holdings' Oceanwide Financial Technology vehicle and financial services firm SBI. The company raised an initial $312m when it floated on the New York Stock Exchange, issuing 31.2 million American Depositary Shares (ADSs) priced at $10.00 each. Ping An itself subscribed for $10m of shares. The extra capital represents the partial exercise of an over-allotment option that gave the underwriters 30 days to buy up to 4.68 million more ADSs. Spun off in 2017, OneConnect offers a cloud-based platform that includes a range of financial technology tools to help businesses in the industry digitise their services.

**8** Data centre interconnection technology provider Equinix completed a $335m purchase of US-based bare-metal automation system developer Packet that enabled corporates SoftBank, technology producers Dell, Samsung and leasing services firm JA Mitsui Leasing to exit. Packet has built an automation software platform for use with bare-metal servers – servers located in a physical space rather than in the cloud. The company's technology will be integrated into Equinix's enterprise offering.

**9** Lemonade, the US-based online insurance provider backed by Alphabet, SoftBank and insurance firms Allianz and XL Catlin, went public in a $319m IPO. The offering consists of 11 million shares priced at $29.00 each on the New York Stock Exchange. The company had set a range of $23 to $26 for the IPO before increasing that to $26 to $28. The IPO price valued the company at more than $1.9bn. Founded in 2015, Lemonade offers property and casualty insurance through an online platform that uses bots instead of human brokers, using AI and behavioural economics to combat fraud. It is present in the US, UK and Germany.

**10** UCloud Information Technology, a China-based cloud services provider backed by media group Bertelsmann, secured RMB1.94bn ($284m) IPO on Shanghai Stock Exchange's Star Market. The company reportedly selected Star Market for its flotation as it is the only bourse in mainland China that enables companies to go public with a dual-class share structure, enabling founders to retain a majority of the voting rights.

UCloud issued 58.5 million shares priced at approximately $4.84 each, valuing it at about $2bn, and its share price increased to $10.60 on the first day of trading.. Founded in 2012, UCloud operates 32 data centres across 25 countries and territories in Asia, Europe and the US. It focuses on products such as cloud storage, data analytics and cybersecurity tools and serves clients primarily in the internet, e-commerce, manufacturing, gaming and financial industries.

## Exits from emerging telecoms enterprises, August 2019-July 2020

| Portfolio Company | Location | Sector | Exit Type | Acquirer | Exit size ($m) | Exiting investors |
|---|---|---|---|---|---|---|
| OneWeb | USA | Telecoms | $2bn | Acquisition | Bharti Enterprises | Airbus SAS \| Bharti Enterprises \| British Government \| Coca-Cola \| Government of Rwanda \| Grupo Salinas \| Hughes Network Systems \| Intelsat \| Qualcomm \| SoftBank \| Virgin |
| Agora | Canada | Telecoms | $350m | IPO | | Coatue \| GGV Capital \| International Data Group \| Morningside \| Shunwei \| Susquehanna International Group |
| Mobile Posse | USA | Telecoms | $66m | Acquisition | Digital Turbine | Columbia Capital \| Court Square Ventures \| Harbert Venture Partners \| SoftBank \| undisclosed investors |
| Weex | Mexico | Telecoms | | Acquisition | Yonder Media Mobile | AllVP \| Coca-Cola |
| Cavendish Kinetics | USA | Telecoms | | Acquisition | Qorvo | Qualcomm \| Tallwood Venture Capital \| Wellington Partners |
| Flash Networks | USA | Telecoms | | Acquisition | Volaris Group | Argonaut Private Equity \| Evergreen Investment Partners \| HarbourVest \| Verizon |

GCV reported six exits from emerging telecoms-related enterprises that involved a corporate investor.

1 Broadband satellite network operator Hughes Network Systems committed $50m to join conglomerate Bharti Enterprises and the UK government in buying UK-based satellite internet services provider OneWeb. The conglomerate's UK subsidiary, Bharti Global, and the British government, made a winning $1bn bid for the bankrupt business. Founded in 2012 as WorldVu, OneWeb's goal is to build a constellation of 650 low Earth orbit satellites to deliver internet access to rural and remote areas. It launched 74 satellites before filing for bankruptcy in March 2020. The UK government's purchase of OneWeb is reportedly motivated by its desire to build a homegrown alternative to Galileo, the EU-owned global navigation satellite system. The UK will lose access to Galileo when it leaves the EU.

2 Agora, a China-based video communication technology provider backed by quantitative trading firm Susquehanna International Group, floated on the Nasdaq Global Select Market today in a $350m IPO. The offering consisted of 17.5 million ADSs, each representing four ordinary shares, at $20.00 each, above the $18 to $20 range the company had set. The IPO price valued the company at $2bn. Founded in 2014, Agora provides a software development kit that enables developers to more easily integrate audio and video communications as well as livestreaming functionality into their software and games. It relies on Agora's cloud-based platform, removing the need for developers to build their own infrastructure. Agora claims it has clocked more than 2 billion installations of the kit to date.

3 Mobile content discovery platform Digital Turbine agreed to purchase US-based peer Mobile Posse in a deal reported by DC Inno to be about $66m in size, allowing SoftBank to exit. Softbank Capital led the company's $10m series B round in 2007. Founded in 2005, Mobile Posse has developed a content discovery platform intended to be built into smartphones by original equipment manufacturers to provide an aggregated feed tailored to users' individual tastes. The company expected to announce $55m in revenue for 2019.

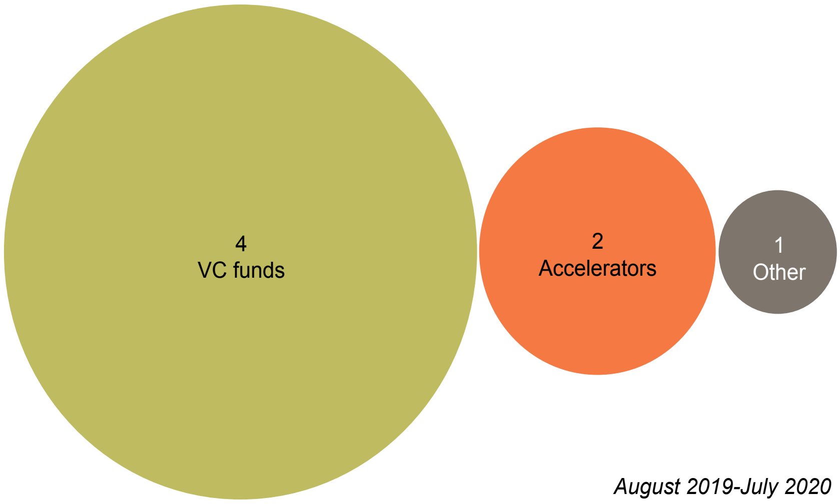
4 US-based telecoms company Yonder Media Mobile agreed to acquire Mexico-based mobile Virtual Network Operator carrier Weex for an undisclosed amount. The latter, which was launched through the Coca-Cola Founders Platform in 2014, aims to become Mexico's largest mobile virtual network operator. Its goal is to substitute predetermined, fixed packages that traditional telecom companies offer for a personalised, flexible alternative.

5 Qualcomm exited radio frequency (RF) technology provider Cavendish Kinetics in an acquisition of undisclosed size by RF equipment producer Qorvo. Spun off from Cambridge University, Cavendish produces micro-electromechanical systems technology used to enhance antenna tuning in smartphones, improving reception and mobile data rates. The deal followed at least $68.5m in funding for Cavendish, which raised $36m in a 2015 round that included $25m from Qorvo subsidiary Triquent Semiconductor.

6 Software holding company Volaris Group agreed to acquire US-based mobile optimisation technology provider Flash Networks in a deal of undisclosed size enabling telecoms firm Verizon to exit. Founded in Israel in 1996, Flash supplies a range of mobile internet-focused products covering areas like signalling and radio connection optimisation, network security or app monetisation.

# Funds

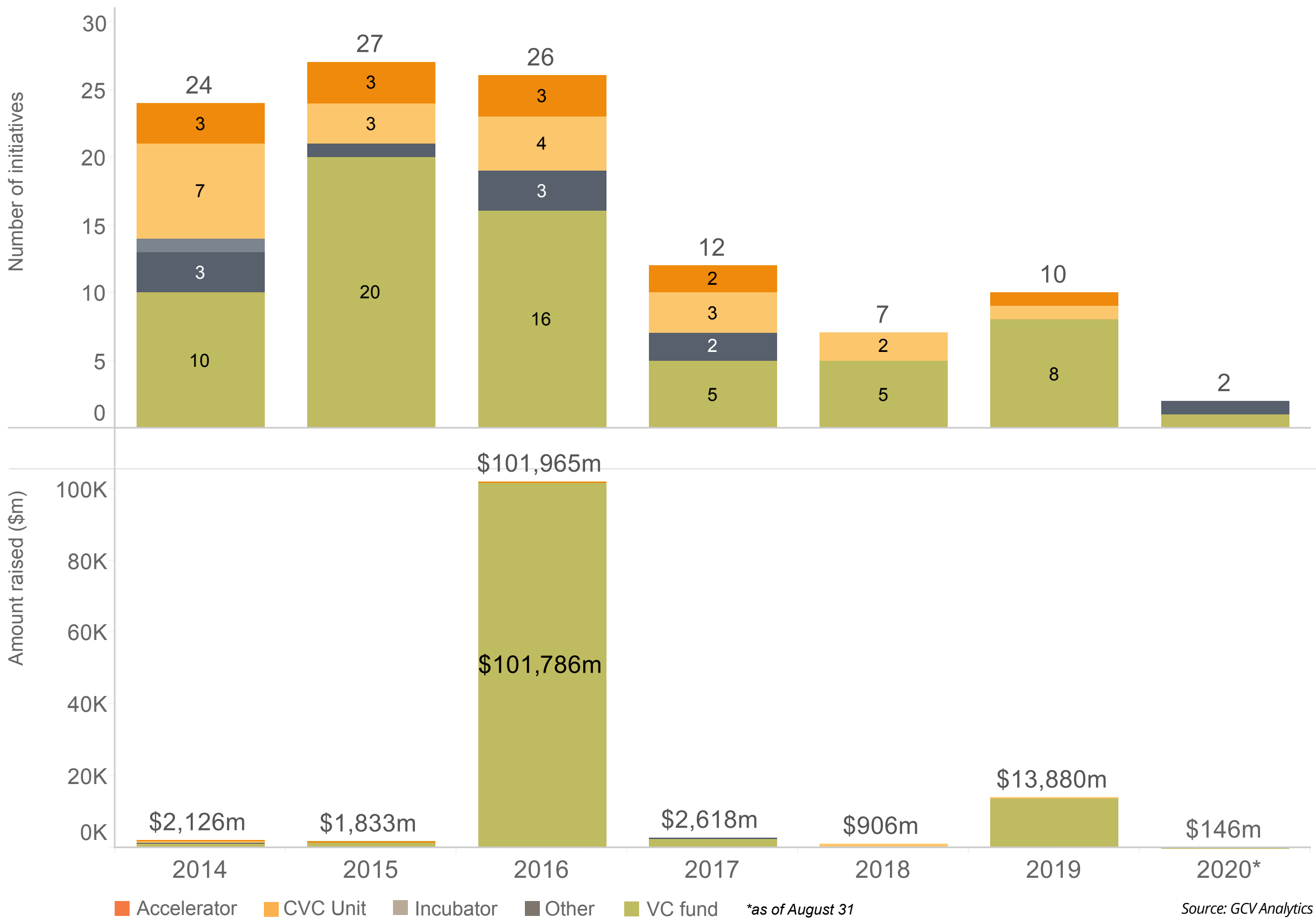
## New initiatives




For the period between August 2019 and July 2020, corporate venturers and funds investing in the telecoms sector secured more than $8.8bn in capital via seven funding initiatives, which included four VC funds, two accelerators and one other initiative. The dollar estimate, however, is high due to the effect of a $8.5bn fund which targets telecoms, among many other sectors.

## Telecoms funding initiatives over time

On a calendar year-basis, the number of funding initiatives in the telecoms sector went up slightly from seven in 2018 to 10 last year, significantly down from the peaks of 24-27 initiatives reported in 2014-16. The total estimated capital for 2019 stood at $13.9bn because of the effect of the unusually large TA XIII.



## Top funding initiatives, August 2019-July 2020

| Fund Name | Type | Funds Raised | Location | Focus | Backers |
|---|---|---|---|---|---|
| TA XIII | VC Fund | $8.5bn | USA | IT, Financial, Consumer, Health, Services, Telecommunications | TA Associates \| Taiwan Life |
| 5G Ecosystem Fund | VC Fund | $200m | USA | Telecommunications | Qualcomm |
| Rongteng 5G Industry Fund | VC Fund | $146m | China | Telecommunications | Dahua \| SAIC Motor Limited \| Sunon \| Winreal Investment \| Zhebao \| ZhongJi InnoLight |
| Vodacom Digital Accelerator | Accelerator | | Tanzania | Health; IT; Media; Services; Telecommunications | Smart Lab \| Vodacom Tanzania |
| Orange Fab in Russia | Accelerator | | Russia | IT, Telecoms | Orange |
| STV II | VC Fund | | Saudi Arabia | Telecommunications | Saudi Telecom (STC) |
| Positive Energy+ | Other | | Spain | IT, Energy, Telecommunications, Industrial | Acciona \| BP \| EIT InnoEnergy \| Enagás \| Iberdrola \| Red Electrica |

*Source: GCV Analytics*

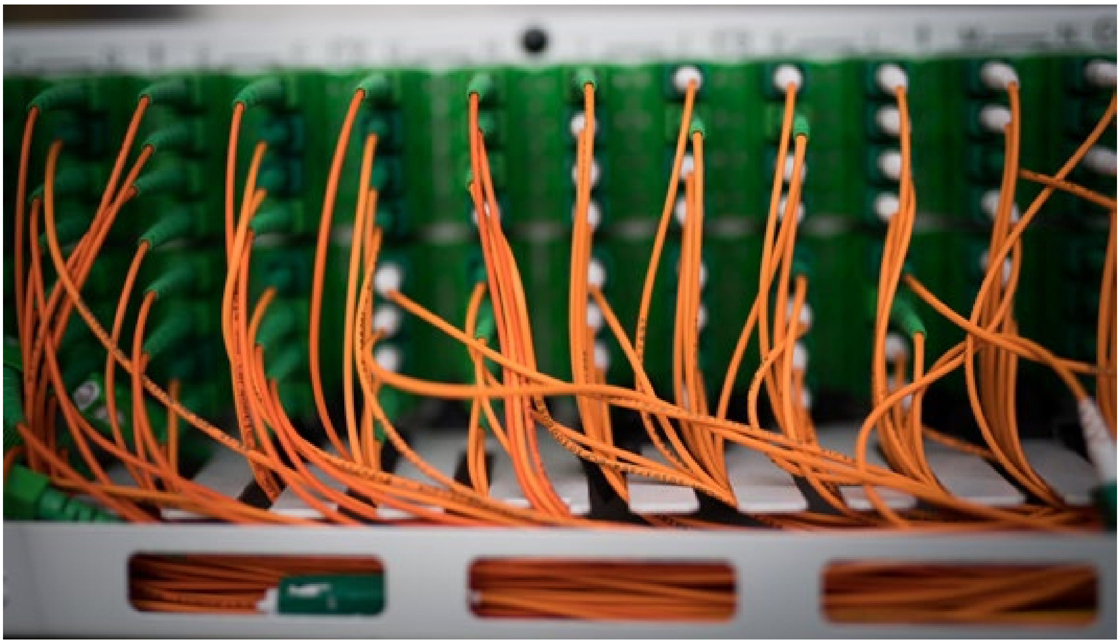
1 Insurance firm Taiwan Life provided $20m to TA XIII, which is run by growth-focused private equity firm TA Associates. The fund focuses on telecoms, financial services, consumer goods, healthcare, business, services, technology and media companies, investing across North America, Western, Central and Eastern Europe. The investment was one of several commitments to equity and debt funds made by Taiwan Life in 2019, according to its annual filing.

2 Qualcomm Ventures launched a $200m investment vehicle intended to boost an ecosystem around an expected 5G network product offering. The 5G Ecosystem Fund will provide up to $200m in funding for companies developing technologies and products that will incorporate 5G,. More specifically, the fund will invest in areas involving the transformation of mobile networks to a 5G standard and its potential in enterprise markets.

3 Office furniture manufacturer Sunon, surveillance equipment maker Dahua, optical communication technology producer ZhongJi InnoLight, online media company Zhebao and carmaker SAIC contributed to the latest fund for China-based investment firm Winreal Investment. The fund, dubbed Rongteng 5G Industry Fund, reached its first close having raised half of its projected total. The vehicle was expected to close at RMB2bn ($292m). The carmaker participated through its SAIC Capital subsidiary, while the other corporates invested directly. Winreal concentrates on investments in companies seeking to digitally enhance existing industries such as education, manufacturing, transport and security. The vehicle will invest in developers of technology related to 5G.

