July/August 2019

Global Corporate Venturing

IT sector continues to nurture innovation

INSIDE

Europe pilots innovation council

Large rounds uncovered

Facebook partners for Libra coin

Contents

Global Corporate Venturing

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EDITORIAL

Europe’s position narrows as disruption unfolds

James Mawson, editor-in-chief

Social network Facebook’s plans to launch the Libra blockchain and native cryptocurrency, its custodial wallet and subsidiary Calibra, programming language Move and its governing body the Libra Association based in Geneva, Switzerland, certainly took most of the attention this month.

Benedict Evans at venture capital firm Andreessen Horowitz, and the Token Economy’s Stefano Bernardi and Yannick Roux picked up on the opportunities Libra could create for applications on top, while guest commentator Jalak Jopanputra covers the inside report on Libra *(see comment)*. As Token Economy said: “[Facebook’s proposal] completely blurs the lines between finance and tech once and for all. Banks and financial institutions more generally won’t just want to be on and off-ramps to Libra. They will want to build stuff on it, or they’ll be forced to in order to stay relevant.”

This creates issues and opportunities for others, with Bitcoin’s price rising rapidly in the days after Libra’s announcement. Ripple, the startup behind the XRP cryptocurrency, has agreed to invest up to $50m in MoneyGram, a US-listed money-transfer service. Ripple agreed to buy $30m worth of shares and warrants to buy stock at $4.10 a share, for a 10% stake in the company, and additional warrants for up to $20m worth of newly issued stock, also at $4.10 a share, over the next two years at MoneyGram’s discretion.

While still relatively rare for corporate venture (CVC) deals to be into large, listed companies, such as Tencent’s purchase of Tesla stock, it does reflect the growing pattern for corporations to apply CVC techniques to a wider range of opportunities and become more porous between what is inside and outside the walled garden as well as a general trend for public and private markets to be moving closer together. That Ripple had a chance for its CVC investment in Moneygram followed the collapse last year in China-based commerce company Alibaba’s takeover plan for the money service over US authority’s concerns.

The US and China have been threatening tariffs and a trade war but the most immediate sign of worsening relations have been in the limitations on overseas venture deals by the Committee on Foreign Investment in the US that have affected other countries caught in the crossfire.

At the GCV Connect meetings in Berlin and Zurich last month, as well as repeated in May’s GCV Symposium, a host of CVCs said they were scaling back or considering avoiding US deals in future because of the obstacles put in the way by the committee and other bodies.

Naturally, this can create opportunities for other entrepreneurs. The Zurich meeting of GCV Connect, hosted by Swisscom Ventures, heard from Pascal Koenig, CEO and founder of Ava, about its technology to enable fertility and how being based in Switzerland has enabled it to sell in the US but also be perceived as relatively neutral in other jurisdictions *(see innovative region)*. A similar message came from UIPath, a Romania-based robotic process automation developer *(see special report)*.

Europe, led by the UK, has continued to churn out more startups than the US and is increasingly admired for the quality of its technology and entrepreneurial ambitions. However, the scale of the innovation capital economy continues to grow, with more than $1 trillion in venture capital invested this decade according to data provider Pitchbook, and creation of small and medium-sized enterprises might be insufficient in a world of well-funded platforms “blitzscaling” their way to market dominance.

Europe, led by the UK, has continued to churn out more startups than the US

The EU’s 28 member states might in aggregate have a larger market than the US – Germany is bigger than California’s gross domestic product and Spain is comparable to the economy of Texas – but with a few dozen European startups raising rounds of at least $100m last year compared with more than 100 in both the US and China, it is an uphill battle to break out, not helped by the seeming disinterest from governments and corporations in Europe *(see analysis)*.

As CVCs drily noted in discussion at the GCV Connect meetings, held under Chatham House rules, European corporations are still allocating only a fraction of a percent to corporate venturing while US and Chinese peers are in some cases providing nearly all their free cashflow to the space because it is regarded as strategically important and complementary to other innovation tools. Entrepreneurs say breaking out as a consumer company takes more than $1bn in funding and the really ambitious entrepreneurs are coming from the US and China.

Not all, of course, these US and Chinese companies will make it and the consequences in a blow-up from a business that raised 10 or 11-figure amounts of venture capital could be significant in turning off the cash spigots for others.

But those that do make it are changing the world. And, perhaps tellingly, less than a handful of Facebook’s dozens of initial partners for Libra are based in Europe, including UK-based Vodafone and Farfetch, and Sweden’s Spotify. ◆

NEWS

SoftBank Vision Fund seeks $4bn in loans

Vision Fund, the $98.6bn fund managed by telecommunications and internet group SoftBank, is looking to secure $4bn in debt financing against its stakes in some portfolio companies, the Financial Times has reported.

The unit has entered discussions with financial services firms including Goldman Sachs to borrow the money which would be used to repay some of its limited partners. Part of the fund's capital was provided in the form of debt.

The stakes in question are a 12.8% share of ride hailing service Uber, which floated in an $8.1bn initial public offering in May, a 33.4% stake in cancer test developer Guardant Health, which has a market cap of $7bn, and 7.3% share of messaging platform developer Slack, which is set to shortly go public in a direct listing having last been valued at $7.1bn.

Vision Fund will however have to repay a larger amount if the share price of those portfolio companies fall, people directly involved in the deal told the FT. Guardant's shares are up some 400% on their IPO price in October 2018, but Uber's are about 9% down since it went public.

The deal is set to be formally signed once Slack lists, an event likely to take place later this month. The news came as a Wall Street Journal report on the weekend stated that some of the limited partners in the first Vision Fund plan to make small or no contributions to any follow-up vehicles.

Saudi Arabia's Public Investment Fund is among those despite it having supplied $45bn for the inaugural Vision Fund, as is Canada Pension Plan Investment Board, according to people familiar with the matter.

In May, Vision Fund was reported to be exploring the option of raising money through an initial public offering of its own while also approaching potential limited partners for a second fund.

Shanda helps Hustle Fund II to first close

Online game producer Shanda is backing the second fund to be raised by US-based venture capital firm Hustle Fund, which has achieved a $10m first close, DealStreetAsia has reported.

Founded in 2017, Hustle Fund invests at pre-seed stage, providing $25,000 in capital and helping portfolio companies advance to the point where they would raise seed funding. It is headquartered in the US but has begun moving into Southeast Asia's startup scene.

Hustle Fund II has a $50m target for its close and it follows the firm's $11.5m first fund, which closed in September 2018. Shanda anchored that vehicle, while internet company Naver and messaging platform developer Line were among the limited partners.

Corporates to shake up SaaS startups

Mobile payment technology provider Stripe has co-established Japan-based startup support program Go_SaaS to promote software-as-a-service (SaaS) and subscription services.

Digital identity technology provider Auth0 and automated testing software developer CircleCI have co-launched the initiative.

Go_SaaS will support independent software vendors and startups that intend to set up software-as-a-service platforms and subscription-based businesses. The scheme will provide access to computing platform Amazon Web Services.

More than 100 software-as-a-service developers are set to benefit from the program, accessing consultation and technical support from the three companies.

Stripe will issue coupons up to ¥2.5m ($22,000) to help introduce its payment system, while AWS Japan will grant access to its verification fee support program for participants subscribed to the AWS Partner Network.

Mirae Asset-Naver Asia finds VinaCapital

Mirae Asset-Naver Asia Growth Fund, the vehicle formed by internet company Naver and investment firm Mirae Asset Daewoo, has partnered a venture capital fund managed by asset manager VinaCapital, DealStreetAsia has reported.

Mirae Asset provided an undisclosed amount of capital for VinaCapital Ventures' latest fund as a limited partner in connection with a strategic partnership, while Naver will support the firm's portfolio companies in international expansion.

Launched in August 2018, VinaCapital Ventures is a $100m VC fund that is seeded by VinaCapital and which is focused on investing in Vietnam-based technology companies.

The asset management firm's previous investments include logistics platform Logivan, accelerator operator Zone Startups, ride hailing app developer FastGo, digital gifting platform UrBox and digital banking technology provider Wee Digital.

VinaCapital Ventures partner Khanh Tran said: "We are excited to collaborate with Mirae Asset and Naver not simply for the financial investment but for the opportunity to access the experience and technologies that will help our investee companies reach their potential."

NEWS

Vertex asserts itself with $770m fund

Leasing services provider NEC Capital Solutions will provide $50m for a $770m fund being raised by Vertex Ventures, the venture capital arm of Singaporean government-owned investment firm Temasek.

The corporate, which is owned by IT services firm NEC and leasing services provider Sumitomo Mitsui Finance & Leasing Company, will supply the cash through subsidiary Risa Partners, while financial services firm Aozora Bank is set to put up $20m.

Japanese limited partners are expected to put up 20% of the capital for Vertex Master Fund II, with Risa serving as intermediary, the latter said in a statement. Risa established a Southeast Asian subsidiary in 2012 and will navigate any regulatory differences between the markets.

The fund will invest in the US, China, Israel and India and Southeast Asia, representing Vertex's four main regional offshoots, each of which operate independently, and intends to distribute at least $100m to each area.

Vertex is targeting companies with the potential to reach $1bn valuations, and plans to help them grow by matching them with Japanese corporations. Its global portfolio includes ride hailing service Grab, which is valued at $14bn, and warehouse robot developer Geek+, which last raised money at a valuation of more than $1bn.

News of the latest fund comes weeks after Vertex revealed it has raised $230m for the first close of its fourth Southeast Asian fund.

YPF rises to corporate venturing

Argentina-based oil and gas producer Yacimientos Petrolíferos Fiscales (YPF) has created a corporate venturing arm called YPF Ventures that will invest through two vehicles: Argentina Energy Bridge and YPF Early Stage Fund.

Growth equity fund Argentina Energy Bridge will focus on cross-border investments while the seed-stage YPF Early Stage Fund will partner local entrepreneurs to strengthen the energy and cleantech innovation ecosystem in Argentina.

YPF Ventures intends to provide up to $4m for each deal, having already invested in Argentina-based renewable energy provider Sustentator and US-based micro-mobility company Bird Technologies.

Miguel Gutiérrez, president of YPF, said: "In the current scenario, leading an energy business requires anticipating what is coming, combining vision and innovation – two key assets that will allow us to deepen our purpose of transforming the lives of Argentinians through energy."

YPF chief executive Daniel González added: "YPF Ventures captures and recovers the entrepreneurial spirit of our company, projecting it into the current scenario of innovation and technological disruption."

WTW to broker corporate venturing deals

UK-based insurance broker Willis Towers Watson (WTW) has launched a corporate venture capital arm called WTW Strategic Ventures.

WTW Strategic Ventures will invest in developers of insurance, risk and human capital technologies that are pertinent to the firm's business.

The corporate has also launched an entity called Growth Board which will collaborate with the existing New Venture Investment Committee to back emerging ideas and develop market reach, customer bases and business models.

John Haley, chief executive of Willis Towers Watson, said: "WTW Strategic Ventures is core to the company's growth strategy by enhancing our capabilities to identify and develop strategic opportunities and alliances aimed at delivering tangible value to our clients. These new initiatives will source investments and utilise relationships with the venture capital community, clients and industry connections to support innovation inorganically and organically with the Growth Board, to create new offerings in areas of strategic interest to the company."

Wavemaker drifts to $60m close for third fund

Singapore-based venture capital firm Wavemaker Partners has reached a $60m close for its third Southeast Asia fund, securing the capital from limited partners (LPs) including infrastructure conglomerate Keppel.

The firm is targeting $100m for a final close and has also received LP commitments from the Singaporean state-owned Temasek, the World Bank-managed International Finance Corporation (IFC), growth equity firm Pavilion Capital, private investor Lance Gokongwei and family offices including Aglaia.

Wavemaker intends to back 60 emerging developers of enterprise and deep technologies through the fund, providing roughly $500,000 per company as a first investment.

The fundraising comes after Wavemaker closed its second Southeast Asian fund at $66m in late 2017, with contributions from Temasek and IFC as well as AddVentures, the corporate venturing unit overseen by building materials producer Siam Cement Group.

NEWS

Crane crowns $90m close for first fund

MassMutual Ventures, insurance firm Massachusetts Mutual Life Insurance's corporate venturing arm, is among the limited partners (LPs) that have helped UK-based venture capital firm Crane Venture Partners close its first fund at $90m.

The Crane I seed fund has attained its final close, following commitments from the UK government-backed British Patient Capital, along with unnamed entities and individual investors based in the US, Europe and Asia.

Crane has co-invested with corporates in recent months in companies including Onfido and Aire, having also partnered MassMutual Ventures to increase global presence for its portfolio of emerging data and enterprise tech developers.

Invengo invigorates $145m IoT fund

China-based radio frequency identification technology provider Invengo is set to launch an internet-of-things (IoT) fund that will target RMB1bn ($145m) in capital for its final close, China Money Network has reported.

The fund has set a target of about RMB300m for its first close and the partners plan to open up a second tranche once it has secured 80% of the initial threshold, equating to roughly $35m.

Invengo is launching the vehicle in partnership with investment firm Shenzhen HTI Venture Capital, with the pair expected to invest $800,000 and $650,000 respectively, to establish a fund manager on a 55/45 equity basis.

The fund will primarily look to invest in growth or mature-stage businesses with products in emerging industries aligned with its IoT focus.

Publicly-listed Invengo hopes to gain insights from the vehicle that will help improve the competitiveness of its business, and will also seek new opportunities to promote its services in China and further afield.

The firm was founded in 1999, and now provides IoT-ready radio frequency identification products for purposes ranging from identity management to supply chain logistics, transport and pharmaceuticals.

Northleaf notches up $223m in fund commitments

Corporates including Sun Life, Manulife and Bank of Montreal are among the limited partners that have helped Canada-based investment firm Northleaf Capital Partners close its latest fund at its C$300m ($223m) hard cap.

Northleaf Venture Catalyst Fund II reached its final close following LP commitments from insurance provider Manulife and BMO Capital Partners, the private equity arm of the Bank of Montreal, as well as high net worth individuals and undisclosed family offices.

The new capital added to a December 2018 initial close that featured insurance and asset management group Sun Life, financial services firm Toronto-Dominion Bank, Canada Pension Plan Investment Board and BDC Capital, the VC investment arm of the state-backed Business Development Bank of Canada.

Founded in 2009, Northleaf manages more than $12bn in venture capital, private equity, private credit and infrastructure commitments.

A minimum of 80% of the fund's capital will be invested in Canada-based VC and growth-oriented funds, with up to 20% mandated to funds based outside the country. Up to 25% will be set aside for direct investments, of which 80% will be allocated to Canada-based companies.

The fund, which forms part of the Government of Canada's Venture Capital Catalyst Initiative, has already made contributions to vehicles managed by iNovia Capital, StandUp Ventures and Versant Ventures.

Northleaf's previous investments include narrative entertainment platform developer Wattpad, cybersecurity services provider eSentire and biopharmaceutical company Zymeworks.

Inner Loop Capital joins Syndicate Fund

Bloomberg Beta, US-based media group Bloomberg's corporate venturing arm, is one of the limited partners (LPs) that have helped early-stage venture capital firm Inner Loop Capital launch its $2.6m Syndicate Fund.

VC firm Gula Tech Adventures has anchored the cybersecurity-focused fund, which also has two family offices and undisclosed founders of cybersecurity companies among its LPs.

Formed in January 2019, Syndicate Fund partners US-based entrepreneurs developing cybersecurity technologies in the Washington metropolitan area and Silicon Valley. It plans to back eight seed-stage companies in the next 18 months, providing between $300,000 and $400,000 per deal.

Inner Loop also targets enterprise technology developers building cloud infrastructure, data analytics and enterprise software-as-a-service offerings.

Bloomberg Beta concentrates its investments in data-centred technologies, and has previously committed to VC firm Unshackled Ventures' $20m second fund.

NEWS

NGP's investment total reaches $90m

National Grid Partners (NGP), the corporate venturing arm of energy supplier National Grid, has now invested a total of $90m from its initial $250m budget, after backing four new portfolio companies and two strategic funds.

NGP has become a limited partner in venture capital firm IQ Capital's third fund, which concentrates on deep tech and which had raised $121m for a $165m targeted close as of June 2018, and the eighth fund of Israel-focused VC firm Jerusalem Venture Partners, which closed at $220m in February 2019.

The unit is also a limited partner in sustainable energy generation-focused vehicle Energy Impact Fund, which had raised $150m of its $400m ceiling from investors including National Grid as of 2015, according to a regulatory filing.

NGP has added sound recognition technology provider Audio Analytic, whose NGP-backed series A round GCV reported, to its portfolio together with solar power installer Carbon Lighthouse, infrastructure asset management consultancy Copperleaf and payment technology developer GoCardless.

The additions mean NGP has now backed 12 companies in all, following earlier commitments to the likes of edge computing platform developer Pixeom and energy management software producer Autogrid.

The unit also announced it had opened new offices in San Francisco to facilitate collaboration between industry leaders and assistance for the division's early-stage portfolio companies.

NGP launched in November 2018 with the objective of supporting the energy grid's transition in response to trends such as decarbonisation, decentralisation and digitisation. Its first fund has a three-year term and invests up to $30m in each deal, in the main taking part in early and growth-stage rounds.

Valo Ventures advances to $175m close

US-based venture capital firm Valo Ventures has reached a $175m final close for its debut fund, securing capital from limited partners including electricity producer Fortum, TechCrunch has reported.

The Finland-based corporate agreed in December 2018 to commit $170m to Valo Ventures, which was founded by Scott Tierney, a co-founder of CapitalG, the corporate VC subsidiary of internet and technology conglomerate Alphabet formerly known as Google Capital.

Founded in 2018, Valo Ventures is focused on investing in early and growth-stage technology startups that could bring about long-term social, economic and environmental benefits.

The firm will target North America and Europe-situated companies tackling global trends, such as empowered consumers, autonomy and mobility, urbanisation, climate change and the circular economy.

Valo Ventures took part in a $13m series A round for Landit, the US-based operator of a career development platform aimed at women and diverse groups, in February 2019.

Other members of the firm's portfolio are weather data platform developer PlanetIQ, business management software provider Atollogy and a stealth-stage company working on an artificial intelligence-based platform for electricity demand and supply forecasting.

Diagram Ventures draws up second fund

Portag3 Ventures, an investment vehicle formed by financial conglomerate Power Corporation, has supplied an undisclosed amount to anchor a C$55m ($40.3m) fund launched by Canada-based investment firm and incubator Diagram Ventures.

Founded in 2016, Diagram Ventures provides venture capital investment and incubator-style support to companies developing financial, insurance and healthcare-focused technology.

Limited partners in the firm's second fund also include more than 75 angel investors and family offices, including Mark Britto, executive vice-president of global sales and credit for payment processor PayPal, and Henri de Castries, the former chief executive of insurer Axa Global.

Bruce Heyman, the former US Ambassador to Canada and a former partner at investment bank Goldman Sachs, is also an LP in the fund, along with Angela Strange, Andrew Chisholm, Charles Goldman, Nicole Junkermann and Anatol von Hahn.

Portag3 Ventures backed Diagram's C$30m ($25m) debut fund in 2017 alongside several private investors. That vehicle has made five investments to date, backing online healthcare platform Dialogue, employee management software provider Collage, insurance software developer Breathe Life, online mortgage platform Nesto and blockchain app maker Dfuse.

Francois Lafortune, co-founder and chief executive of Diagram, said: "With the support of our anchor investor, Portag3 Ventures, Diagram has rapidly gained a strong level of investor interest both in Canada and internationally, leading us to exceed our initial fundraising target of C$50m in less than six months.

"We are thrilled and honoured with the quality of investors in our second fund. This is a reflection of the quality of the entrepreneurs Diagram has attracted and the success of the companies we co-created with them."

Gobi takes Sunway to Malaysia fund

Diversified conglomerate Sunway Group has partnered venture capital firms Gobi Partners and Malaysia Venture Capital Management (Mavcap) to launch a $10m Malaysia-based microfund.

The vehicle will invest in Malaysia-based companies at seed and pre-series A stage, and intends to participate in between 25 and 30 deals. It is the successor to the Gobi-run ASEAN SuperSeed Fund.

Malaysia SuperSeed Fund II is targeting technology areas such as artificial intelligence, big data, fintech, e-commerce and online marketplaces, cloud services, the internet of things and taqwatech, which aligns with Islamic principles.

Gobi Partners has launched microfunds directed toward Indonesia and the Philippines over the past year, and in April 2019 hooked up with Fatima Ventures, the corporate VC unit owned by diversified conglomerate Fatima Group, for a $20m fund focusing on Pakistan.

Cathay catches $358m for corporate-backed fund

Cathay Innovation, the venture capital arm of France-based private equity firm Cathay Capital, reached the €320m ($358m) first close of a €500m fund today, securing capital from several corporate limited partners.

The LPs include hospitality chain Accor, airport operator ADP, biotech firm BioMérieux, diversified conglomerate Dassault, outdoor advertising company JCDecaux, luxury goods producer Kering, appliance maker SEB, tire manufacturer Michelin, alcoholic beverage producer Pernod Richard and automotive components supplier Valeo.

French government-owned investment bank BPIfrance has also thrown its weight behind the fund.

Cathay Innovation was established in 2015 to invest in startups based in Europe, North America and China, supporting portfolio companies through multiple rounds. The venture capital operation has grown to 30 staff across offices the cities of Paris, San Francisco, Beijing and Shanghai.

Cathay Innovation's first fund achieved its final close of $320m in 2017, raising cash from LPs including ADP, SEB and its peer Joyoung, Michelin, Valeo, and financial services firm BNP Paribas' insurance division, BNP Paribas Cardif.

The first fund also featured oil and gas company Total, BPIfrance and CDB Capital, a unit of Chinese state-owned financial institution China Development Bank. It has invested in more than 30 companies to date.

The second fund is expected to maintain the firm's focus on the digital transformation of industries ranging from commerce and consumer technology to business-to-business services, healthcare, financial services and energy.

Cathay is particularly keen on aligning its investments with the United Nations' Sustainable Development Goals, a set of 17 targets for environmental and social benefits such as the elimination of poverty and hunger, and access to clean water and sanitation.

Intel fires up Ignite in Israel

Semiconductor technology producer Intel has launched an open innovation scheme called Ignite to support Israel-based early-stage companies developing artificial intelligence (AI), autonomous systems and data-focused technologies.

Intel will select up to 15 startups to join the 20-week initiative, providing mentoring in product, business, management and technical aspects. It will not acquire their intellectual property or take an equity stake.

The corporate has assigned Tzahi "Zack" Weisfeld, previously global head of corporate assistance scheme Microsoft for Startups, as general manager and managing director for Ignite. He will report to Intel Israel general manager Yaniv Garty.

Avner Goren, vice-president of Intel's architecture, graphics and software group, will help Weisfeld liaise between Ignite and Intel's technical units.

AgFunder invites startups to Grow

US-based, agriculture-focused investment and digital media platform AgFunder is set to form an agriculture and food technology-focused accelerator in Singapore in partnership with Rocket Seeder, AgFunder News has reported.

The Grow accelerator will run alongside two other AgFunder initiatives centred on Southeast Asian markets: a $50m venture capital fund dubbed AgFunder Asia AgriFood Innovation Fund that first emerged in April 2019, and an agriculture intelligence and research innovation initiative labelled AFN Asia.

Grow will run two programs a year, each lasting three-months, with support from government enterprise development agency Enterprise Singapore and the country's Economic Development Board. Portfolio companies will also receive tailored training and introductions to experts.

AgFunder hopes its new initiatives will help build a vibrant ecosystem for agriculture-focused technologies in Southeast Asia, drawing upon both local talent and advancements from elsewhere.

NEWS

Catalys Pacific catches $100m for debut fund

Japan-based venture capital firm Catalys Pacific has officially launched a $100m healthcare fund backed by life sciences companies Celgene, Chugai Pharmaceutical, Eisai and Takeda Pharmaceutical.

Internet and telecommunications conglomerate SoftBank has also provided capital for the fund. Catalys has not confirmed whether it has reached the $100m target, indicated in a regulatory filing in March 2019 that revealed the firm had so far secured $80m.

Catalys will focus on the healthcare sector, and will particularly seek out technologies tackling unmet medical needs. The firm is led by founder and managing director Brian Slingsby, managing partner Takeshi Takahashi and venture partner Bill Watt, and will operate out of Tokyo and Kanagawa in Japan, as well as Seattle in the US.

Catalys will collaborate with investment group Abingworth and venture capital firms Domain Associates and Frazier Healthcare Partners in identifying potential portfolio companies and establishing startups. It has not revealed whether the firms – designated preferred partners – contributed cash to the fund.

Robert Hershberg, executive vice-president and head of business development and global alliances for Celgene, said: "The strong network and trust that the Catalys Pacific team has within academia, biotech and the pharmaceutical industry in Japan enables them to galvanise open innovation in the region. Their experience combined with a base in Japan as well as independent governance differentiate themselves with other venture capital firms. We are excited to partner with Catalys Pacific to drive forward life sciences innovation with Japan."

Xiaomi forms $29m venture firm

China-based consumer electronics manufacturer Xiaomi has set up an RMB200m ($29m) venture capital and consulting firm called Chongqing Xiaomi Venture Capital, according to data provider Tianyancha.

Xiaomi is the sole backer of the subsidiary, which is based in the Chinese city of Chongqing, and whose legal representative is the corporate's chief financial officer, Shou Zi Chew. The company had invested in 270 companies to date, committing more than $4bn, as of its Q1 2019 financial report.

Xiaomi co-founder and CEO Lei Jun formed another VC firm, Shunwei Capital, in 2011, and it has co-invested with the corporate on multiple occasions, including in rounds for India-based social networking app developer ShareChat and China-based power bank provider Energy Monster.

Capstone connects to $42m fund

South Korea-based venture capital firm Capstone Partners has unveiled a ₩50bn ($42m) fund backed by industry body Korea Telecommunications Operators Association, according to The Korea Herald.

The municipal government of Seoul and fund management firm Korea Growth Investment have also backed the fund. The vehicle will primarily be aimed at technology developers associated with what is known as the fourth industrial revolution.

Approximately 80% of the capital will be allocated to technologies such as artificial intelligence, big data, the blockchain and 5G mobile data services. The fund will put a minimum of about $8.6m into startups based in the city of Seoul.

Capstone has traditionally focused on the internet and communications technology sector. The firm has more than $228m in assets under management through existing vehicles, including six funds backed by internet company Tencent between 2008 and 2015.

Sinopharm signs up for $150m healthtech fund

Sinopharm Capital, the private equity arm of pharmaceutical firm Sinopharm, has partnered healthcare services provider Novena Global Lifecare and investment platform Cedarlake Capital for a $150m healthcare-focused fund, The Straits Times has reported.

Sino-Singapore Healthcare Fund will back businesses from Southeast Asia developing technologies covering areas such as medical services, biomedical projects, mature drugs and precision medicine.

Novena, a subsidiary of investment firm Dorr Group, has also raised $20m of series B funding from Sinopharm Capital and Cedarlake Capital, according to Straits Times.

Founded in 2010, the company provides services such as DNA testing through some 250 health clinics and sales outlets across Singapore, Malaysia, Indonesia, China, Hong Kong, South Korea, Taiwan and India.

The series B capital will fuel the growth of Novena's Chinese business, which will leverage Sinopharm's expertise and distribution capacity while also enabling Sinopharm to build its presence in Novena's core market in Southeast Asia.

Evolve Capital Asia and Brocade River Merchants advised Novena Global for both the fundraising and the series B round. The company has not disclosed details of its earlier financing.

NEWS

DTCP draws LPs for $350m second fund

DTCP, the investment arm of Germany-based telecommunications firm Deutsche Telekom formerly known as Deutsche Telekom Capital Partners, has secured external investors for a $350m fund.

The corporate launched the first fund in 2014 as a successor to T-Venture, its corporate venture capital arm since 1998, supplying $140m to take the total provided by Deutsche Telekom across various funds to $620m at the time.

South Korea-based telecoms firm SK Telecom and optical systems producer Zeiss are limited partners in the new fund, as are private equity firm HarbourVest Partners and investment manager Neuberger Berman.

The new fund will invest at growth stage, providing $5m to $50m in funding to enterprise software developers operating in areas like 5G technology, the internet of things, cloud and network infrastructure, artificial intelligence, cybersecurity and marketing. It will also back other funds.

DTCP has a total of $1.7bn under management as of the second fund's close and plans to shortly open an office in the city of Seoul where SK Telecom is headquartered. It said it has already participated in five deals through the second fund.

Vicente Vento, DTCP's co-founder and CEO, said: "This is an important milestone in DTCP's development from a single LP into a multi LP technology investment platform."

Signifiant signs Mizuho up for $186m growth fund

Japan-based investment firm Signifiant has harnessed financial services firm Mizuho Financial Group to launch a ¥20bn ($186m) growth investment vehicle dubbed The Fund to back growth-stage companies.

Mizuho Capital, the venture capital arm of Mizuho Financial's retail and banking subsidiary Mizuho Bank, will own 33.3% of the vehicle while the rest will be held by Signifiant.

In addition to providing capital for The Fund, the banking group will look to complement Signifiant's business development initiatives through its consumer networks and resources.

The Fund intends to invest several billions of yen (¥1bn = $9.3m) in each round to take a minority stake in portfolio companies. It will focus on startups at growth stage prior to their initial public offering, and will offer management and financial assistance to achieve smooth and continuous growth once they have gone public.

Signifiant will also provide assistance for portfolio companies in executing business and financial strategies, organisational management and governance, while The Fund will offer strategic support.

The firm has already participated in several funding rounds in recent months, having provided capital and mentoring for online securities brokerage Folio, logistics platform developer OpenLogi and artificial intelligence-equipped analysis technology provider Neural Pocket.

RNAM to raise $187m fund of funds

Investment manager Reliance Nippon Life Asset Management (RNAM) is set to manage a $187m fund of funds that will be backed by several Japan and India-based corporates, Hindu BusinessLine has reported.

The limited partners for the vehicle, dubbed Indo-Japan Emerging Technology & Innovation, will include insurance firm Nippon Life, automotive manufacturer Suzuki, financial services firm Mizuho Bank and state-owned financial institution Development Bank of Japan, according to an official familiar with the matter.

RNAM is promoted by Japan-based Nippon Life and Reliance Capital, the financial services arm of India-headquartered conglomerate Reliance Group. It holds 85.8% of the fund's share capital.

The vehicle is expected to reach its first close by the end of September 2019. Approximately $150m, or 80% of the capital, is expected to come from Japanese LPs and the rest from India.

Indo-Japan Emerging Technology & Innovation is intended to invest in 15 to 25 India-focused venture capital funds, with the resulting capital eventually boosting sectors such as the internet-of-things, artificial intelligence, business-to-business software and robotics technology.

Netcare to aid healthtech startups

South Africa-based medical services provider Netcare has partnered Founders Factory Africa (FFA), a subsidiary of incubator and accelerator Founders Factory, to jointly grow 35 health technology startups in Africa.

Netcare will provide startups with access to hospitals, primary healthcare clinics, data and intellectual property in addition to possible funding. FFA members will support them in product development, user interface, engineering, investment, business development and growth marketing.

FFA's six-month accelerator will consider Netcare portfolio companies' applications while its incubator can help entrepreneurs devise health-related business ideas.

JD Logistics stores $218m for fund

JD Logistics, the logistics services provider spun off by China-based e-commerce group JD.com, has raised RMB1.5bn ($218m) for a strategic investment fund, Reuters reported.

JD Logistics and JD.com itself are among the limited partners for the fund, along with several undisclosed public companies and government-led funds, according to Chinese news source Jiemian.

The vehicle will focus on the logistics sector and will complement JD.com's existing investment team, which has a remit to invest in a wider array of industries.

The entity also adds to a fund launched by JD.com's property management arm in partnership with Singapore's sovereign wealth fund, GIC, which had secured $698m as of February this year, according to a regulatory filing.

JD Logistics was spun off in 2017, when it began offering its delivery and warehousing services to external clients.

The company was reportedly looking to raise at least $2bn in a funding round co-led by Sequoia and Hillhouse Capital in January 2018, but has not provided an update. It has yet to turn a profit, suffering from a $407m loss in 2018.

Hakuhodo DY hatches CVC initiatives

Japan-based advertising holding company Hakuhodo DY Holdings has formed a corporate venture capital arm, Hakuhodo DY Ventures, in addition to a strategic fund called Hakuhodo DY Future Design Fund.

The unit has been allocated an initial ¥200m ($1.8m) in capital, but Hakuhodo said it intends to invest up to ¥10bn ($92.4m) in corporate VC activities by the end of 2023 as part of its medium-term business plan.

Hakuhodo DY told TechCrunch Japan the investment period for the vehicle is expected to be 10 years, and that it will begin by focusing on Japan-situated companies across a range of sectors, participating at seed to late stage.

The corporate had previously participated in a $21m series C round for millennial-focused online publisher Mic in early 2017through its US subsidiary, Kyu Collective.

Members of Hakuhodo DY Group will contribute to the fund's operations, assisting portfolio companies in areas including marketing data, media content and business development. The group also seeks to access new business models that can help its affiliates be more innovative.

Ahren Innovation arranges $253m close

UK-based investment firm Ahren Innovation Capital closed its inaugural vehicle at more than £200m ($253m) from limited partners (LPs) including consumer goods conglomerate Unilever, insurance firm Aviva and broadcaster Sky.

The LP list also featured diversified holding group Wittington Investments, undisclosed US families, and individual investors including André Desmarais, Carlos Rodriquez-Pastor and the eight scientists who co-founded the vehicle. The fund had reached a $129m first close in September 2018.

Founded in 2017, Ahren Innovation Capital focuses on technologies covering the human brain and artificial intelligence, genetics and biotechnology, space and robotics, and energy and environmental technologies.

The firm both invests in and helps build companies, offering access to the expertise of its founding science partners. It is in particular seeking out opportunities that take a multidisciplinary approach to tackle challenges.

Ahren has already achieved its first exit, after Bicycle Therapeutics, a UK-based developer of treatments for diseases with a high unmet need, which completed a $60.7m initial public offering in May 2019.

TDK takes a stab at corporate venturing

Japan-based electronics manufacturer TDK Corporation has launched a $50m corporate venture capital vehicle called TDK Ventures.

TDK Ventures will make investments in early-stage companies in technological fields including magnetics, microelectromechanical systems, piezoelectrics, dielectrics, semiconductors, organic materials and neuroelectrical systems.

In a wider sense, those technologies would feed into applications in areas such as digitised healthcare, advanced mobility, robotics, internet-of-things and mixed reality.

The unit is intended to help its parent company unlock new markets and technologies while providing portfolio companies with mentoring and a potential customer base, in addition to industry and operational know-how.

TDK has promoted Nicolas Sauvage, its US-based senior director of ecosystem since 2016, to lead the unit, and it plans to hire a number of corporate venturing professionals to engage with the entrepreneurial ecosystem.

The corporate itself has intermittently participated in strategic investments of late, acquiring UK-based sensor technology developer Chirp in February 2018, having taken a stake in Japan-headquartered audio system developer Trigence Semiconductor two years earlier.

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Sony syncs with Daiwa for $185m fund

Japan-based consumer electronics producer Sony and Daiwa Capital Holdings, a subsidiary of brokerage Daiwa Securities, have launched a joint investment vehicle that is looking to raise up to ¥20bn ($185m) for its initial fund.

The entity in question, Innovation Growth Ventures (IGV), reached the first close of its Innovation Growth Fund in June, and has raised an undisclosed amount from limited partners including Mitsubishi UFJ Lease & Finance Company, a leasing subsidiary of financial services group Mitsubishi UFJ Financial.

Financial services firms Sumitomo Mitsui Banking Corporation (SMBC) and Osaka Shoko Shinkin Bank have also contributed capital to the vehicle, along with an undisclosed university.

IGV was launched to invest in startups operating in key high-growth industries, expanding the activities of Sony Innovation Fund, the corporate venturing unit launched by Sony in 2016.

Sony Innovation Fund invests in technologies such as robotics, drones, artificial intelligence, sensors and machine learning, as well as platform and service offerings across several areas.

Sony Innovation Fund has invested in more than 40 companies to date, including optics display technology producer DigiLens, vision technology developer Brodmann17, document-reading tool provider Cinnamon, digital asset management platform WealthNavi and mobility software developer RideCell.

Keith Larson retires from Intel

Keith Larson, vice-president and managing director of semiconductor and data technology producer Intel's corporate venturing subsidiary, Intel Capital, has shared the highlights of his career with Global Corporate Venturing after retiring in April.

Having spent nearly 23 years at the unit, Larson was one of five voting executives on the investment committee responsible for approving all its investments, before deciding to retire two months ago.

During that time, Larson has witnessed, and been partly responsible for the emergence of corporate venturing. He firmly believes that the Intel Capital team has led by example, laying down the foundations for the rest of the industry, especially with regard to sustainability investing.

"For any investment to have any sort of strategic impact, that company needs to survive and thrive," Larson told GCV. "In the early days corporates were chasing the technology and not really thinking through the commercial aspect of it. They were backing companies that were not financially stable or viable.

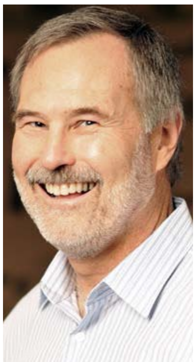
"That is something that really sustained Intel Capital and created a model for the rest of the corporate venturing industry to follow, when you now see how other people are becoming successful in corporate investing compared to 30 years ago."

Larson cited that focus on sustainability along with its parent's size and strength as the reasons Intel Capital was able to create a long-term strategy. That approach has helped Intel nearly quadruple its annual revenue from about $20bn in 1996 to $70.8bn in 2018.

Prior to joining Intel, Larson had been a general partner at venture capital firm InterVen Partners for nine years up to 1994, having previously been chief financial officer and controller at First Interstate Capital.

One of the most important skills Larson developed at Intel was the ability to develop an investment thesis for a given technical and market domain prior to proposing an investment.

"Constructing an investment thesis was something we developed over time at Intel Capital and was very important to Intel Capital's sustained financial and strategic success," he said. "Essentially, an investor can be much more effective by using critical thinking and testing out planned investments and what drives a value chain before proposing a single investment."


Larson

Regarding personal successes, Larson noted Research In Motion, the smartphone maker that rebranded as Blackberry and which at one time had a market capitalisation of $83bn, was his first investment at Intel, adding: "That was an interesting one and was actually tied fairly close to Intel, more than people knew at the time as it was actually the processor that was in Blackberry."

Another personal success for Larson was Intel's investment in US-based intelligent switch maker Berkley Networks. He said: "This investment was an early example of how Intel thought through strategic investing to create a visibility into judging whether an investment makes sense as acquisition, and was the subject of a Harvard Business School case study."

What sets Intel Capital apart from the rest of the industry is Intel's ecosystem and network, according to Larson, and they play an extremely important role in adding value to prospective investments. Intel is a supplier and advisor to some of the largest companies in the world, all of which are looking for new products and technologies to use in their businesses.

"In addition, Intel is an outstanding resource for working with companies to assist them in developing, trialling and driving standards for their technology," he added. "Those are a just a couple of the many ways Intel Capital uses Intel's network, ecosystem and resources to add value."

Larson also highlighted the importance of syndicating with other investors as a way to achieve better results. When a new investment is being considered, Intel Capital proactively considers which co-investors provide the most value to the company and to Intel Capital itself.

"Having other smart, experienced investors around the table improves the outcome," he said. "This is especially true

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when those investors are other corporate strategic investors that can add value in ways that are complementary to Intel Capital's value creation."

Larson describes Intel's proposition for portfolio companies as unique, and something that traditional venture capital firms cannot provide as they do not have access to the breadth and scale of customers that Intel does.

"Similarly, a traditional VC does not have the array of technologists, salespeople and others to help companies develop or standardise technologies and products."

Despite retiring from his position at Intel, Larson will remain on the board of directors for water systems producer Northwest Pipe Company.

Larson also plans to announce one advisory position with an artificial intelligence hardware developer in the coming months and is opening to joining two or three other boards, for public companies or select larger private businesses.

Wang makes landing at Legend Capital

Piau Voon Wang has been appointed managing director and chief operating officer of Legend Capital, the venture capital firm formed by conglomerate Legend Holdings, DealStreetAsia has reported.

Wang arrives at Legend Capital after stints as a co-chief investment officer at asset management firm Noah Holdings from 2016 until 2017, and as a partner from 1999 to 2016 at private equity firm Adams Street Partners, where he contributed to a new strategy for investments into Asia.

Wang previously worked as a manager in the M&A consulting department for now-defunct accounting firm Arthur Andersen, and has also provided his services to the investment teams at Nikko Capital Singapore and Indosuez Asset Management. He is currently an independent director at private equity fund-of-funds Astrea III and a director at PV Advisory.

Ueno waves goodbye to AGC


Ueno

Masatoshi Ueno has left his senior manager position at AGC Ventures, the US-based corporate venturing unit of Tokyo Stock Exchange-listed glass manufacturer Asahi Glass, a subsidiary of Japan-headquartered diversified conglomerate Mitsubishi.

Ueno joined AGC Ventures in 2011 and oversaw deals covering the advanced materials manufacturing sphere, including a $12.5m series B round for 3D printing technology developer Arevo and a $12m series C round for biomanufacturing technology provider AbSci.

Ueno featured in Global Corporate Venturing's Powerlist in 2017, in the wake of AGC Ventures leading the $65m series C round for smart glass developer Kinestral Technologies.

Ueno did not disclose who will take on his duties at the unit, but confirmed he will join construction, mining and industrial equipment producer Komatsu as a US-based managing director to run corporate venturing and innovation activities on behalf of the chief technology officer.

He said: "After eight years of working for AGC, the time has come to move forward and continue my career at a different place.

"I am very grateful to you for giving me opportunities to do something interesting and good for society."

Eon eyes Birr for strategic role


Birr

Germany-based energy utility Eon has hired Thomas Birr, a member of Global Corporate Venturing's 2019 Powerlist, to oversee its innovation initiatives.

Birr has been chief executive of Innogy Innovation Hub, energy utility Innogy's startup accelerator and corporate venturing arm, in addition to senior vice-president of innovation and business transformation at Innogy, since September 2016.

Prior to his most recent promotion, Birr had held several senior positions at RWE, Innogy's parent company since 2000.

Birr was head of strategy and corporate development prior to joining Innogy, which was formed in 2016 by the amalgamation of RWE's network, retail and renewable energy subsidiaries into a single entity.

The news comes at a time when Eon is expecting to complete the merger process with Innogy. It received approval for the deal from the European Commission in February this year while RWE secured permission from US regulators in May to acquire Eon's North American renewables subsidiary.

Innogy CEO Uwe Tigges said: "Thomas Birr has made great strides for RWE and Innogy over the past 20 years. He had a crucial influence on the strategy of RWE. At Innogy, he made a significant contribution to our reputation as one of the most innovative companies in the energy sector. We are certain that in his future role, Thomas Birr will bring together the best of both worlds – Innogy and Eon – and will develop this even further."

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Toyota AI Ventures calls on Keller

Toyota AI Ventures (TAIV), a US-based corporate venture capital vehicle owned by Japan-headquartered carmaker Toyota, has hired Erin Keller as an associate.

Keller had spent two years from April 2017 at Yamaha Motor Ventures & Laboratory Silicon Valley (YMVSV), a corporate venture capital subsidiary of electronics and automotive manufacturer Yamaha.

YMVSV hired Keller as an associate before she was promoted to senior associate in December 2018, featuring in Global Corporate Venturing's Rising Stars roster the following month.

TAIV launched a $100m second fund in May that will focus on fields such as artificial intelligence technology for use in transport and autonomous mobility.


Keller

Comcast Ventures casts principal roles

Comcast Ventures, mass media group Comcast's corporate venture capital subsidiary, has recruited three new principals. The new members include Fatima Husain, who was product head for accommodation booking platform Airbnb, and Adam Spivack, formerly a senior director of trading and yield at Comcast's advertising subsidiary, FreeWheel Media.

Sheena Jindal completes the set, having spent short lengths of time at Advance Venture Partners, the corporate venturing affiliate of media group Advance Publications, and VC firm Bessemer Venture Partners following 18 months as manager of strategy and operations at commerce software producer Symphony Commerce.

Comcast Ventures focuses on early-stage investments in communications, digital entertainment and consumer internet technology developers, having invested in 3D home design service provider Modsy in recent weeks.

Comcast Ventures head Amy Banse ranked 22nd on Global Corporate Venturing's Powerlist earlier this year, while principal Daniel Gulati was promoted to managing director following his appearance in this year's GCV Rising Stars list.

Wu takes cue at Alibaba Innovation Ventures

China-based e-commerce and internet conglomerate Alibaba has made chief financial officer Maggie Wu head of its strategic acquisitions and investments unit, Alibaba Innovation Ventures, CNBC has reported.

Wu replaces Joe Tsai, co-founder and executive vice-president of Alibaba, who will continue to provide support for Alibaba's strategic investment operations. Wu joined the company in 2007 as chief financial officer of its business-to-business e-commerce platform.

The decision marks the first major reshuffle since Alibaba co-founder and chairman Jack Ma announced in September 2018 that he would step down from the latter position within a year, to be replaced by CEO Daniel Zhang.

Tsai had led Alibaba Innovation Ventures together with managing partner Ethan Ying Xie, who took 11th place in this year's GCV Powerlist. Alibaba has also disclosed that it is spinning off its supermarket division, Freshippo, and plans to merge its enterprise software arm, DingTalk, with cloud computing subsidiary Alibaba Cloud.

Alibaba began ramping up investments when Xie joined the company in 2013. Its portfolio includes purchases of, or investments in Southeast Asian e-commerce unicorns Lazada and Tokopedia, brick-and-mortar retailers Easyhome, Sun Art and InTime, technology developers such as Magic Leap and app-based service providers like Ofo and Ele.me.

SoftBank recruits managers for Latin American fund

Japan-headquartered telecommunications and internet group SoftBank has hired four senior members for its SoftBank Latin America Fund, SoftBank Group International (SBGI) unit and the newly formed SoftBank Tech Hub.

Venture capital firm Sequoia Capital's former chief financial officer, Chris Cooper, will reprise the role at SBGI, while Patricia Menendez-Cambo, previously vice-chair at law firm Greenberg Traurig, has become deputy general counsel at SBGI, serving concurrently as general counsel for the fund and Tech Hub.

Francisco Sorrentino has joined Latin America Fund and SBGI as chief human resources officer, having come from software provider Microsoft. The fund's new chief operating officer (COO) is Lee Bocker, who held the same role at hedge fund manager TRG Management.

The company launched the $5bn SoftBank Latin America Fund, known at the time as SoftBank Innovation Fund, in March this year to partner tech developers in the region. SBGI manages SoftBank's global subsidiaries including semiconductor maker Arm and US telecoms business Sprint.

SoftBank COO Marcelo Claure, who also heads Latin America Fund and is chief executive of SBGI, will manage the four hires, who will be based in Miami, as SBGI sets up SoftBank Tech Hub in the US city to assist the fund's investments in Latin America. Claure came in second on Global Corporate Venturing's Powerlist this year,

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Bekaert's Carvalho carves out KBC role

Belgium-based financial services and advisory firm KBC Securities intends to ramp up venture capital funding in Belgium, Netherlands and Luxembourg through a newly formed fund, according to Nuno Carvalho, a new investment director for the vehicle.

"KBC Focus Fund wants to play a central role in building the ecosystem of advanced technology startups and businesses in the Benelux region," Carvalho told Global Corporate Venturing. KBC hired him earlier this month for the recently launched €55m ($62m) evergreen fund.

Carvalho will help identify developers of advanced technologies in areas such as nanotechnology, microelectronics and the internet of things, focusing on early and scale-up stage startups in France, Germany and the UK as well as the Benelux countries.

Focus Fund looks to partner entrepreneurs adopting a so-called "hands-by" approach which involves taking active board seats as well as "being close to the startup team and providing support whenever needed" including network and knowledge in the industry, Carvalho said.

The corporate incubates startups through its StartIt@KBC incubator and provides seed funding through university spinout funds where KBC acts as a limited partner (LP), including the €30m Gemma Frisius Fund and the €40m Qbic Fund.

In addition, KBC has made an LP commitment to nanoelectronics research institute Imec's €120m Imec.xp and Fund, which was named Fundraising of the Year in May by Global University Venturing. Carvalho confirmed to GCV that the two funds have co-invested in an Imec spinout called Pharrowtech which develops high-speed wireless chips and antennas.

Carvalho explained: "We will be covering the gap of series A and B stage financing, since companies can already access seed funding via the university and research institute's funds, and at late stage via private equity growth and corporate finance.

"KBC has the knowledge and the means to support the entrepreneurs throughout every stage of their venture's growth – ultimately we can help the company go through an IPO process with KBC Securities as an underwriter."

Carvalho had previously worked at steel wire transformation and coating product maker Bekaert for 14 years, half of which he spent conducting open innovation and corporate venturing activities.

Carvalho became investment manager at Bekaert in November 2011, before ascending to head of Bekaert Venturing four months later as the corporate underwent reorganisation. Bekaert promoted him to director of innovation and corporate venturing in 2016.

Orlando lands at Wittington

Canada-based diversified holding group Wittington Investments has launched a C$100m ($75m) corporate venturing vehicle that will be headed by Jim Orlando, The Globe and Mail has reported.

Orlando came from pension fund manager Ontario Municipal Employees Retirement System (Omers), having joined its private equity arm, Omers Private Equity, in 2007 as managing director. He helped Omers form venture capital unit Omers Ventures in 2011 and has been managing partner since 2013.

The position involved Orlando overseeing North American investments for Omers Ventures in the media and telecommunications sectors, including rounds for content management software provider Contentful and communication technology developer Ranovus.

His new role will involve Orlando identifying startups that are developing technologies with a strategic fit to subsidiaries of Wittington's Canada-based food distribution business George Weston, which include baked goods producer Weston Foods, food retailer Loblaw Companies and pharmacy chain operator Shoppers Drug Mart.

Ocampo decamps to YPF Ventures

Argentina-headquartered oil and gas producer Yacimientos Petrolíferos Fiscales (YPF) has chosen Tomás Ocampo to lead its corporate venturing arm, YPF Ventures, as US-based managing director.

Ocampo helped the corporate set up YPF Ventures in May. He was a US-based adviser to Japan-headquartered utilities J-Power and Osaka Gas on corporate venturing initiatives in advanced mobility and renewable energy in 2018.

YPF Ventures' two vehicles – US-based growth equity fund Argentina Energy Bridge and the Argentina-based, seed-stage YPF Early Stage Fund – will concentrate on global and local deals respectively, and the company has invested in scooter rental service Bird Technologies and renewable energy provider Sustentator in recent weeks.

El Cronista has reported that Ocampo recently said in a speech to the Argentine Association of Private Equity, Venture and Seed Capital forum that YPF Ventures is seeking to access innovation ecosystems including China, Israel, Silicon Valley and Latin America "by partnering the most advanced energy companies".

The unit would follow the corporate venture capital initiatives of petroleum suppliers such as Chevron, BP and Shell, adding that he intended to "unlock the sleeping talent" in the industry.

Ocampo confirmed that lithium was among the areas that YPF Ventures would be focusing on in order to improve the corporate's lithium production and help reduce climate change.

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Moro Casquete moves back to Telefónica

Pablo Moro Casquete, formerly head of innovation at insurance firm Mutua Madrileña, has rejoined Spain-based telecommunications firm Telefónica, as head of new business for its Telefónica Innovation Investment subsidiary.

Telefónica runs six investment vehicles and has co-invested with public and private investors in startups based in Europe and Latin America. Its main corporate venturing fund, Telefónica Ventures, targets big data, blockchain and cybersecurity technology developers, including 4iQ and Carto.

Moro Casquete had previously been at Telefónica for more than 12 years since 2006, having joined its Wayra accelerator network in 2014 as manager of global partnerships for Telefónica Open Future, before managing strategic projects and then its startup portfolio.

Having joined Mutua Madrileña in March 2018, Moro Casquete's role involved him devising innovation strategy for Open Innovation, which partners external startups and venture capital funds, and Internal Innovation, which focuses on intrapreneurship and intra-startup programs.

Greenstreet finds greener pastures in UK and Ireland

Ladi Greenstreet, formerly US-based head of healthcare for Accenture Ventures, the corporate venturing arm of professional services firm Accenture, has been promoted to head of UK and Ireland for the unit.

Accenture hired Greenstreet in 2011 as a UK-based management consultant to oversee digital strategy, analytics and technology transformation, before transferring him to the US for a one-year stint at the Fjord design division for the firm's digital marketing arm, Accenture Interactive, in 2014.

Greenstreet joined Accenture Ventures the following year, to develop and implement market strategies for the unit's health and public service group, also leading digital health efforts and backing growth-stage enterprise technology developers.

On behalf of Accenture Ventures, Greenstreet partnered startups focusing on areas including artificial intelligence (AI), blockchain, cybersecurity and augmented and virtual reality technology.

Accenture Ventures has invested in website optimisation software producer Optimizely, AI-focused database provider Splice Machine and banking software developer Finxact in recent months.

Caixa Capital's Vazquez veers to Next47

Next47, a corporate venture capital vehicle owned by Germany-headquartered industrial equipment and appliance producer Siemens, has hired Adiari Vazquez as a UK-based associate.

Vazquez had been a Portugal-based investment manager at Caixa Capital, the corporate venturing fund operated by financial services firm Caixa Geral de Depósitos, for more than three years having joined in late 2015, and oversaw early-stage deals in smart energy and materials.

Next47 was launched in 2016 with $1.1bn to focus on investments in deep technology and business-to-business technology developers. It has eight offices globally, spanning China, France, Germany, Israel, Sweden, the UK and US.

The unit supports developers of decentralised electrification, autonomous machines and digitisation technologies, having backed data management technology developer Yellowbrick Data and log-analysis technology provider Logz.io in recent weeks.

Vazquez will help Next47 identify startups disrupting established sectors including industry, infrastructure, manufacturing, construction and agriculture.

Analysis: SoftBank gets a $300m Gympass

The telecoms firm SoftBank has backed a substantial $300m round of gym membership provider Gympass, which is part of the beauty and fitness space, which has seen stable corporate-backed deal flow with rising valuations in recent years.

Brazil-based fitness membership service provider Gympass raised a $300m round, led by the near-$100bn SoftBank Vision Fund, an investment subsidiary of telecoms conglomerate SoftBank. The round was also backed by SoftBank's $5bn Latin America Fund and, in fact, it was its first officially disclosed investment reported back in January. The setting up of the LatAm fund is clear indication of the potential SoftBank sees in the Latin American region. It has already invested in other Brazil-based companies, such as ride hailing service provider 99 and last-mile delivery service Loggi.

SoftBank co-invested along with traditional VC firm Atomico, growth equity firm General Atlantic as well as investment group Valor. The latter three were identified as returning investors, although no further details were disclosed on the company´s previous funding rounds. The round reportedly valued the company at more than $1bn. The fresh capital is

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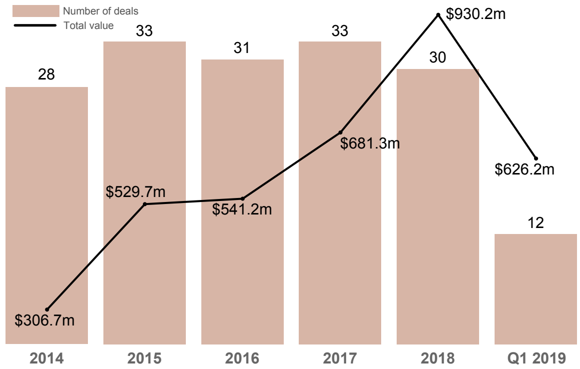
expected to help Gympass to enhance its offering and technology employed as well as consolidate presence in existing markets and move into Asia.

Launched in 2012, Gympass runs a corporate fitness platform which allows companies to facilitate gym membership as a benefit to their employees. The company has already struck partnerships with almost 47,000 gyms across 566 cities around North and South America as well as Europe.

Gympass is part of the broader hygiene, beauty and fitness space, which has registered a constant corporate-backed deal flow of about 30 rounds per annum since 2014, as the GCV Analytics graph shows. The total estimated dollar value of these rounds, however, has grown from $306m in 2014 to $930m last year and $626m during the first three months of 2019. This suggests that valuations in this space have been growing. ◆

Corporate-backed rounds in hygiene, beauty and fitness enterprises 2014-19

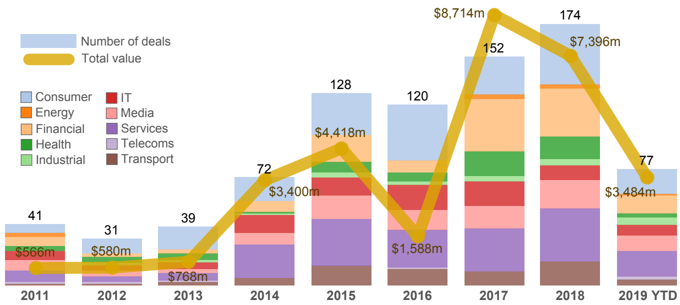


Analysis: PhonePe gets paid $1bn

India-based payment tech company PhonePe is looking to raised $1bn at $7bn-$8bn valuation from various investors, including Tencent.