4 Mobile network operator Vodacom Tanzania launched a three-month accelerator in partnership with corporate access-led incubator Smart Lab with $150,000 in funding to train local entrepreneurs. Vodacom Digital Accelerator will accept early and growth-stage businesses in segments including mobile, telecoms, media, health, education, e-commerce and financial technology.

The accelerator will be split into three phases and provide participants with access to Vodacom resources, mentors and partners, ahead of an investor's day where an additional six months of support from the corporate and others will be up for grabs. Vodacom Tanzania is a subsidiary of South Africa-headquartered Vodacom Group, which cohasunts telecoms firm Vodafone among its shareholders.



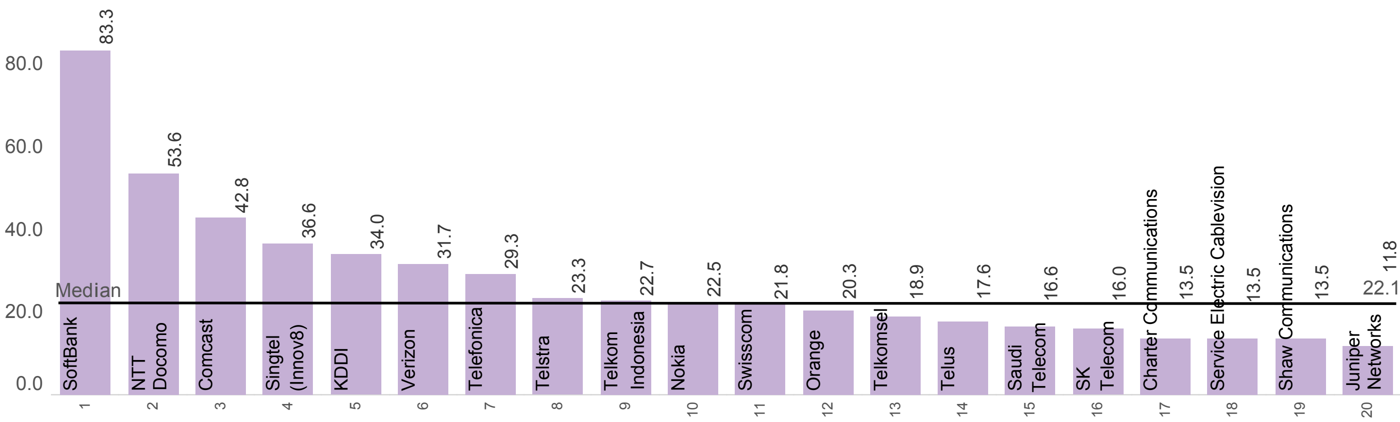
**France-based telecoms group Orange has started its 17th Fab programme**

**5** Orange Fab, the accelerator for France-based telecoms operator Orange, started its 17th programme in Russia. It will be based at the Skolkovo campus and will accelerate technology startups focused on AI, big data analytics, internet of things, next-generation network and cloud technologies. More than 400 startups have been through Orange Fab programmes since 2013.

**6** STV, the Saudi Arabia-based venture capital firm originally set up by Saudi Telecom, was reported to be considering raising a second fund sized at a minimum of $500m. Abdulrahman Tarabzouni, chief executive of STV, told Bloomberg: “I definitely see a path to a second fund that is equal or larger to the $500m fund we have today.”

Ride hailing service Uber bought STV portfolio company Careem Networks in 2019 for $3.1bn, while retailer Amazon purchased Dubai-based peer Souq.com in 2017. Other portfolio companies include e-commerce firm Mrsool and education app Noon Academy.

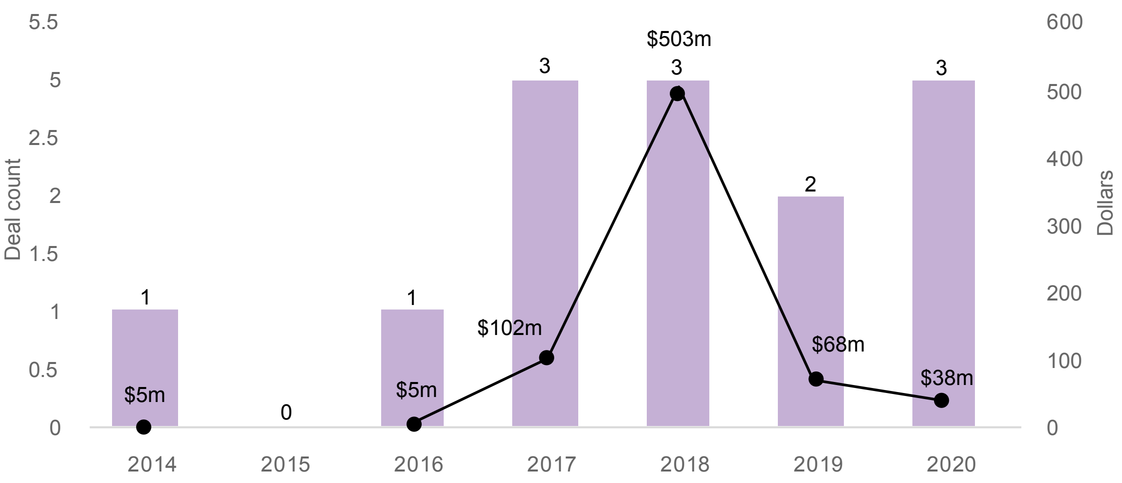
## Power ranking, August 2019-July 2020




*Source: GCV Analytics*

# University funding

## Funding in university spinouts




*as of August 31

Source: GCV Analytics

By the end of 2019, there were only two rounds raised by university spinouts developing telecoms-related technologies and three during 2020. Estimated total capital deployed in 2019 stood at $68m, up from $503m in 2018.

**1** Blu Wireless, a UK-based developer of 5G communication technologies spun out of University of Bristol, obtained £12.7m ($16.6m) in growth funding from investors co-led by mobile chipset manufacturer Arm. The round was also co-led by Calculus Capital, Kendall and MGL, with participation from Guinness Asset Management. Founded in 2009, Blu Wireless supplies connectivity technology for wireless network applications that enables the operator to limit latency and instability in data speeds. The company is currently focusing on a 5G telecoms technology known as millimetre wave that could help clients such as transport networks deliver reliable multi-gigabit speeds.

**2** Tarana Wireless, a US-based broadband technology developer based on research at University of California, Berkeley, received $24m in funding from investors including satellite technology and services provider EchoStar as part of a round with a $60m targeted close.

Founded in 2009, Tarana has developed a fixed wireless access network that boasts gigabit speeds. Its radio signals are impervious to obstructions, interference, spectrum scarcity and changing weather conditions. The network dynamically adjusts thousands of times per second to deliver consistent speeds at a range of up to 15 kilometres using unlicensed spectrum.

# People

SoftBank dominated the people news.


**Ralf Wenzel**

The parent company hired Ralf Wenzel as chief executive of its nascent Latin America-focused incubator, Tech Hub. Wenzel is the founder and CEO of Foodpanda, an online food ordering platform acquired in 2016 by peer Delivery Hero, where Wenzel subsequently took on the chief strategy officer position from early 2017 until 2019. His new role will involve him creating 50 joint ventures and strategic partnerships in the next five years among Vision Fund portfolio companies.

The group also hired Taiichi Hoshino to head up its investment planning department. Hoshino had been a managing director at Japan Post Bank, rising in mid-2018 to oversee a $1.9 trillion investment portfolio with senior managing director Kunio Tahara. Hoshino had previously co-founded Golvis Investment, a hedge fund where he served as chief operating officer.

Subsidiary SoftBank Investment Advisers, which runs the VisionFund, hired Ioannis 'John' Pipilis as head of financing. Pipilis had been the head of fixed income trading at financial services firm Deutsche Bank. He joined the bank in 2000 as a senior trader in its global credit trading division before being appointed global head of credit structuring in 2007. Deutsche Bank made Pipilis head of fixed income in mid-2018 to handle areas such as corporate and sovereign credit derivatives, high-yield bonds and leveraged loans.

SBIA also promoted Faisal Rehman to managing partner. He was recruited in August 2018 from financial services firm Deutsche Bank where he had spent nearly two decades. He oversaw Vision Fund's deals in the Middle East as a United Arab Emirates-based partner. US-based Ramzi Ramsey was also promoted to partner.

Jenny Lee, formerly a senior talent partner at financial services firm Citadel, joined SBIA as head of US talent acquisition. Lee was expected to support recruitment efforts, identifying, acquiring and managing human resources, mainly in the US.


**Vikas Agnihotri**

Vikas Agnihotri joined the subsidiary as an India-based operating partner. Agnihotri joined Google in 2011 as an India-based director before being promoted to managing director of sales at Google India seven years later. He was made interim head of Google India in April 2019. Vision Fund appointed Sumer Juneja as an India-based partner in late 2018 and its local portfolio companies include Delhivery, FirstCry, Grofers, Lenskart, Ola, Oyo, Paytm and PolicyBazaar.

Kristin Bannon was hired by Vision Fund as a vice-president. Bannon had been a vice-president at Morgan Stanley for nearly a decade, and had led its technology investment banking. She joined SoftBank Investment Advisers (SBIA), which manages Vision Fund on behalf of the corporate. The fund also hired Serena Dayal as an investment director. She had been a senior vice-president at Fortress Investment Group (FIG) since 2017, overseeing real estate private equity deals, before SoftBank and FIG joined forces to form an asset management arm called SoftBank Financial Services in March 2018.

Daisy Cai became a partner at Vision Fund. She had been a founding partner at Gaocheng Capital, a growth-stage private equity firm backed by hedge fund manager Hillhouse Capital. The move will represent a return to corporate venturing for Cai, who had previously 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.

SoftBank assigned two Vision Fund managing partners, 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 has been leveraging his connections with Abu Dhabi sovereign wealth fund Mubadala Investment to help raise the second Vision Fund. He had been hired Naheta in 2017 after a stint at Knight Assets & Co, the UK-based investment firm he founded in 2011. 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 on SoftBank's acquisitions of semiconductor manufacturer Arm and telecoms operators Vodafone Japan and Sprint.

The failure of workspace provider WeWork to go public in September 2019 combined with paper losses at ride-hailing portfolio companies like Uber, hard hit by the covid-19 pandemic, and those that have gone bankrupt such as Brandless or OneWeb, led to substantial losses at Vision Fund, which shed staff.

David Thévenon joined UK-based venture capital firm Balderton Capital as a general partner. SBIA recruited Thévenon in 2016 as a founding partner of the $98.6bn Vision Fund, two years after he joined SoftBank as a managing director. Thévenon led its investments in ride hailing services Didi Chuxing, Grab, Ola and 99 in addition to digital insurance provider Lemonade and online lenders Kabbage and SoFi.

**David Thévenon**

Michael Ronen left SBIA, having been negotiating terms for several weeks. Ronen had joined in 2017 after three years at investment bank Goldman Sachs' technology, media and telecoms group. Ronen's deals included a commitment of up to $2.25bn for autonomous driving software developer Cruise Automation, its leading of a $1bn round for shipping management platform Flexport and an investment in parking system developer ParkJockey at a valuation of more than $1bn.

Xiangyu 'Sean' Liu departed from his investment director position to join litigation finance technology provider Legalist as chief financial officer. Liu was hired in 2018 to help set up a China-based office in Shanghai, where he oversaw the investment team and conducted deals with companies based in the country. The Vision Fund formed a $200m joint venture with insurer ZhongAn Online P&C Insurance in August 2018 and the vehicle has backed China-headquartered companies including travel services provider Klook and automotive e-commerce platform Chehaoduo (Guazi).

Carolina Brochado left the Vision Fund and joined investment firm EQT. SBIA hired Brochado as a UK-based investor in early 2019 and promoted her to partner early this year. By the time she left the unit in April, she had invested in companies including data analytics technology developer Behavox and fitness subscription service Gympass.

Praveen Akkiraju left his managing partner position at SBIA. Akkiraju joined in April 2018 after two years as chief executive of cloud technology producer Viptela, following four years as CEO of enterprise software supplier VCE from 2012. His remit involved investing in enterprise technology developers in the Americas and Asia, as well as co-leading India-based deals. His duties at Vision Fund, including his board seat at portfolio company Automation Anywhere, will be largely assumed by senior managing partner Deep Nishar.

Setyanto Hantoro departed from telecoms firm Telkom Indonesia's corporate venturing arm, MDI Ventures, and took a managing director role at its wireless network group, Telekomunikasi Selular (Telkomsel). Hantoro has worked for Telkom Indonesia for more than a decade and held a variety of roles. He was Telkom Indonesia's VP of strategic business development and executive VP of strategic investment for more than seven years from 2012. Hantoro most recently served as interim chief executive of MDI Ventures, according to Telecompaper Asia, after former chief executive Nicko Widjaja's departure in July 2019.

MDI Ventures hired Shannon Lee Chaluangco as a Singapore-based investment director. Chaluangco came from C31 Ventures, the corporate venture capital subsidiary of shopping centre operator CapitaLand, where she was an investment manager from 2017 before becoming team lead in early 2019. Chaluangco managed the S$110m ($79m) fund on behalf of C31 Ventures, which participated in deals for portfolio companies such as retail data analytics software provider Omnistream, restaurant booking platform Chope and mobile commerce platform Mobikon.


**Pedro Trucharte**

Pedro Trucharte left his interim manager role at MásVentures, Spain-based telecoms company MásMóvil's startup accelerator, to join digital consulting firm Kairós Digital Solutions. The company had appointed Álvaro del Portillo to lead the unit. Del Portillo had been head of strategic technical projects for MásMóvil and had sat on MásVentures' executive committee since early 2018. Trucharte's role at MásMóvil involved Trucharte partnering seed-stage venture capital fund Inveready and setting up MásVentures in January 2019. He helped define the scheme's open innovation strategy in a bid to identify and back companies developing innovative telecoms technologies.

Laurel Buckner left her managing director position at ATN Ventures, the corporate venture capital (CVC) arm of US-based telecoms and renewable energy investment holding company ATN International. Venture capital firm WestRiver Group hired Buckner in the same role ahead of the planned launch of a fund that will target machine learning. Based in Seattle, she will co-lead its $100m Pacific Northwest fund with MD Anthony Bontrager. A

Global Corporate Venturing Powerlist winner in 2018, Buckner joined ATN as a senior vice-president in late 2017 to set up its corporate VC unit, after being vice-president of corporate venture investments and mergers and acquisitions at US-based telecoms firm GCI Communications.

**Laurel Buckner**

US-listed telecoms group Verizon hired Tammy Mahn as an Israel-based managing director for its corporate venturing arm, Verizon Ventures. The move came as the unit was bolstering its activities in Israel, having invested in internet-of-things technology startup Wiliot and machine learning software developer Iguazio earlier. Mahn joined another managing director in Israel, Merav Rotem Naaman, who was a Global Corporate Venturing Rising Star in 2018, and senior associate Gidon Azaryev, who came on board in February 2020.

US-based mobile network operator US Cellular's strategic investments and partnerships team ceased operations in 2019 former business development manager Susan Bova confirmed to GCV. The company's strategic investments and partnerships division made equity investments, focusing on startups developing 5G networking, cloud services, data, mobile payments, internet-of-things agriculture, smart cities, artificial intelligence, blockchain and cybersecurity technology. Former business development manager Susan Bova told GCV she has left US Cellular "to explore other options", while Jeff Cologna, an executive that has concentrated on strategic investments and partnerships since 2007, was unable to comment on his next move.

Claudio Barahona Jacobs left Wayra Chile, a regional startup accelerator for Spain-listed telecoms group Telefónica, and joined Chile-based venture capital fund Alaya Capital Partners. Movistar Innova, an entrepreneurial co-working centre and incubator backed by Telefónica Chile's Movistar subsidiary, hired Barahona in 2011 as senior innovation product manager. He also became head of acceleration at Wayra Chile to oversee early-stage investments. Telefónica Open Future, Telefónica's open innovation arm and Movistar Innova's successor, appointed Barahona country manager for Chile in 2016 to run CVC initiatives in the country including Wayra, fund-of-funds network Amerigo and corporate venturing vehicle Telefónica Ventures.

Joshua Agusta joined Mandiri Capital, the VC arm of Indonesia-based financial services firm Bank Mandiri, as director of fund investments. Agusta spent more than four years at MDI Ventures, as head of portfolio from early 2017 to September 2018 before being promoted to vice-president of investments. Formed in 2015 with a reported $36.5m in capital, Mandiri Capital targets financial technology developers located in Southeast Asia and also oversees an incubator known as Digital Business Incubator.