India-based mobile payment service provider PhonePe, which is owned by e-commerce operator Flipkart, is reportedly in the process of raising $1bn from a group of investors featuring internet group Tencent, hedge fund manager Tiger Global Management and unnamed other investors. The company is reportedly seeking the fresh funding at a valuation within the $7bn to $8bn range.

Corporate-backed deals in India 2011-19



Founded in 2015, PhonePe runs a mobile app that makes it possible for users to transfer money by using a phone number rather than a bank account number. In addition, the app is also delving into online lending, wealth management and insurance services. It boasts 50 million monthly active users and claims to have facilitated up to 290 million monthly transactions by then end of April 2019.

PhonePe was acquired by Flipkart as the end of 2015 and it was, at the time, its third major acquisition in the payment tech space, after it had bought its peers NGPay in 2014, and FX Mart Pvt in August 2015.

The India innovations scene has received much attention from corporate venturer, as our GCV Analytics data illustrated on the bar chart suggest. While the number of deals went up significantly already in 2015 to 128 rounds, up from 72 in the previous year, the growth in dollars resulting from increasing valuations, became more manifest in 2017 and 2018, with 152 and 174 rounds, worth an estimated total of $8.71bn and $7.39bn, respectively. Notably, the number of investments in fintech enterprises went up in those two years, registering 35 in 2017 and 32 rounds in 2018. The overall upward trend in valuations appears to have been sustained through the first months of this year, as we have already reported 77 deals, worth an estimated total of $3.48bn by the end of May. ◆

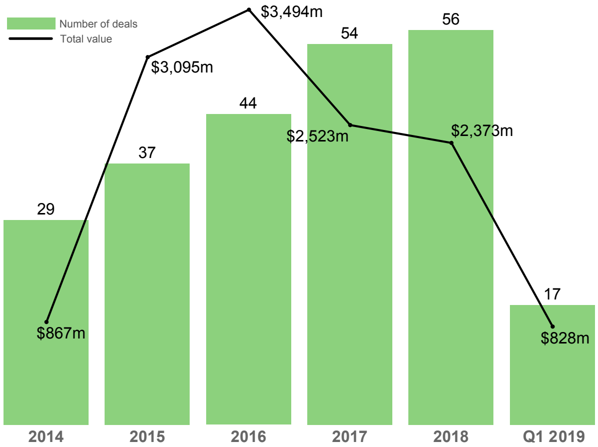
Analysis: SoftBank gives Creditas $200m

SoftBank backed online lender Creditas, a company from the alternative lending space, which does not seem to have experienced exponential growth in valuations.

Brazil-based consumer lender Creditas received $200m from telecoms conglomerate SoftBank, reportedly at a $700m post-money valuation. The company did not reveal how it would use the fresh funding but presumably to amplify the range of collateral it accepts and also considers making loans to businesses. SoftBank is not the first corporate investor to back the business. Santander innoVentures, the venturing unit of Spain-based bank Santander, has backed it in the past and so has media and e-commerce group Naspers through its Fintech Fund and its venturing arm Naspers Ventures.

Launched in 2012 as BankFacil, Creditas runs an online lending platform which offers personal consumer loans of different size, varying between R$5,000 and R$2m ($1,250 to $500,000). Creditas charges an average of 2% in interest on loans secured against a vehicle collateral and 1.25% interest on those against a real estate collateral. These low interest charges are extremely competitive when compared to interest rates charged by banks and other institutions in Brazil.

Corporate-backed rounds in alternative lending enterprises 2014-19



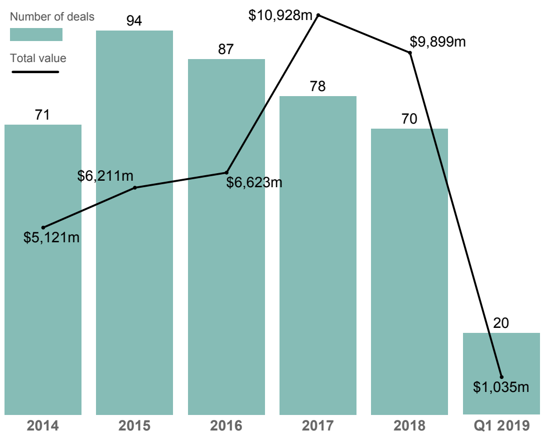
The alternative lending space has been part of the fintech corporate-backed global deal flow, which – as our GCV Analytics data suggests – grew between 2014 and 2017 from 29 to 54 rounds, as shown on the bar chart here. The number of corporate-backed rounds remained stable in 2018 at nearly the same level as the previous year. The total estimated capital in such grew in a similar fashion from $867m in 2014 to $3.49bn in 2016 and levelled off at about $2.52bn and $2.37bn in 2017 and 2018. This appears to indicate that valuations of emerging enterprises in this space may not have experienced the same surge as other sectors and sub-sectors. This is likely due to the nature of the lending business that– whether done electronically or on paper – involves, for the most part, the same process for loan-takers and lenders, which is hardly a subject to profound disruption – lending an amount today in exchange for the principal plus some interest at a later date. ◆

Analysis: Zhenkunhang procures $160m

Industrial e-commerce platform Zhenkunhang raised a $160m corporate-backed series D round, which forms part of the emerging e-commerce space

China-based industrial e-commerce platform Zhenkunhang raised $160m in a series D round, which was led by internet group Tencent, and also featured Legend Capital, the venturing subsidiary of conglomerate Legend Holdings. Other participants included Matrix Partners China, the local affiliate of US-headquartered early-stage investment firm Matrix Partners, as well as venture capital firm Eastern Bell Venture Capital and Genesis Capital, a growth equity fund run by former Tencent investment managers Richard Peng and Kurt Xu. Legend Holdings was a returning investor. In the past, Zhenkunhang was also backed by petroleum company Shell, which had participated in an earlier round via its Shell China subsidiary.

Corporate-backed rounds in e-commerce enterprises 2014-19



Founded in 1996, Zhenkunhang runs a business-to-business online trading and procurement services marketplace, which sells over 2 million industrial products such as tools as well as consumables for maintenance, repair and operation, sourced from more than 5,000 suppliers. The company did not reveal what it intends to use the fresh funding for.

Zhenkunhang is an example of a company from the e-commerce space, which has been under the radar of corporate venturing investors, as the GCV Analytics chart here shows. Over the past five years, there has been no dearth of rounds raised by such enterprises and backed by corporates, reaching a top at 94 deals in 2015 and decreasing ever since, down to 70 in 2018. However, the total estimated capital employed in those rounds grew from $5.12bn in 2014 to $10.92bn in 2017 and then slid to $9.89bn last year. This suggests valuations of such enterprises have gone up as well. ◆

SPECIAL REPORT

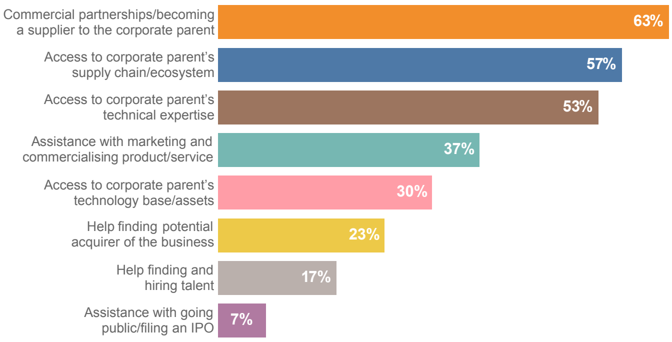
Quick insights from the GCV founders survey

Kaloyan Andonov, reporter, GCV Analytics

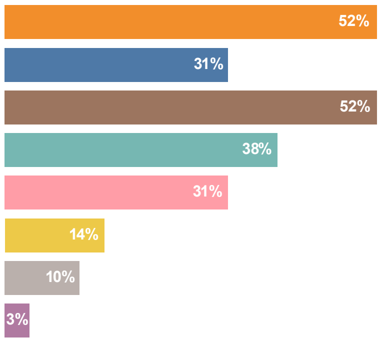
In February and March this year, Global Corporate Venturing conducted a small pilot survey of founders of businesses that have received corporate funding. They were referred to the survey by their corporate backers. It gave us some interesting insights.

According to our survey data, startup founders set their expectations on the value that corporate can delivery, for the most part, in line with their actual capabilities. Commercial partnerships (63%), access to the corporate supply chain and ecosystem (57%), access to corporate technical expertise (53%) and active assistance with marketing and commercialisation (37%) are the top raked expectations.

What businesses expected from corporate investment, aside from financial backing



What businesses say they actually received



However, in terms of benefits actually obtained from corporate investors, it turns out corporates fall very short on delivering access to their supply chain and ecosystem – 57% of respondents expected to obtain this benefit, while only 31% said to have actually obtained it. What corporates also fall short on is assistance with potential exits. Few corporates are actively helping startups find potential acquirers – 23% of respondents expected them to but only 14% of startups received or are receiving such assistance.

It may be argued, however, that the latter is hardly surprising, as corporate venturers have primarily strategic objectives in mind when committing capital rather than financial ones, which tend to place a higher weight on an eventual exit. The fact that nearly a quarter of all respondents expected corporates in their syndicate to help them look for an acquirer may reflect particular circumstances around specific businesses.

One of the often-talked-about shortcomings of corporate investors – corporates being perceived as unreliable follow-on investors – has been dispelled by our survey results. The majority of respondents (71%) say they feel confident that corporate venturers will continue to back their businesses in subsequent funding rounds. ◆

Is the business confident the corporate investor(s) will continue to support future rounds?

ANALYSIS

The future for $100m rounds and the innovation economy

James Mawson, editor-in-chief, and Kaloyan Andonov, reporter

It has been a remarkable decade for innovation capital. More than $1 trillion of venture capital had been invested by the end of last year, according to data provider Pitchbook, driven by corporations engaging in more than half that total, according to GCV Analytics.

For context, this makes the 2010s' total greater than all prior decades of venture capital combined, even including the dot.com bubble period around the turn of the millennium.

And, unsurprisingly, this wave of cash has driven similar comparisons.

Julian Birkinshaw, professor of strategy and entrepreneurship at London Business School, said: "My personal view is we are living in crazy times, where the supply of private money is so large (and the alternative uses for that money are so uninspiring) that we are seeing VC-backed firms hyped up to unsustainable expectations. This bubble has to burst at some point!"

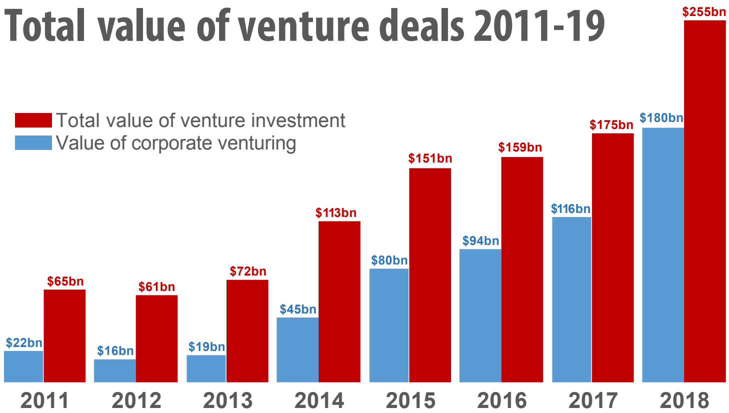
William Janeway, affiliated lecturer of the Faculty of Economics at the University of Cambridge and partner and senior adviser at private equity firm Warburg Pincus, pointed to the source of the massive increase in funding. He said: "As I said on stage [at the GCV Symposium in May], I believe that the mega rounds of late-stage VC are a function of the market scale enabled by digitalisation plus – critically – the financial environment: i.e. real riskfree interests at zero or less than zero.

"Corporate VC is clearly a substantial source of funding in these rounds but the role of non-corporate investors is critical."

These large, or mega, rounds of at least $100m were relatively rare up until the mid-point of the decade but have been used to fund hundreds of portfolio companies.

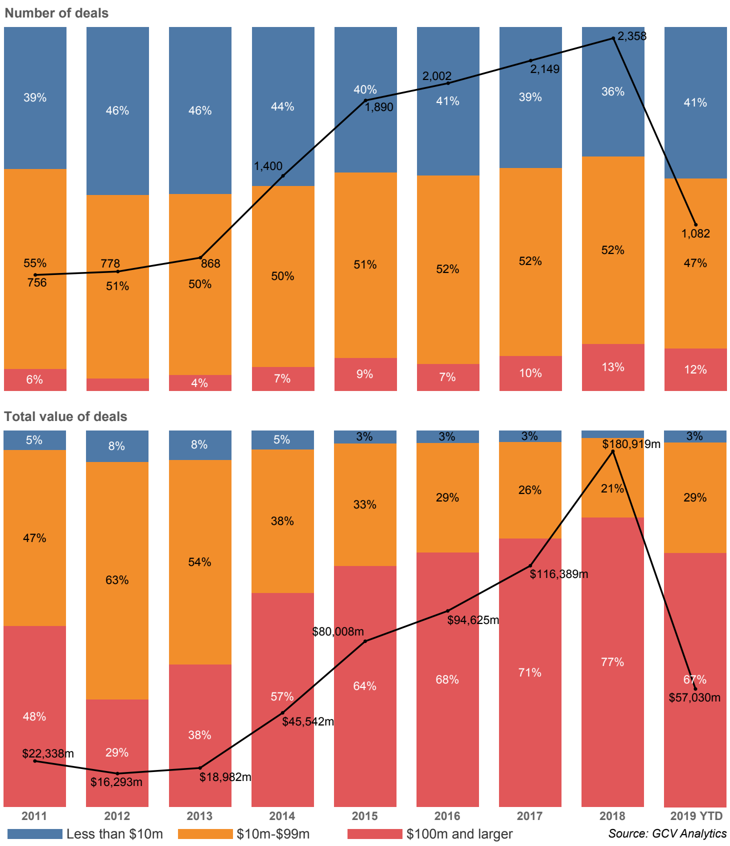
The portfolio companies receiving the investment have predominantly been in the US and China, with 127 and 113 large rounds to businesses based in those two countries last

Total value of venture deals 2011-19



Source: PitchBook & GCV Analytics

Corporate venturing deal activity 2011-19



Source: GCV Analytics

ANALYSIS

year, respectively, according to GCV Analytics.

The rest of the world managed 63 such large rounds in 2018, including 33 in Europe, according to GCV Analytics and the European Investment Fund data, respectively.

If corporations were involved in more than two thirds of all global venture deals by value last year, they were particularly engaged through the large rounds. While making up 303, 13%, of corporate venturing deals in 2018 by volume, up almost 50% from the year before, these $100m-plus rounds were about three-quarters of the global total of 413 tracked by PitchBook.

In aggregate, the corporate venture capital (CVC)-backed large rounds provided 77% of the $181bn by value of deals they were involved in last year, according to GCV Analytics.

This year could again see more than 400 $100m-plus rounds, extrapolating from PitchBook's 169 deals recorded in the first five months of 2019. And corporations remain the driving force and involved in about three-quarters of these rounds, according to GCV Analytics.

Notably, some portfolio companies are adept at raising multiple large rounds. The 303 CVC-backed large rounds last year involved 257 companies.

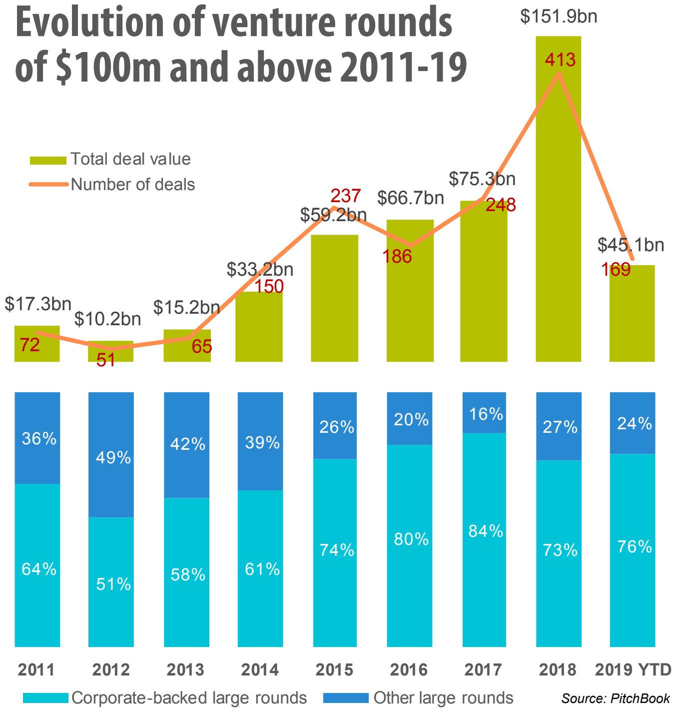
Thirty-seven companies have raised four or more rounds of at least $100m this decade, according to GCV Analytics. In aggregate, these 37 companies have raised at least $127bn, more than a quarter of the total committed in all those large rounds.

A majority of these serial large-round-raising companies have been based in Asia, led by mobility companies Grab with its 11 rounds ($6.65bn total) and Didi Chuxing with its 10 rounds ($22.5bn).

But one consideration for the number of large rounds this year could be whether the number of exits as investors look to flotations on stock markets and trade sales as a route to liquidity and returns.

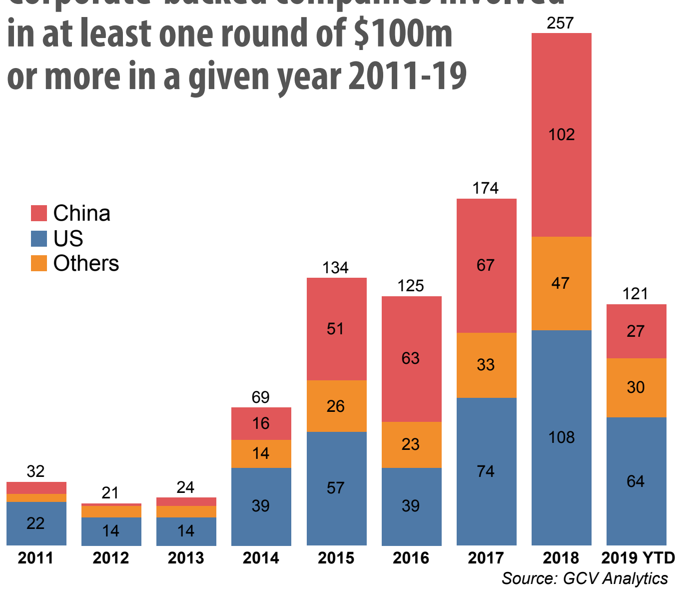
Last year saw a record $249.5bn raised from 194 venture-backed IPOs, according to PitchBook.

Evolution of venture rounds of $100m and above 2011-19



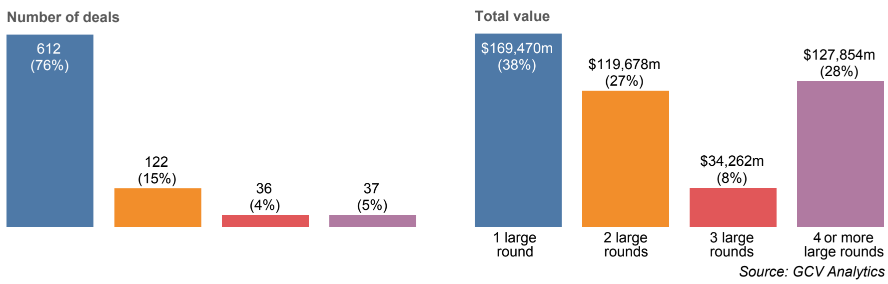
Source: PitchBook

Corporate-backed companies involved in at least one round of $100m or more in a given year 2011-19



Source: GCV Analytics

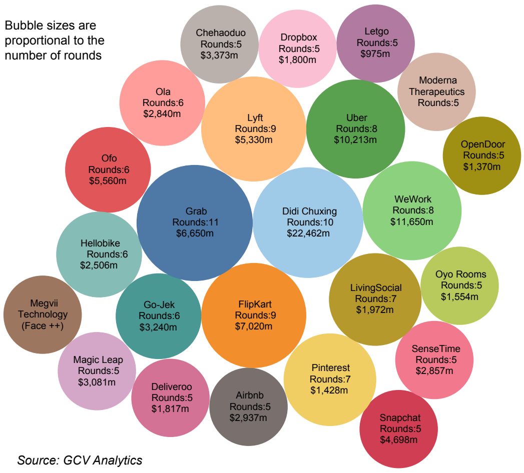
Corporate-backed companies with rounds of $100m or more



Source: GCV Analytics

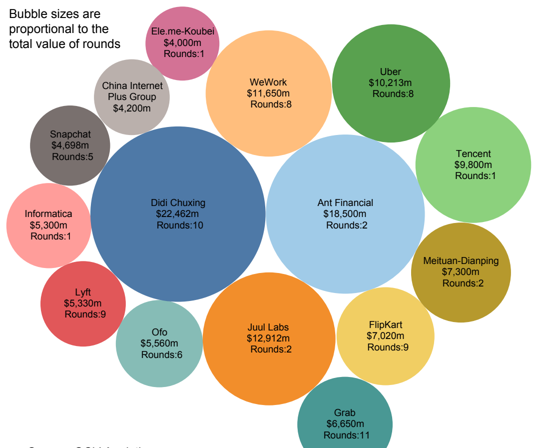
ANALYSIS

Corporate-backed companies with multiple rounds of $100m or more



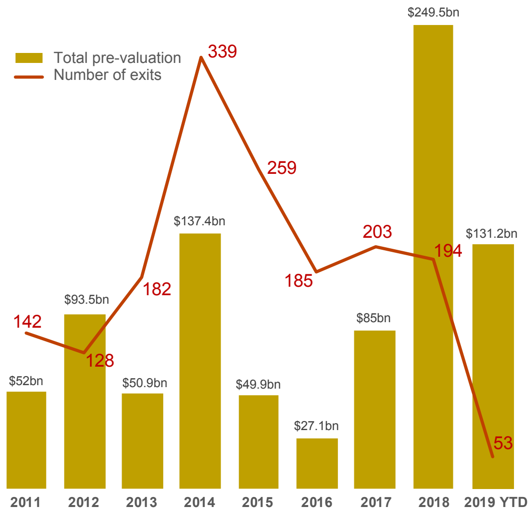
Source: GCV Analytics

Corporate-backed companies with rounds of $100m or more

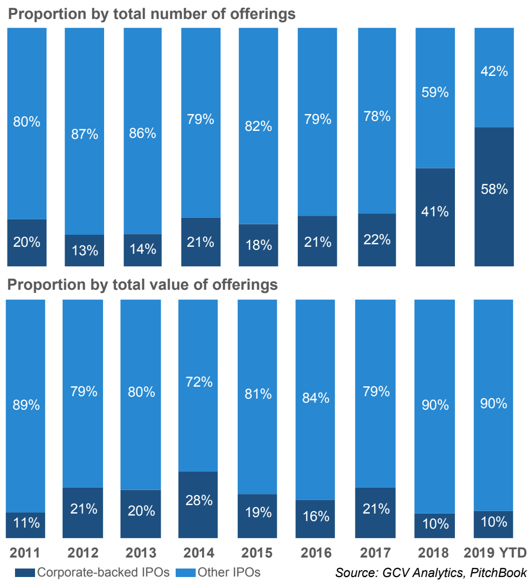


Source: GCV Analytics

Global evolution of IPOs 2011-19



Source: PitchBook



Source: GCV Analytics, PitchBook

For context, this was above the high for all IPOs in 2000 when $242bn was raised from 2,117 flotations, according to academics Craig Doidge, Andrew Karolyi, and Rene Stulz at the National Bureau for Economic Research in their paper, The US Left Behind: The Rise of IPO Activity Around The World.

And, perhaps unsurprisingly given the increased role of CVC-backed large dealmaking, corporate venture-backed IPOs surged as a percentage of the total with 80 out of 194, even if their share of the proceeds fell. This year the proportion has increased still further in the first five months of the year to 58%.

Nearly 40% of the 80 CVC-backed IPOs last year had raised at least one $100m+ round, according to GCV Analytics. But these were the largest IPOs judged by proceeds with more than 80% of the $25bn in proceeds.

Janeway said: “Entrepreneurs who can stay private while funding growth privately at stratospheric valuations (and often while retaining control) have powerful incentives to delay IPOs. But the IPO market itself has followed the concentration [of] the investment banking industry to require larger deals, which means longer time from startup to IPO. So, this is a complex, multi-dimensional problem.”

Janeway at the GCV Symposium had expressed reservations about cash flowing to businesses with “no plausible path to positive cash flow from operations”.

The number of loss-making companies listing on the US stock exchange is approaching a 30-year high, according to Empirical Research Partners data, with the average company going through an IPO now making a loss.

ANALYSIS

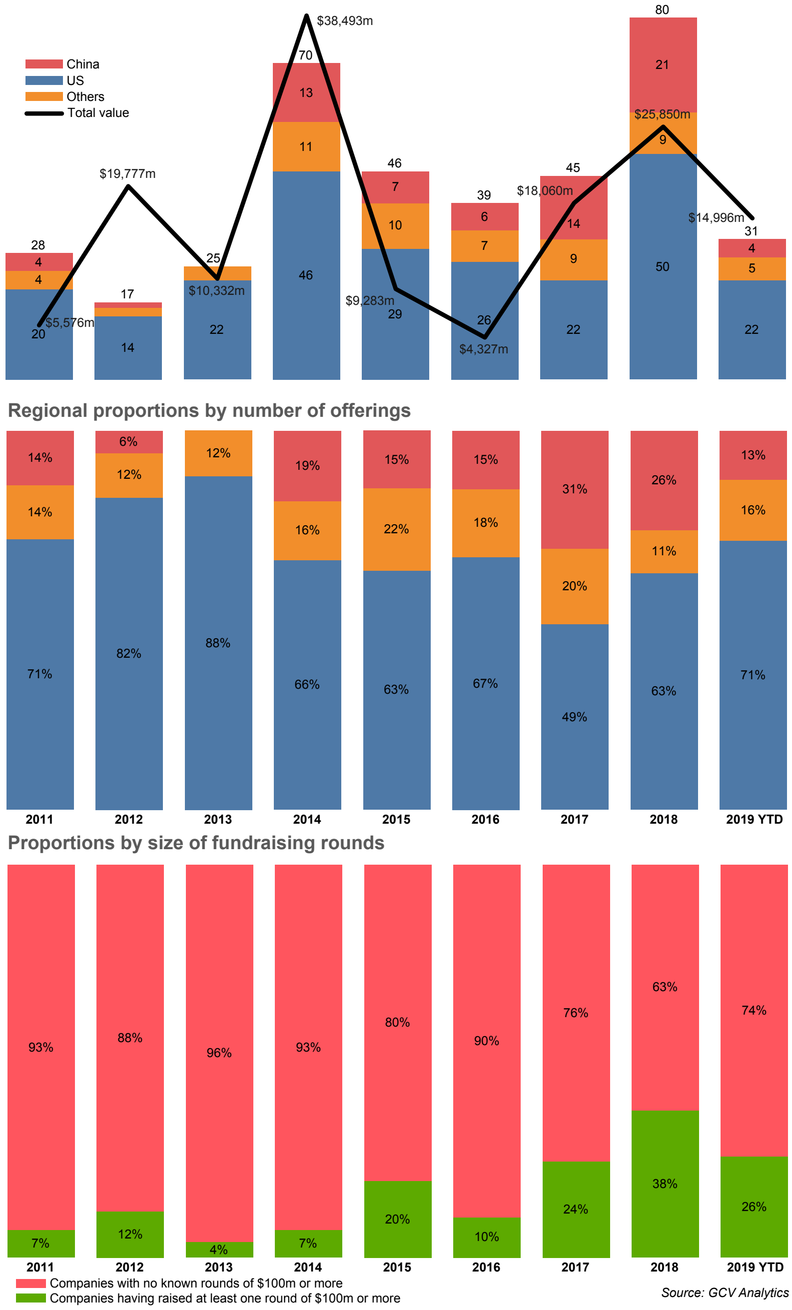
Investor Alex Graham, in a blog post for Toptal, who noted the Empirical data said: "The need to IPO nowadays is not to find new capital sources, but instead to provide liquidity to earlier investors for crystalising their gains. Yet in recent years, companies going public have still not yet settled on stable business models; consequently, the percentage of companies going public with negative earnings has now reached peak dot-com bubble territory.

"The sheer volume of private capital available has blurred the focus on private startups to find sustainability quicker. When they do eventually debut, it can seem like they are limping over the line, instead of galloping onwards.

"It also goes without saying that corporate investors, or those who are not investing money ring-fenced in closed-ended fund structures, could cause contagion risk to the VC market if there is a cash crunch in the wider economy. This could force such entities to try and fire sell assets and/or abruptly curtail investment cadence."

Josh Lerner, Jacob H Schiff professor of investment banking at Harvard Business School, said: "The same issue surfaced during the dot.com era, where many companies with limited prospects went public at sky-high valuations. Most ended up badly after the market crashed in 2000. At the same time, it is important to remember the companies such as Microsoft and Google were depicted in media accounts as being overvalued at the time they went public [in 1986 and 2004, respectively]."

IPOs of corporate-backed enterprises 2011-19



Source: GCV Analytics

A similar pattern for mergers and acquisitions (M&A) has also been seen, albeit from a smaller base as trade buyers have struggled with the valuations.

Lerner said: "Certainly, it is hard to imagine many companies being able to buy an Uber, given the size of its market capitalisation relative to its peers. We have seen, though, many of the acquisitions of venture-backed companies in recent years have been at sky-high valuations."

Last year, CVC-backed trade sales reaped $45bn from 141 M&A deals, primarily in the US. Only 9% of these exits, however, had been to companies that had raised at least one $100m+ round. These trade sales of well-funded portfolio

ANALYSIS

companies were often the most valuable ones, making up 55% of the proceeds.

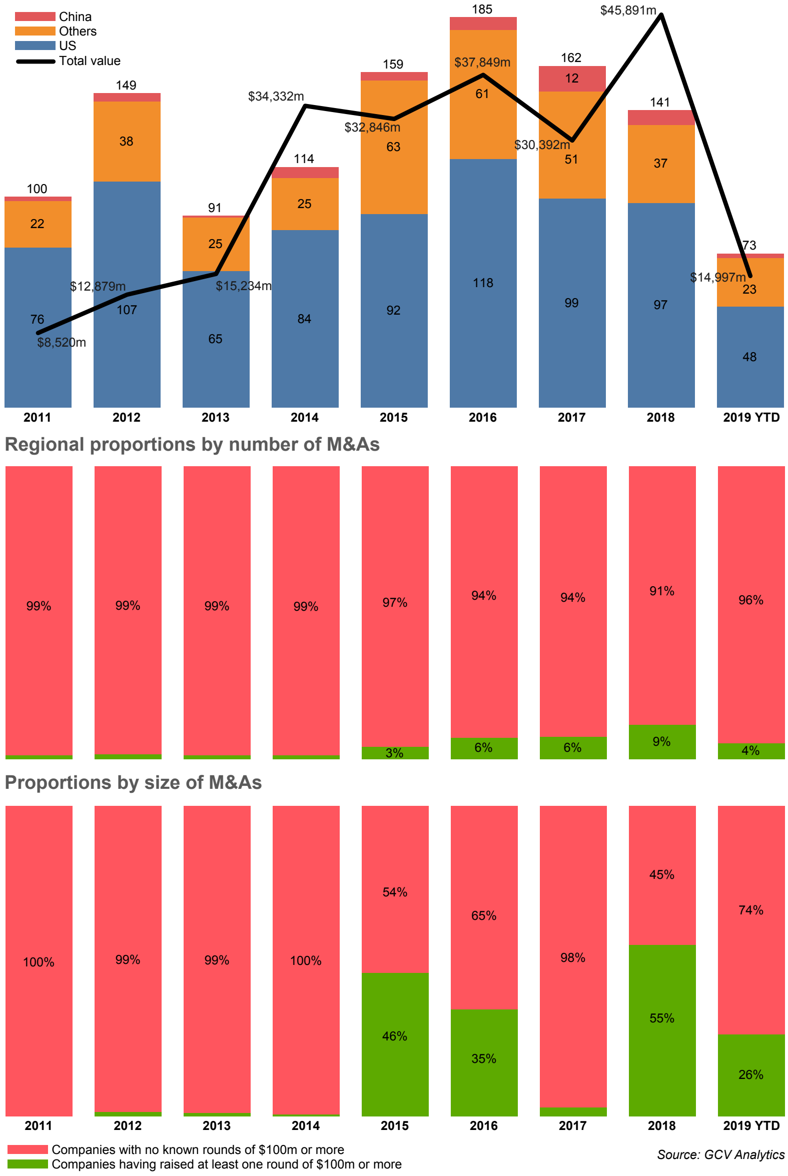
And the nature of business, whether well-funded, incumbent or startup, remains open to risks, including regulatory changes or protectionism and tariffs between the US and China.

Data provider Crunchbase in a post on the $100m (its term is supergiant) rounds said: "China is driving less supergiant venture capital deal volume than it did in the past". But the main risk remains misjudging costs and revenues compared to competitors.

In its review of 11 venture-backed business failures, data provider CB Insights said: "When Solyndra folded, it was not just one of the biggest solar company failures of all time — it was one of the biggest VC-backed failures of all time.

Solyndra manufactured a unique type of solar cell made of copper indium gallium selenide (CIGS). At the time, CIGS was a far cheaper alternative to polysilicon, the main component in most solar panels — a fact that helped the company raise a total of $1.2bn.... But what Solyndra's investors and the government didn't see — or didn't understand the importance of — was that the price of polysilicon was on the decline as early as 2008.

M&A of corporate-backed enterprises 2011-19



Source: GCV Analytics

"By the time the Department of Energy was setting up the parameters of [its $535m] loan, the price of polysilicon was already starting to plummet, from $475/kg in February 2008 to as low as $73/kg in May 2009. By December 2011, it was under $30/kg. The price collapse of competitor material polysilicon destroyed Solyndra's value proposition. When it couldn't sell its systems for any cheaper and still make a profit, the company had to file for bankruptcy. By September 2011, Solyndra's business model had fallen apart. The company announced it was effectively ceasing operations immediately and filing for Chapter 11 bankruptcy, putting more than 1,100 people out of work overnight."

But while Solyndra was caught out by the unexpected fall in a rival commodity price, other businesses funded with large rounds have also struggled. SpeedX, a China-based bike maker, and Bluegogo, a sister company set up for bike sharing had tried to raise venture funding to scale up rapidly – something called blitzscaling in Silicon Valley and promoted in a book by Reid Hoffman and Chris Yeh.

In Cycling Tips extensive analysis: "In May 2017, SpeedX and Bluegogo were at the zenith of their industry – a company of more than 500 staff, valued at more than $150m, with an attractive high-end road bike on the way, a fleet of 800,000 sharebikes, and 20 million registered users. Within six months, it was all gone.

"If you ever want to know how it feels when you're in a startup that goes bust – when hundreds of people lose their jobs and everything they've worked so hard to build – just ask a former Bluegogo or SpeedX employee. They'll tell you; it feels like total despair."

Critics are circling other hard-riding, well-funded entrepreneurs. US magazine The Intelligencer said: "There are hundreds of co-working companies around the world, but what has long distinguished WeWork is [founder Adam] Neumann's insistence that his is something bigger. In 2017, Neumann declared that WeWork's 'valuation and size today are much more based on our energy and spirituality than it is on a multiple of revenue.' He has long maintained that categorising WeWork as a real-estate concern is too limiting; it is a 'community company' with huge ambitions."

WeWork has been valued at $47bn but Intelligencer noted: "In 2000, [magazine] Fast Company published a story about Regus titled 'Office of the Future,' highlighting its efforts to bring 'community' to the workplace. But the bubble burst and Regus went bankrupt. The company recovered and rebranded as IWG, but its existence presents another conundrum for WeWork. IWG currently has roughly 3,000 locations and 2.5 million customers worldwide, numbers that dwarf WeWork's. IWG is profitable and now has a hipper, WeWork-ish offering. It is publicly traded and worth around $3bn."

The American Affairs Journal article, Uber's Path of Destruction, started: "Since it began operations in 2010, Uber has grown to the point where it now collects over $45bn in gross passenger revenue, and it has seized a major share of the urban car service market. But the widespread belief that it is a highly innovative and successful company has no basis in economic reality.

"An examination of Uber's economics suggests that it has no hope of ever earning sustainable urban car service profits in competitive markets. Its costs are simply much higher than the market is willing to pay, as its nine years of massive losses indicate. Uber not only lacks powerful competitive advantages, but it is actually less efficient than the competitors it has been driving out of business.

"Uber's investors, however, never expected that their returns would come from superior efficiency in competitive markets. Uber pursued a 'growth at all costs' strategy financed by a staggering $20bn in investor funding. This funding subsidised fares and service levels that could not be matched by incumbents who had to cover costs out of actual passenger fares. Uber's massive subsidies were explicitly anticompetitive—and are ultimately unsustainable—but they made the company enormously popular with passengers who enjoyed not having to pay the full cost of their service."

Criticism of any highly-valued company is part of the greater scrutiny expected as their impact on society and the economy grows and Uber and WeWork (owned by parent The We Company) have delivered on the high revenues investors wanted and this still remains a factor in valuations on public and private markets.

Both Uber and WeWork have also been active in trying to develop their innovation strategies around their core markets. Uber last month bought Mighty AI, an autonomous vehicle developer backed by GV, a corporate venturing unit of Alphabet formerly known as Google Ventures, while WeWork has acquired Teem, Euclid, Managed by Q and Waltz in the past year.

Loss-making companies that have floated have beaten the stock market by around 9% year-to-date, even though historically they have typically underperformed by a similar amount, on average, according to fund managers Schroders.

Frank Thormann, manager in Schroders' research note, said: "I consider this current environment as anomalous, and the market has gravitated towards a different kind of company. At the same time, investors should remember that mean reversion is a powerful force. Sentiment could change quickly in favour of profitable and cash-generative companies."

Until then, Lerner said: "There are certainly still any unicorns [private companies valued at least $1bn] out there, so there is no shortage of privately held companies that have an appetite (whether deserved or not is a matter for debate) for large cheques from private investors."

Janeway agreed and added: "Given the likelihood that the financial environment will remain very loose for the foreseeable future, I expect there will continue to be continuing opportunities for corporate VC to do the sorts of deals of the last several years. Whether this is optimal for the sponsoring corporates is a very different question." ◆

SECTOR FOCUS

IT sector continues to nurture innovation

Kaloyan Andonov, reporter, GCV Analytics

With spill-over effects across all industries undergoing digitisation, innovation in the IT extends far beyond the realms of the sector itself.

GCV Analytics defines the IT sector as encompassing general artificial intelligence applications, big data and analytics, virtual and augmented reality technologies, semiconductors and microchips, cybersecurity, enterprise and other software as well as other IT businesses.

The digitisation of today's world is inextricably linked to the datafication phenomenon and the rise of big data. Ever smarter connected devices produce large streams of data. One of the main challenges for different sectors with big data was its operationalisation, which has to do with automation and enabling data analytics to ultimately enable extracting relevant information and insights.

According to Todd Goldman, vice-president of marketing of data service provider InfoWorks and a Silicon Valley veteran, there has been much focus on ad-hoc data analytics since the emergence of big data. However, the advent of automation and machine learning (ML) algorithms is expected to help companies move toward "full operationalisation of enterprise-wide big data analytics at scale". Goldman also notes that many organisations are likely to continue to use hybrid data analytics deployment – on premises and in the cloud.

The use of big data analytics is certainly growing, as latest surveys of data executives show. The latest Big Data and AI Executive Survey, conducted by consulting firm New Vantage Partners, found that 62% of data executives have already seen measurable results from investments in big data and artificial intelligence, while nearly half of them (48%) said their organisations were competing on data and analytics.

Handling big data streams would be unthinkable without AI, which is the other major factor in the IT innovation world today. The media fist popularised buzzwords like "artificial intelligence", "machine learning" and "deep learning" (DL). To be clear on the terminology, AI refers to any instances of a machine performing tasks characteristic of human intelligence – from recognising objects and images through speaking languages to problem solving. Machine learning is a specific kind of AI where there is a machine learning to perform a task without having been explicitly programmed to do so. Deep learning, in turn, is an approach to ML, inspired by the functioning of neural networks in our brain.

There have been other buzzwords gaining popularity and growing in usage in recent times, as the realm of AI tech advances. The phrase "natural language processing" (NLP), for example, refers to extracting or generating meaning and intent from texts in a natural, readable and grammatically correct form. "Computer vision", on the other hand, is about extracting meaning or intent from visual elements, whether characters in text documents or faces, objects, scenes etc. from images.

The hype around AI and ML has not been a mere fad. It is a technology that already yields measurable results for busi-

SECTOR FOCUS

ness enterprises. The second edition of the State of AI report, issued by consulting and auditing firm Deloitte found, citing its executives survey, that nearly 60% of organisations acquire AI technologies by simply buying enterprise software that comes with AI already integrated. Most of the survey respondents (82%) said they had gained a financial return from their AI investments. For companies across sectors, the median return on investment from cognitive technologies was 17%. The respondents also reported that AI greatest benefits were enhancing current products, optimising internal operations and making better decisions.

Most interesting and controversial are the questions on the impact of AI on the economy and, particularly, on human labour. While the world is likely far away from an Asimovian robot-dominated stage where machines and robots have replaced all working humans, AI is set to augment human productivity in the coming decades but much of this is accompanied by the sentiment of fear. According to a survey cited in the 2019 Global Human Capital Trends by Deloitte, 38% of respondents expected technology to eliminate jobs at their organisations within the next three years, while only 13% thought automation would "eliminate a significant number of positions."

While such attitudinal research findings do evidence the presence of a significant degree of fear, there are reasons to believe AI may be a positive force at the workplace. Earlier research from Deloitte, cited in the 2019 Global Human Capital Trends, concluded that "automation, by removing routine work, actually makes jobs more human, enabling the role and contribution of people in work to rise in importance and value." In other words, AI is expected to enhance human labour rather than replace it, with human work being reframed in terms of problem-solving and the ability to create new knowledge.

The latter would clearly necessitate an improvement of skills among the workforce. This is also evidenced in results from the same Deloitte survey: 62% of respondents said they were "using automation to eliminate transactional work and replace repetitive tasks" and 47% were also "augmenting existing work practices to improve productivity". Such practices came hand in hand with reskilling – 84% of respondents who said automation would require reskilling were also increasing investment on reskilling and retraining.

As skills are going to be key in the AI-power workplace, it is not unreasonable to supposed that the impact of AI on low skilled and high skilled positions would be uneven. A report entitled "The macroeconomic impact of AI", produced by auditing and consulting firm PwC, estimates that 326 million jobs will "come to depend on and be heavily impacted by AI" by 2030. Most of the impacted jobs will likely be low-skilled positions. Skilled jobs, on the other hand, will "be more positively impacted, supporting a bias towards skilled labour."

Despite the social implications of this, the projected impact of AI at the current juncture on macroeconomic level is positive. The cited PwC report estimates that AI could generate an additional 14% of expected global GDP growth by 2030, thanks to AI-enhanced services and products, on the consumer side, and a workforce armed with AI tools that will significantly drive up its productivity.

Aside from (creative) destruction of jobs, digitisation o brings along significant digital threats that are addressed by the cybersecurity subsector. The cybersecurity market growth has been driven by the adoption of digital technologies across a wide range of industries as well as the increased use of internet-connected mobile technologies by consumers. In parallel, cyberattacks have also become more sophisticated, with a growing variety of tactics to exploit vulnerabilities. As analyst Steve Duplessie, founder of Enterprise Strategy Group (ESG), once put it: "Cybersecurity is a magnificent market because the problem can never be solved entirely. Fix one hole, the bad guys find another. It is a ping-pong match for hackers."

The latter has clearly shown in the growth this subsector. According to estimates of Cybersecurity Ventures – venture firm specialising in this space, the global cybersecurity market was worth an estimated $3.5bn in 2004. In 2017 it was worth more than $120bn, suggesting that it had grown by roughly 35X over 13 years. Cybersecurity Ventures forecasts global spending on cybersecurity products and services will exceed $1 trillion cumulatively by 2021. Market research firm Gartner, in turn, forecasts global spending on information security (a subset of the wider cybersecurity market) to grow to $124bn by the end 2019 and by $170.4bn by 2022. Thus, whatever the methodology to estimate the size of the cybersecurity market used by research firms, one thing is certain – its growth is not set to stop.

Today´s digitised world, with its burgeoning data and connectivity of everything, would be unthinkable without cloud technology and cloud infrastructure. Many data-driven and data-dependent businesses have either moved operations completely to the cloud or reduced their operational expenses on private data centres. The 2019 State of the Cloud Survey, conducted by tech asset management solution provider Flexera, found that that almost every organisation (94% of the surveyed) is using cloud tech at some level, with the adoption of both public and private clouds (public cloud hosting refers to situation in which a client's data are stored in the cloud hosting provider's data centre and the provider is responsible for the management and maintenance of the data centre). On average, companies are using or experimenting with five public and private clouds, with the majority of workloads now running in cloud, according to the survey.

While business operations migrate to the cloud, individual consumers are moving to a new digital reality, enabled by virtual reality (VR) and augmented reality (AR) technologies. It is unclear at present whether the two technologies will converge or diverge from one another, as they become more marketable. Online publication Venture Beat recently noted how mobile AR, smart glasses and VR could diverge in the medium-term, at least commercially, citing findings and

SECTOR FOCUS

forecasts of Silicon Valley-based consultancy Digi Capital.

The possibility for divergence stems from different fundamental economics and adoption of the two technologies. On the one hand, AR – including mobile AR and smart glasses – is forecast to reach a 2.5 billion installed base and $70-$75bn in revenue by 2023. VR, on the other hand, may top 30 million installed base, with more "modest" revenues of $10-$15bn revenue for the same period. Given its larger installed base, mobile AR seems to be a more promising candidate for the mass consumer market in the medium term, while smart glasses are more geared toward enterprise customers.

VR tech – with its high attrition rates, modest sales and lower installed base, still appears like a technology yet to come out of its early stage. Despite the wide range of application of VR tech, a report by global analyst company CCS Insight points gaming as the primary reason for sales of VR devices, noting that it is unlikely to change.

On the hardware side, it is chips and semiconductors that enable sufficient computing power for all these developments in the sector. According to the KPMG 2019 Global Semiconductor Industry Outlook, conducted in collaboration with the Global Semiconductor Alliance, about two-thirds of the 149 leaders of semiconductor companies ranked the internet of Things (IoT) first as the main application driving semiconductor revenue, among important drivers the report identifies. Wireless communications (with the rollout of 5G) are also expected to drive revenues by 60% of respondents, while 43% opined that the computational requirements of cognitive technologies like AI will also drive demand for the industry.

Despite these survey results, the semiconductor and chip subsector has actually registered a drop recently. The Semiconductor Industry Association reported significant decreases in global revenues. Global sales of semiconductors totalled $96.8bn in the first quarter of this year, representing 15.5% drop versus results from the previous quarter and 13% less than same quarter of 2018.

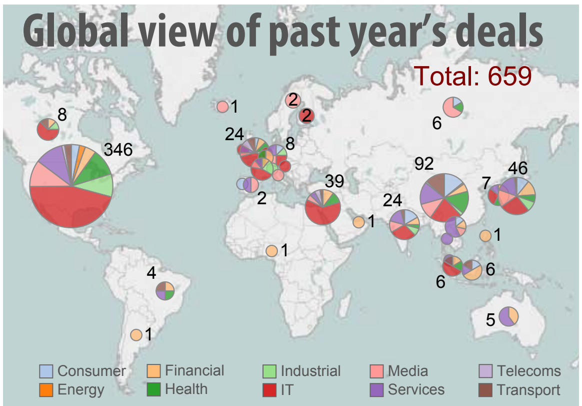
The latter has made some readjust their forecasts on the sector. According to the Nikkei Asian Review, the global market for semiconductors is expected to contract 12.1% to $412bn by end of 2019. This is significant adjustment from the expected 2.6% growth predicted by the World Semiconductor Trade Statistics in 2018. The correction in forecasts has been attributed largely to uncertainties around current affairs like Brexit, the trade war between the US and China and weak smartphone demand. We are yet to see to what extent this expected contraction will impact venture investments. It is already well known, for instance, Intel Capital – a key corporate venturer by its history, number and size of investments – has recently undergone significant changes in terms of human resources (read more on it in the "People" section below).

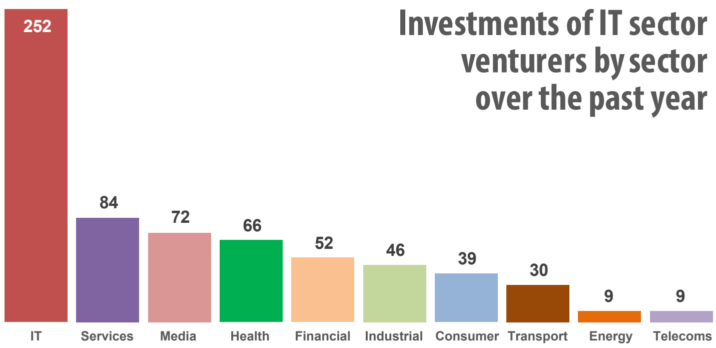
Another notable rising tech in the hardware space is edge computing, which has been driven by digitisation and the rise of IoT. Edge computing is defined as distributed form of computing which brings computer data storage closer to the location where needed. Computation is performed, mostly or entirely, on distributed device nodes. According to reports cited by Reuters, the global edge computing market is expected to grow at a CAGR of 27.3% from 2018 to 2023 and to reach $9.2bn in size. We expect to see more corporate-backed deals in this area.

For the period between June 2018 and May 2019, we reported 659 venturing rounds involving corporate investors from the IT sector. More than half of them (346) took place in the US, while 92 were hosted in China, 46 in Japan, 39 in Israel and 24 in India and the UK.

The majority of those commitments (252) went to emerging enterprises from the same sector (mostly artificial intelligence, semiconductors and chips as well cybersecurity) but also with the remainder going into companies developing other technologies in synergies with the IT sector incumbents: 84 deals in the services sector (mostly human resources tech and edtech), 72 in the media sector (digital marketing and adtech, games and gaming, audio and video content and tech as well as social media), and 66 in the life sciences sector (mostly healthcare IT as well as pharmaceuticals).

The network diagram, illustrating co-investments of IT corporates, shows the broad variety of investment interests of the sector's incumbents. The commitments range from smart grid tech (Actility) and 3D printing (Desk-





top Metal) through drone navigation (AirMap), sensors for self-driving cars (AEye) and IoT networks (FogHorn Systems) to data storage (Weka.io), electric vehicles (Nio) and ride hailing (Go-Jek).

On a calendar year-on-year basis, total capital raised in corporate-backed rounds rose from $34.39bn in 2017 to $41.56bn in 2018, representing a 21% increase. The deal count also grew, though only by 13%, from 553 deals in 2017 to the 626 tracked by the end of 2018.

As outlined further in this article, the 10 largest investments by corporate venturers from the IT sector were not necessarily concentrated in the same industry.

The leading corporate investors from the IT sector in terms of largest number of deals were diversified internet conglomerate Alphabet, cloud-based enterprise software provider Salesforce, internet company Tencent and electronics manufacturer Samsung. The list of IT corporates committing capital in the largest rounds was headed by also by Alphabet and Tencent along with mobile semiconductor producer Qualcomm.

The most active corporate venture investors in the emerging IT businesses were Alphabet, chipmaker Intel and electronics producer Dell.

The emerging IT businesses in the portfolios of corporate venturers came from augmented reality tech (Magic Leap), big data analytics (Abeja), cybersecurity (Ionic Security, Cyber GRX, Team8), artificial intelligence (Graphcore) and mobility software (RideCell).

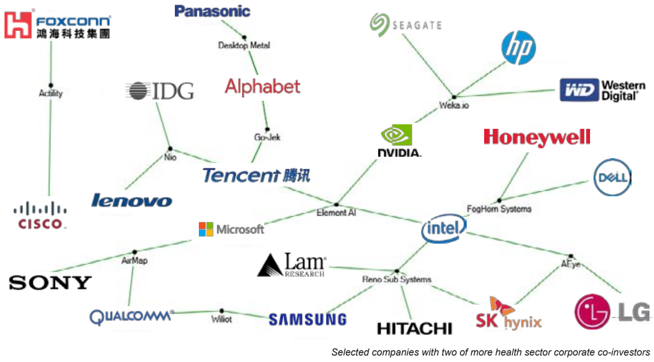
Overall, corporate investments in emerging IT-focused enterprises went up from 443 rounds in 2017 to 549 by the end of 2018, suggesting a 24% increase. The estimated total dollars in those rounds grew even more significantly, by 65%, from $11.57bn in 2017 to $19.04bn last year, suggesting that valuations of emerging tech enterprises are clearly on the rise.

Deals

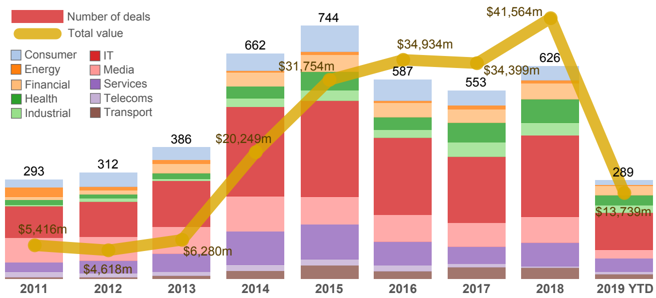
Corporates from the IT sector invested in large multi-million-dollar rounds, raised by enterprises from the telecoms, media, services and transport sector. Four of the top 10 deals were above the $1bn mark.

US-based satellite services provider OneWeb secured $1.25bn in funding from investors including Qualcomm, telecoms firm SoftBank and diversified conglomerate Grupo Salinas. The corporates were joined by the government of Rwanda, and the round increased the total raised by the

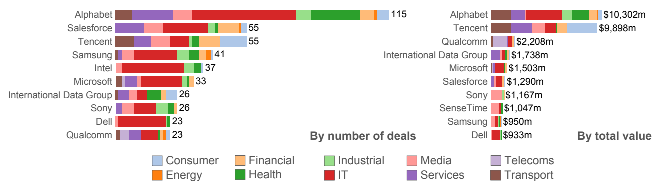
Co-investments of IT sector venturers 2017-19



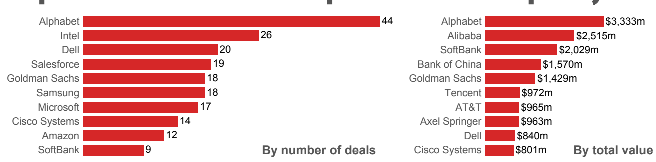
Deals by IT corporates 2011-19



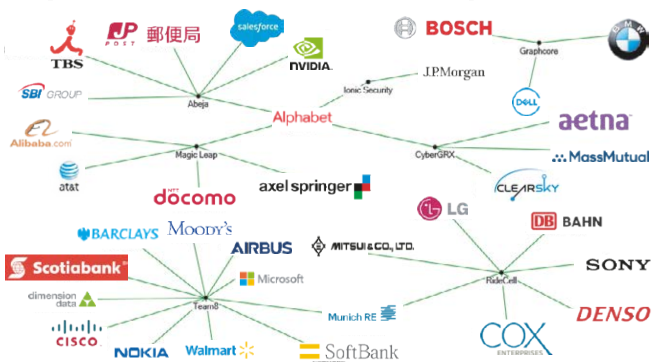
Top IT sector investors over the past year



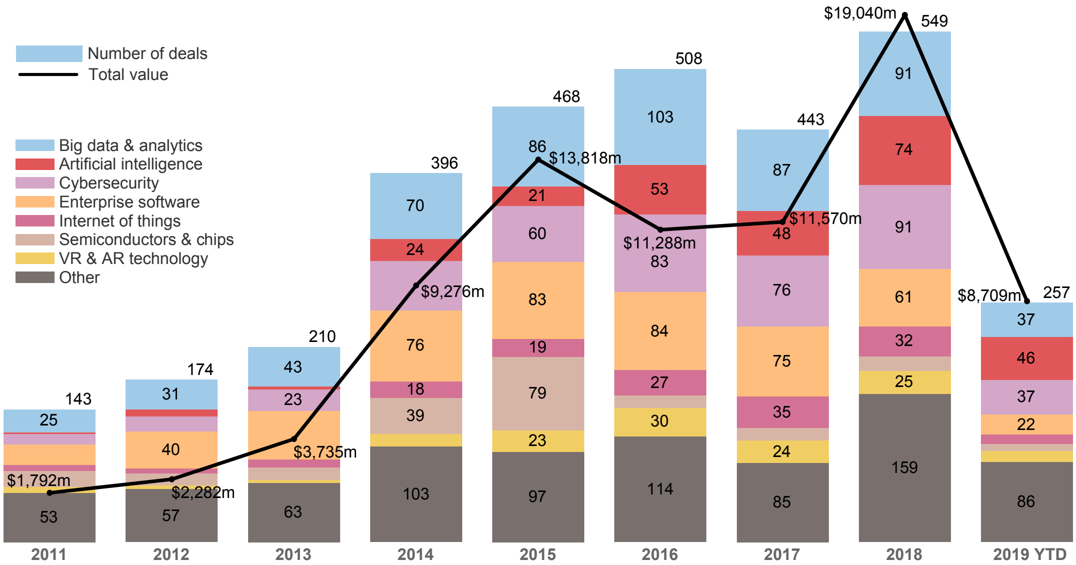
Top investors in IT enterprises over the past year



Corporate co-investments in IT enterprises 2017-19



Corporate-backed deals in emerging IT enterprises 2011-19



company to about $3.4bn. Founded in 2012, OneWeb is building a network of low earth-orbit satellites that are intended to provide high-speed internet connectivity to rural areas and other underserved parts of the world The satellites are built through a partnership with another investor, aerospace manufacturer Airbus. The latest funding followed a launch of OneWeb's first six satellites and will be used to accelerate production and increase its launches to 30 per month by the end of 2019.