Comcast Ventures, the corporate venturing arm of Comcast, hired professional basketball player Andre Iguodala as a venture partner for its Catalyst Fund. Formed in 2011 with $20m of capital, Catalyst Fund concentrates on startups at seed and series A-stage with founders from under-represented minority groups. Its 26-strong portfolio includes community lodging network operator Starcity and legal-analysis software provider Ross Intelligence. Iguodala is a prolific investor who has backed about 40 companies including footwear manufacturer Allbirds, eSports team owner Swift, second-hand clothing marketplace Twice and video conferencing technology producer Zoom Video Communications. Iguodala has also invested in and sat on the board of Jumia, the Africa-focused online marketplace that went public in April 2019, but is best known in the wider world for winning three NBA titles with basketball team Golden State Warriors.

Terry Evans was appointed principal at Verizon Ventures. Evans's investment remit at Verizon includes commerce and advertising, connected devices and hardware, data and analytics, infrastructure and networking, and media and entertainment. He comes on board after four years at diversified products manufacturer United Technologies as a mergers and acquisitions corporate development manager specialising in building automation systems and energy management software. Prior to joining United Technologies, Evans was a wealth management-focused business development manager at financial services firm PNC from 2011 until 2013 and at banking group HSBC from 2009 until 2011.

## Innovative region: Taiwan

# Corporate venturing made in Taiwan

**> Sector is quite small**
**> Investors headed by semiconductor maker MediaTek**
**> Alibaba has made 22 investments from an entrepreneurs fund**

**Liwen-Edison Fu**
*Supplements and features editor*

**Taiwan – whose territories encompass the islands of Formosa, Pescadores, Quemoy and Matsu, among others – ranked fourth among the most innovative economies in 2019, according to the World Economic Forum's Global Competitive Report, after Germany, the US and Switzerland and ahead of Sweden, South Korea, Japan, the UK, France and the Netherlands.**

Although Taiwan is not part of the World Health Organisation (WHO) due to its intricate relationship with China, it has been largely unaffected by the ongoing covid-19 pandemic. The main island is about 160 kilometres off the southeast coast of China, where the outbreak first emerged but, at the time of writing, the country's Ministry of Health and Welfare's Centres for Disease Control has recorded seven deaths and 55 locally transmitted cases in a population of nearly 24 million.

As early as December 2019, before the WHO had confirmed human-to-human transmission, Taiwan implemented strategies to trace and contain cases and later introduced big data analytics to identify possible contingencies.

The Taiwanese government nationalised surgical and N95 mask production and distribution, and by March 2020, more than 135 apps and software programs were developed for real-time mask stock availability and ordering systems and for providing transparent information to the citizenry.

The tech-enabled democracy has produced hacktivism and other forms of civic participation, according to software producer Microsoft executives Jaron Lanier and Glen Weyl, who told Foreign Affairs: "These tools showed where masks were available, but they did more than that. Citizens were able to reallocate rations through intertemporal trades and donations to those who most needed them, which helped prevent the rise of a black market."

The Taiwan Venture Capital Association has roughly 200 member funds. Yu-Chin Hsu, deputy minister of Taiwan's Ministry of Science and Technology, told Startup Genome: "Taiwan has played a vital role in the global high-tech ecosystem for the past 30 years.

"We have elite startups from a range of verticals including artificial intelligence (AI), smart technologies and healthcare. We help our startups connect to the global tech ecosystem in all key markets and applications."

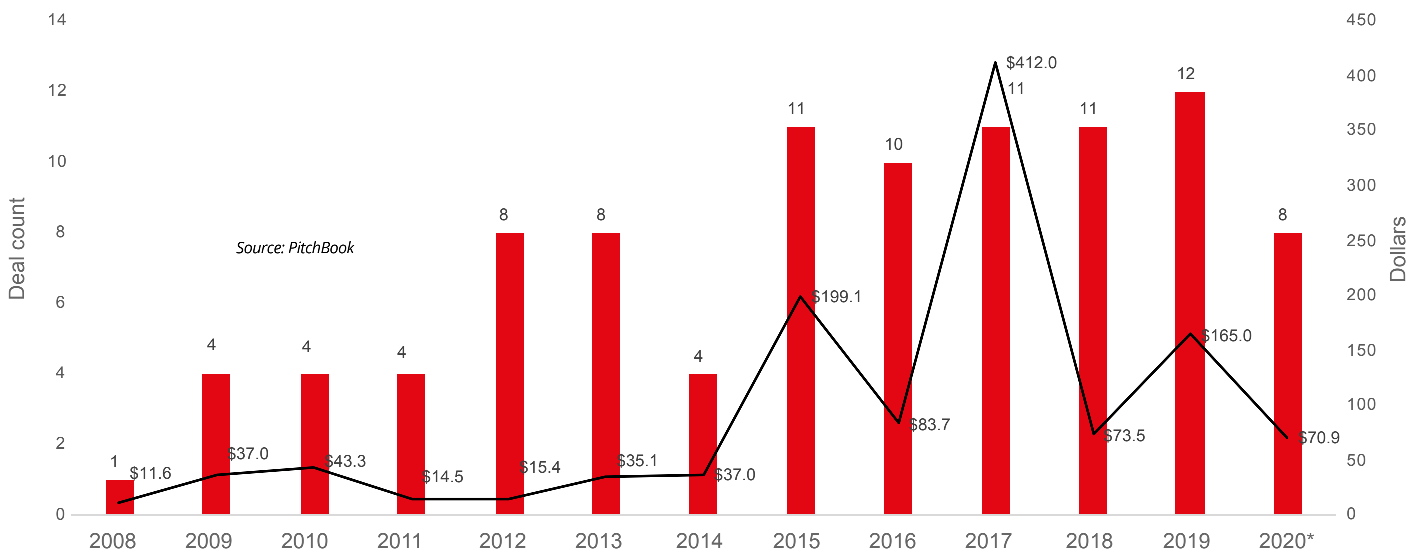
The country is home to specialists in hardware, including contract chipmaker Taiwan Semiconductor Manufacturing Company, laptop and smartphone makers Asus, Acer and Quanta Computer, as well as contract manufacturer Foxconn, which produces chips for US-based technology companies Apple and Alphabet, among others.

Taiwan's corporate venturing scene is relatively small, having reached its peak in 2017 in terms of volume, recording $412m across 11 deals. Last year, Taiwan-based corporates made 12 investments with a total deal value of $165m.

Of the top 10 corporate venturers in the Taiwanese ecosystem, MediaTek Ventures, President International Development, Center Ventures, SinoPac Financial Holdings Company and YFY Biotech Management Company are backed by local corporates: fabless semiconductor maker MediaTek, food conglomerate Uni-President Enterprises Corporation, biopharmaceutical company Center Laboratories Group, financial services firm Bank SinoPac and National Securities, and diversified conglomerate YFY Group respectively. Multimedia software producer CyberLink fills out the list.

Prolific corporate venturers based outside Taiwan hail from China, the US and Japan. China-headquartered e-commerce group Alibaba is the most active investor, having conducted two direct investments and 20 deals through its Alibaba Entrepreneurs Fund, and it is followed by US-based semiconductor and data technology provider Intel's

## Taiwan CVC dealflow




*as of August 19

Source: PitchBook

## Top 25 Taiwan CVC deals by size from 2011-19 August 2020

| Portfolio company | Deal size (m) | Round | Investor(s) | Sector |
|---|---|---|---|---|
| Gogoro | $300.00 | Series C | Sumitomo Corporation, ENGIE New Ventures, Generation Investment Management, Temasek Holdings | Consumer Products and Services (B2C) |
| Gogoro | $130.00 | Series B | Panasonic, National Development Fund of Taiwan, Individual Investor, Samuel Yin | Consumer Products and Services (B2C) |
| Appier | $80.00 | Series D | ARM, Pavilion Capital, TGVest Capital, Insignia Venture Partners, UMC Capital, JAFCO Investments Asia | Business Products and Services (B2B) |
| ThunderCore | $50.00 | | Huobi, Sora Ventures, Collaborative Fund, Arrington XRP Capital, Kinetic, MetaStable, Pantera Capital, Electric Capital, ZhenFund, SV Angel, Collider Ventures, FBG Capital, Hashed (Accelerator), Rocketfuel USA | Financial Services |
| Appier | $42.50 | Series B | UOB Venture Management, Sequoia Capital India, MediaTek Ventures, FirstFloor Capital, UMC Capital, TransLink Capital, Qualgro, JAFCO Investments Asia, Sequoia Capital China, Pavilion Capital, WI Harper Group | Business Products and Services (B2B) |
| 17 Media | $40.00 | | Z Holdings, Golden Equator Capital, Infinity Ventures, Vertex Ventures Southeast Asia & India, Majuven, Golden Summit, KTB Ventures | Information Technology |
| JHL Biotech | $35.00 | Series B | Allen Chao, CDIB Capital Group, TaiAn Technologies Corporation, President International Development, Milestone Capital, Fubon Financial Holdings, Taishin Financial Holdings, Biomark Capital, Sequoia Capital China, Kleiner Perkins, Hotung Venture Capital | Healthcare |
| Appier | $33.00 | Series C | AMTD Group Company, Alibaba Entrepreneurs Fund, SoftBank Group, Naver, EDBI, Line Ventures | Business Products and Services (B2B) |
| ACT Genomics | $29.50 | | HKSTP Ventures, CLSA Capital Partners | Healthcare |
| 17 Media | $26.50 | Series D | ASE Global Group, Kaga Electronics Co., InnoVen Capital, Vertex Growth | Information Technology |
| Perfect | $25.00 | | CyberLink, China Creation Ventures, Alibaba Group, Taobao China | Consumer Products and Services (B2C) |
| Perfect | $25.00 | Series A | Extol Capital, CyberLink, Yuanta Financial Holding, China Creation Ventures | Consumer Products and Services (B2C) |
| 17 Media | $23.00 | | LeSports | Information Technology |
| CoolWallet | $16.75 | Series B | National Development Fund of Taiwan, Monex Group, BitSonic, SBI Holdings | Consumer Products and Services (B2C) |
| Ubitus | $15.00 | | Birch Venture Capital, Samsung Venture Investment, IT-Farm, Substance Capital | Information Technology |
| CoolWallet | $13.00 | Series A | Bitmain, Kyber Capital, Midana Capital, SBI Holdings, OwlTing | Consumer Products and Services (B2C) |
| ACT Genomics | $12.50 | Series B | Hotung Investment Holdings, President International Development, Eminent Venture Capital, UMC Capital, Hua Nan Venture Capital, CDIB Capital International | Healthcare |
| SNSplus | $12.50 | Series A | Intel Capital, Matrix Partners China, WI Harper Group | Information Technology |
| KKday | $10.50 | Series B | MindWorks Ventures, H.I.S. | Consumer Products and Services (B2C) |
| LandMark Optoelectronics | $10.13 | | Tainet Communication System | Information Technology |
| Apollo Medical Optics | $10.08 | Series A | Hua Nan Financial Holdings Company, Wistron, SinoPac Financial Holdings Company, Harbinger Venture Management | Healthcare |
| Viscovery | $10.00 | | CDIB Capital Group, Alibaba Entrepreneurs Fund, NZ Growth Capital Partners, IStart VC, H&Q Asia Pacific | Information Technology |
| NextDrive | $10.00 | Series B1 | ARM, Alibaba Entrepreneurs Fund, TechNode, WI Harper Group | Consumer Products and Services (B2C) |
| Amwise Diagnostics | $10.00 | Series B | Simcere Diagnostics | Healthcare |
| EZTABLE | $8.80 | Series C | ikyu.com | Information Technology |

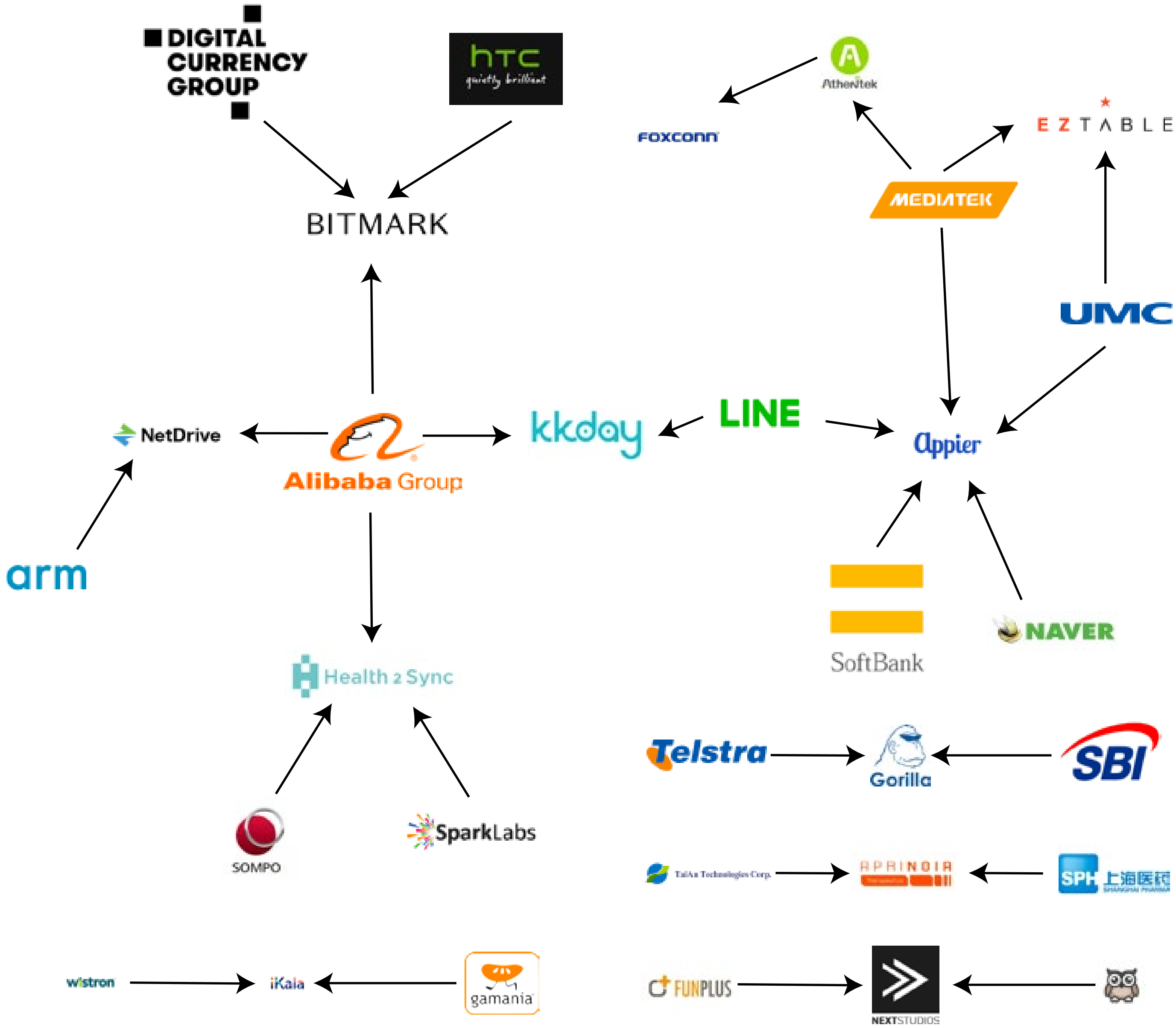
*Source: PitchBook*

corporate venturing subsidiary, Intel Capital, with nine deals under its belt.

Japan's mobile network operator NTT Docomo, internet company CyberAgent, cybersecurity technology producer Trend Micro and messaging platform developer Line, which is a subsidiary of South Korea-headquartered internet company Naver, are also active in Taiwan, through their corporate venturing vehicles: NTT Docomo Ventures, CyberAgent Capital, Trend Forward Capital and Line Ventures.

Top corporate venture capital (CVC) deals in Taiwan's innovation ecosystem include those for electric scooter provider Gogoro, enterprise software tool supplier Appier, blockchain technology startup

### Top CVC deals in Taiwan-based companies, 2011-September 10 2020




*Source: GCV Analytics*

ThunderCore, live streaming portal 17 Media, and cancer therapy developers JHL Biotech and ACT Genomics.

Perfect Corporation, the owner of an AI-infused social fashion and beauty app; CoolBitX, which is developing a cryptocurrency wallet dubbed CoolWallet; and Ubitus, a provider of online gaming services, are among the Taiwanese companies that have received corporate backing, as are social media company SNSplus, experience travel booking platform KKDay and LandMark Optoelectronics, which produces epitaxial wafers for optical communication.