E-commerce and media group Naspers invested $660m in India-based online food delivery platform Swiggy, leading its $1bn series H round. Local services platform Meituan Dianping and Tencent also took part in the round, along with DST Global, Coatue Management, Hillhouse Capital and Wellington Management. The round reportedly valued Swiggy at $3.3bn. Swiggy runs an app-based service enabling users to order food from local restaurants to be delivered to their homes. It is present in 58 Indian cities.

Indonesia-based on-demand ride provider Go-Jek secured about $1bn from investors including corporate backers, reportedly at a $10bn post-money valuation. Tencent, e-commerce firm JD.com and Alphabet co-led the funding, which represented the first close of Go-Jek's series F round. They were joined by conglomerate Mitsubishi Corp and investment manager Provident Capital. Go-Jek owns a mobile ride hailing and on-demand services app that reportedly had up to 25 million users as of mid-2018. It has moved into Singapore and is in discussions with Philippine regulators over an entry into that market.

US-based short-form video production company NewTV closed an initial $1bn in funding, raising the cash from a con-

Top 10 deals by IT sector corporate investors over the past year

Company	Location	Sector	Round	Size	Investors
OneWeb	US	Telecoms	–	$1.25bn	Government of Rwanda | Grupo Salinas | Qualcomm | SoftBank
Swiggy	India	Consumer	E and beyond	$1bn	Coatue | DST Global | Hillhouse Capital Management | Meituan-Dianping | Naspers | Tencent | Wellington Management
Go-Jek	Indonesia	Transport	E and beyond	$1bn	Alphabet | JD.com | Mitsubishi | Provident Capital Partners | Tencent
NewTV	US	Media	A	$1bn	21st Century Fox | Alibaba | Entertainment One | Goldman Sachs | ITV | JP Morgan | Liberty Global | Lionsgate | Madrone Capital Partners | Metro-Goldwyn-Mayer Studios | NBC Universal | Sony | Viacom | Walt Disney | Warner Media
Magic Leap	US	IT	D	$963m	Alibaba | Alphabet | AT&T | Axel Springer | Grupo Globo | Saudi Arabia's Public Investment Fund
Ke.com	China	Services	D	$800m	Tencent
Suning Sports	China	Media	A	$600m	ABC International | Alibaba | CCB International | China Minsheng Bank | Evergrande Group | Goldman Sachs | Jiangsu Province | SenseTime | Sports Industrial Fund of Zhejiang Province
Ximalaya	China	Media	E and beyond	$580m	General Atlantic | Goldman Sachs | Tencent
UiPath	US	IT	–	$568m	Accel Partners | Alphabet | Coatue | Dragoneer Investment Group | Institutional Venture Partners | Madrona Venture Group | Sands Capital | Sequoia Capital | T Rowe Price | Wellington Management
VIPKid	China	Services	D	$500m	Coatue | Sequoia Capital | Tencent | Yunfeng Capital

sortium including a range of corporate investors. Media and entertainment groups 21st Century Fox, Walt Disney, Entertainment One, ITV, Lionsgate, Metro Goldwyn Mayer, NBCUniversal, Viacom and Warner Media were all among the investors and, according to Deadline, possible content suppliers. Diversified electronics and media conglomerate Sony, e-commerce firm Alibaba, mass media group Liberty Global and investment banking firms Goldman Sachs and JPMorgan Chase also participated in the round, which was led by investment group Madrone Capital Partners. NewTV is developing an online platform that will feature drama, comedy, documentaries and reality shows cut into episodes that are 10 minutes in length, made with budgets comparable to high-profile cable channels or streaming services like HBO or Netflix.

US-based augmented reality technology developer Magic Leap closed a series D round at $963m. The round was initially backed by Alphabet, Alibaba and media company Grupo Globo that all contributed to the round's $502m first tranche. The first tranche also featured Singaporean government-owned investment firm Temasek. Magic Leap subsequently managed to add $461m to the round. $400m of them came from Saudi Arabia's Public Investment Fund. The remaining $61m were committed by a host of new investors, including media group Axel Springer's corporate venturing unit, Axel Springer Digital Ventures. This series D round reportedly valued the company at about $6bn. Founded in 2011, Magic Leap develops an AR headset together with a dedicated operating system and is in talks with prospective content producers. Magic Leap's goggle are capable of superimposing animated computer graphics over a user's vision of real life. Its light field technology could hypothetically be used for a variety of purposes.

Tencent led an $800m series D round for China-based real estate listings and services platform Ke.com. Spun off from online and offline estate agency Lianjia and also known as Beike Zhaofang, Ke runs an online platform that enables users to search and locate free properties, using 3D modelling technology to help them see the layout of the homes and providing real estate brokerage services. The company also offers an online marketplace for in-home decoration and renovation services. It has a presence in 500 Chinese cities and will use the proceeds from the round to strengthen its technology and enhance user experience.

Suning Sports, the sports broadcasting offshoot of China-based retail and commerce conglomerate Suning, closed a $600m series A round co-led by Alibaba. Goldman Sachs co-led the round, which included artificial intelligence technology provider SenseTime, property developer Evergrande Group and subsidiaries of banks CCB International, Minsheng Bank and ABC International. The round reportedly valued Suning Sports at $2.6bn. Suning Sports owns the broadcasting rights to several large sporting competitions, particularly in football where it holds the rights for China's domestic league, England's Premier League, Spain's La Liga and Germany's Bundesliga, as well as the Asian Champions League.

China-based online audio streaming platform Ximalaya completed a RMB4bn ($580m) funding round featuring Tencent. The round also included Goldman Sachs and growth equity firm General Atlantic and valued Ximalaya at approximately $3.5bn post-money. Founded in 2012, Ximalaya operates an online repository for audio content such as podcasts and radio shows covering music and information. It reportedly has more than 40 million registered users, of which 6 million are daily active users. The company has partnerships in place with carmakers BMW and Ford, which offer the service as part of their in-vehicle entertainment systems, and smart device producers Haier, Skyworth and Midea, which employ it in their home devices.

US-based robotics software provider UiPath completed a $568m series D round featuring CapitalG, the investment arm of Alphabet formerly known as Google Capital. Investment manager Coatue Management led the round, which included Dragoneer, Wellington Management, Sands Capital, Accel, Sequoia Capital, IVP, Madrona Venture Group and funds and accounts advised by T. Rowe Price Associates. The round was closed at a $7bn post-money valuation. UiPath has developed robotic process automation (RPA) software that helps companies automate parts of their business by programming robots with new skills, enabling them to fulfil a wider range of repetitive tasks.

China-based online tutoring service VIPKid raised $500m in series D+ funding from a consortium co-led by Tencent. Tencent co-led the round along with Coatue Management, Sequoia Capital and Yunfeng Capital. It reportedly valued VIPKid at RMB20bn ($3.1bn). Founded in 2013, VIPKid operates a platform that offers real-time, one-to-one English tutoring. It employs more than 40,000 teachers from North America and has attracted more than 300,000 students across 35 countries to date. The funding will enable the company to add more educational content including online textbooks, introduce additional tools and services for teachers and develop machine learning technologies that can drive future products.

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

SoftBank committed almost $1bn in China-based image recognition technology provider SenseTime via its SoftBank's Vision Fund. The transaction reportedly valued SenseTime at $4.5bn. Founded in 2014, SenseTime produces artificial intelligence technology capable of recognising faces, vehicles and objects on a large scale. The company is increasingly moving into the augmented reality and autonomous driving sectors but its technology is utilised most thoroughly in mass surveillance systems. It is developing a software product, Viper, that will analyse data from more than 100,000 camera streams in real time.

SECTOR FOCUS

Top 10 investments in IT sector enterprises over the past year				
Company	**Location**	**Round**	**Size**	**Investors**
SenseTime	China	–	$1bn	SoftBank
Magic Leap	US	D	$963m	Alibaba | Alphabet | AT&T | Axel Springer | Grupo Globo | Saudi Arabia's Public Investment Fund
Megvii Technology	China	E and beyond	$750m	Abu Dhabi Investment Authority | Alibaba | Bank of China | Industrial and Commercial Bank of China | Macquarie
Megvii Technology	China	D	$600m	Alibaba | Boyu Capital
Horizon Robotics	China	B	$600m	China Oceanwide USA Holdings | Citic | Hillhouse Capital Management | Morningside | SK Group | undisclosed investors
UiPath	US	–	$568m	Accel Partners | Alphabet | Coatue | Dragoneer Investment Group | Institutional Venture Partners | Madrona Venture Group | Sands Capital | Sequoia Capital | T Rowe Price | Wellington Management
Beijing Qianxin Technology	China	Stake purchase	$548m	China Electronics Corporation
Snowflake Computing	US	–	$450m	Altimeter Capital Management | Capital One | Iconiq Capital | Madrona Venture Group | Meritech Capital | Redpoint Ventures | Sequoia Capital | Sutter Hill Ventures | Wing Ventures
G7 Networks	China	–	$320m	Bank of China | China Broadband Capital | Global Logistics Providers | Hatton Capital | Hopu Investments | Intelligent Fund of Funds | Mount Morning Capital | Tencent | Total
Automation Anywhere	US	–	$300m	SoftBank

China-based facial recognition software provider Megvii received $750m in series E funding from investors including Alibaba at a valuation of more than $4bn. The round was led by a $200m investment from Bank of China Group Investment, the private equity arm of state-owned financial services firm Bank of China. Founded in 2011 and also known as Face++, Megvii provides a software platform known as Face++ which uses artificial intelligence technology to identify faces, people and objects. The technology is used in consumer devices and retail.

Megvii accounted for another of the top rounds raised by emerging IT businesses. In July 2018, Megvii raised $600m in a funding round also featuring Alibaba. The corporate was reportedly joined in the round by investment firm Boyu Capital.

China-based artificial intelligence (AI) chip developer Horizon Robotics raised $600m in a series B round backed by two subsidiaries of conglomerate SK Group. SK China and SK Hynix, the conglomerate's Chinese and semiconductor subsidiaries respectively, backed the round together with a number of corporate venture capital funds of unnamed, China-based car manufacturers. Horizon Robotics' valuation was reprtedly "at least" $3bn. Founded in 2015, Horizon Robotics is developing embedded AI chips for applications such as autonomous vehicles, surveillance equipment and other smart devices. The company's clients include SK Telecom, the telecoms subsidiary of SK Group, which entered into a cooperation agreement in November 2018 to use Horizon's algorithms to develop smart retail stores.

China-based network security products vendor Beijing Qianxin Technology raised more than RMB3.73bn ($548m) in funding from telecoms equipment manufacturer China Electronics Corporation (CEC). CEC obtained a 22.6%. The deal reportedly valued Qianxin at $2.4bn. The corporate became Qianxin's second largest shareholder, behind chairman and CEO Qi Xiangdong, who is also co-founder and president of cybersecurity software provider Qihoo 360. Qianxin was spun out of Qihoo 360 to develop network security products and services that perform activities such as tracking of phishing threats in real time and thwarting distributed denial of service attacks, in addition to a cloud-based antivirus and anti-malware platform. The company's clients include government departments, state-owned enterprises and large financial services firms in China, and it has also expanded into Indonesia, Singapore and Canada.

US-based data warehousing technology provider Snowflake Computing completed a $450m funding round which included Capital One Growth Ventures, the strategic investment subsidiary of financial services firm Capital One. Venture capital Sequoia Capital led the round, which valued Snowflake at $3.5bn pre-money. Altimeter Capital, Iconiq Capital, Madrona Venture Group, Redpoint Ventures, Sutter Hill Ventures, Meritech Capital and Wing Ventures also invested. Snowflake has created a data warehousing platform for the cloud that enables businesses to store and manage large quantities of data across multiple clouds. It will put the latest funding toward expanding its engineering and sales teams as it looks to add to its product range.

IoT technology developer G7 Networks secured $320m in funding from investors including oil and gas supplier Total, Tencent and logistics services provider Global Logistics Providers (GLP). The round was led by Hopu Investments and included Bank of China Investment, a subsidiary of financial services firm Bank of China, as well as China Broadband Capital, Intelligent Fund of Funds, Mount Morning Capital and TH Capital. Founded in 2010, G7 Networks operates a software platform that relies on IoT devices to track and monitor trucks within a provider's own fleet and subcontracted vehicles. The system calculates predicted arrival times and tracks driving aspects such as speeding and fuel anomalies and is used to track more than 800,000 vehicles for more than 60,000 clients.

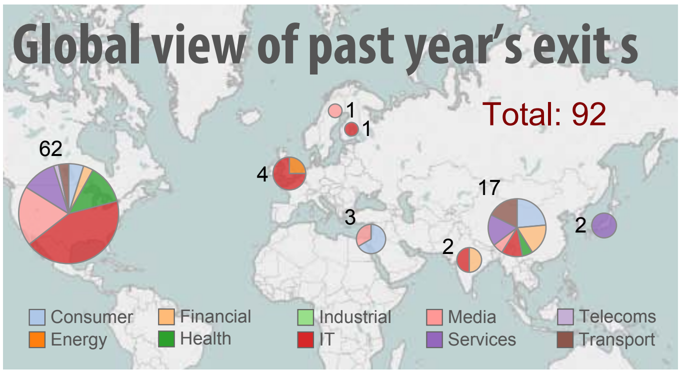
The SoftBank Vision Fund invested $300m in US-based robotics automation technology developer Automation Anywhere at a reported valuation of $2.6bn post-money. Founded in 2003, Automation Anywhere has developed robotic

SECTOR FOCUS

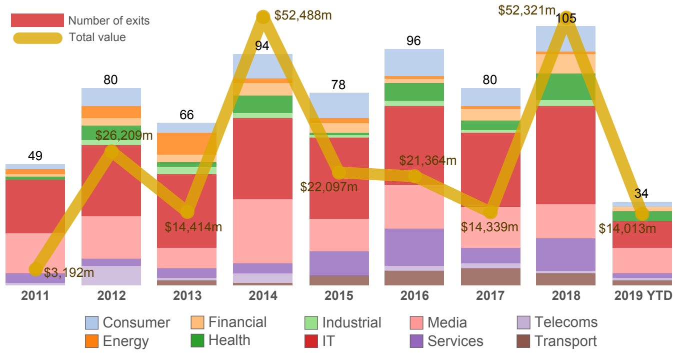
process automation (RPA) technology that enables enterprise customers to automate everyday business processes. The company's product offering includes a central RPA platform, an artificial intelligence bot called IQ Bot and a predictive analytics tool dubbed Bot Insight. It also operates its own app store which sells bot applications.

Exits

Corporate venturers from the IT sector completed 92 exits between June 2018 and May 2019 – 63 acquisitions, 27 initial public offerings (IPOs), one merger and one stake sale.



Exits by IT corporates 2011-19



US-based on-demand ride service Uber, which counts with a range of corporate investors as backers, including Alphabet and Baidu, raised $8.1bn when it went public on the New York Stock Exchange. This was a long-awaited IPO of what was for long the most highly valued unicorn in the venture capital realm. Uber issued 180 million shares, priced at $45.00 each, near the bottom of the $44 to $50 range it had set earlier. Founded in 2009, Uber runs an app-based on-demand ride service spanning 63 countries in addition to food delivery and last-mile delivery services. Its core ride hailing service boasts 91 million monthly active users and its UberEats offering 15 million. It recently spun off an autonomous driving subsidiary called Uber ATG, which received $1bn in funding from automotive manufacturer Toyota, automotive components producer Denso and SoftBank.

China-based consumer electronics producer Xiaomi, which counts Qualcomm as an investor, raised $4.72bn in its IPO on the Hong Kong Stock Exchange. The company priced roughly 2.18 billion shares at the low end of the HK$17 to HK$22 ($2.17 to $2.80) range it had previously set. The price valued Xiaomi at about $54bn. The offering was originally intended to be a dual offering that would have raised up to $10bn, but Xiaomi was forced to drop the Shanghai portion, reportedly after failing to answer several questions from Chinese regulators. Founded in 2010, Xiaomi designs and manufactures smartphones as well as other electronic devices such as smart home products, tablets and televisions which are connected through its MIUI operating system. It made a RMB43.8bn ($6.6bn) net loss in 2017 from revenues of RMB115bn.

China-based local services platform Meituan Dianping raised $4.22bn in an IPO that included a $400m investment by Tencent. The latter was joined as a cornerstone investor by asset manager Oppenheimer, which bought $500m of shares, hedge fund Lansdowne Partners ($300m), investment advisory firm Darsana Capital Partners ($200m) and the government-backed China Structural Reform Fund ($100m). Meituan Dianping issued 480 million primary shares on the Hong Kong Stock Exchange priced at HK$69 ($8.79) each, near the top of the IPO's HK$60 to HK$72 range. The offering valued the company at about $52bn. Established through the 2015 merger of group buying platform Meituan and restaurant listings service Dianping, Meituan Dianping now operates an online portal that links to a range of services including food delivery, travel booking and event ticketing.

Networking equipment manufacturer Cisco Systems agreed to acquire Duo Security, a US-based authentication software provider backed by human resources software producer Workday and Alphabet. Cisco will pay $2.35bn in cash and assumed equity awards for Duo's outstanding shares, warrants and equity incentives on a fully-diluted basis. Founded in 2009, Duo Security operates a cloud-based user verification platform that uses two-factor authentication, where a user has to enter a unique, time-limited code in addition to their password, to prevent data breaches, credential theft and unauthorised account takeover. The technology also assesses the trustworthiness of each device used to log in and restricts access unless both the user has been verified and the device meets company-defined security criteria.

US-based on-demand ride provider Lyft – which counts several corporate investors among its backers including Alphabet – raised $2.34bn in its awaited IPO, in which it floated at the top of its range. Lyft issued 32.5 million shares priced at $72.00 each. It initially planned to issue almost 30.8 million shares priced between $62 and $68 each, before upgrading the range from to $70 to $72 earlier this week. The company was reportedly valued at $24.3bn in the offering. Founded

SECTOR FOCUS

Top 10 exits by IT sector corporate investors over the past year

Company	Location	Sector	Exit type	Acquirer	Size	Investors
Uber	US	Transport	IPO		$8.1bn	Alphabet | Axel Springer | Baidu | Benchmark | Bennett Coleman & Company | BlackRock | Dragoneer Investment Group | Fidelity | Kleiner Perkins | Lone Pine | Menlo Ventures | Microsoft | New Enterprise Associates | Qatar Investment Authority | Saudi Arabia's Public Investment Fund | Sequoia Capital | SoftBank | Summit Partners | Toyota | TPG | Valiant Capital | Wellington Management
Xiaomi	China	Consumer	IPO		$4.72bn	All-Stars Investment | China Mobile | CICFH Entertainment | DST Global | GIC | Hopu Fund | International Data Group | Morningside | Nokia | Qiming Venture Partners | Qualcomm | SF Express | Temasek | Yunfeng Capital
Meituan-Dianping	China	Consumer	IPO		$4.2bn	Canada Pension Plan Investment Board | Capital Today | China Structural Reform Fund | China-UAE Investment Cooperation Fund | Coatue | Darsana Capital Partners | DST Global | GIC | Hillhouse Capital Management | International Data Group | Lansdowne Partners | Oppenheimer Funds | Priceline | Sequoia Capital | Tencent | Tiger Global Management | TrustBridge Partners
Duo Security	US	IT	Acquisition	Cisco Systems	$2.35	Alphabet | Benchmark | Geodesic Capital | Index Ventures | Lead Edge Capital | Meritech Capital | Radar Partners | Redpoint Ventures | Resonant | True Ventures | Workday
Lyft	US	Transport	IPO		$2.34	Alibaba | AllianceBernstein | Alphabet | Andreessen Horowitz | Baillie Gifford | Coatue | Didi Chuxing | Fidelity | Founders Fund | Icahn Enterprises | Jaguar Land Rover | Janus Capital Management | Janus Henderson Investors | Kingdom Holding | KKR | Magna | Mayfield | Ontario Teachers' Pension Plan Board | PSP Investments | Rakuten | Senator Investment Group | Third Point Ventures
Pinduoduo	China	Consumer	IPO		$1.63bn	Cathay Capital | Gaorong Capital | International Data Group | Lightspeed Venture Partners | Sequoia Capital | Sky Royal Trading | Sun Vantage Investment | Tencent
Adaptive Insights	US	IT	Acquisition	Workday	$1.55bn	Bessemer | Cardinal Venture Capital | Information Venture Partners | JMI Equity | Monitor Ventures | Onset Ventures | RBC Technology Ventures | Salesforce | Wells Fargo (Norwest Venture Partners)
Cylance	US	IT	Acquisition	Blackberry	$1.4bn	Blackstone | Capital One | Citigroup | Dell | Draper Fisher Jurvetson | Draper Nexus | Fairhaven Capital | Insight Venture Partners | Khosla Ventures | KKR | TenEleven Ventures | Thomvest Ventures | undisclosed investors
Nio	China	Transport	IPO		$1bn	Baidu | Baillie Gifford | Citic | GIC | Hillhouse Capital Management | Hopu Investment Management | International Data Group | JD.com | Joy Capital | Lenovo | Pine Capital | Sequoia Capital | Shunwei Capital | Temasek | Tencent | TPG
Farfetch	US	Consumer	IPO		$885m	Advance Publications | DST Global | E.Ventures | Eurazeo | Index Ventures | International Data Group | JD.com | New Leaf Venture Partners Advent Venture Partners | private investors | Temasek | Vitruvian Partners

in 2012, Lyft runs a ride hailing platform that facilitated rides for some 30.7 million users in 2018, through a network of about 1.9 million drivers. It made a $911m net loss in 2018 from approximately $2.16bn in revenue.

Pinduoduo, the China-based group buying platform backed by Tencent, raised approximately $1.63bn when it floated in the US. The company priced the IPO at the top of its $16 to $19 range, issuing 85.6 million American depositary shares (ADSs) on the Nasdaq Global Select Market. The flotation valued Pinduoduo at $23.8bn including all outstanding share options. The IPO was reportedly oversubscribed 20-fold and the buyers included Fidelity Investments and Abu Dhabi-owned sovereign wealth funds. Pinduoduo's group buying platform enables multiple buyers to form groups, either on the platform itself or through social media networks, to buy items in bulk at discounted rates. It made an $83.7m net loss in 2017 from $278m in revenue, counting more than 343 million active users.

US-based business planning enterprise software developer Adaptive Insights, which counted Salesforce and Wells Fargo's venturing firm NPV among its backers, agreed to an acquisition by cloud-based human resources management platform Workday for $1.55bn. At the time of the announcement, Workday revealed plans to integrate Adaptive Insights' platform into its own suite of applications. The transaction was announced three weeks after Adaptive Insights had filed for a $100m IPO. Founded in 2003 as Adaptive Planning, Adaptive Insights runs a software-as-a-service cloud-based platform which enables businesses to build models of their operations and collaborate on planning while analysing

Top 10 exits from IT sector enterprises over the past year

Company	Location	Exit type	Size	Acquirer	Investors
Duo Security	US	Acquisition	$2.35bn	Cisco Systems	Alphabet | Benchmark | Geodesic Capital | Index Ventures | Lead Edge Capital | Meritech Capital | Radar Partners | Redpoint Ventures | Resonant | True Ventures | Workday
Adaptive Insights	US	Acquisition	$1.55bn	Workday	Bessemer | Cardinal Venture Capital | Information Venture Partners | JMI Equity | Monitor Ventures | Onset Ventures | RBC Technology Ventures | Salesforce | Wells Fargo (Norwest Venture Partners)
Cylance	US	Acquisition	$1.4bn	Blackberry	Blackstone | Capital One | Citigroup | Dell | Draper Fisher Jurvetson | Draper Nexus | Fairhaven Capital | Insight Venture Partners | Khosla Ventures | KKR | TenEleven Ventures | Thomvest Ventures | undisclosed investors
Nginx	US	Acquisition	$670m	F5	BV Capital | E.Ventures | Goldman Sachs | Index Ventures | MSD Capital | New Enterprise Associates | private investor | Runa Capital | Telstra
Luxtera	US	Acquisition	$660m	Cisco Systems	August Capital | California Institute of Technology | Lux Capital | New Enterprise Associates | Sevin Rosen Funds | Tokyo Electron
Treasure Data	US	Acquisition	$600m	Arm	AME Cloud Ventures | Dentsu | Heavybit | Innovation Network Corporation of Japan | IT-Farm Corporation | private investors | SBI Group | Scale Venture Partners | Sierra Ventures
Twistlock	US	Acquisition	$410m	Palo Alto Networks	Dell | Iconiq Capital | Polaris Venture Partners | Rally Ventures | TenEleven Ventures | YL Ventures
Avnera	US	Acquisition	$405m	Skyworks Solutions	Altien Ventures | Bessemer | Best Buy | DAG Ventures | Icon Ventures | Intel | Panasonic | Polycom | Redpoint Ventures
NewVoiceMedia	UK	Acquisition	$350m	Vonage Holdings	Bessemer | BGF Ventures | Eden Ventures | Highland Capital Partners | MMC Ventures | Notion Capital | Salesforce | Technology Crossover Ventures
Samanage	US	Acquisition	$350m	SolarWinds	Gemini Israel Ventures | Innovation Endeavors | Marker | Morgan Stanley | Salesforce | Silicon Valley Bank | Vintage Investment Partners | Viola Ventures

performance data.

Enterprise software supplier Blackberry agreed to acquire US-based cybersecurity technology provider Cylance, allowing Dell and financial services firms Citi and Capital One to exit. The deal consisted of $1.4bn in cash and the assumption of unvested employee incentive awards. Cylance produces predictive endpoint cybersecurity products that utilise artificial intelligence to combat malware and fileless attacks, detecting and responding to threats. Its technology will be used to enhance BlackBerry Spark, Blackberry's connected enterprise communications platform.

Nio, the China-based smart electric car developer that counts domestic corporates Tencent, JD.com, internet group Baidu and electronics manufacturer Lenovo as investors, raised approximately $1bn when it floated on the New York Stock Exchange. The IPO consisted of 160 million ADSs priced at $6.26 each, almost at the bottom of the $6.25 to $8.25 range the company had set earlier. It valued Nio at $6.4bn. Founded in 2014 as NextEV before officially rebranding in July 2017, Nio is working on plug-in electric cars fitted out with features including in-built artificial intelligence and autonomous driving systems. Nio's first model, the EP9 supercar, was released in 2016, and it launched its first commercial model, a seven-seater sports utility vehicle known as the ES8, in December 2017.