Telecoms firms Taiwan Star Telecom Corporation (formerly Vibo Telecom) and Tecom exited mobile network technology developer VMAX Telecom, which was acquired by peer Vee Time Corp, while healthcare technology companies Medeon Biodesign (backed by Center Ventures), TaiGen Biotechnology (backed by corporates YFY, Taiwan Sugar, China Steel and Cathay Life Insurance, among others) and Taiwan Liposome (backed by YFY Biotech) went public.

## Top Taiwan based CVC exits from 2011-August 19, 2020

| Portfolio company | Size (m) | Exit type | Sector |
|---|---|---|---|
| VMAX Telecom | $1,430 | Merger/Acquisition | Information Technology |
| Medeon Biodesign | $72.42 | IPO | Healthcare |
| TaiGen Biotechnology | $36.75 | IPO | Healthcare |
| Taiwan Liposome | $35.00 | IPO | Healthcare |
| Advanced Lithium Electrochemistry Company | $22.08 | IPO | Energy |
| Dawning Leading Technology | $14.90 | Merger/Acquisition | Business Products and Services (B2B) |
| Aspeed Technology | $7.62 | IPO | Information Technology |
| Sunfun Info | $6.13 | IPO | Information Technology |
| Gudeng Precision Industrial Co. | | IPO | Business Products and Services (B2B) |
| MemoCom | | Merger/Acquisition | Information Technology |
| SNSplus | | IPO | Information Technology |
| LandMark Optoelectronics | | IPO | Information Technology |
| JHL Biotech | | IPO | Healthcare |
| 17 Media | | Merger/Acquisition | Information Technology |
| i-TRUE Communications | | Merger/Acquisition | Information Technology |
| Somnics | | IPO | Healthcare |
| GMobi | | Merger/Acquisition | Information Technology |
| iXensor | | IPO | Healthcare |

*Source: PitchBook*

**Jack Huang**
*Founder and chairman, Taiwan Renaissance Platform*

## Leaders think about tomorrow and the day after tomorrow

Once facing bankruptcy, Taiwan-based wafer contract manufacturer Win Semiconductors is now the world's largest gallium arsenide (GaAs) foundry semiconductor company with a market capitalisation growth of 640% in eight years. Having partnered global first-tier manufacturers and mastered the technical blueprint for the next decade, how is Win planning to take it to the next level and maintain its lead?

Win Semiconductors chairman and president Dennis Chin-Tsai Chen, discusses his business philosophy over the past two decades.

**Huang:** Win Semiconductors was founded in 1999, and at that time, the market was dominated by global companies, and there were many newcomers and the competition was fierce. Soon after [in the early 2000s], the infamous tunnelling fraud involving chipmaker Procomp Informatics took place. In addition, Win Semiconductors was losing NT$1bn ($28.8m at contemporary rates) a year and was in a precarious situation.

In 2003, you took over the management of the company and focused on streamlining the business and ramping up research and development (R&D) efforts, which helped turn its operating loss into a profit in just a few years. Why did you make such a bold decision at that time? What if the R&D initiative did not produce any results? Please share your journey along the way.

**Chen:** When Win Semiconductors was founded, we were still living in the 2G era, and the whole industry was expecting 3G to arrive shortly and that there would be unlimited business opportunities. In the end, all we heard was the sound of the stairs, but no one had come down. Therefore, around

2000, many companies around the world could not survive because they could not see the future.

At that time, we had an excellent team who had returned to Taiwan from the United States, and we wanted to emulate chip contract maker Taiwan Semiconductor Manufacturing Company (TSMC)'s successful model of silicon wafer manufacturing and become a compound semiconductor foundry. After I took over, I thought we would not make it because we were all lab technicians and had no experience in mass production. At that time, the three integrated device manufacturers (IDMs) – Skyworks Solutions, TriQuint Semiconductor and RF Micro Devices [later merged with TriQuint] – had a 95% market share and were already satisfying the market needs. How could we compete as a new foundry company that had inferior technology and no mass production experience?

We had almost burned through all our money in 2003, and it seemed like we only had NT$500m ($14.4m) left – a semiconductor company with that kind of cash is really unable to operate. I, therefore, reduced all the production lines because why waste time when we could not do business? Fortunately, we found an acquaintance from a leading company in the industry who came to Taiwan on a voluntary basis and gave us a full week of lectures from the perspective of their leading position, clearly explaining the technological blueprint for the future of the industry to us. We also learnt the technology we needed at each stage, so we were no longer blind men touching an elephant, figuring out its entire shape by the trunk or the tusk.

**Huang:** So you got a blueprint.

**Chen:** Yes, and it was from a global perspective. The gentleman even formed an advisory group to support us after he went back to the US. He identified the problems according to the technology to be developed in the blueprint, and our team of PhDs worked hard in groups, and the American group would come to Taiwan every three months to check on our progress.

**Dennis Chin-Tsai Chen**

We were lucky – when we were at our wits' end, we found Taiwan's Lord Mengchang [prime minister of the ancient state of Qi 475 BC-221 BC, known for his leadership and generosity], Yeh Kuo-Yi, co-founder of original design manufacturer Inventec Corporation, who helped provide resources. And fortunately, because our technology fit the market, we were getting close to becoming an IDM in 2006.

At that time, Avago Technologies (now Nasdaq-listed semiconductor software product maker Broadcom) saw the coming of 3G and wanted to enter the wireless communication field, so they approached us in 2005. They were so impressed with our technology that they mentored and partnered our company. When the iPhone launched the world's first 3G handset, we went in, and now we are about to see iPhone 12. This proves one thing – without technology, there is absolutely no opportunity. Research and development is the most important core factor for the survival of an enterprise – especially in the technology industry.

**Huang:** You had the opportunity to have a blueprint for future development at an early stage, which is priceless. Most of the companies in Taiwan involved in the chain of the international division of labour just make what other people need, following the others step by step, not being able to see beyond today's landscape. Win Semiconductors, on the contrary, foresaw the future because it planned ahead of time.

**Chen:** Indeed, because of this advanced deployment experience, we still have a 10-year tech development blueprint in place. In addition, because of our position in the industry, all of our tier-one customers come to us to discuss the future, which means we have been talking to all of the top global players about what will happen in 10 years, so our blueprint is probably pretty accurate, and even today, our tech is prepared to serve them.

**Huang:** Are these technologies developed in-house or from external sources?

**Chen:** I made two bold and expensive decisions back in the day to take the long road ahead. The first one was technology. I insisted that we had to research and develop all the technologies ourselves. So far, we have developed almost all of our technologies, and we are developing all the III-V compound semiconductor technologies. So as we insist on our own research and development on the one hand, and diversified development on the other, it is very costly.

The second is production capacity. Technology alone without production capacity is like having a good kitchen without a stove and a pot. Therefore, our production capacity is always based on the demand and advance deployment, it takes us two years at the fastest from building the factory to shipping the products. We have to be very clear about the future, otherwise, the risk of expansion is very high.

**Ximen district, Taipei**

**Huang:** In the global production chain, you are no longer an OEM [original equipment manufacturer], and your role is becoming more and more valuable, which means you are formulating specifications on the one hand and selecting technology on the other. By the time people behind you catch up, things are already set in stone. This is the key threshold for Taiwan's future industry to move up to the next level, and you have to jump over it to make the leap.

**Chen:** The most popular words this year in Taiwan are "advance deployment", to plan ahead, you

**Taipei 101 skyscraper**

must have the strength to do so, and the strength comes from your R&D investment. From the beginning, I have not set limits on investment in R&D, we are looking at the need, not at the budget – the latter is just a management tool.

I have strong views on key performance indicators (KPIs), too. KPIs can only be used in the executive unit, but as you get to the top of the strategic thinking, KPIs are of no use at all. KPIs are even more useless in the context of the R&D department.

**Huang:** In recent years, Win has made several reinvestments and mergers and acquisitions (M&A) – how are these transactions related to your core technologies and main products? You also have a corporate venturing subsidiary, Win Venture Capital, is it going to conduct financial or strategic startup investments?

**Chen:** I am not so sure whether it is financial or strategic, but I should say both, depending on the opportunity. If it is related to my work, such as SiC (silicon carbide) solutions for RF (radio frequency), then I will definitely invest in it, and this would be strategic.

I also pay attention to the biotechnology vertical – it will have its place in the future and will be a good opportunity for Taiwan. Our ancestors left a lot of wisdom in the field of Han herbology, but they did not use scientific methods to develop them. If we combine western knowledge or technology on this basis, there is actually quite an opportunity – if a startup is developing this, we will also invest in it.

In addition to drugs, there is also testing, tools and medical materials. Taiwan's information and communications technology (ICT) industry is strong, and if we can combine it with biotech, ICT still has an opportunity in this area. So while I cannot say what the purpose is across the board, it will depend on the opportunities.

**Huang:** Would it possible for you to achieve some of your goals through M&A in the future?

**Chen:** Yes, I would not rule that out. In fact, we had merged with Global Communication Technology in the beginning – we were generating profit but they were not, and the share exchange ratio was their 1 share for our 1.5 shares – people thought I was mad for buying a company that was not yet generating revenues. However, I calculated that the difference was not hundreds of millions of [new Taiwanese] dollars, and I spend more than that a year just to fight off competitors, so this is a means to eliminate that rivalry. But if there is an opportunity that can expand our own strength, we will also consider that.

**Huang:** Finally, is there any advice you can give to other businesses from your own experience?

**Chen:** I do not dare to suggest anything because I only know my own industry. But I firmly believe all companies have their own virtues, and it is up to them to establish their core competency based on these assets, their own needs and the characteristics of their industry. Without a core competency, all other ideals are futile. Secondly, I would suggest that we should look further ahead, rather than just thinking about the current situation. If you focus too much on the current customers and only change things in this way, then you will be stuck and never get out – this is my humble opinion.

*Founded in 1999, Win Semiconductors is the world's largest GaAs foundry with 70% market share. The company employs about 3,000 people and has a total market capitalisation of over NT$120bn ($4.1bn). Its annual revenue in 2019 was NT$21.38bn ($729m).*

*Translated by Liwen-Edison Fu.*

**Andrew Yang**
*Deputy chief executive, Taiwan Renaissance Platform*

## Chunghwa Telecom to join forces with startups to enter the global market

In the past, telecommunications industry's main source of revenue came from connection, but in the ongoing 5G and the AIoT (artificial intelligence-of-things) era, telecoms operators around the world are facing a decline in profit. How should Taiwan's telecoms companies shake off the "dumb pipe" image and explore new growth momentum?

Joseph Yang, the chief executive of Taiwan Renaissance Platform, hosted a discussion on Chunghwa Telecom's innovation strategies for the 5G era, which featured Chih-Mao Hsieh, president of Chunghwa Telecom; Yuan-Kai Chen, associate director of the investment business division; and Ju-Kun Lee, director of the strategic transformation office.

### Two positionings and four strategies – the transformation has to start from scratch

Chunghwa Telecom officially launched a three-year transformation plan in 2019, and president Chih-Mao Hsieh said that the company will take up a customer-centric approach in the future, aiming to become a "leader in smart living and an enabler of digital economy" and provide a variety of innovative services.

In five to 10 years, half of Chunghwa Telecom's employees will retire, which will pose certain challenges to business operations but will also usher in new opportunities for consumers


**(From left): Joseph Yang, Chih-Mao Hsieh**

and enterprises, such as 5G, artificial intelligence (AI), 4K and 8K resolution, augmented and virtual reality (AR/VR) video streaming. In this regard, Hsieh stated Chunghwa Telecom's transformation will focus on four main axes: optimising experience in its core business, expanding revenue from the emerging business, optimising strategy on cost efficiency and enhancing comprehensive foundation capabilities.

In addition, he pointed out that the key to a successful transformation is to "start from scratch". It involves two types of "heads": the head of an individual, which means changing people's mindset; and the other is the "head" of the organisation, which means the top management and senior executives of the organisation must reach a consensus so that the largest transformation plan in the history of Chunghwa Telecom can advance more smoothly.

### "Finding the pearl through contact" is the key to both internal and external transformation

Hsieh said that Chunghwa Telecom has an intrapreneurial mechanism to encourage employees to put forward various ideas, and the ideas approved by a panel of judges will be given one year of incubation period and funding. Teams that are assessed as meeting the conditions for business operation are more likely to open up as independent companies – success stories include Chunghwa Precision Test Tech in 1995, Chunghwa Leading Photonics Tech in 2016 and the recently established CHT Security in 2017.

Externally, Chunghwa Telecom will adhere to the broad alliance strategy, using the "ABC Principles" – acquisition, business development and collaboration – to actively seek out strategic partners in each field that can leverage cooperation synergies and extend core capabilities.

Apart from participating in international 5G organisations, hiring external consultants and collaborating with universities and other academic institutions, Chunghwa Telecom has also been working with the most influential startup communities in Taiwan such as the Asia America Multi-

Technology Association's Taipei Cradle Programme, National Chiao Tung University's Gloria-Semicon scheme, National Taiwan University's Taidah Entrepreneurship Centre, CDIB Capital Innovation Accelerator, CHT-PCH Fund I, co-owned by Chunghwa Telecom and e-commerce group PChome Online, Taiwanese-state backed Taiwania Capital, as well as Plug and Play. Furthermore, the company formed Chunghwa Telecom 5G Accelerator in 2018 in a bid to actively identify forward-looking trends and outstanding partners in various fields. 5G, AI, big data, gaming, smart healthcare, smart mobility, smart manufacturing, smart agriculture and enterprise private network are all within the scope of Chunghwa Telecom's strategic radar.

"The most important attribute we value in a startup team is enthusiasm," said Hsieh. A 20-member investment committee from Chunghwa Telecom works with experts from the company and Chunghwa Telecom Laboratories to carefully evaluate the future growth and tech maturity of the proposed startup company.

As for how much budget will be planned for the annual investment, Chen added there is no clear budget limit for the current plan, and Chunghwa Telecom will remain open-minded in evaluating any good opportunities in line with the company's strategic blueprint.

## Mature companies join forces with startups to challenge the world together

"Our goal is not to be an entrepreneurial coach, but to put innovative service into practice," said Hsieh.

Chunghwa Telecom, which also operates a startup accelerator, has learned a lot about working with startup teams. Hsieh observed that many startups tend to focus on services or technologies, but what customers need is a complete solution. Chunghwa Telecom can help startup teams with proof-of-concept, proof-of-business application scenarios, information security, cloud services or infrastructure, and combine the strengths of both parties and provide better innovative services to customers.

Besides business cooperation and customer referrals, Chunghwa Telecom will also evaluate and invest

**(From left): Yuan-Kai Chen, Chih-Mao Hsieh Ju-Kun Lee, Cynthia Chen of Taiwan Renaissance Platform, Joseph Yang**

in suitable teams, as well as inject resources from the group, so that both the startup and the group can integrate and communicate in the areas of customer engagement, product development, organisation and talent, to achieve a win-win-win situation – providing customers with complete services, helping the startup to do great business and extending Chunghwa Telecom's core competitiveness.

In addition to aggressively entering the Taiwan market, Chunghwa Telecom will also invite its portfolio companies to participate in the global telecommunications industry events, such as the Mobile World Congress in Barcelona, Spain, to export Taiwan's solutions to customers from around the world and to gather forces to tackle challenges together.

Government helps corporates invest in startups to accelerate the transformation

In the post-covid-19 era, digital transformation will become a pressing need for companies. Although mergers and acquisitions are one of the fastest ways to transform, the failure rate is also quite high. Hsieh suggested that the government can provide incentives such as investment tax credits and subsidies for business development, or provide an open data platform to encourage enterprises to boldly make use of external innovation to quickly realise the transformation and upgrading Taiwan's industries.

Hsieh said that as the revenue proportion of personal customers declines, the proportion of enterprise customers will also increase, and it is estimated that the optimal intersection will be reached in five years. In response to this, Chunghwa Telecom will also introduce AR remote contact services, AI image analysis, cloud network services, drones and other application services as appropriate to help enterprise customers predict failures, optimise operational processes and help companies save manpower and costs.

"For you, we are always at the forefront," pledges Chunghwa Telecom's slogan. In the 5G era, the company will continue to lead Taiwan into the future.

*Spun off from Taiwan's Ministry of Transportation and Communications' Directorate General of Telecommunications in 1996, Chunghwa Telecom is Taiwan's largest integrated telecoms operator. The company employs about 32,000 people and its annual revenue reached NT$207.52bn ($7.1bn) in 2019.*

*Translated by Liwen-Edison Fu*

Special report

# A revolution in the making: health and AI

**> Pandemic has boosted venture dollars across health AI**
**> AI telemedicine and diagnostic tools race to scale up successfully**
**> Big pharma eyes strategic gains but data collection remains an issue**

**Callum Cyrus**
*Reporter*

**Most people have read the Wizard of Oz or watched the film but few go as far as to remember every line. Now it is possible to have it literally woven into your DNA as the Esperanto-language version of Frank Baum's 1900 classic just received a novel re-release. All 150 pages have been imprinted into a double strand of DNA.**

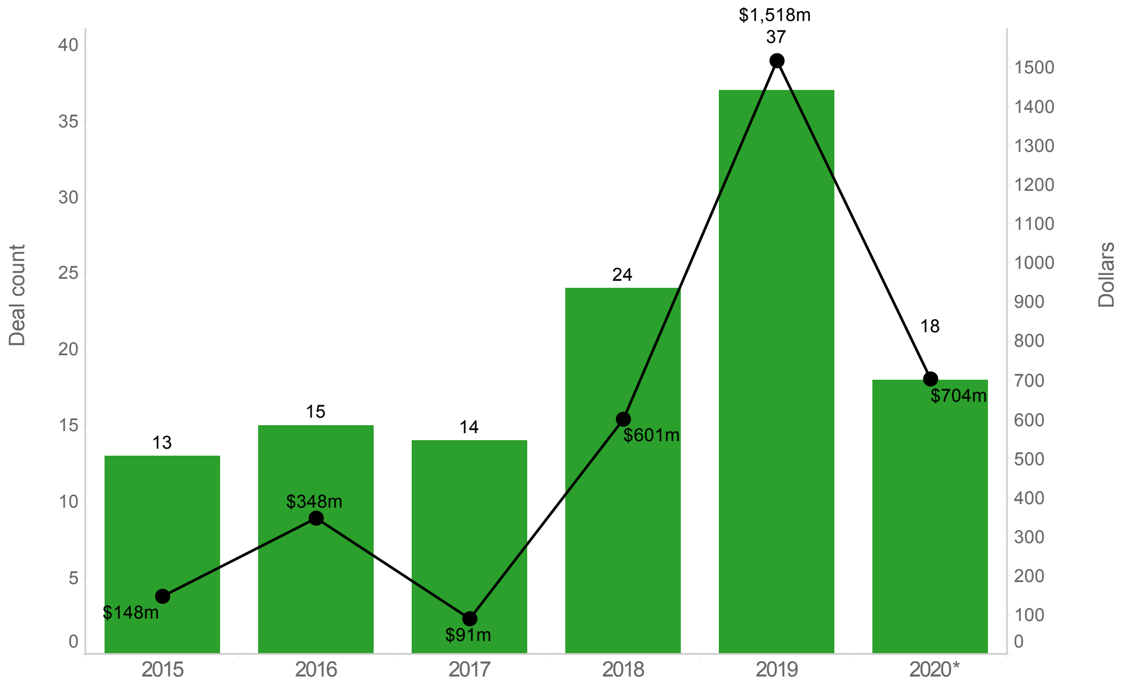
Where DNA strands become damaged, University of Texas at Austin's algorithm is trained to retrieve the text from other areas of code, demonstrating how models could learn to fix gaps in medical information.

And so society is poised to advance, by harnessing the connection between biotech and data-driven artificial intelligence (AI). If there is a coronavirus vaccine unearthed at breakneck speed, then here too AI will have been crucial.

As covid-19 ensnared China, it was AI from internet group Baidu that allowed its secondary RNA sequences to be predicted 120 times faster than conventional RNA analysis. (The two main types of nucleic acids are DNA, which provides the code for the cell's activities, and RNA, which converts that code into proteins to carry out cellular functions.)

Later, the US government asked ImmunityBio, an immunotherapy company, to work on covid-19 after its AI supercomputer, powered by Nvidia and Microsoft hardware, put together a

## Health artificial intelligence or machine learning corporate-backed deals




*as of July 6

Source: GCV Analytics

computational model of the Sars Cov-2 spike protein.

It is arguably AI's biggest test to date, and the world now awaits with suspense news from the potential vaccines it has helped devise.

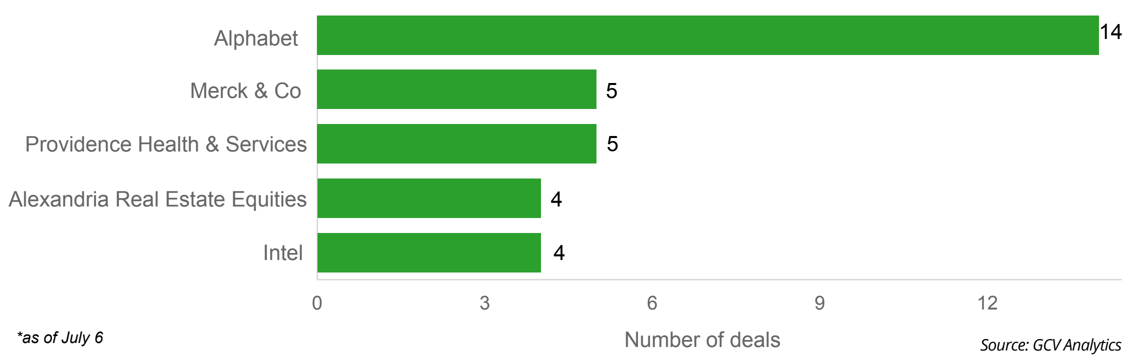
A stampede of coronavirus-related startups have emerged, including at Nvidia Inception, the virtual AI-focused accelerator of Nvidia. Renee Yao, the company's global lead for healthcare AI startups, says more than 200 of Inception's 900-plus health-focused members claim to have technologies useful in tackling or managing the disease.

AI may have even discerned the scale of the threat before it was discovered by global health officials. BlueDot, a Canada-based infectious disease forecasting platform, says it found unusual pneumonia cases in Wuhan in late December 2019 and flagged the cluster as significant, according to broadcaster CNBC.

This forecasting has also strengthened the arsenal of developing nations least equipped to tackle infectious disease.

For example, technology group IBM told GCV it had helped implement a covid-19 forecasting dashboard for

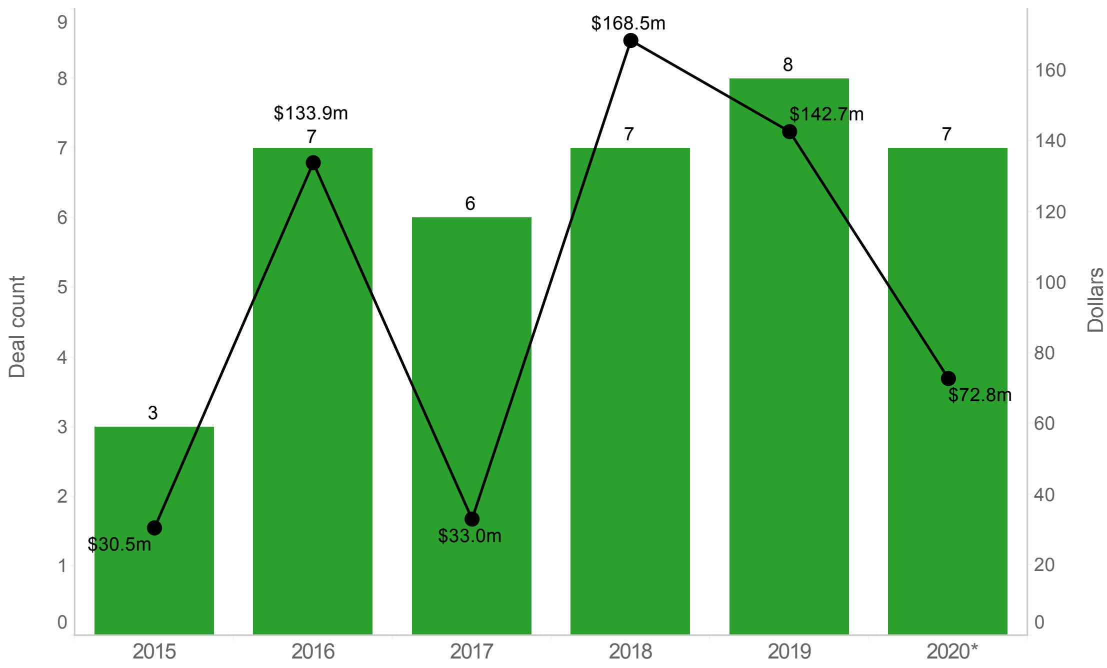
## Top investors in healthcare artificial intelligence, 2015-2020




*as of July 6

Source: GCV Analytics

## Diagnostics & medical devices AI/ML sector corporate-backed deals




*as of July 6

*Source: GCV Analytics*

the South African province of Gauteng, using AI to recognise existing clusters and factors likely to influence the virus's future spread. Having reported 500,000 cases by August 2020, South Africa is the African nation most affected by covid-19, with Gauteng accounting for about 21% of its diagnoses in June according to IBM.

Fighting coronavirus has demonstrated deep algorithmic potential in all areas of medicine, with the greatest benefits arguably still to come.

With models already capable of digesting compound structures and genetic code, we are potentially on the cusp of an age where deep AI sparks revolutionary medical insights.

GCV Analytics indicates there were 37 corporate-backed rounds for explicitly AI or machine learning-driven health applications in 2019, almost three times the number in 2015. Collectively, the deals hauled in $1.5bn compared with $601m year-on-year.

The dollar tally for 2020 has surpassed 2018 already, with $704m from 18 deals as of early July, despite the economic situation.

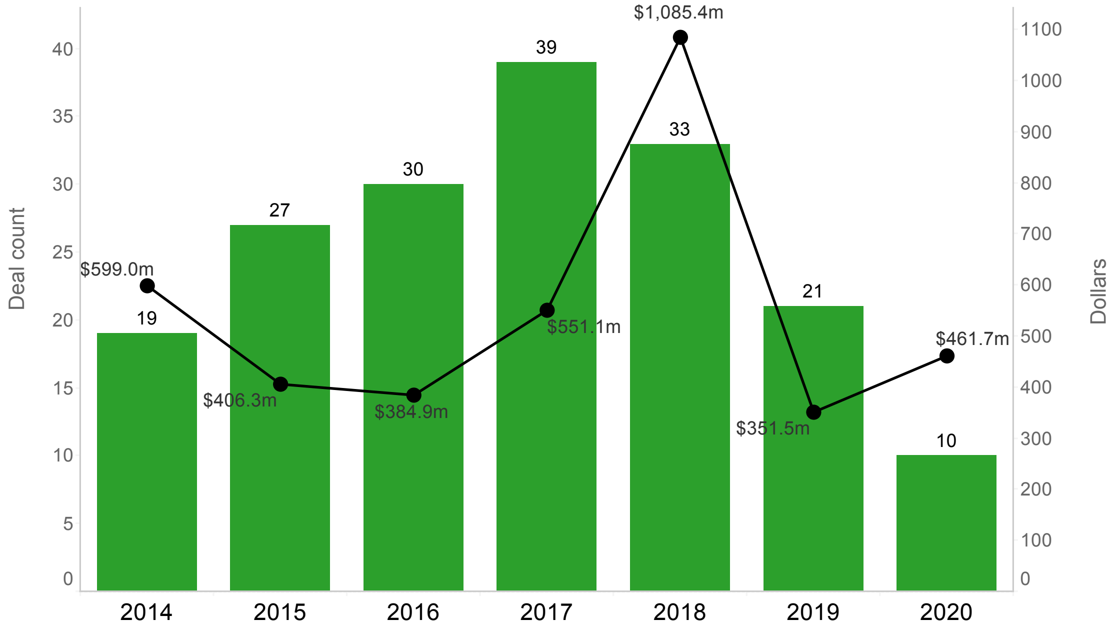
Deal values continue to rise although the number of exits for AI health companies

## Top 5 deals in healthcare artificial intelligence 2015-July 6, 2020

| Portfolio Company | Location | Round | Round Size ($m) | Co Participant List |
|---|---|---|---|---|
| Babylon Health | UK | C | 550 | Centene Corporation \| Kingdom of Saudi Arabia \| Kinnevik \| Munich Re Ventures \| Vostok New Ventures |
| Tempus | USA | E and beyond | 200 | Baillie Gifford \| Franklin Templeton \| New Enterprise Associates \| Novo \| Revolution \| T Rowe Price |
| iCarbonX | China | A | 154 | Tencent \| Vcanbio Cell and Gene Engineering |
| Insitro | USA | B | 143 | Alexandria Real Estate Equities \| Alphabet \| Andreessen Horowitz \| Arch Venture Partners \| BlackRock \| Canada Pension Plan \| Casdin Capital \| Foresite Capital \| Hof Capital \| T Rowe Price \| Third Rock Ventures \| Two Sigma Investments \| WuXi AppTec |
| BenevolentAI | UK | Undisclosed | 115 | Undisclosed strategic investors \| Woodford Investment Management |

*Source: GCV Analytics*

## Corporate-backed deals in digital health




*as of July 6

*Source: GCV Analytics*

may have stalled, according to Anand Kamannavar, global head of Applied Ventures, the corporate venturing arm of semiconductor technology producer Applied Materials.

Kamannavar said: "From the [trade body] National Venture Capital Association's data and our experiences investing, we are seeing a surge in late-stage deal values and outsized deals are pushing the average higher."

Alphabet heads the league table of CVC investors since 2015 in deal numbers, underscoring the space's importance.

**For more on the intersection between health and artificial intelligence, see our Q3 artificial intelligence supplement.**

## Global University Venturing

# Chasing the light at the end of the tunnel

**> Spinouts are leading the vaccination charge**
**> University of Oxford trials look promising**
**> Pandemic must still be taken seriously**

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

**Covid-19 remains a threat but universities are at the forefront of fighting back.**

When lockdowns were implemented around the world six months ago, there was a cautious optimism that the short-term inconvenience was necessary but would allow us all to emerge on the other side in a significantly better place to beat the pandemic.

Some countries have done a good job, though almost all have found it challenging to continue keeping the virus at bay: New Zealand, for example, had effectively eradicated the virus on its shores (though some travellers have brought it with them) but the city of Auckland was forced back into lockdown when a local outbreak occurred in August.

Others are, to put it mildly, stumbling along. England (specifically England, not the UK) managed to fumble its way through the crisis but took no measures to protect its elderly population in care homes and the prime minister's own adviser broke the law to travel across the country during lockdown – somehow staying in his job despite a huge public outcry.

England has also had to implement local lockdowns but in another example of early success being no guarantee for continued safety, the town of Caerphilly in Wales – which had done comparatively better at preventing community spread than its neighbour – was also put into lockdown in early September.

The UK parliament's financial watchdog has even concluded that there was an

**A US Centres for Disease Control and Prevention scientist works in a biological safety cabinet**

"astonishing" failure by the government to plan for the economic impact to the possibility of a flu-like pandemic. You could argue nobody expected one, but it has only been 10 years since the swine flu pandemic, when the same party was in power (albeit not the same government).

Some have handled it outright catastrophically. Cases are finally dropping in 30 US states – but this good news hides the fact that the country is adding some 36,000 new infections per day as of September 11. Overall, the US has approximately 6.4 million cases – more than 22% of the world's confirmed infections – and is responsible for just over 21% of global deaths (191,802 out of 910,157 casualties), according to figures collated by Johns Hopkins University by September 11. Anthony Fauci, director of the National Institute of Allergy and Infectious Diseases, has warned that things will get worse for America as it heads into autumn.

If we were all hoping in March to be cautiously emerging from lockdowns everywhere by now, as a species we have utterly failed. The reason is entirely political, motivated by a populist idea that shops and restaurants need to reopen to save "the economy" (the long-term effect, of course, will be an economy weakened beyond anything that enforced restrictions would have caused).

But while we will certainly need politicians to ensure vaccines are deployed fairly and made mandatory for anyone bar those with medical restrictions, politicians were never going to be the ones to ultimately save us. The people who will save us are the scientists.

The World Health Organisation is currently tracking the development of 180 potential vaccines, including 35 already in clinical trials – some being developed by spinouts such as Moderna (Harvard University), CureVac (Eberhard Karls University of Tübingen) and Biontech (Johannes Gutenberg University Mainz).

The fastest vaccine ever developed in human history so far was the one for mumps and that took four years, but there is reason to be optimistic about a quicker vaccine for covid-19. For one, the urgency of the situation has meant that government, institutional and private investors have been throwing billions of dollars at the research.

On July 20, University of Oxford and pharmaceutical firm AstraZeneca revealed the results of their phase 1/2 trial for a vaccine candidate with the catchy name of ChAdOx1 nCoV-19 in medical journal The Lancet. The research group's Prof Andrew Pollard told the BBC the results were "extremely promising", though the long-term viability of the vaccine remains to be determined. The study involved 1,077 participants, 90% of which were shown to develop antibodies and T-cells that can fight off the virus. The UK government immediately proceeded to pre-order 100 million doses of the final product.