Farfetch, the UK-based fashion e-commerce platform backed by media group Advance Publications, JD.com and It company Internet Data Group – went public in an IPO which raised approximately $885m. The company issued just over 33.6 million shares on the New York Stock Exchange while its shareholders sold an additional 10.6 million. The shares were priced at $20 each, above the IPO's $17 to $19 range, giving it a market cap of about $5.8bn. Founded in 2008, Farfetch operates an online marketplace for luxury and high-end fashion items, selling pieces from almost 1,000 producers to a 2.3 million-strong customer base worldwide. Farfetch increased revenue 55% year on year to almost $268m in the first half of 2018, though its losses increased from $29.3m to $68.4m over the same period.

Global Corporate Venturing also reported several exits of emerging IT-related enterprises that involved corporate investors from different sectors.

Application services provider F5 agreed to acquire US-based app development technology producer Nginx for approximately $670m in a deal, giving an exit to telecoms firm Telstra. Nginx was founded in 2011 to market the open-source web server and application delivery software of the same name. The company offers a premium version helping enterprises deliver content rapidly and securely, and the software is used in some 375 million websites, often for load balancing, where multiple workloads are distributed across several computing platforms.

Cisco agreed to acquire US-based fabless semiconductor maker Luxtera in a $660m deal, giving electronics producer Tokyo Electron an exit. Luxtera manufactures optical transceivers made with silicon photonics for use in data centres and service providers, enhancing performance and reducing cost. Cisco will integrate the company's technology across its intent-based networking product range, and it is expected to improve the corporate's optical transceiver portfolio.

Luxtera's employees will report to David Goeckeler, general manager of Cisco's networking and security business.

Treasure Data, a US-based real-time data management platform backed by marketing firm Dentsu, was acquired by Arm, the semiconductor subsidiary of SoftBank, for approximately $600m.The deal was thought to form part of a push into the internet-of-things sector by Arm. Founded in 2011, Treasure Data has created an enterprise customer data platform that uses machine learning and artificial intelligence technologies to extract real-time insights into users across channels such as apps and phone calls.The data can then be used to provide personalised offerings for customers. The company targets the internet-of-things, automotive, entertainment and retail industries.

Cybersecurity technology provider Palo Alto Networks agreed to acquire container security software developer Twistlock for approximately $410m in cash, giving Dell an exit. Twistlock has built a cybersecurity platform that protects cloud-native container systems such as Docker and Kubernetes, using machine learning to track normal app behaviour and scaling accordingly to detect any changes that could point to security issues. The product also offers visual maps showing the security status of applications in real time, and automatically blocks activity and processes that are flagged up as anomalous.

Avnera, a US-based fabless semiconductor producer backed by corporates including Intel, electronics producer Panasonic, retailer Best Buy, communications technology provider Polycom and audio equipment maker Onkyo, agreed to a $405m acquisition by semiconductor company Skyworks Solutions. Skyworks agreed to pay $405m in cash in an upfront transaction, with up to $20m in additional capital due if Avnera meets certain performance target. Founded in 2004, Avnera designs analogue system-on-chips that facilitate the production of consumer products such as wireless home cinema systems or gaming headsets that require low power consumption. The company's technology will enhance Skyworks products in fields such as smart voice assistants and vehicle in-dash systems.

Business communications technology supplier Vonage Holdings agreed to acquire US-based customer service technology provider NewVoiceMedia in a $350m deal that gave Salesforce an exit. NewVoiceMedia has developed a cloud software platform that integrates with an organisation's existing customer relationship management software, bringing together all its communications channels in a single place to help staff contact customers more effectively.

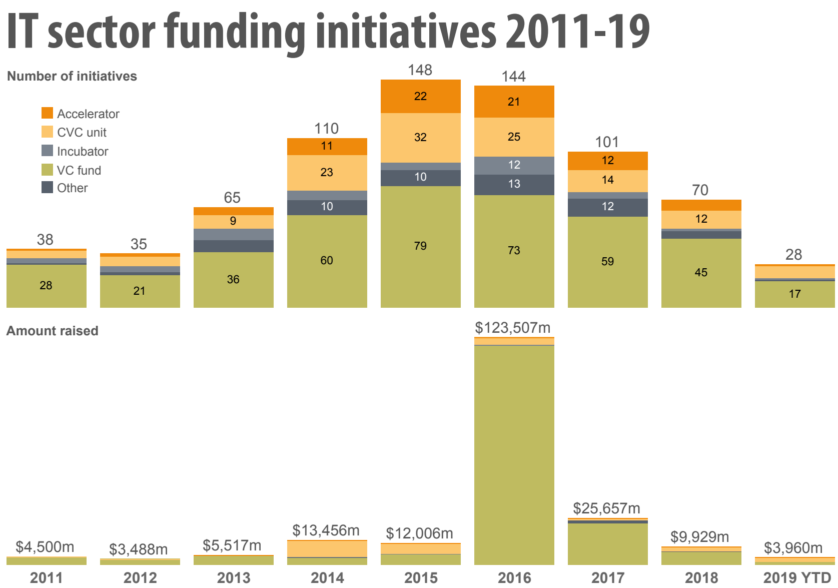
IT management software provider SolarWinds agreed to acquire Samanage, a US-based employee service management platform developer backed by enterprise software producer Salesforce, for $350m. Founded in 2007, Samanage operates a cloud-based software platform that facilitates IT service management, offering features such as a unified interface for support tickets and procurement tools, applying artificial intelligence to automate certain processes. SolarWinds expects Samanage's offering to complement its on-site IT infrastructure management software, helping to cover the requirements of customers ranging from small and medium-sized enterprises to large corporations.

Funds

For the period between June 2018 and May 2019, corporate venturers and investing in the IT sector secured over $8.76bn in capital via 57 funding initiatives, which included 34 VC funds, 15 new CVC subsidiaries, four accelerators and four other initiatives.

On a calendar year-to-year basis, the number of funding initiatives in the IT sector went down to 70 in 2018, versus the 101 registered in 2017, and also significantly down from the peaks of 144 and 148 such initiative reported in 2015 and 2016. The total estimated capital also decreased– it stood at $9.93bn by the end of last year, down 61% from the $25.66bn in 2017. In 2019, the respective dollar figure stood at $3.96bn just over the first five months of the year.

China-based venture capital firm Fortune Venture Capital secured RMB4.63bn ($667m) for its latest renminbi-denominated fund, from limited partners including property developer Century Golden Resources Group. Financial services firm Industrial and Commercial Bank was also among the LPs, as was Shenzhen Yunneng Fund, Kpeng Capital and the city of Shenzhen's guidance



IT sector funding initiatives over the past year

Funding initiative	Type	Funds raised	Location	Focus	Investors
Unnamed Fortune VC fund	VC fund	$667m	China	IT, media, consumer, telecoms, services, industrial	Century Golden Resources | Fortune Venture Capital
Foxconn-Jinan Fund	VC fund	$545m	China	IT	Hon Hai | Jinan municipal government
Globis Fund VI	VC fund	$321m	Japan	IT, financial	Globis Capital Partners | Sumitomo | Tokio Marine
China Ventures Fund I	VC fund	$300m	China	IT, media	KB Insurance | KDB Capital | LG Electronics | Naver | Nexon | NongHyup Financial Group | SoftBank | TPG
Unnamed Legend Capital fund	VC fund	$266m	South Korea	IT, health	Legend Holdings | SK Group
Latitude Venture Partners I	CVC unit	$200m	Indonesia	Industrial, financial, IT, health	Sinar Mas
NMV I	VC fund	$187m	China	IT, industrial	Alcatel-Lucent | China Everbright Group | China Foundation of Science & Technology for Development | GIC | Jafco | K.Wah Group | Kerry Group | Motorola Solutions | Shanghai Alliance Investment | Shanghai NewMargin Ventures | Sunevision
AV8 Ventures I	VC fund	$170m	US	IT, health, transport	Allianz | AV8 Ventures
Csiro Innovation Fund 1	VC fund	$167m	Australia	IT, Industrial, Health	Hostplus | Lockheed Martin Corporation | Main Sequence Ventures | Temasek | University of Melbourne
Unnamed Ayala Fund	VC fund	$150m	Philippines	Financial, IT, energy, industrial	Ayala Corporation | Kickstart Ventures
Raystone AI Fund	VC fund	$148m	China	IT, industrial, health	National Venture Capital Fund for Emerging Industries | Raystone

fund. Founded in 2000, Fortune VC focuses on the technology, media and telecoms; consumer goods and services; agricultural technology and cleantech spaces. Its portfolio includes electronics recycling service Aihuishou and browser developer Red Core Security.

Taiwan-based electronics contract manufacturer Foxconn partnered the municipal government of Jinan in China to form a RMB3.75bn ($545m) fund aimed at the semiconductor sector. Foxconn has committed to setting up five integrated circuit design companies and one high-performance chip developer in Jinan, all of which are expected to benefit from the fund. The corporate has also spun off its existing semiconductor projects into a new unnamed company that will manage four existing chip-focused subsidiaries of Foxconn: Fitipower Integrated Technology, Foxsemicon Integrated Technology, ShunSin Technology Holdings and Socle Technology. Sharp, the consumer electronics product maker acquired by Foxconn in 2016, will reportedly also offer its chip production services to the joint venture, though further details of that deal did not emerge.

Japan-based venture capital firm Globis Capital Partners unveiled a ¥36bn ($321m) first close for its sixth fund, with commitments from limited partners including insurance provider Sompo Japan Nipponkoa Insurance. Tokio Marine Asset Management, the investment management arm of insurance firm Tokio Marine, also backed the fund, dubbed Globis Fund VI, as has financial holding company Sumitomo Trust through its Japan Vintage Fund 2019. Financial services firms Sumitomo Mitsui Banking Corporation and Bank of Yokohama are also among the limited partners (LPs). The fund will invest up to $45m in each portfolio company. Globis Fund VI will focus on technologies such as AI, IoT and blockchain, and also offer assistance with management development and staff recruitment.

SoftBank established a $300m corporate venturing fund in China in partnership with a subsidiary of private equity group TPG. SoftBank participated in the venture through SoftBank Ventures Korea, the Korea-based, internationally-focused fund it set up in 2000, while TPG is represented by its TPG Growth division. China Ventures Fund I will back early-stage companies focusing on areas such as AI, deep tech, digital media and online content. It will be managed by SoftBank Ventures Korea CEO JP Lee and Jason Ding, a managing director of TPG Growth.

SK China, a local subsidiary of South Korea-based telecoms conglomerate SK Group, put ₩300m ($266m) into a fund created by Legend Capital, the VC firm formed by conglomerate Legend Holdings. The fund will focus on early-stage companies in the IT and healthcare industries based in China and across Asia. SK China expects its contribution will enable it to expand its business in the country. SK China runs a group of real estate, energy and rental car businesses in China. Its parent SK Group previously became a limited partner in a $600m fund for Legend Capital but it is unclear if this was the same vehicle.

Latitude Venture Partners, the Indonesia-based venture capital and business development vehicle affiliated with conglomerate Sinar Mas, secured $200m in capital. Latitude targets investments in growth-stage companies that can bring value to Indonesia, where Sinar Mas is also based. Sectors of interest to the firm include financial, industrial, healthcare and artificial intelligence technology. Sinar Mas already operates a corporate venturing unit known as Sinar Mas Digital Ventures and is a partner in EV Growth along with internet company Yahoo Japan and VC firm East Ventures. Latitude is headed by Linda Wijaya, formerly CEO of paper producer Asia Pulp and Paper and a shareholder in Sinar Mas, as managing partner. Partner YC Ng was the founder and managing partner of Hawthorn Capital, a firm that made VC investments on behalf of family offices.

NewMargin Ventures, a China-based investment firm backed by food producer Kerry Group and telecoms equipment provider Motorola Solutions, reached the first close of a RMB10bn ($1.48bn) fund. The fund raised approximately $187m from limited partners including state-owned conglomerate China Everbright and two government-backed funds. Founded in 1999, NewMargin Ventures focuses on high-margin manufacturing and state-owned enterprises, as well as civil-military integration, a national strategy designed to transfer technologies from military and defence research to civilian-focused industries. The latest fund will target information technology and new materials, investing in companies producing high-end chips, industrial robotics and automation technology. NewMargin identified Kerry Group, Motorola Solutions, hotel manager K.Wah Group, mobile device producer Alcatel and Sunevision, the technology arm of property developer Sun Hung Kai Properties, as investors.

US and UK-based venture capital firm AV8 Ventures closed its €150m ($170m) debut fund after securing the full amount from insurance firm Allianz. AV8 will invest in seed and series A-stage startups in the digital health, big data, AI, mobility and enterprise technology sectors. By the time of the announcement, the fund had already been investing for approximately a year and currently boasts seven portfolio companies including Locomation, an autonomous trucking technology spinout of Carnegie Mellon University. The portfolio also included women's healthcare platform Alpha Medical and Contract Wrangler, which relies on machine learning to extract information from vast quantities of contracts, as well as weather forecasting service PlanetIQ.

Australia-based fund manager Main Sequence Ventures added A$132m ($94.8m) to its Csiro Innovation Fund 1 from investors including aerospace and defence equipment manufacturer Lockheed Martin. University of Melbourne, superannuation fund Hostplus and Singaporean government-owned investment firm Temasek also contributed to the fundraising, which increased the size of Csiro Innovation Fund 1's to $167m, $23m above its original target. Csiro committed $21.5m to the fund, taking the capital from its royalties on wifi, the wireless networking technology invented by the institute, while the government injected $50.3m. The fund specifically invests in domestic spinouts and small and medium-sized enterprises, with a focus on quantum computing, health, space and agricultural technology.

Philippines-based diversified conglomerate Ayala launched a $150m corporate venture capital fund. The fund will be the largest in the country if it reaches its targeted close. It will seek out opportunities in areas such as AI, fintech, automation and battery technologies, as well as other areas relevant to Ayala's subsidiaries. Ayala intends to raise the capital from its subsidiaries, which cover sectors such as retail, education, financial services, telecoms, water utilities and renewable energy, IT, public transport, car manufacturing, healthcare, logistics and business process outsourcing. Kickstart Ventures, the investment arm of telecoms firm Globe Telecom, was tasked with managing the fund. Globe Telecom is a joint venture between Ayala and telecoms provider Singapore Telecommunications, and Kickstart currently has more than 20 companies in its portfolio.

Raystone Capital, the investment arm of China-based mobile games developer Raystone, closed its latest growth fund at RMB1bn ($148m). The fund will target China-based growth-stage companies working on AI technologies that could be used in sectors such as smart manufacturing and digital healthcare. State-backed venture capital fund National Venture Capital Fund for Emerging Industries is a limited partner in the entity, as are funds backed by the city of Shenzhen's municipal government, with the government-owned vehicles contributing 25% of the total. Shenzhen Longgang District Venture Capital Guiding Fund and Shenzhen government-backed fund-of-funds Kunpeng Fund also participated in the fundraise.

People


Sodhani


Brooks

Intel Capital, the corporate venturing subsidiary of Intel, experienced significant changes in terms of its talent pool. The changeover process from former head Arvind Sodhani to Wendell Brooks, led to the departure of a number of senior executives. In 2018, Intel Capital reinstated a carried interest compensation policy for employees and moved towards backing a smaller number of deals with larger amounts.

Intel Capital´s team has gone from about 115 employees in 2014 to about 68 in 2018, according to data uncovered by Global Corporate Venturing from Intel, LinkedIn and other public sources, although a number of Intel Capital people have rotated from and back to the parent company, such as Arturo Litvin, Curtis McKee, Eric King, Erica Wu, Greg Scott, Manish Tangri and Vijay Reddy. Last year, Intel Capital also laid off a quarter of its investment team, as the firm moved to a model where it makes a smaller number of larger deals more closely related to its parent company's core business.

One of the team members who left was Christine Herron, an early-stage investor who was also co-lead of Intel Capital's Diversity Initiative – formerly known as the Diversity Fund – a program that backs founders who are female or in underrepresented minority groups, as well as those who are lesbian, gay, bisexual or transgender, disabled or veterans. Herron now works as an advisor at Bullpen Capital.


Dang

Sanjit Singh Dang, investment director at Intel Capital since 2009, left to set up a corporate-focused venture capital service. Singh Dang co-founded U First Capital as chairman with partner Ekta Dang, who is CEO. It will assist corporations in accessing external innovation through tie-ups with entities such as startups and universities. Before joining Intel Capital, Singh Dang had worked as an engineer

SECTOR FOCUS

at the chipmaker for nine years.

Larry Cook, former finance director at Intel Capital, joined investment firm Omidyar Network as head of operations for its Financial Inclusion division. During his five-year stint at Intel Capital, Cook managed equity investments and M&A strategy across the firm's artificial intelligence, data centre and autonomous driving portfolios. Cook's deals included Intel Capital's investment in enterprise data software provider Cloudera. In previous roles at Intel, Cook was finance business manager for sales and marketing, working with accounts held by computing equipment producers Dell and HP. He was also a strategic financial analyst for Intel's Flash Memory group, having joined the company in 2006.

Hiren Majmudar, vice-president at Intel Capital joined its portfolio company SiFive, a fabless provider of customised semiconductors. SiFive, which hired Majmudar as a VP of business development, makes customised semiconductors based on Risc-V semiconductor intellectual property core. Majmudar was initially hired by Intel in 1993 in an engineering capacity before he was appointed in 2000 as a director of electronic design automation (EDA) support for five years and director of software development tools and technical marketing for a year. After a one-year spell at EDA software producer Magma Design Automation, Madmudar returned to Intel in 2008 as a director of IP engineering, focusing again on EDA.


Arora

Nikesh Arora, who left SoftBank where he spearheaded its corporate venturing strategy as company president and chief operating officer in 2016, became CEO and chairman of cybersecurity company Palo Alto Networks. Arora replaced long-time executive Mark McLaughlin, who will become vice chairman of Palo Alto Networks. Arora joined SoftBank in late 2014 from Google where he had served as chief business officer, and directed SoftBank to lean more towards larger investments, notably in his home country of India.


Chao

Tony Chao left his position as senior investment director and general manager at Applied Ventures, semiconductor maker Applied Materials' corporate venturing unit, to assume a new role at venture capital firm Tyche Partners. "After a decade in CVC and at Applied Ventures, I have accepted a partner position with Tyche Partners," Chao said. Chao had joined Applied Ventures in 2007 and had been senior investment director and general manager of Applied Ventures since 2015. Chao led the charge for Applied Ventures into Asia first by serving as an expatriate in Shanghai and then opening operations in Singapore and finally a Korea fund. Tyche Partners invests in disruptive technologies such as cloud and enterprise data storage, 3D printing, robotics, semiconductors and internet-of-things and wearable devices. Chao was succeeded by Rajesh Swaminathan, an investment director who has been at Applied Ventures since 2009.


Eggen

Patrick Eggen left Qualcomm's corporate venturing unit, Qualcomm Ventures, where he was managing director for North America, to launch a new venture capital fund. The fund, Counterpart Ventures, was co-founded by Eggen and Joe Saijo, who was formerly president and managing director of Recruit Strategic Partners (RSP), a corporate venturing subsidiary of human resources firm Recruit, with both taking partner positions. Counterpart will provide between $2m and $8m for companies and is stage-agnostic. It did not reveal the areas in which it plans to invest but the co-founders said the investments will have an "emphasis on speed, conviction and partnership".


Kirby


Ugras

Miles Kirby and George Ugras co-founded UK and US-based venture capital firm AV8 with a $180m fund committed by insurer Allianz. AV8 will mainly invest in seed and series A-stage deals in digital health, big data, artificial intelligence, machine learning, mobility and robotics, according to Angel.co. Prior to AV8, Ugras was head of IBM Ventures, the eponymous computing technology provider's corporate venturing arm. Ugras initiated his VC career investing in early-stage technology companies, first at Apax Partners as a principal then at Adams Capital Management as a partner. Kirby, on the other hand, had been a director at Oxford Capital's growth investments team before launching AV8. Prior to joining Oxford Capital, he had spearheaded US-based technology provider Qualcomm's European unit as a managing director from 2012 to 2015. During his time at Qualcomm, he devised an internal incubator which specialised in augmented reality, wireless charging and machine learning.

Abhishek Shukla joined enterprise technology producer Hewlett Packard Enterprise (HPE)'s corporate venturing vehicle, Pathfinder, as managing director of global venture capital investments. He replaced Ray Schuder. Shukla came from GE Ventures, the corporate venturing vehicle for US-headquartered power and industrial equipment maker General Electric, where he was managing director of software investments. GE Ventures had hired Shukla in 2016, initially as director of software investments, before being promoting him in February 2017. Shukla had previously spent two years as senior manager of corporate development and venture investments at Cisco, after nearly five years in a similar role at Hewlett-Packard spinoff Agilent Technologies.

Christoph Lymbersky, formerly a partner at Germany-based consulting firm M2P Consulting's venture capital arm, M2P Venture & Capital Partners, took a managing partner position at Global Ventures. Germany-based investment bank Global Ventures seeks to invest in developers artificial intelligence, financial services, internet-of-things and mobility technology, targeting early-stage companies ranging from seed to series B stage. M2P hired Lymbersky in October 2017 to head Venture & Capital Partners. He had previously been managing director of T-Venture, the corporate venturing subsidiary of telecoms firm Deutsche Telekom that has since evolved into Deutsche Telekom Capital Partners.

Itxaso del Palacio, formerly a partner at software provider Microsoft's corporate venture capital unit, M12, was appointed as an investment director at UK-based venture capital firm Notion Capital. Del Palacio joined M12, formerly known as

SECTOR FOCUS

Microsoft Ventures, in 2017, helping to launch its UK office in London and managing its business-to-business (B2B) technology deal flow in Europe. At M12, Del Palacio led financing rounds for, and held board positions at, background and credentials checking service OnFido, human resources software developer Beamery, language processing and translation software provider Unbabel and data anonymisation startup Hazy.

Gretchen Howard, a partner at Alphabet's growth equity arm CapitalG, left to join US-based online trading platform Robinhood. Howard ended a four-year spell at CapitalG to become a vice-president at Robinhood. She had helped source CapitalG's first investment in Robinhood, a $363m series D round that valued the company at $5bn. She was also involved in CapitalG's investments in fintech platform Credit Karma, ridesharing app Lyft, home rental marketplace Airbnb and food delivery service Gusto. Howard joined Google in 2006 as a manager director in sales and business operations and the co-site lead of Alphabet's internet subsidiary Google's San Francisco office.

David Schenkein, former chief executive of biopharmaceutical company Agios Pharmaceuticals, was hired by GV, a corporate venturing subsidiary of Alphabet, as a general partner. In the new role, Schenkein will co-lead GV's life sciences investment team, which also features fellow general partners Blake Byers and Krishna Yeshwant. Schenkein had joined Agios in 2009 and helped transform the company from a preclinical-stage startup to a business with two US-approved cancer drugs in the market. Prior to joining Agios, Schenkein was the senior vice-president of clinical haematology and oncology at pharmaceutical company Genentech, after five years at Millennium Pharmaceuticals where he oversaw the clinical development of Velcade, a cancer therapy aimed at treating non-Hodgkins lymphoma.


Whiteaker

Thomas Whiteaker left his managing partner position at venture capital firm Propel Venture Partners, to join IBM Ventures as partner. Whiteaker had spent three years at Propel, the VC firm formed in early 2016 to invest in financial technology developers on behalf of financial services firm BBVA. Whiteaker had previously been an executive director at BBVA's strategic investment vehicle, BBVA Ventures, which spun out into Propel Venture Partners when the latter was formed, since 2012. BBVA Ventures had hired Whiteaker following four years at Hartford Ventures, the corporate investment unit for US-based insurer Hartford Financial Services Group. He had previously led investments in e-commerce, security and authentication for Visa Ventures, the corporate VC arm of payment services firm Visa.


Levine

Scott Levine left his managing director position at WarnerMedia Investments, media group WarnerMedia's now-defunct corporate venturing unit, to join Samsung Catalyst Fund, which is owned by Samsung. WarnerMedia Investments, formerly known as Time Warner Investments, had hired Levine in 2011 and he was responsible for investments in digital media startups. WarnerMedia Investments' deals in which Levine participated included investments in video technology software providers You.i TV and Conviva, as well as virtual reality technology developers 8i and NextVR. Levine also oversaw funding for portfolio companies that were later acquired, such as data management developer Krux, which was bought by Salesforce for about $700m, and online video content producer Maker Studios, which was acquired for $500m by Walt Disney.


Robinson

Elliott Robinson left his partner position at software provider Microsoft's M12 Ventures, for venture capital firm Bessemer Venture Partners where he will be a growth equity investor. At Bessemer, Robinson will concentrate his efforts on growth investments and look to partner entrepreneurs building SaaS and cloud software companies. Robinson joined M12 in 2016, having come from Canada-based growth equity firm Georgian Partners where he was vice-president. During his time at M12, Robinson focused on early to growth-stage investments in AI, ML, cybersecurity, big data analytics, cloud infrastructure and enterprise software-as-a-service (SaaS) technology developers.

Robert Keith, principal at Salesforce's corporate venturing arm, Salesforce Ventures, was promoted to head of Australia. The move involved Keith relocating to the unit's Sydney office and it came as Salesforce Ventures launched its $50m Australia Trailblazer Fund, to invest in Australia-based startups that develop cloud-based enterprise software. Prior to joining the unit in 2014, Keith worked on the IPO for life sciences-focused CRM application provider Veeva, which represented one of Salesforce Ventures' first IPO exits, as an investment banking analyst at financial services firm Morgan Stanley.

Balaji Gopinath and Ron Yerkes left SAP.IO, Germany-based enterprise software provider SAP's corporate venturing fund, at the end of 2018 to launch a venture capital firm dubbed Twelve Venture Capital. Gopinath joined SAP.IO Fund as global vice-president following its formation in 2017 and Yerkes was hired as a director later. Yerkes was involved in startup engagement for the unit, while Gopinath conducted seed and series A deals in the AI, blockchain, big data, industrial IoT and business-to-business (B2B) sectors. Gopinath also helped set up SAP.IO Foundries, an accelerator that works with more than 50 B2B-oriented startups per year across the cities of Paris, Berlin, Munich, Tel Aviv, Tokyo, Singapore, New York and San Francisco.

China-based facial and image recognition software provider SenseTime hired Jennifer Xuan Li from Baidu as an investment director. Li had been a strategic investment director at Baidu's artificial intelligence group since late 2015, before leaving to take the SenseTime role. Prior to her stint at Baidu, Li had spent a little over a year as an investment banking analyst at financial services firm Deutsche Bank's mergers and acquisitions team, having previously worked in analyst roles for UBS and Canaccord Genuity.

LG Technology Ventures, the recently launched strategic investment arm of South Korea-based electronics producer LG,

SECTOR FOCUS

hired Taejoon Park from fellow corporate venturing unit Applied Ventures as an investment director. Park had assumed several roles at Applied Ventures, semiconductor technology producer Applied Materials' corporate venturing unit, after joining in 2012, most recently being promoted from senior investment associate to investment principal in early 2016. ELG Technology Ventures is equipped with $400m from LG and subsidiaries LG Chem, LG Display and mobile carrier LG Uplus, and will invest in developers of technologies such as artificial intelligence, robotics and auto components.


Subramanian

Karthik Subramanian, formerly head of cybersecurity investments and acquisitions at Cisco Investments, Cisco Systems' corporate venturing unit, accepted a partner position at growth equity firm Evolution Equity Partners. Subramanian will also be responsible for leading investments in the cybersecurity, enterprise software, IoT, cloud and analytics sectors. Subramanian had been involved in several endeavours during his nearly five-year stint at Cisco Investments. He led investments in 11 cybersecurity companies including cybersecurity software developer Verodin and acquired assets with a cumulative deal value of over $3.7bn.

Jim Brisimitzis left Microsoft, where he headed its Microsoft for Startups initiative, to take a managing partner role at venture capital and accelerator group Quake Capital. Brisimitzis is now based at Quake's Seattle office, helping the firm in its fundraising and expansion plans and taking charge of corporate development and outreach. Microsoft has put $500m of funding behind Microsoft for Startups, which offers early-stage cloud software developers the opportunity to distribute products to its existing customer base in addition to providing more conventional accelerator resources such as expertise and technology. The unit had been headed by Brisimitzis as general manager of cloud development relations since it was established in 2015. He had previously spent almost 18 months as head of operations and growth programs for M12. Microsoft had hired Brisimitzis in 2005 and he had worked with original equipment manufacturer server product, channel management and product marketing before joining Microsoft Ventures.