The potential vaccine hit a bump in the road in early September when a volunteer fell ill and the trial was paused as standard practice to investigate whether the sickness was an adverse effect or unrelated. It has now been ruled unrelated and the trial has resumed.

But for now, we will continue to all be stuck in limbo: even if Oxford's, or any of the other vaccines, pass all regulatory hurdles by the end of the year, it will be until mid-2021 for doses to become widely available. If politicians, and citizens, fail to take the situation seriously for that long, it could mean tens of thousands of additional deaths.

Yet if you look carefully, you can see light at the end of this seemingly never-ending tunnel, as faint as it might be. And while Oxford is conducting its research with a corporate partner, the fact that there are multiple spinouts working on a vaccine too means there is a decent chance that a spinout will save humanity – be honest, how many of you really had that in their sights when becoming a tech transfer professional?

Global Impact Venturing

# Corporates turn to strategic investments to drive sustainable innovation

**> Companies have an immense opportunity to drive sustainability**
**> Salesforce and Danone are early adopters**
**> Diverse firms perform better**

**Moses Choi**

*First published by ImpactAlpha*

**When Amazon announced its $2bn Climate Pledge Fund to facilitate the transition to a low-carbon economy, it became the latest in a growing number of corporates using balance sheet capital to invest in and spur sustainable innovation.**

In the past year alone, Microsoft, Citi, Merck, Splunk and Unilever have announced new approaches to invest with an impact-oriented thesis.

Corporates are distinctive for their potential to adopt, scale and, ultimately, accelerate impact. Thoughtful design and execution of impact-oriented investing strategies can future-proof competitiveness, activate purpose and unlock new avenues for innovation.

Over the last decade, private market investors have developed strategies to originate "impact investments" with the "intention to generate positive, measurable social and environmental impact alongside a financial return", according to the Global Impact Investing Network. The market initially consisted of small, niche asset managers. Today, the impact investing market encompasses some of the world's largest private investors such as Blackstone and KKR, representing roughly more than $700bn in assets.

Emerging in this context is a cadre of corporates that are executing strategies to invest in ventures that drive social and environmental impact. "Solving our planet's carbon issues will require technology that does not exist today," wrote Microsoft's Brad Smith when he announced the firm's $1bn Climate Innovation Fund to invest in technologies and expand access to capital to carbon-tech entrepreneurs.

SparkMeter

**TCNV portfolio company SparkMeter uses smart meters on microgrid and distribution utilities**

"A significant part of our endeavour involves putting Microsoft's balance sheet to work to stimulate and accelerate the development of carbon removal technology."

With more than $22 trillion of balance sheet cash – and the ability to raise significant capital through instruments like green bonds – corporates have an immense opportunity to accelerate sustainability by leveraging their core businesses, operations and global supply chains.

## Strategic alignment

Corporate investments to spur innovation can be expressed through many channels, including research and development, internal incubation, and even mergers and acquisitions. Perhaps the most widely recognised avenue is through corporate venture capital (CVC). With more than $57bn invested across more than 3,200 deals in 2019, corporates have never been as active in the open innovation economy

CVC generally refers to a direct equity investment in a startup company using balance sheet capital or through an intermediary vehicle. CVCs typically seek to achieve two objectives: an expected return commensurate with the corporate's cost of capital and "strategic" value. Highly contextual to a specific company, strategic value can accrue to a corporate in myriad ways such as garnering technical insights, driving revenue growth through partnerships, or inspiring employee engagement.

By marrying the scope of CVC and logic of impact investing, a growing field of corporate investors are seeking to generate financial return, strategic value and impact.

Salesforce is an early adopter of such an approach. "Social and environmental impact is core to who we are as a company," says Claudine Emeott of the $50m Salesforce Impact Fund. Launched in 2017 with Salesforce Ventures, "the Impact Fund is uniquely positioned to catalyse the growth of companies who are building products and solutions to benefit society." Through the fund, portfolio companies receive funding to accelerate their growth, in addition to the credibility, access and advice that comes with an investment from Salesforce Ventures.

For mission-driven entrepreneurs, credibility is key. Recent quantitative research suggests that when compared with traditional venture capitalists, angel investors or investment banks, CVCs are "uniquely more helpful" to impact-oriented startups by conferring legitimacy and signalling those "poised to be disruptive winners."

## More than capital

As a strategic investor, says Emeott, "we believe that our capital is just the start to a deeper relationship, and we are excited to roll up our sleeves and work alongside our entrepreneurs to help them leverage the power of the Salesforce ecosystem".

Unite Us, a Salesforce Impact Fund portfolio company, believes Salesforce can spot long-term value in companies that are driving change and impact. "Salesforce understands and supports our mission to use combined technology and community engagement to transform how integrated healthcare and services are delivered in communities," says Unite Us's Dan Brillman.

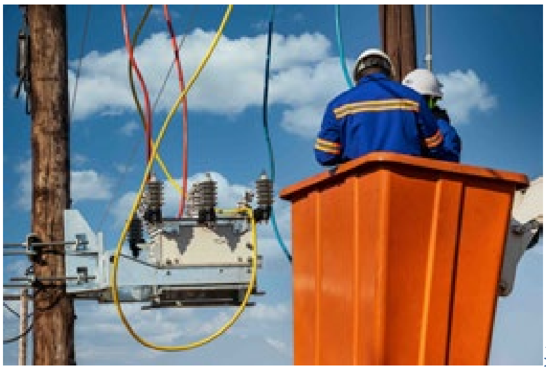
Danone Manifesto Ventures (DMV), the $150m corporate venture arm of global consumer company Danone, launched in 2016. To help signal its impact commitment to entrepreneurs and co-investors, Danone Manifesto Ventures became the first corporate venture fund to receive B-Corp certification, a business certification to meet high standards of social and environmental performance, transparency and accountability. While not a prerequisite for investment, B-Corp certification has helped facilitate meaningful conversations with entrepreneurs around mission and values.

"[The B Corporation certification reinforces] our commitment towards entrepreneurs who embrace our view that success is not only measured by profit but also by social and environmental impact," says Danone's Laurent Marcel.

Beyond simply financial capital, corporates offer startups and emerging companies business resources, intellectual capital, and a wide network of customers and suppliers. Access to managerial, technical and business expertise has the potential to better structure and rive and drive enterprise growth. Together, these advantages can be a "multiplier effect" to differentiate performance.

DMV backed San Francisco-based Harmless Harvest, the organic coconut water company, not simply because of its product, but also because of how thoughtful the company was in implementing programmes to support the environment and livelihoods of farmers in Thailand.

Aligned in mission, Harmless Harvest launched a programme on regenerative agriculture with support from another corporate resource, Danone's Ecosystem Fund, which focuses on co-creation of inclusive businesses.



Engineers working on a SparkMeter distribution utility

SparkMeter

## Patient capital

Corporates are able to consider both long-term sustainability challenges and the disruptive technologies that could solve them by balancing both returns and strategic value. This resonates with Total Carbon Neutrality Ventures (TCNV), the corporate venture unit of the global energy company Total. TCNV's mission "is focused on finding, funding and fostering high-potential startups which will contribute to creating a low carbon future."

Since 2008, TCNV and its predecessor teams have invested in early-stage ventures with a recognition that energy disruptors require patient sources of capital. "By aligning with longer-term expectations for startups solving the energy transition, corporate investors offer 'patient' capital. We can also leverage our patient approach to identify frontier opportunities for impact and to fund enabling technologies," says TCNV's Ademidun (Demi) Edosomwan.

Building on its existing portfolio of 35 global start-ups, TCNV's $400m fund includes a mandate to invest in providing energy access for people living off-grid in emerging markets. With a corporate footprint in more than 40 African markets, TCNV seeks to balance generating returns with investing in innovations that help Total future-proof its business and provide reliable, affordable and clean energy. The portfolio includes companies such as ZOLA Electric (off-grid energy) and SparkMeter (smart metering).

## Purpose and inclusion

As corporates pursue sustainable innovation, they can activate purpose. By 2025, millennials will comprise the majority of the global workforce, and nearly all millennials want to use their skills to "do well and do good". Millennials also represent the most diverse generational cohort in US history, and the business case is clear: diverse companies are more likely to outperform less diverse peers, according to research from McKinsey.

Earlier this year, Citi, the global banking franchise, announced the launch of a $150m Citi Impact Fund. The fund makes equity investments in "double bottom line" ventures that have a positive impact on society, across workforce development, physical and social infrastructure, financial capability and sustainability. The new effort uses the bank's own capital to invest in businesses that are led or owned by women and minority entrepreneurs "to not only help these businesses scale and thrive but to also shine a light on the investment opportunities among this pool of often overlooked, high potential entrepreneurs".

At least a dozen corporate venture funds, including Comcast Venture's Catalyst Fund, Salesforce Impact Fund and Microsoft's M12 invest with a "gender lens" or a broader diversity investment strategy that includes a gender focus, according to the latest research from Project Sage, a Wharton Social Impact project.

## Seizing the moment

The sustainability challenges we face today are too profound, material and time-bound. The UN estimates an annual private capital funding gap of nearly $2.5 trillion to achieve the UN Sustainable Development Goals by 2030. Private capital will undoubtedly have an important role to play, but capital alone is not enough. Equally important is the velocity in adopting innovative technologies and solutions with purpose and intent.

To seize the opportunity, corporates must collaborate with entrepreneurs, governments, philanthropy and civil society. I, for one, am optimistic that corporates can play a meaningful role to accelerate a more sustainable future.

*Moses Choi has spent the last decade executing investments and managing sustainable innovation opportunities across capital markets, ESG, technology and corporate venture capital. The views expressed in this op-ed are his own. If you are interested in learning more about this topic, please reach out to him on LinkedIn.*

# Monthly report: July-August

## Figures trending upwards

**> Deals down in numbers but roughly similar in total dollars (y-o-y)**
**> More funding initiatives continue to be reported**
**> Higher number of exits vs same months last year**

**Kaloyan Andonov**
*Reporter*

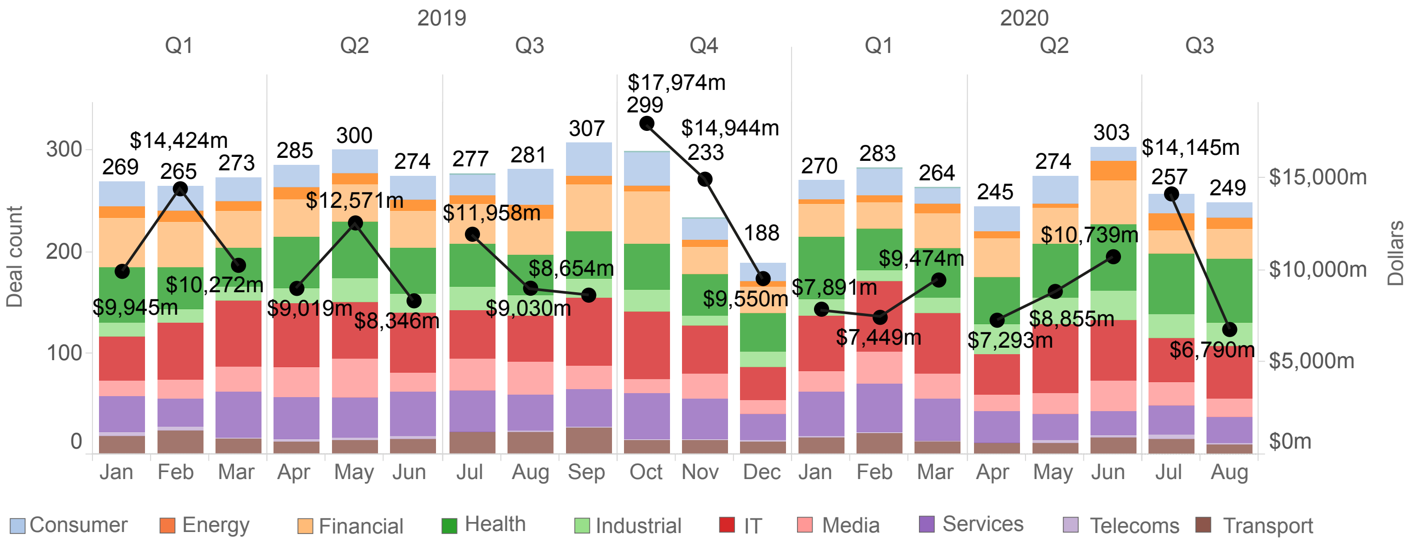
While investment activity levels are lower than last year and summer months tend be "slower", the overall trend appears to be broadly upward, suggesting a recovery from the covid-19 pandemic shock earlier this year.

### The headline numbers

| Deals | Exits | Funding initatives |
|---|---|---|
| 506 | 67 | 24 |

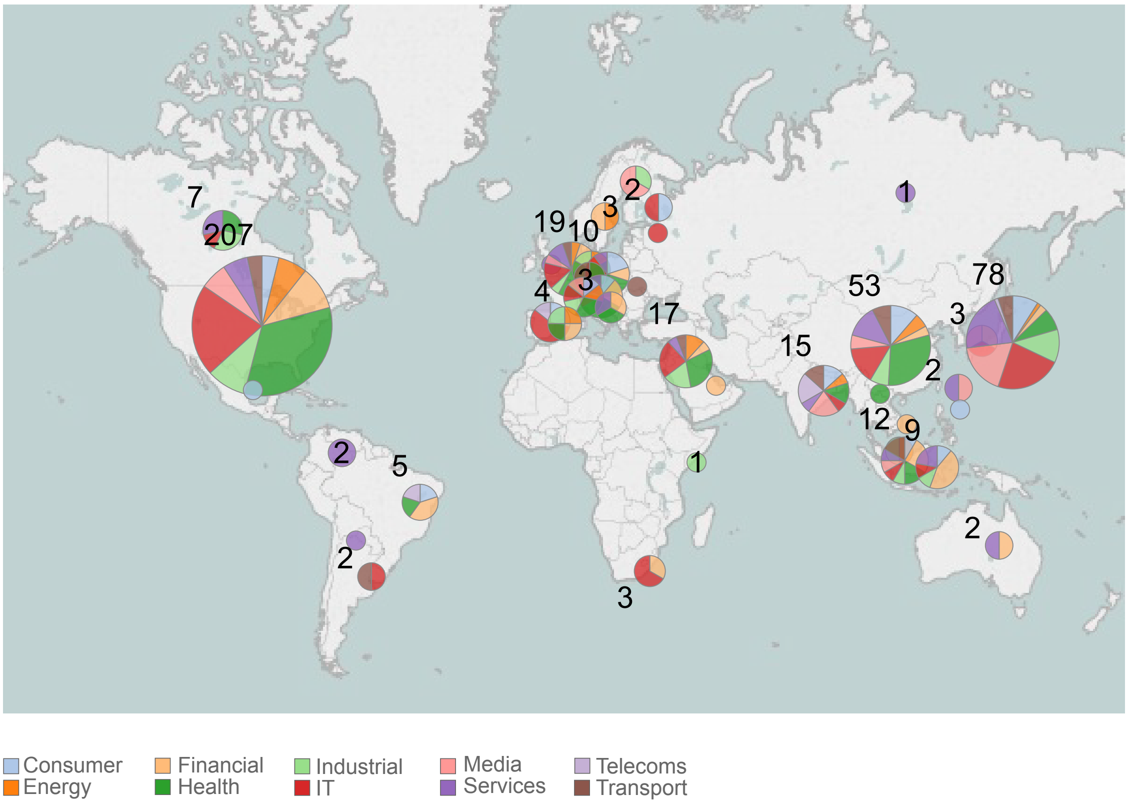
### Deals over time

The number of corporate-backed deals in July and August stood at 506. In July, there were 257 – down 6% from the 274 in the same month last year – and 249 in August, down 11% from last year's 281. The total investment value was $14.14bn in July and $6.7bn in August – roughly comparable with last year's. Both months saw fewer deals than June this year (303).