Di-Ann Eisnor, a director at internet technology provider Google's Area 120 incubator, joined US-based venture capital firm Obvious Ventures as a venture partner. Eisnor took a position at Area 120, which enables teams from within Google to pitch ideas and, if accepted, develop them full-time. As a venture partner at Obvious Ventures, Eisnor will be responsible for adding startups to the firm's urban infrastructure portfolio, which includes electric vehicle charging service Amply, distributed energy platform Enbala and construction materials supplier Plant Prefab. Eisnor worked for Google since 2013 when it acquired Waze, the traffic navigation platform developer where she had been director of growth since 2009, a position she retained post-acquisition. Prior to joining Waze, Eisnor was co-founder and CEO of collaborative mapping website Platial and co-founded entrepeneurship micro fund Neighborhood Start Fund.

Vinícius Scaramel, formerly an innovation area manager at construction materials producer InterCement, joined Brazil-based business management software provider Grupo Benner in September. Scaramel took an innovation and products manager role at Grupo Benner and is responsible for implementing innovation processes, promoting intrapreneurial culture, and accelerating and leading innovation projects to maximise Benner's results. In his two-year role at InterCement, Scaramel coordinated and managed its open innovation schemes in Brazil, Argentina, Cape Verde, Egypt, Mozambique, Paraguay, Portugal and South Africa. Prior to his involvement in the innovation ecosystem, Scaramel had been an entrepreneur himself, founding waste management consulting firm Bakuara in 2008 and co-founding construction waste management system provider ConstruSave in 2015.

Kaushik Anand, head of India for Alphabet's CapitalG, left to join A91 Partners, a mid-stage fund recently launched by former senior executives at venture capital firm Sequoia Capital. CapitalG had hired Anand in 2015, and he has led investments in automotive e-commerce platform CarDekho, maths tutoring services Cuemath, online lending platform Aye Finance and sales software provider Freshworks. Anand will explore investments in the consumer, pharmaceutical, healthcare, financial services and technology sectors. Prior to joining CapitalG, Anand was an early-stage investor at Sequoia Capital. He had previously worked as a business analyst at management consultancy McKinsey and Company and founded four companies in US and India, including Kreyada and Clever Layout.

Marcos Almeida left Brazil-based IT services firm Stefanini after more than three years leading its corporate development and venture investments. Almeida said his role covered Stefanini's subsidiaries and affiliates, mergers and acquisitions, startups and investor relations activities, telling Global Corporate Venturing by email: "I am leaving the company to pursue a new career opportunity." Since 2009, Stefanini had acquired stakes in about 17 companies with an eye on startups feeding into dealflow for later-stage acquisitions. Most of those deals involved the company taking controlling positions, but Stefanini also bought minority stakes and created startups.


Finn

Meredith Finn, senior director at Salesforce Ventures, who had helped launch its $50m Impact Fund, left to do "great work" for herself. Claudine Emeott, a director of Salesforce Impact Fund, now oversees the Impact Fund, having joined the unit in 2017 after a five-year stint at non-profit organisation Kiva Microfunds, which loans its $150m annual fund to low-income entrepreneurs. Finn said the fund's launch was one of her biggest achievements.

Houman Haghighi, formerly head of business development at Qualcomm Ventures, joined venture capital firm Menlo Ventures as a business development partner. Haghighi joined Qualcomm Ventures in 2011 and was charge of investments in robotic gaming platform Reach Robotics, robotic arm developer Carbon Robotics, deep learning technology producer Clarifai and cybersecurity technology producer AttackIQ. During his time at the unit, Haghighi also founded and headed Qualcomm Robotics Accelerator, a joint effort with accelerator TechStars. His relationship with Qualcomm dates to 2003 and he held positions in engineering, project management and product

SECTOR FOCUS

development before transitioning into corporate venture capital.

Priya Saiprasad left her position as principal at M12 for a venture investor role at venture capital firm Mayfield Fund. Saiprasad was a founding member of M12 from 2016 and oversaw investments in business-to-business software providers. She was involved in funding rounds for Workboard, Go1 and Skedulo most recently. Her departure follows that of Elliott Robinson, a former partner at M12. Mayfield Fund focuses on early and growth-stage developers of consumer and enterprise technologies. It co-invested with M12 in customer engagement software developer Outreach's series C, D and E rounds. Her role at Mayfield will involve Saiprasad concentrating on investments in AI and analytics-focused enterprise technology providers.

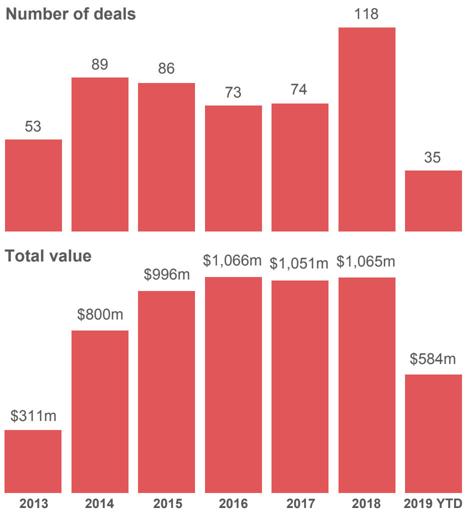
University backing for IT companies

By the end of 2018, there were 118 rounds raised by university spinouts, up 59% from the 74 registered in the previous year. The level of estimated total capital deployed in 2018 stood at $1.07bn, around the same level as in previous years.

SambaNova Systems, a US-based AI application technology spinout of Stanford University, raised $150m in a series B round led by Intel Capital. GV also participated in the round, as did VC firms Walden International and Redline Capital and growth equity firm Atlantic Bridge Ventures. Founded in late 2017, SambaNova is working on a software platform capable of running cutting-edge AI technology sourced from advanced research being conducted across the world. One of SambaNova's co-founders, Kunle Olukotun, is a cadence design professor of electrical engineering and computer science at Stanford University while another, Christopher Ré, is an associate professor in Stanford's department of computer science.

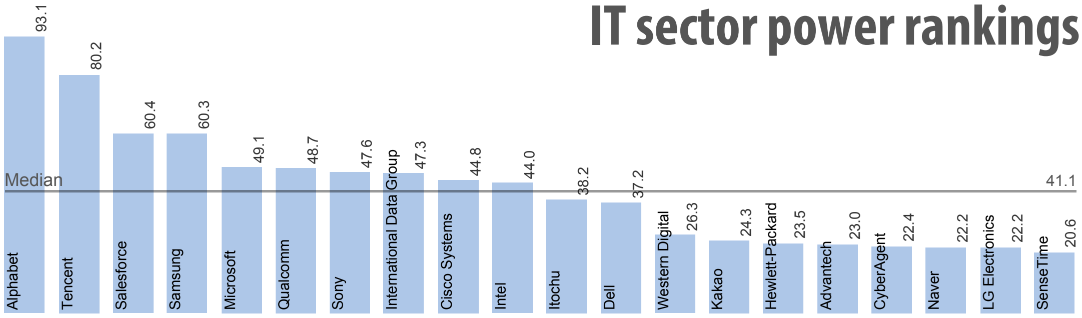
Spin Memory, a US-based random access memory (Ram) technology developer spun out from New York University, raised a $52m series B round, featuring semiconductor equipment producers Arm and Applied Materials that co-led the round, supplying $29m of equity funding alongside undisclosed new and existing investors. Applied Materials invested through its subsidiary Applied Ventures. Originally incorporated as Spin Transfer Technologies, Spin Memory is working on designs for magnetoresistive random access memory (MRam) that will be able to supplant existing Ram technologies. As computers typically use Ram to hold data and machine code as it is actively processed, deep tech applications such as AI and big data are likely to require it in abundance. Spin Memory's MRam range will initially offer comparable speed and endurance to static Ram chips, which often handle video processing and processed cache memory in computer systems.

Deals in university spinouts in IT 2013-19



Cogito, a US-based voice analytics technology spinout from Massachusetts Institute of Technology (MIT), received $37m in series C funding from investors led by Goldman Sachs. Salesforce Ventures and venture capital firm OpenView Venture Partners participated in the round. Goldman Sachs provided the cash through its Growth Equity Fund. Cogito has developed a software platform for sales professionals that uses artificial intelligence and behavioural analytics to interpret involuntary cues in a customer's speech pattern to detect frustration or calculate the likelihood that a sale will close. The software provides real-time feedback to call centre staff on how to adapt their approach and alerts supervisors to poor customer experience, giving them the chance to jump in on a call. ◆

IT sector power rankings



Interview: Wendy Lung, IBM Ventures

Lung, managing director of IBM Ventures, spoke to Robin Brinkworth about being an IBM lifer, how IBM Ventures' flexibility delivers value for IBM, and the broader corporate venturing ecosystem

IBM Ventures was set up in 2001, making it one of the elder statesmen of the corporate venturing world. Its function is strategic, or as Wendy Lung puts it, "our mission is to provide 'headlights' for IBM's business units by understanding various disruptions in the market – from there we engage with the best startups to help solve the business problems of both IBM and our enterprise customers".

Lung is the managing director of the unit, and has been since 2008, and she said the unit tries to orient its "approach with startups from the beginning. From there we can determine the best path forward. Whether that is through a partnership, direct investment, acquisition or something else."

IBM Ventures' interactions with IBM's other business units is characterised by depth. When trying to understand a business unit's current needs and future wants, Lung said IBM Ventures essentially becomes "a member of the business unit teams".

"Technology and market demands regularly shift, so our focus continually adapts over time in favour of the highest growth areas of opportunities for IBM. We get intimately involved with the business units to fill gaps in the portfolio or roadmap, and help build an ecosystem around our platforms to keep them abreast of the newest disruptions."

Corporate venturing occasionally appears to have two binary visions: strategic units versus financial units. What is refreshing about Lung's approach is that although she identifies IBM as strategic, she pointed out that "we begin with the strategic fit and then create the model – not the other way around. The model can be determined in tandem with our business units after the strategic fit has been established."

Driving growth is not dictated by a singular venture capital model. As Lung said: "This might take different forms, like establishing a partnership with a startup to attack a new market, leading a subsequent direct investment or identifying a potential acquisition to support a strategic initiative."

IBM Ventures' flexibility extends to the stages it invests at as well, with Lung saying that the unit is happy to go early or late, depending on the opportunity.

"We invest in companies based on the maturity of the market opportunity and the business synergy. For example, we invested in Digital Asset Holdings early to jointly develop distributed ledger technologies to help our clients transform their business with blockchain.

"Examples of later stage investments include Apptus, Lightbend and IFTTT. The investment in Apptus extended an existing partnership to deliver AI [artificial intelligence] solutions to enterprises for revenue generation and management of commercial relationships. The investment in Lightbend was built upon the long history of IBM supporting the millions of developers in the Java and Scala communities and the strategic collaboration to create new code, tools and documentation to help those developers build applications on the Lightbend platform. The IFTT investment leveraged AI and together provided IoT [internet of things] end users with more unique and personalises experiences."

Such a tailored approach also offers a firewall against competition. Lung said competition was "fiercer than ever before" but the fundamentals of IBM's business ensured IBM Ventures keeps its competitive edge.

"For us, it goes back to the fact that IBM's strategy is wholly focused on the needs of our enterprise clients. These are leaders in their industries – and 95% of Fortune 500 companies – rely on us to handle their data. We are uniquely suited to help enterprise startup thanks to our relationships with the largest enterprises in the world, in-depth knowledge of industries and processes and the trust of these client as they go through digital reinvention.

"It is not just about access, but also about genuinely helping startups. We help fine-tune their solution, attract early enterprise clients or become part of a platform or solution that will provide greater reach than they could by themselves."

Lung added: "IBM is a technology company, but it is first and foremost an enterprise company."

IBM is associated with IT, and this interview appears in the IT sector report of GCV's magazine, but IBM Ventures' portfolio goes beyond traditional IT. Is this because IT has become a horizontal, rather than a vertical? Where does IBM Ventures go next?

"Ultimately, it comes down to solving enterprise business problems. This is the reason why we are very focused on the challenges of digital re-invention that every enterprise is going through right now.

"There is definitely a broad strategy that involves a deep understanding of new technologies and how they will shape the enterprise. These include categories like artificial intelligence, hybrid cloud, blockchain, cybersecurity and others.

"Cloud, for example, is ubiquitous, but in reality, only 20% of enterprise workloads today have moved to the cloud at this time. We believe that the remaining 80% is what will provide real value opportunity for businesses as they transform mission-critical workloads and applications for cloud usage. But the other key reality is that most enterprises today have unique regulatory or data requirements, and anywhere from five to 15 clouds across multiple providers.

"We call this 'Chapter 2' and it will require a new, hybrid cloud approach. Companies will need to have the freedom and flexibility to move their data easily, while implementing and scaling AI and other applications. This requires deep knowledge of on-premises IT in tandem with private or multiple public clouds. They will need consistent management and security and leverage open source technology to avoid vendor lock in."

Turning to other technologies, when asked about what excites her most technologically, Lung is clear: "Quantum computing. Quantum will add new computational power to solve some of today's most unsolvable problems that are the result of computational capacity. That is exciting!

"Commercialisation may be a way out, but we are working with dozens of other corporations, academic institutions and national research labs in the IBM Q Network to pursue practical quantum applications. Early examples include chemistry, optimisation and machine learning. The limitless possibilities are mind-blowing as we see in our early partners like Zapata Computing and others.

"That said, the broader tech industry must avoid the 'grow at all costs' model. This has worked well for many, but it is concerning and unclear where it all ends up. As an example, fintech has come on strong in the past seven years and experienced some decent early returns. Today, with the exception of blockchain and various AI initiatives, the current environment feels somewhat overhyped with an abundance of consumer-focused solutions that feel more incremental than transformative."

Exciting technology is one thing, but excitement is not equal across technology sectors. Which areas does Lung think are underserved by current CVC investment? Lung's answer is revealing, as she points, not to technology, but rather to purpose.

"There is a renewed interest and focus on impact investment. There is tremendous opportunity for companies who already heavily invest in corporate citizenship and responsibility to create a tighter relationship with their venture arms.

> "There is a renewed interest and focus on impact investment"

"One of our key initiatives right now is Call for Code, which aims to engage developers to create solutions that significantly improves preparedness for natural disasters and accelerate relief when they hit. We are currently building a networks of seed stage, impact investors to join us in supporting this effort.

"The ultimate success is to create both financial and social value. I am hopeful that the next wave of corporate venturing will increasingly centre around social impact – the premise that social good and financial return do not need to be exclusive of each other. I am inspired by the work that GCV is doing in launching Global Impact Venturing to further develop this community."

IBM is active in 175 countries, meaning that IBM Ventures has to offer real breadth to its parent. Lung's team get involved in an array of different ways: "We are fortunate to be able to discover great startups in virtually every country. These involve collaboration with our local teams, global networks of investors and countless partners across local innovation ecosystems. In many countries, we extend our reach, particularly in growth markets, via local incubation and accelerator investments. We also leverage our program called Startup with IBM, in which we offer free technology and resources to startups that are developing product, in many cases pre-revenue".

Lung is in a remarkable position, having been at IBM for her entire professional career. She speaks of working with IBM's business units, the same business units in which she used to work. She is, in many ways, her own competitive advantage, given IBM Ventures' strategic ambitions.

"Having had executive roles across various business units in IBM over that time, I have a deep understanding of the priorities of the business units and can position the value of corporate venture and open innovation based on those needs. A robust internal network is a critical success factor.

"But the real strength is in the team as whole and the different strengths that each member brings. Our team consists of partners who have decades of experience in corporate venture, entrepreneurship and expertise across various industries and geographies.

"Stanford's study by Ilya Strebulaev concluded that the best corporate venture teams are made up of both internal and external skills. The premise has proven well for our team and I look forward to further adding diverse people and skills to the team."

Lung knows her team at IBM well, but she also speaks reflectively about the broader corporate venturing ecosystem.

"It has been absolutely fascinating to watch this industry change in the 10 years that I have been involved. There is no specific curriculum or set of skills that can be taught in a classroom for this job. Most of us have and will continue to learn as we go. One of the best things about the CVC community is that we genuinely learn from each other. I have experienced nothing but openness and honesty in sharing best practices and not-so best practices with others so we can help each other succeed in an often times challenging role. Exciting times ahead and I hope IBM Ventures can continue to play a role in the evolution of this industry." ◆

COMMENT

Facebook coin brings crypto adoption closer

Jalak Jobanputra, founder, Future Perfect Ventures

The big news heading out of last month and into the upcoming year is Facebook's long-awaited GlobalCoin (or Libra Coin), likely to be a stablecoin pegged to a basket of global currencies. Details of its initial consortium leaked late last month.

The Block broke the news of members who are contributing $10m each – these include Visa, Mastercard, Coinbase, Spotify, Women's World Banking, Paypal, eBay, Farfetch, Mercado Libre, PayU, Stripe, Lyft and Uber. While more details were revealed on June 18, the listed members are expected to be operating nodes on the network and will earn fees in return for validating transactions. A Facebook subsidiary called Calibra is also expected to run one of the nodes. Given recent regulatory scrutiny, it's not a surprise that Facebook is building out a consortium to appear as decentralised as possible.

A big question yet to be answered is who in the network will see what data, and how that data will ultimately be used. While most of Facebook's blockchain team members are based in the Bay Area, Facebook incorporated a limited liability company several months ago in Switzerland to focus on "payments and blockchain". Switzerland is the original home for Ethereum and has promoted crypto-friendly regulatory frameworks.

> Facebook may be able to reach scale in payments and create new revenue streams

As a stablecoin, the coin would be used as a payments rail for its users to transact with each other, and the coin would be convertible via exchange partners (such as Coinbase) to fiat or other cryptocurrencies. Facebook has for many years attempted to enter the payments space. By corralling its current properties including WhatsApp and Instagram, as well as its announced consortium partners, across billions of global users, Facebook may be able to reach scale in payments and create new revenue streams without officially becoming a bank.

Facebook could also incentivise users (whether ad partners or consumers) to use its coin via discounts on services, creating more demand for the coin and more revenue for the node operators. While Facebook growth has slowed in the US and Europe, the US still represents its highest revenue per user (ARPU), almost all of it from advertising. 70% of Q1 2019 daily active users came from emerging markets - if Facebook is able to leverage its coin to increase ARPU amongst those users, it can gradually decrease its reliance on its current advertising model.

There are a lot of ifs here – but ironically (and to the chagrin of many crypto purists) the Facebook coin could be the catalyst for global crypto adoption... ◆

This is an edited version of Jobanputra's weekly blog

COMMENT

Venture capital desperately needs more governance

Scott Lenet, president, Touchdown Ventures

In any industry where individuals serve as professional fiduciaries, there are typically degree programs, mandated training, certification, continuing education, and oversight. But not so in venture capital and private equity, which remain a Wild West where rule-breaking is a foundational principle. This philosophy can have enormous psychological benefits to entrepreneurs, who are often trying to accomplish what can seem impossible. By liberating themselves from the idea that things must remain the way they have always been, entrepreneurs take risks, challenge the status quo, and can even change the world.

I remember seeing a prominent venture capitalist interview a prospective hire by playing sports together. At a volleyball game, the experienced VC established the rule that there were no rules. His goal was to see whether the candidate could adapt to an environment that challenged expectations and norms. This mentality permeates Silicon Valley and is a source of pride for venture capitalists.

A potential negative consequence to this culture is the notion that rules simply don't apply in our industry. And because there is little to no oversight or regulation in venture capital, it is easy for a healthy approach to challenging business assumptions to follow a slippery slope into potential fraud, sexual harassment or other illegal behaviours.

An important way to apply checks and balances to this dangerous mentality is the institutionalisation of rules, norms, and industry-specific best practices. Our industry needs more qualified professionals to teach this material. For this reason, I have been trying to contribute to the professionalisation of our field by teaching venture capital at the graduate level for several decades.

> I can imagine that a call for more governance could be especially unpopular in our business

In institutional venture capital, the National Venture Capital Association is the best known organisation to offer professional training, and in corporate venture capital, Global Corporate Venturing is the leading industry association. Neither of these excellent organisations are mandated by any governing body like the Securities and Exchange Commission, so participation is optional.

One of the most important ways to institute more governance includes helping to train investment professionals to serve as board directors. Directors typically have real authority and influence, and they represent shareholders who have no voice on the board – it is a true fiduciary responsibility.

Board service is yet another arena where there is no formal training, and novices can be thrown onto their first boards with no experience of any kind. The best training available might be to shadow more experienced investors as observers during board meetings. The quality of this training is uneven, varying with the commitment, mentoring tendencies, and experience of the senior investment professional.

In my experience as a director, I have seen a wide range of preparation to serve in this type of role and witnessed many misconceptions about the nature of the responsibility. For example, many venture capitalists believe that in their capacity as a director, they represent the class of stock that enabled their participation on the board. In other words, a series A investor would represent all series A shareholders, while the CEO would represent common shareholders, and so on. In fact, directors serve all shareholders equally, regardless of class of stock. It is actually illegal for directors to privilege one group of shareholders over another, yet this happens frequently in the board room.

For reasons like this, the National Association of Corporate Directors (NACD), a group for which I am a guest faculty member, has announced it is starting a certification program to test the competence of individuals to serve as directors. In my opinion, it is time to institute these kinds of practices for directorships, and the leadership taken by the NACD in launching a board director certification program is something that the private and public investing community should wholeheartedly support.

We need to do this despite the fact that governance is a dirty word in an industry that worships rule-breakers. It is the least sexy part of the job. New technologies, ambitious entrepreneurs, and groundbreaking business models are what inspire venture capitalists. Even financial statement analysis and legal agreements are more captivating than governance. Yet governance matters.

I can imagine that a call for more governance could be especially unpopular in our business, but I believe it is what is best for the entire ecosystem. Sometimes, following the rules can be a good idea. Let us encourage breaking the rules when it comes to challenging preconceptions about what is possible in business. Let us follow the rules when it comes to protecting the public, ensuring fairness, and training the next generation of venture capitalists to be competent. ◆

This is an edited version of an article first published in Forbes

COMMENT

Multinational corporates storm the Israeli market

Eze Vidra, managing partner, Remagine Ventures

In Israel, one of the most active venture capital markets outside of Silicon Valley, 2018 was a banner year with $7.5bn of venture capital invested. 43% of the total volume of deals ($3.26bn) involved a CVC. According to IVC, the level of activity of CVC funds in Israel in the past few years has massively increased. From 773 deals involving CVCs in 2012 to 949 in 2018. On average, the rounds involving CVCs are larger, a function of the stage that CVCs get involved in. Anecdotally, I've seen CVCs invited to deals from series B onwards, when the startup board is focused on strategic value and international expansion.

According to a recent report by PWC and Startup Nation Central, there are 536 multinational corporates innovating in Israel, out of which 16% (85) are investment led.

Taking money from corporates is not a trivial decision for a startup, especially at the early stage. Also, not all CVCs are equal. Some invest for financial returns, others for strategic value, which might create misaligned incentives. There is also the speed of decision-making (depending on the CVC fund's structure and investment committee). It is also hard for the startup to assess the signalling risk (taking money from Coca Cola can often mean that their competitors might be turned off from working with the company) or the exit blocking risk in case of strategic investments.

On the flip side, corporates can truly be strategic partners for startups if leveraged the right way. CVCs can sometime open doors to commercial agreements, bring with them brand association and can become great design partners or reference customers, helping the startup cross the chasm and unlock capabilities. More often than not, this happens post series A.

Corporates with legacy businesses are facing disruption from both large tech and startups across industries

Drivers for the rise of CVC activity

From the corporate perspective, it's a natural evolution. Corporates with legacy businesses are facing unprecedented disruption from both large tech and startups across industries ("software is eating the world" after all). The CEOs and boards face a few options:

- Try to innovate internally (R&D) – tends to be expensive and depends on their talent
- External growth through M&A – often fails to deliver the synergies and requires deep pockets
- Invest direct into companies – there are various models of doing this. Independent investing arms vs. in-house, financial returns vs. strategic value, standalone fund vs. cap table
- Invest into VC funds – as LPs, for financial return, dealflow and strategic value
- Other means of driving innovation through accelerators, incubators, scouting, etc.

The recent PitchBook analyst note, "The golden mean of corporate venture capital" breaks down additional forces:

- Strategic drivers – "In addition to CVC units, corporations are also forming startup incubators and accelerators to benefit from startup innovation. Because of this trend, we believe CVC has become a core part of corporate innovation as a means of giving companies access to emerging technologies including artificial intelligence (AI), financial technology and biotechnology". AI is a huge driver of this category: "nine out of 10 companies reported AI investments in a recent BCG survey.
- Financial drivers – "they also found no relationship between cash balances and CVC activity".
- R&D and capital expenditure spending – "Both R&D and capex spending had a positive relationship with CVC activity in 2018".
- Cash balances – "The study found no correlation between cash balances and the presence of a CVC program, but our data shows that average cash balances for 27 CVC parents increased by a record amount in 2018, suggesting that cash balances can fuel CVC activity".
- M&A spending – "Among CVC parents, M&A outflows sharply decreased in 2018".
- Market value (aka stock price).

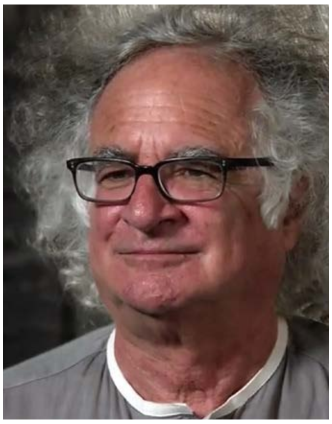
"Companies that are perceived as more innovative as measured by R&D spending can outperform their less innovative peers, meaning that forming a CVC unit can be a part of a broader strategy to recategorise a company as an innovator and boost market valuations."

So, is the sentiment towards CVC investors changing too? As an example, in 2013 Fred Wilson vowed to never have a corporate investor in the syndicate (he later apologised). USV has since co-invested with GV, Capital G, Samsung Next, BDMI, Hearst Ventures, Qualcomm Ventures and others in more than one deal each, so the jury is still out.

In the words of James Mawson, CEO of Global Corporate Venturing: "As with any potential investors, entrepreneurs need to make sure they ask corporate venturers the tough questions for how they can help them in their five primary needs of capital, customers, product development, hiring and, eventually, an exit. The best investors will have the track record and clear path to success for their portfolio companies. Together, they and the entrepreneurs can make the world a better place but only if both sides have their eyes wide open.” ◆

This is an edited version of an article first published on VC Cafe

Reflections from an ex-CVC in Israel



Avram Miller, co-founder, Intel Capital

Several months ago, I was contacted by a contributor to Forbes, com, Gil Press. He was going to spend some time in Israel, where I live (mostly) and wanted to interview me about corporate venture capital. Frankly, I was surprised that at this point in my life, anyone was interested in interviewing me about anything, so I agreed. Also, I am writing a book about my time in technology, so I thought it might be helpful in clarifying some of my own thinking. We spoke for about 90 minutes. I found it enjoyable and indeed, useful.

I think his article was pretty well written and researched. However, it wandered away from the topic a bit. It turned out to be more about me than about corporate venture capital. I have mixed feelings about that. On one hand, I am happy that our discussions took Gil there because it makes me feel that people may be interested in my book. But I am uncomfortable when so much of the accomplishments of Intel Capital in the early years focus on me personally. It was a team effort. While I played a significant role, we certainly could not have achieved such success if it was not for Les Vadasz, who was my boss and partner, as well as so many others that played significant roles. All that will be clarified in my book, I hope.

Investing in early-stage companies and even interacting with venture capitalist provides a window into future markets and technologies

The dangers of having a personality

I recall when in 1996 USA Today published a profile on me with the heading: “For Intel, he is a one man think tank.” There was a lot of anger amongst the management of Intel about that, and I could appreciate that. I often joke that I was one of the few Intel executives with a “personality.” What I meant was that I was one of the few that was an extrovert, comfortable with public speaking and interacting with the press.

Fred Wilson is quoted in the article as thinking that “corporate venture capital is dumb.” He believes corporations do not benefit from being minority investors. He says that if you want an asset, “just buy it.” Fred has been a VC most if not all of his professional life. I am not sure he understands how large corperations actually work. In any case, I disagree with him.