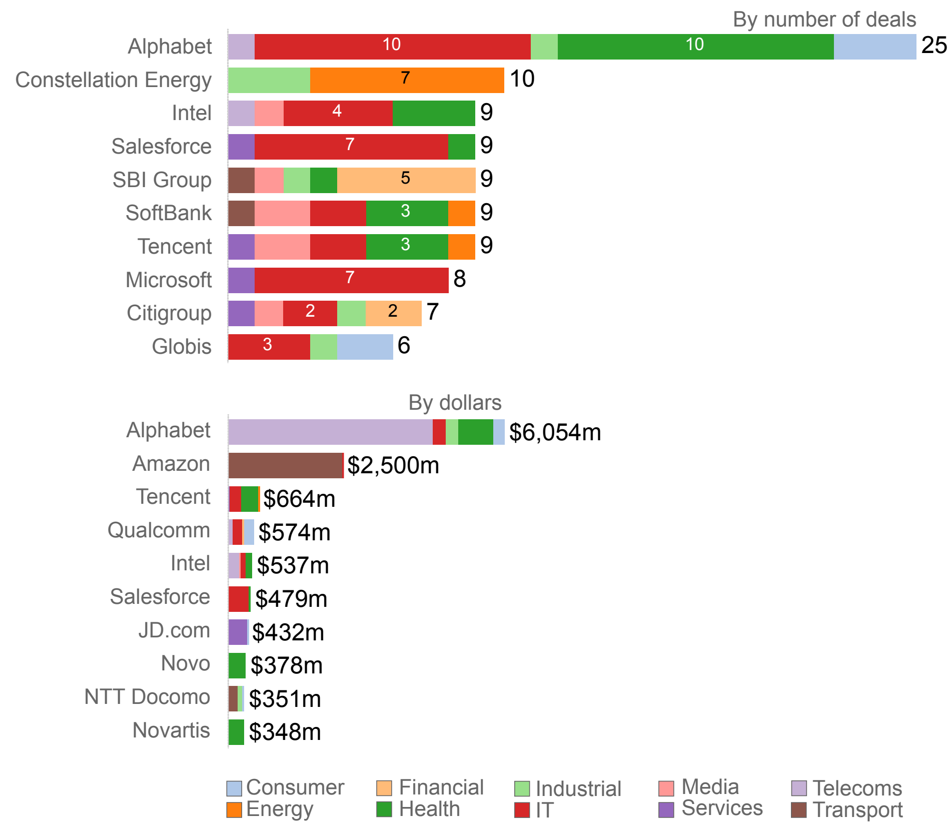

Source: GCV Analytics

## Global view of deals




The US came first in the number of corporate-backed deals, hosting 207 rounds, while Japan was second with 78 and China third with 53.

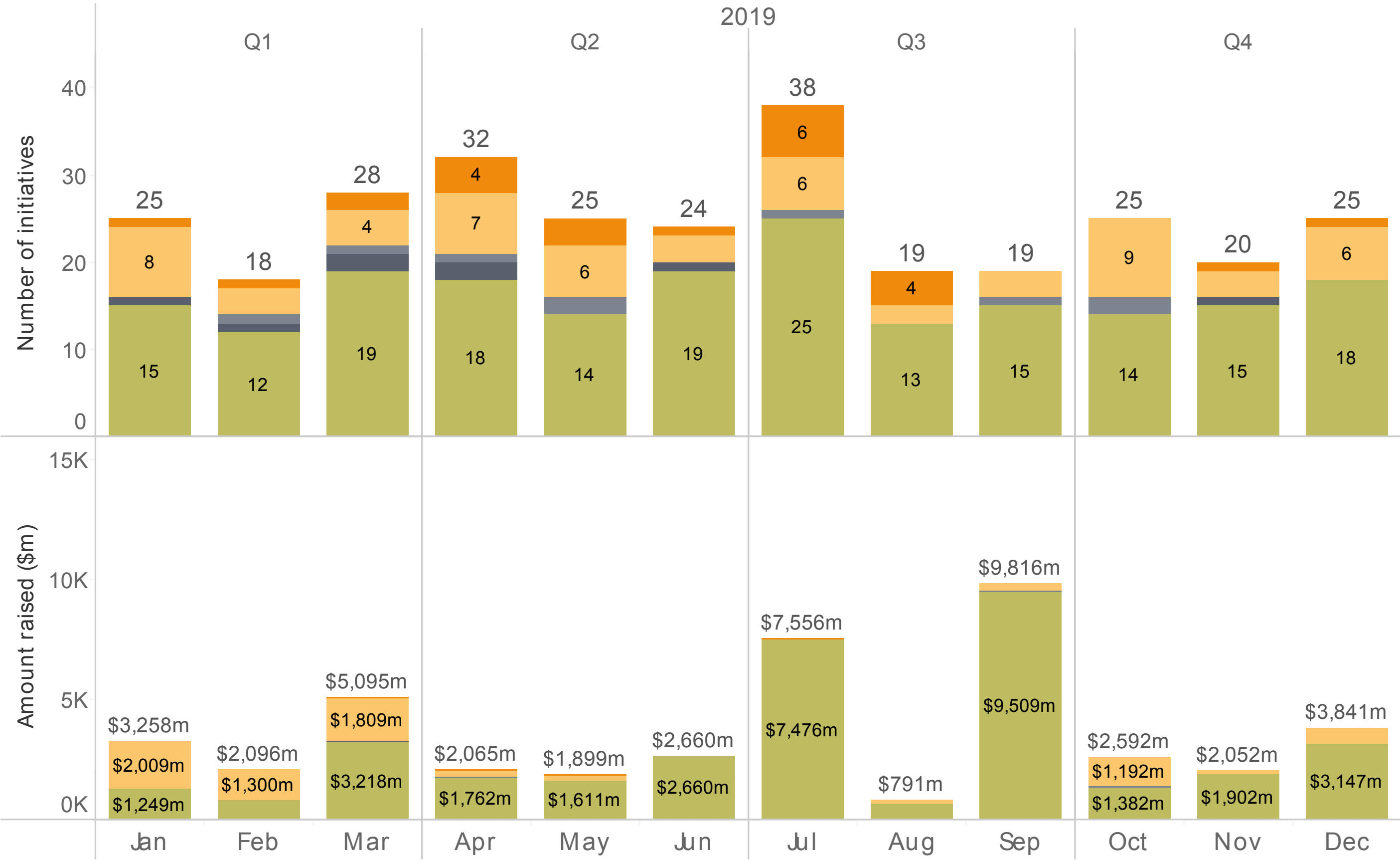
## Top investors in July-August

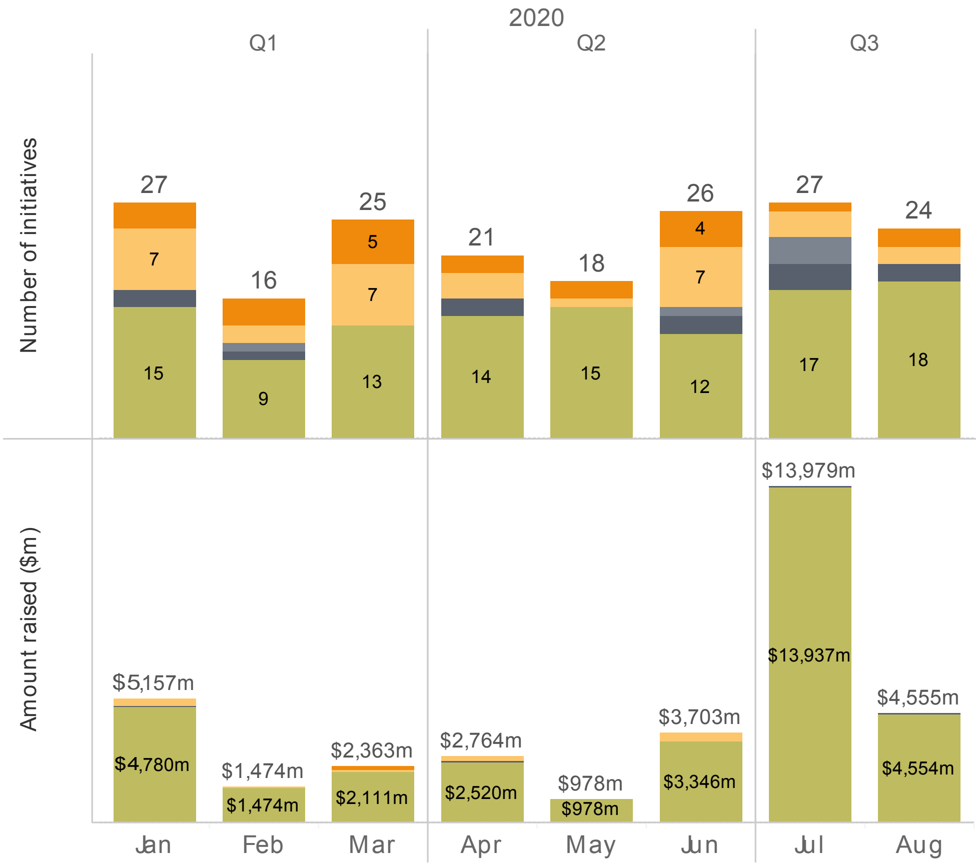



The leading corporate investors by number of deals were internet conglomerate Alphabet, utility company Constellation Energy and semiconductor manufacturer Intel. In terms of involvement in the largest deals, Alphabet topped the list along with e-commerce, cloud services and consumer device group Amazon and internet technology group Tencent.

*Source: GCV Analytics*

## Monthly funding initiatives




There were 51 corporate-backed funding initiatives in July and August. The July figure (27) suggested a 29% drop compared with July 2019, which had 38. The August figure (24) was 26% higher than the same month last year (19). Capital initiatives reached $14bn in July and $4.55bn in August, considerably more than the same months last year.

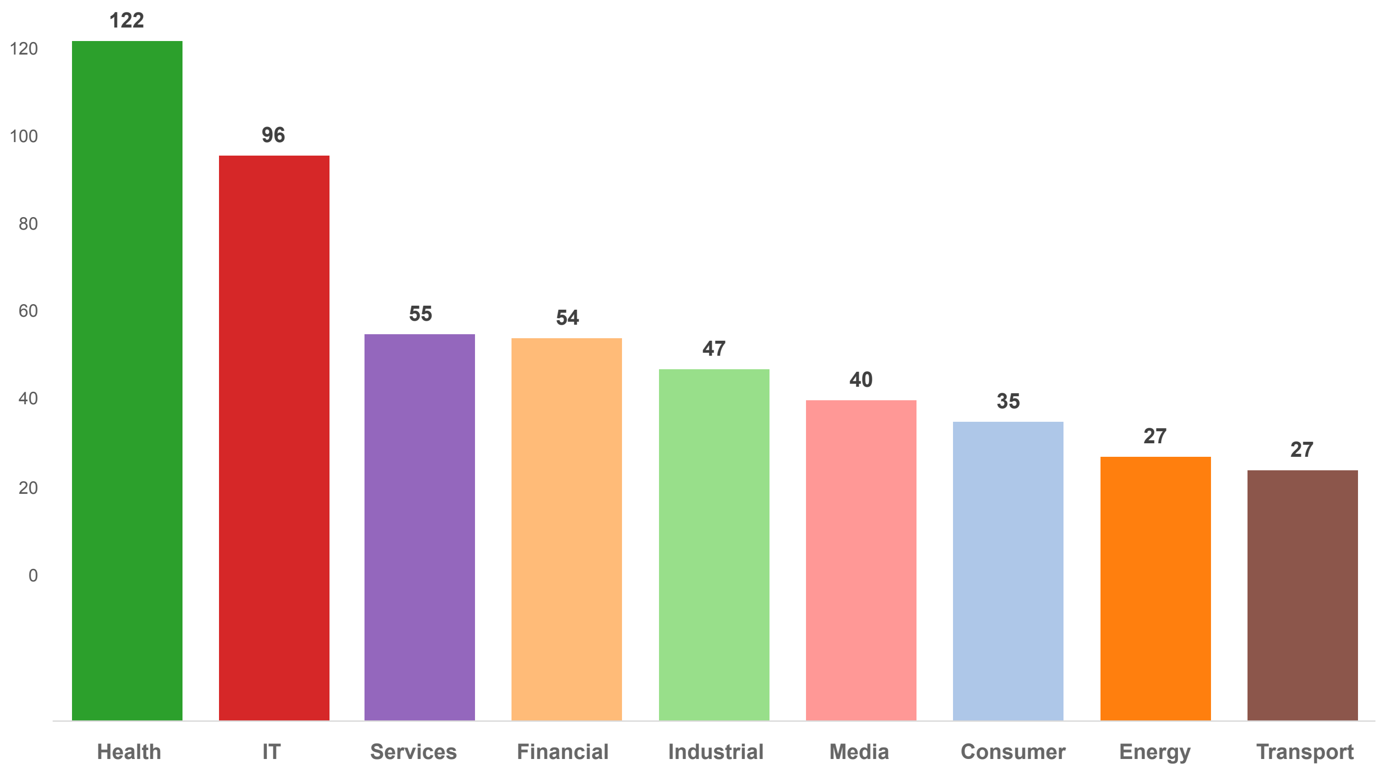
The trends probably reflect that corporate venturers are opening up to new funding models that include external limited partners and, to a degree, a race to attract some of the liquidity with which central banks have flooded financial markets in response to the pandemic.

*Source: GCV Analytics*

# Deals

## By sector

Emerging businesses from the health, IT, services and financial sectors led in raising the largest number of rounds in these two months. The most active corporate venturers came from the financial, IT, health and services sectors.




## Heatmap

| | Financial Services | IT | Health | Services | Industrial | Media | Consumer | Energy | Telecoms | Transport |
|---|---|---|---|---|---|---|---|---|---|---|
| North America | 60 | 60 | 47 | 19 | 18 | 19 | 12 | 19 | 15 | 4 |
| Asia | 64 | 38 | 13 | 37 | 24 | 28 | 24 | 8 | 10 | 10 |
| Europe | 30 | 10 | 15 | 6 | 6 | 6 | 8 | 8 | 4 | 4 |
| Middle East | 6 | 3 | 3 | 2 | 6 | | 1 | 1 | 1 | |
| South America | 3 | 4 | | | | 1 | 3 | | 1 | |
| Africa | 2 | | | | 1 | | | | 1 | |
| Australia/NZ | | | | 1 | | | 1 | | | |
| Eastern Europe | | 1 | | | | | | | | |

*Source: GCV Analytics*

## Top 10 deals

| Portfolio company | Location | Sector | Round | Round size ($m) | Co-Participant List |
|---|---|---|---|---|---|
| Jio Platforms | India | Telecoms | Stake purchase | $4.5bn | Alphabet |
| Rivian | USA | Transport | Undisclosed | $2.5bn | Amazon \| Baron \| BlackRock \| Coatue \| Fidelity \| Soros Fund Management \| T Rowe Price |
| Miss Fresh | China | Consumer | Undisclosed | $495m | Abu Dhabi Capital Group \| China International Capital Corporation \| Goldman Sachs \| Industrial and Commercial Bank of China \| Tiger Global Management |
| Kuayue Express | China | Services | Stake purchase | $432m | JD.com |
| Xiaopeng Motors | China | Transport | C | $300m | Alibaba \| Qatar Investment Authority |
| Freenome | USA | Health | C | $270m | Alphabet \| American Cancer Society \| Andreessen Horowitz \| Bain Capital \| Catalio Capital Management \| Colorectal Cancer Alliance \| Cormorant Asset Management \| Data Collective \| EcoR1 Capital \| Farallon Capital Management \| Fidelity \| Janus Henderson Investors \| Kaiser Permanente \| Novartis \| Perceptive Advisors \| Polaris Venture Partners \| RA Capital Management \| Roche \| Rock Springs Capital \| Sands Capital \| Section 32 \| Soleus Capital \| T Rowe Price |
| Epic Games | USA | Media | Undisclosed | $250m | Sony |
| VillageMD | USA | Health | Undisclosed | $250m | Walgreens Boots Alliance |
| Farmer's Business Network | USA | Industrial | E and beyond | $250m | Alphabet \| Balyasny Asset Management \| Baron \| BlackRock \| DBL Partners \| Expanding Capital \| Fidelity \| Kleiner Perkins \| Lupa Systems \| Mandi Ventures \| Private Investor \| T Rowe Price \| Temasek |
| Traveloka.com | Indonesia | Services | Undisclosed | $250m | EV Growth \| undisclosed investors |

**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, took a 7.7% stake and announced a collaboration on the development of technology including an affordable entry-level smartphone. Alphabet has also announced plans to invest $10bn in India in the next five to seven years.

Jio operates a mobile network and broadband service, as well as about a dozen proprietary apps. It aims to expand into online retail, digital payments, education and healthcare, building an ecosystem modelled on that of China-based e-commerce firm Alibaba.

**2** US-based electric truck developer Rivian completed a $2.5bn financing round that included Amazon. The round was led by funds and accounts advised by investment manager T Rowe Price and also featured financial services and investment group Fidelity Management and Research, among others. Rivian is working on a plug-in electric truck and an electric sports utility vehicle R1S that will both use a flexible skateboard chassis it has developed.

The company struck a partnership agreement with existing investor Amazon in September 2019 to jointly create an electric delivery van and manufacture 100,000 of the vehicles for its use. Amazon's participation in the round followed an agreement last month to acquire autonomous vehicle developer Zoox for a reported $1.3bn.

**3** MissFresh, the China-based online supermarket backed by Tencent and consumer electronics producer Lenovo, completed a $495m financing round. China International Capital Corporation led the round, which included fellow investment bank Goldman Sachs' asset management arm as well as financial services firm Industrial and Commercial Bank of China, Tiger Global Management and Abu Dhabi Capital. The round valued the company at more than $3bn.

MissFresh operates an e-commerce platform that delivers groceries to customers in as little as an hour,


**Walgreens Boots Alliance signed a strategic partnership with VillageMD**

sourcing items from more than 1,500 small warehouse scattered across China. The company had more than 25 million monthly active users as of mid-2019.

**4** Kuayue Express, a China-based delivery services provider backed by logistics property developer GLP, agreed to sell a controlling interest to JD Logistics, a subsidiary of e-commerce group JD.com, for RMB3bn ($432m). JD Logistics will acquire both existing and newly issued shares in the Kuayue Express.

Founded in 2007, the comapny has built an integrated logistics network with services ranging from same-day delivery and intra-city shipping to cold-chain transportation for fresh produce. It oversees 13 freight planes and 17,000 trucks that operate across China.

**5** China-based electric vehicle (EV) producer Xiaopeng Motors raised an estimated $300m from investors including Alibaba to increase its series C-plus round to $800m just ahead of its flotation.

Qatar's sovereign wealth fund, Qatar Investment Authority, was also an investor.

Founded in 2014 and also known as Xpeng, Xiaopeng Motors sells smart EVs equipped with artificial intelligence and autonomous driving functionality. It has sold close to 20,000 models of its compact sports utility vehicle, G3, according to Reuters.

**6** US-based oncology diagnostics technology developer Freenome completed a $270m series C round featuring pharmaceutical firms Roche and Novartis, healthcare provider Kaiser Permanente and Alphabet.

Bain Capital Life Sciences and Perceptive Advisors co-led the round, which also included investment and financial services group Fidelity, among others. Alphabet, Kaiser Permanente and Roche participated through respective corporate venturing units GV, Kaiser Permanente Ventures and Roche Venture Fund.

Freenome has developed a system that can detect cancer with a single blood draw using multi-omics technology that combines multiple forms of biological analysis. It has a screening test for colorectal cancer in clinical trials and one that will detect precancerous lesions.

**7** Consumer electronics and media group Sony Corporation invested $250m in US-based game developer Epic Games at a reported valuation of nearly $17.9bn. Sony is also seeking to expand collaboration between the companies. It recently unveiled the first slate of games for its forthcoming game console, the PlayStation 5, which is due to launch by the end of 2020. Epic has created a series of games based on its multiplayer first-person shooting game engine, Unreal Engine. The most popular is Fortnite, which has generated north of $4bn of revenue by the end of last year.

**8** Pharmacy operator Walgreens Boots Alliance (WBA) formed a $1bn strategic partnership agreement with US-based primary care provider VillageMD that included an initial investment of $250m. The $1bn figure consisted of an undisclosed mix of equity and convertible debt financing that will be provided over the next three years. The $250m equity investment represents the first instalment and WBA will own a 30% stake in VillageMD once the debt has been converted into equity.

Founded in 2013, VillageMD runs a nationwide network of primary care services providers called Village Medical. It has partnered more than 2,800 doctors with some 600,000 patients. The partnership will enable WBA to offer full-service doctor offices at its pharmacies.

**9** US-based farming data analytics platform provider Farmer's Business Network (FBN) closed a $250m series F round that included GV. Investment manager BlackRock led the round through unnamed funds and accounts. The transaction reportedly valued FBN at $1.75bn. The compay has built a farmer-to-farmer networking platform that enables independent growers to pool information on topics including the prices and performances of seeds and herbicides. The company runs an e-commerce service selling seeds, crop protection and biologicals, and will use part of funding to expand that service.

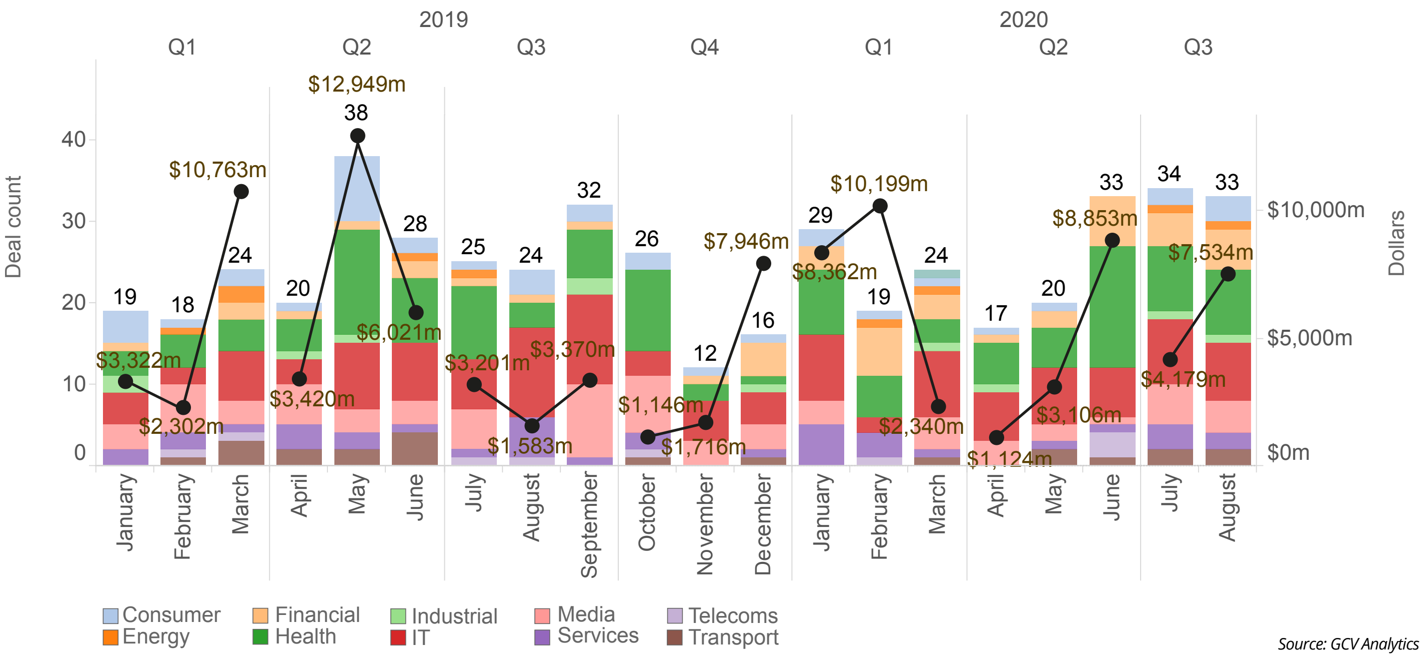
**10** Traveloka, an Indonesia-based online travel booking platform backed by e-commerce group JD.com and travel services provider Expedia, raised $250m in equity financing. The round was led by an undisclosed financial institution that some sources identified as Qatar Investment Authority, the country's sovereign wealth fund. Existing shareholders also contributed to the round, though only EV Growth was named. Founded in 2012, Traveloka enables consumers to book flights, bus and train journeys, accommodation, meals and attractions. Users can also take out insurance and a travel credit card. Traveloka is active in Australia, Indonesia, Malaysia, Thailand, Vietnam, the Philippines and Singapore.

# Exits

GCV Analytics tracked 67 exits involving corporate venturers as either acquirers or exiting investors during the summer months – 34 in July and 33 in August. The transactions included 35 acquisitions, 29 initial public offerings (IPOs), one merger and two other transactions.

The exit count figure was comparable to June, which recorded 33 exits. The total estimated exited capital decreased to $4.18bn in July but bounced back to $7.53bn in August, still 15% lower than June's $8.85bn. During the same months of 2019, the exit count was considerably lower: 25 and 24 in addition to the estimated total capital.

## Monthly exits




*Source: GCV Analytics*


**KE Holdings, the China-based online estate agent, went public in a $2.12bn IPO on the New York Stock Exchange**

## Top 10 exits

| Portfolio company | Location | Sector | Exit type | Acquirer | Exit size ($m) | Co-Participant List |
|---|---|---|---|---|---|---|
| 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 |
| 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 Investment Company \| Neumann Capital \| Primavera Capital \| Private Investor \| Qatar Investment Authority \| Sequoia Capital \| Shengyu Investment \| Shunwei Capital \| Tairen Alpha Fund \| UCar \| Xiaomi \| Yunfeng Capital \| ZWC Partners |
| Li Auto (Chehejia) | China | Transport | IPO | | $1.1bn | BlueRun Ventures \| Bytedance \| China Merchants Wealth \| China Taiping Insurance \| Fancheng Capital \| InTime Retail \| Leo Group \| Matrix Partners \| Minshi Hexun Capital \| Ping An Insurance \| Private Investor \| Shougang Group \| Source Code Capital \| Wang Xing |
| Signal Sciences | USA | IT | Acquisition | Fastly | $775m | CRV \| Harrison Metal Capital \| Index Ventures \| Lead Edge Capital \| O'Reilly Media |
| Farasis | China | Energy | IPO | | $486m | China Industrial Fund \| China Insurance Investment Fund \| China State-Owned Capital Venture Investment Fund \| China V Fund \| Daimler \| Dongxing Securities \| Huatai Securities Company \| Jiangsu Soho Holdings |
| Relay Therapeutics | USA | Health | IPO | | $400m | Alexandria Real Estate Equities \| Alphabet \| BVF Partners \| Casdin Capital \| DE Shaw \| EcoR1 Capital \| Foresite Capital \| Perceptive Advisors \| Section 32 \| SoftBank \| Tavistock Group \| Third Rock Ventures |
| Oak Street Health | USA | Health | IPO | | $377m | Humana |
| Cambricon Technologies | China | IT | IPO | | $368m | Alibaba \| Capital Venture Investment Fund \| Chinese Academy of Sciences \| CICC \| Citic Securities \| iFlytek \| Lenovo \| Oriza Holdings \| SDIC \| TCL Group \| Turing Robot \| Yonghua Capital |
| InstaShop | United Arab Emirates | Consumer | Acquisition | Delivery Hero | $360m | Jabbar Internet Group \| Souq.com \| VentureFriends |
| Lemonade | USA | Financial Services | IPO | | $319m | Aleph \| Allianz \| Alphabet \| General Catalyst \| OurCrowd \| Sequoia Capital \| SoftBank \| Sound Ventures \| Thrive Capital \| Tusk Ventures \| XL Catlin |

**1** KE Holdings, the China-based online estate agent also known as Beike, went public in a $2.12bn IPO in which Tencent invested $160m. The offering consisted of 106 million American depositary shares (ADSs), each equating to three ordinary shares, issued on the New York Stock Exchange priced at $20.00 each. The price stood above the $17 to $19 range the company had set earlier, valuing it at about $22.6bn. Tencent bought 8 million ADSs while hedge fund manager Hillhouse Capital paid $100m for 5 million ADSs and venture capital firm Sequoia Capital purchasing 3.5 million for $70m.

KE Holdings was formed in 2001 as real estate brokerage Lianjia before adding Beike as an online and offline platform that manages real estate transactions. The combined platform provides access to 260 real estate brokerage brands and had 39 million monthly active users as of June.

**2** Xpeng, the China-based electric vehicle manufacturer backed by corporates Alibaba, UCar, Xiaomi, Duowan and Foxconn, went public in an IPO sized at approximately $1.5bn. The offering consisted of 99.7 million ADSs, each equating to two common shares, issued on the New York Stock Exchange priced at $15.00 each. The company had planned to issue 85 million ADSs priced between $11 and $13 each. The IPO price gave it a market capitalisation of about $21.3bn. Alibaba had expressed interest in buying $200m of shares in the offering and consumer electronics producer Xiaomi $50m but neither confirmed they had done so. Xpeng produces smart EVs that use its proprietary autonomous driving technology and in-car operating system. It has released a sports utility vehicle and sports sedan model but made a $113m net loss in the first six months of this year from $142m in revenue.

**3** Li Auto, a China-based electric vehicle (EV) producer backed by corporates Meituan Dianping, Shougang, Bytedance, InTime, Taiping, Ping An and Leo Group, priced its shares at $11.50 to raise $1.1bn in its IPO. The company issued 95 million American Depositary Shares (ADSs), representing 190 million ordinary shares. Shares opened at $15.50 on the first day of trading and reached a high of $17.50, before closing at $16.46. The company listed on the Nasdaq Global Select Market using the ticker symbol LI.

In addition to the initial public offering, mobile services portal Meituan Dianping and digital media company Bytedance committed to purchasing $330m and $30m in a concurrent private placement. Founded as Chehejia and also known as CHJ Automotive and Lixiang, Li Auto produces smart sports utility EVs.

**4** 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 at Edge, a product Fastly intends to launch that will help businesses securely pursue digital transformation.

**5** China-based EV battery manufacturer Farasis Energy floated on the Shanghai Stock Exchange's Star Market in a RMB3.4bn ($486m) IPO, providing an exit for carmaker Daimler. The company issued just over 214 million shares priced at RMB15.90 each, and its shares closed at RMB27.96 on their first day of trading. Farasis produces lithium-ion batteries for the transport sector and maintains research and development centres in the US and Germany as well as its home country. The proceeds from the offering will be used to expand the company's manufacturing capacity. It generated about $350m in revenue in 2019 resulting in a net profit of approximately $18.7m, according to the IPO prospectus.


**Daimler exited an EV battery manufacturer**

**6** Relay Therapeutics, a US-based cancer drug developer backed by internet group SoftBank and Alphabet, went public in a $400m IPO. The company increased the number of shares in the offering from 14.7 million to 20 million and priced them at $20.00 each, above the IPO's $16 to $18 range. The closing price on the first day of trading stood at $35.05 on the Nasdaq Global Market, valuing it above $3bn. Founded in 2016, Relay is using insights into protein motion to develop small molecule drugs intended to treat cancer by targeting proteins that were previously thought undruggable. Up to

$155m of the IPO proceeds will go to a phase 1 clinical trial for one of its lead product candidates, RLY-4008, in small tumours as well as part of the phase 2/3 trials for the drug.

**7** Oak Street Health, the US-based primary care provider backed by health system owner Humana, closed its IPO at approximately $377m. The company priced more than 15.6 million shares on the New York Stock Exchange at $21 each to raise $328m. Oak Street's shares closed at $44.00, giving it a market capitalisation of about $10.6bn, before the underwriters bought more than 2.3 million more shares through the over-allotment option. Founded in 2012, Oak Street runs more than 50 primary care centres across the US for patients using government health insurance scheme Medicare. The extra share sales mean Humana's stake will be cut from 5.7% to 5.2%.

**8** China-based artificial intelligence chipmaker Cambricon Technologies priced a RMB2.58bn ($368m) IPO giving exits to Alibaba, consumer electronics producer Lenovo, AI-technology provider iFlytek and robotics technology provider Tuling Century. The offering comprised 40.1 million shares issued on the Shanghai Stock Exchange's Star Market at a price of RMB64.39 each. The allocation makes up about 10% of Cambricon's shares, according to the IPO prospectus. Cambricon provides AI processors for use in mobile devices and servers. One of its largest customers had traditionally been electronics manufacturer Huawei, though the latter company began making its own AI chips in 2019.

**9** Food delivery service Delivery Hero bought InstaShop, a United Arab Emirates-based online grocery delivery platform backed by corporates Jabbar Internet Group and Souq, for about $360m. The transaction valued InstaShop at $360m and consists of $270m in cash that has been provided upfront, along with additional payments dependent on the service hitting growth milestones post-acquisition. Founded in 2015, InstaShop runs an on-demand grocery delivery service across the United Arab Emirates, Egypt, Qatar, Bahrain and Lebanon. It has partnerships in place with some 1,500 vendors and brings in goods in as little as 45 minutes. The company will operate under its existing brand as an independent subsidiary of Delivery Hero, which is now present in 44 countries.

**10** Lemonade, the US-based online insurance provider backed by corporate investors Alphabet, SoftBank, Allianz and XL Catlin, went public in a $319m IPO. The offering consisted of 11 million shares priced at $29.00 each that will be issued on the New York Stock Exchange. The company had initially set a range of $23 to $26 for the IPO before increasing that to $26 to $28. One of Lemonade's shareholders, investment manager Baillie Gifford, expressed interest in buying up to $100m of shares in the offering but has not confirmed whether it had done so. The IPO price values the company at more than $1.9bn. Founded in 2015, Lemonade offers property and casualty insurance through an online platform that uses bots instead of human brokers, using artificial intelligence and behavioural economics to combat fraud. The company is present in the US, UK and Germany, and it more than doubled revenue year on year to $26.2m in the first quarter of this year, though its net loss rose from $21.6m to $36.5m in the same period.

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