There are two primary reasons for a corporation to have an early-stage investment group. The first and what I believe the most critical reason is strategic. Investing in early-stage companies and even interacting with venture capitalist provides a window into future markets and technologies. The second is financial. Corporations have certain advantages that venture capital funds do not have. I believe done right, the early-stage investing can not only pay for itself but also subsidise other activities that focus on the future, such as an advanced development group which I also believe is needed by corporations. Investing in early-stage companies by a corporation can give them a window on acquisitions.

Intel’s objectives in venture

At Intel we had established three objectives for our early stage investing; 1) grow the current Intel business 2) provide strategic insight that would positively influence the development of Intel’s strategy and 3) get a significant return on our investments. We succeeded in the first and last objectives and failed on the 2nd, which, sadly, was the most important, in my opinion. The financial returns were critical because it meant that we did not compete with other intel organisations for funds. We generated our own investment capital very early in the development of Intel Capital. The financial returns were also an indication that the business we invested into were successful, which was an indicator of their contribution to our first objective of growing the existing market. Unfortunately, we had no impact on the long-term strategy of Intel. I still feel bad about this and often think what I could have done differently.

Intel capital was well integrated into Intel as a whole. The senior people like Les Vadasz and I were compensated primarily on the success of Intel as a whole and not on the performance of Intel Capital. I am aware that many corporations set up their venture groups like a captive venture fund. I think this is a mistake because it separates the members of the venture group from the corporation they serve. Such groups will become primarily financially focused. In this case, I would agree with Fred Wilson. One problem that comes from not running the corporate venture group like a normal VC is compensation. The people in the organisation can make far more money assuming they are talented if they leave and join a VC firm. This created a certain amount of undesirable turnover. But, fortunately, we had no problems recruiting people to join Intel Capital.

I can’t really comment on the existing corporate venture groups including Intel. I just don’t have enough information. ◆

Global Corporate Venturing
Leadership Society

GCV Leadership Society mission:

The GCV Leadership Society is for corporate venturing leaders and aims to be the pre-eminent provider of data, information, events and other services for the global corporate venturing community. The Society helps develop the corporate venturing leaders of the future.

	Premium* (Company) $13,000 per year	Luminary (Company) $50,000 for 2 years
Executive Advisory Role - act as GCV Leadership Society Ambassador for a two-year period	–	✓
Branding on Leadership Society materials as Luminary members	–	✓
Invitations to exclusive leadership society networking events worldwide	✓	✓
Showcase portfolio companies during GCV events	–	✓
Right to join and use the *'GCV Leadership Society'* Name	✓	✓
Get the Weekly Community Newsletter	✓	✓
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Why Join?

- Support your industry
- Help shape thought-leadership and best practice to increase success
- Network with the most influential corporate venturers in the world – these could be your co-investors or partners
- Raise your company's profile to increase co-investment and deal-flow opportunities
- Increase your personal profile for your next career move
- Join sub-committees to move the industry forward in areas such as deal flow, investment models, partnership approaches, innovation excellence and intellectual property

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(Firm or other industry professional (e.g. Academic, Government)
$10,000 per year*

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For more information or to apply today contact Janice Mawson:
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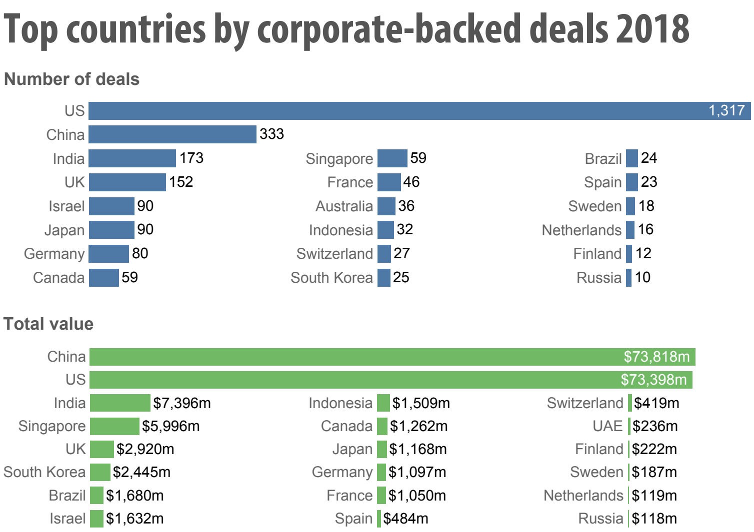
INNOVATIVE REGION

Switzerland's land of opportunity

Robin Brinkworth, reporter

Switzerland is associated with banks, mountains, and watches. Corporate venture capital is rather more recent. That being said, Switzerland is slowly emerging as a homegrown corporate venture capital centre, pushing ahead of South Korea, Brazil, and Spain with 27 deals in 2018.

Switzerland still lags behind the traditional innovation hotbeds, and by deal value it also drops beneath the aforementioned countries too. South Korea had an estimated $2,445m of corporate-backed venture deals last year, Brazil had $1,680m, and Spain had $484m. Switzerland had $419m by comparison.



INNOVATIVE REGION

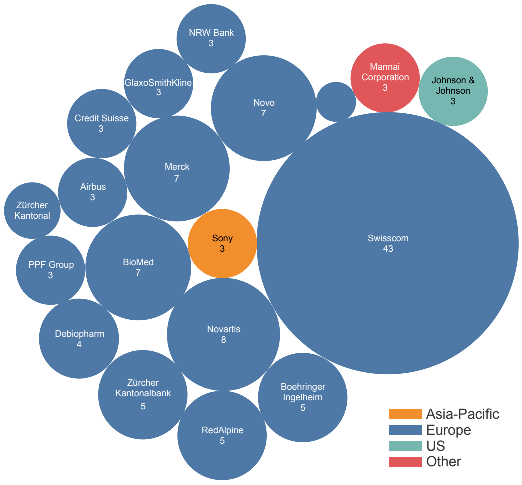
Swiss corporate venture capital is unusually domestic. By far the most dominant corporate investor since 2011 is Swisscom, with 43 deals. Novartis is the nearest domestic competitor, with just eight, and there are only three non-European corporates with multiple deals: Sony, Mannai, and Johnson & Johnson.

The Swiss innovation system's success stories are dominated by health startups, like Prexton Therapeutics, not surprising given the wealth of healthcare expertise centred in Switzerland in companies like Novartis.

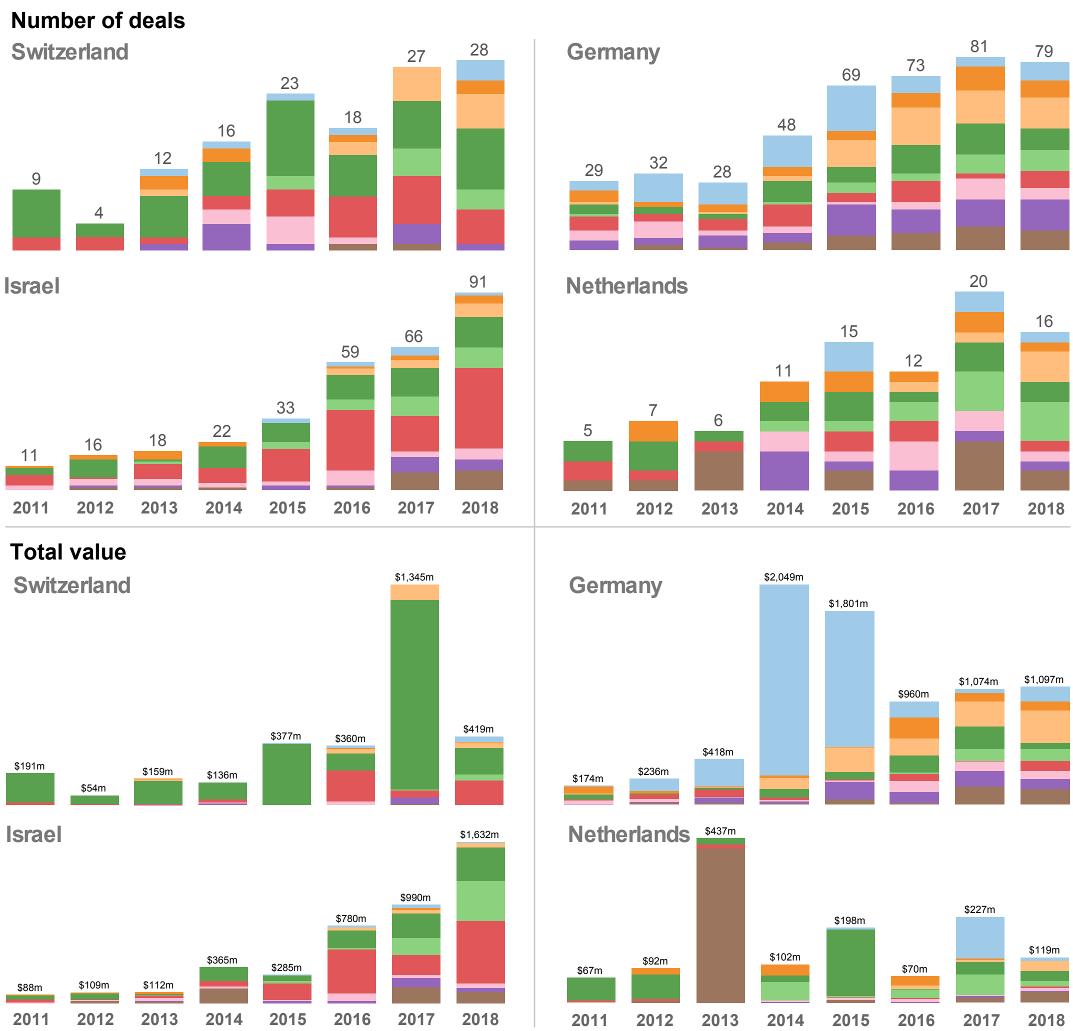
2017 saw $1,345m of corporate-backed venture deals, those numbers significantly inflated by $1,156m of healthcare deals signed, almost all of which was Roivant Sciences' mammoth Series A round of $1.1bn. 2015 did not see a non-healthcare deal signed. Other countries are reliant on some sectors, but none have the monoculture of Switzerland, where almost all of the corporate venture capital money spent there is going on health startups.

It is not just deals either, but exits too. Exits are thin on the ground, at barely more than one a year, and they are

Top corporate investors in Switzerland by number of deals 2011-18



Regional comparison of deal activity 2011-18



Global Corporate Venturing

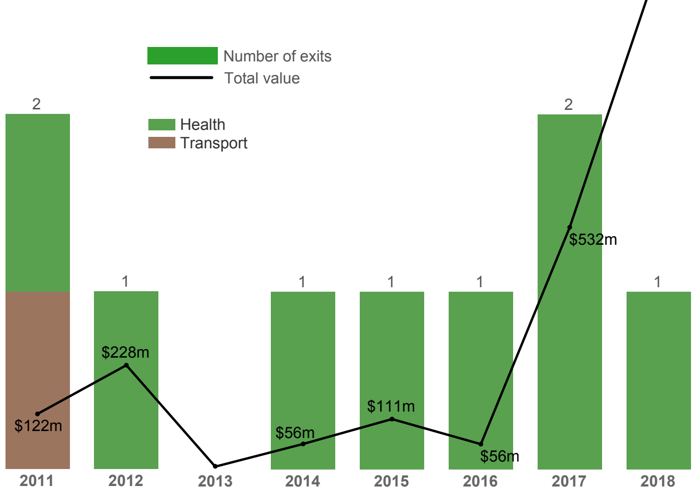
INNOVATIVE REGION

almost always within the healthcare sector.

That being said, the deal count shows that Switzerland is diversifying, even if deal values suggest that is not the case. Of 2018's 27 deals, only nine were in healthcare, with both IT and financial services beginning to contribute, with a combined 30 deals over the last three years.

Universities are increasingly productive, with Switzerland' excellent higher education system proving its worth. Seven deals were signed last year from university spinouts, worth $108m. That said, the number of successful spinouts have fluctuated up and down over the last few years, with 2016 seeing a low of just three deals signed, albeit at an increased value of $151m.

Exits in Switzerland 2011-18

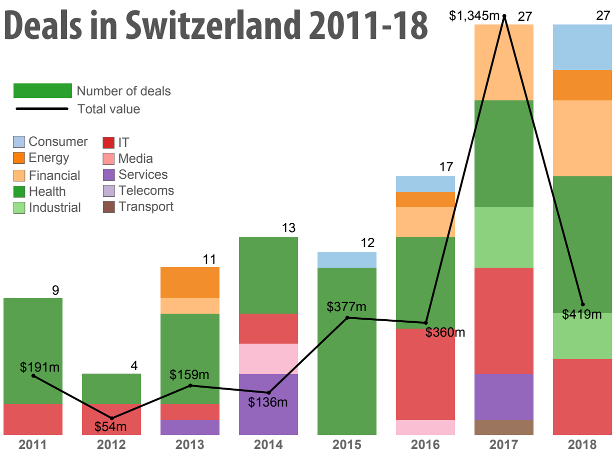


There are more corporate initiatives in Switzerland emerging, although the numbers remain in single figures each year: five in 2018, three in 2017, and four in 2016.

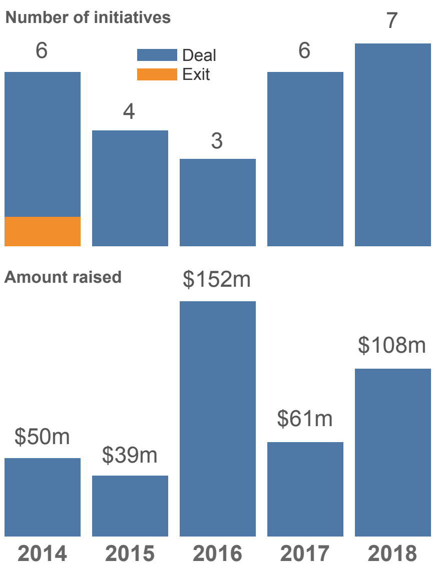
Due to the strong domestic nature of Switzerland's ecosystem, the slow creep upwards of corporate initiatives is reflected in the slow climb in deal count over the last few years. 27 in 2018, up from nine in 2011, an increase of 300%. Compared to Israel's increase of 827%, it looks pretty unremarkable, but GCV's data suggests a broader central European malaise, with recent years seeing deal counts stagnating. Germany saw a peak in 2017 of 81 deals, dropping to 79 in 2018, and the Netherlands saw a larger drop from 20 in 2017 to 16 in 2018.

Switzerland is diversifying beyond the dominant healthcare sector, but the data suggests it is at current still too dependent on a single sector to deliver value compared to other countries. ◆

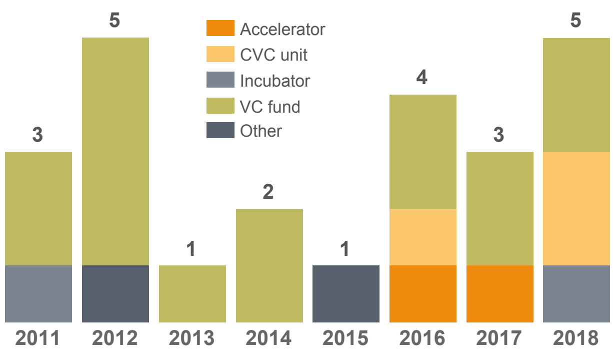
Deals in Switzerland 2011-18



Deals and exits from university spinouts in Switzerland 2014-18



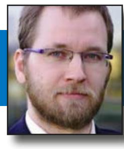
Corporate-backed funding initiatives in Switzerland 2011-18



UNIVERSITY CORNER

A lack of vision will come to haunt us all

Thierry Heles, editor



It seems like only yesterday that Global University Venturing celebrated breaking through 2,000 deals in its database, but at the time of writing we are already at more than 3,200 investments and exits. You can find an updated version of our flagship longitudinal analysis in the latest Global University Venturing magazine – as well as a separate report looking specifically into corporate venture capital funds backing spinouts – to find out more about how the innovation ecosystem is doing, but in case there was any doubt, it is in an outstanding shape.

It is a truth not universally acknowledged, sadly, with one British newspaper claiming in 2017 that "Oxford is the worst university in the world for commercialisation" – despite the fact that in Oxford University Innovation (OUI) the institution boasts the most prolific tech transfer office in the UK when it comes to generating spinouts.

OUI may be second, just about, to ETH Zurich's commercialisation arm ETH transfer – this year's GUV Tech Transfer Unit of the Year – in Europe, but it shows that the public narrative remains woefully misguided.

The view persists not just today but also in other parts of the world, such as Australia, where an election was held this month. Chris Nave, a founding partner of Brandon Capital Partners and chief executive of the spinout-focused Medical Research Commercialisation Fund noted in a comment for local newspaper the Australian that both major political parties, Labor and Liberals, had avoided using the word "innovation" in their campaigns because they thought it hurt the coalition government at the last election.

"In policy terms, only Labor's electric car initiative was an example of a future industry driven by innovation," the article said, and Nave argued that the parties were shunning innovation "at the nation's peril".

"The things which are most important don't always scream the loudest"

Supporting innovation, and recognising those driving it, is not just bad politics but, as Nave correctly identified, dangerous. Innovation may have the side-effect of creating high-skilled jobs – with increasing automation for menial labour, high-skilled positions will be the only jobs available to people – but crucially it also helps solve the really big issues faced not just by a single nation but by all of humanity, such as superbugs and climate change.

There is a focus on Oxford PV, a solar panel technology producer spun out of Oxford, in Global University Venturing. These are the types of project that need serious support long before they emerge as a full-fledged spinout, not because they will make big money, but because they help to ensure that in a century someone will actually be around to care about money.

Meanwhile, in Germany, decades of making the economy dependent on the car industry – the sector commands 20% of the country's economic output, up a whole quarter since 2005 – mean innovation in electric vehicles is now more important, but politicians are reluctant to take substantial action for fear it would hurt the car industry. Better to keep going with pollution – because it will guarantee jobs in the near term and thereby votes – than fight for long-term growth, or so the argument seems to go.

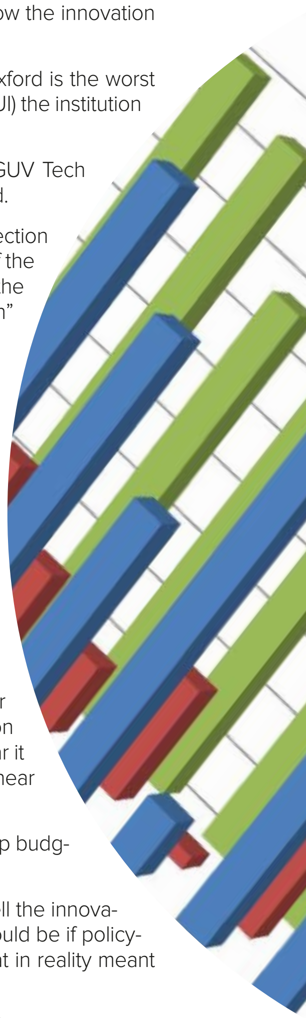
Political will and public narrative are inextricably linked, but with tech transfer offices often on bootstrap budgets without the resources for a marketing team, influencing either remains frustratingly elusive.

It is Global University Venturing's hope that its multi-year data analysis will help underline just how well the innovation ecosystem is doing with so little support. Imagine, even if just for a moment, how successful it would be if policymakers acknowledged this, rather than catering to fringe movements nostalgic for a simpler time that in reality meant having no fridge-freezer in the kitchen and no antibiotics to cure a simple infection.

To quote Bob Hawke, a former prime minister of Australia who died earlier this month: "The things which are most important don't always scream the loudest."

Hawke knew what he was talking about. As prime minister he not only created the country's publicly-funded healthcare system, Medicare, but also initiated superannuation pension schemes for all workers and oversaw the passage of the Australia Act, removing all remaining jurisdiction of the UK.

Hawke was in office from 1983 to 1991 – making him Labor's most successful prime minister and proving that if you have a bold vision, voters will put and keep you in power. If only today's politicians recognised this. ◆



IMPACT REPORT

Europe looks to blended finance for impact

James Mawson, editor-in-chief

Hermann Hauser, EIC adviser

"Since the start of his mandate in 2014, European Commissioner Carlos Moedas has been in strong support of the setting up of a European Innovation Council (EIC) for breakthrough, market-creating innovation, with a focus on smart funding, smart investment and smart regulation, to make Europe 'the place to be' for innovators."

This quote in the programme to the Innovative Enterprise Week Bucharest 2019 conference sums up the importance of the EIC to the commission's strategy in the next budgetary cycle from 2021 to 2027 – called Horizon Europe – and how effectively impact investing is already underpinning its thinking.

An EIC pilot initiative was launched in October 2017 with a budget of €2.7bn ($3.1bn) of combined and re-focused existing funding schemes to ensure funding reached innovators through a Pathfinder scheme to support researchers in future and emerging technologies (FET) and an Accelerator as a blended finance model combining grants with potentially equity.

Hermann Hauser, chairman of the 15-strong High-Level Group of Innovators advising on the design of an EIC in Horizon Europe in a two-year mandate just finishing, described the decision of the European Parliament to support an equity tranche of up to €15m per successful applicant as "surprising" and in a keynote laid the credit at Moedas' feet for pushing through the EIC in a similar search for "excellence" as the highly-regarded European Research Council.

While the three-year pilot has €2.7bn allocated to finish next year, the full EIC was expected to have €10bn for the Horizon Europe budgetary period, Hauser said. However, two insiders at the European Investment bank (EIB), which is expected to run the EIC rather than its subsidiary the European Investment Fund that had originally been given the lead role, said the likely final allocation would be up to 20% less given negotiations still underway in the European Parliament and taking into account the UK's potential exit from the EU as soon as October 31.

The EIC pilot allocated €778m last year to 250 projects out of at least 6,000 applications and is expected to invest about €1bn this year. Adrian Kamenitzer, director of equity, new products and special transactions at the EIB, said the EIC would try and select companies that could benefit from the capital through flexible structures and then crowd-in two to three times the funding through outside investors.

The EIB, through its innovation finance advisory service led by Shiva Dustdar under Simon Barnes as overall head of advisory services at the bank, will also support applicants with mentoring and as due diligence on the potential equity tranche is also being carried out.

Oana Craioveanu, impact hub Bucharest, Julia Reinaud, Gates Ventures, Marc D'hooge, EIB

Stéphane Ouaki, head of unit for the directorate general of research and innovation at the European Commission, in a keynote laid out the process for the EIC Accelerator and the creator of what is expected to be called the EIC Fund to handle the investments.

The fund manager has yet to be appointed but Ouaki in the subsequent panel discussion said it was expecting 70% to 90% of portfolio companies to fail given the focus on FETs and it was unclear if the remaining success

Romania's opportunities are Europe's

It is perhaps a moot point which of the European Commission and the Romanian government comes off as less impressive at the Innovative Enterprise Week Bucharest 2019 conference for the lack of discussion of home-grown, robotic process automation provider UIPath's meteoric rise in the past few years but the absence was definitely noted among attendees.

In some ways, UIPath's development is the perfect example encompassing so much that is great and promising in Romania and Europe currently, while still retaining the ability for an obvious own-goal.

For those who have also missed UIPath's development in the past few years from startup into Romania's largest public or private company, by market valuation at about $7bn it dwarfs the local oil major, Petrom, which was valued at about $5bn in 2017 according to local financial daily Ziarul Financiar.

However, after debating moving to the UK, UIPath shifted in headquarters to the US to be closer to its main investors, including corporate venturing unit CapitalG, part of the Alphabet internet conglomerate that operates the Google search engine, although its main management and a sizeable office remains in Romania.

UIPath had been raising a $400m series D round this year at more than $7bn valuation, according to press reports, having previously raised about $409m since its foundation in 2005, news provider TechCrunch said.

Although supported by local VCs, such as Earlybird and Credo, its later money came from top US investors, such as Sequoia and Accel, as well as CapitalG, which co-led the C round.

An insider at UIPath said Europe's problem now remained this scale-up funding rather than early-stage investment – something which the EIB has been working on for years through its EIF subsidiary acting as a limited partner with about €6bn committed to VC funds and now increasingly as a direct investor in startups. The EIB, however, has struggled to attract or encourage local corporate venturing units to set up or invest locally, something insiders admitted was a source of frustration.

That US corporations and VCs seized the opportunity to fund UIPath and bring it to the US when potential European corporate venturers and VCs remained on the sidelines points to the increasing view that Romania, like much of Europe, is a good nursery for attractive entrepreneurs at reasonable valuations but those with global ambitions have to be based in the US or China.

stories would make up for the losses given the opportunity other investors have to buy out the EIC fund at the earliest opportunity.

This focus on performance and strategic support to entrepreneurs is effectively an impact investing strategy when taken into account with the Horizon Europe's targets around investing for "people and planet", insiders at the conference said.

Analysis by the EIB of its work showed it was already supporting 16 of the 17 sustainable development goals (SDGs) set out by the United Nations. Effectively, the EIB is taking its market and infrastructure focus and adding in SDGs and so moving closer to other supra-national agencies, such as the World Bank and the US Agency for International Development, that are moving in the other direction and trying to crowd in private capital and market instruments to their development targets.

Doing so could help unlock the estimated $20 trillion in capital on corporate balance sheets and billions allocated to corporate venture capital as well as family office money. One example of such an approach was given by Julia Reinaud, director of advocacy and government relations at Gates Ventures, the family office-backed investment firm set by up by Bill Gates, co-founder of software developer Microsoft. Reinaud showed how a coalition of corporations, such as Engie, National Grid and Total, alongside a stack of individuals and the European Commission had come together in 12 months to set up Breakthrough Energy Europe as a €100m pilot venture fund. As one government insider at the conference said: "We need exponential thinking. Adding €10bn is about three months-worth of venture capital funding. How do we get trillions working?" ◆

Stephane Ouaki, EC

Shiva Dustdar and Adrian Kaminetzer, EIB

MONTHLY ANALYSIS

This is our data snapshot based on last month's investment activity.
The charts and tables have been generated by our data platform GCV Analytics.

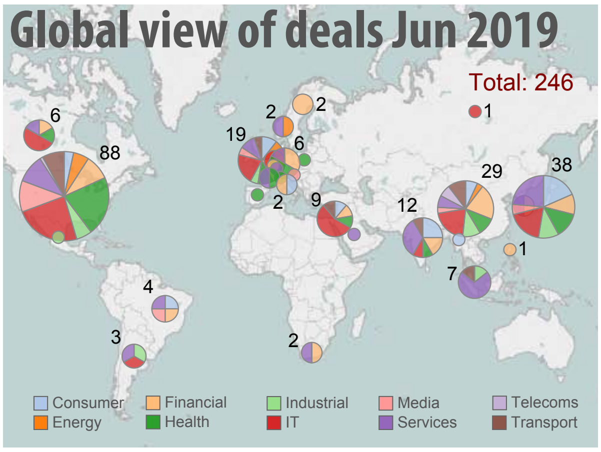
Slowdown in June

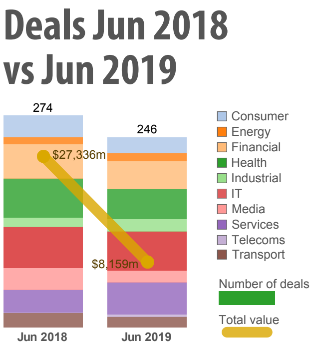
Kaloyan Andonov, reporter, GCV Analytics

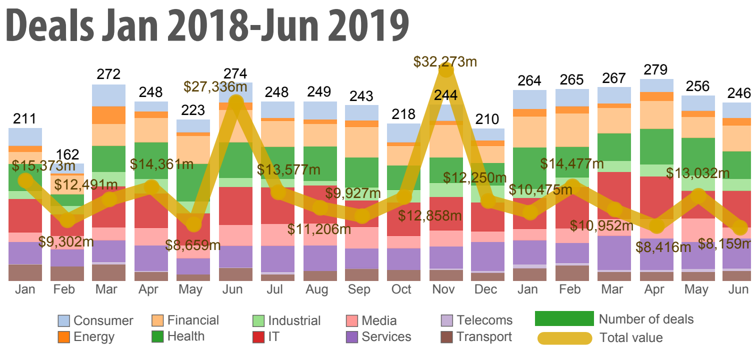
The number of corporate-backed deals GCV reported from around the globe in June was 246, down 10% from the 274 funding rounds from the same month last year. Investment value plummeted even more, by 70%, to $8.2bn – down from $27.3bn in June 2018.

In comparison with preceding months of 2019, June registered the lowest monthly result for the first half of the year in terms of deal count (with other months registering rounds in the upper 200s). The same holds true for the total estimated capital invested, which was lowest in the first half of 2019.

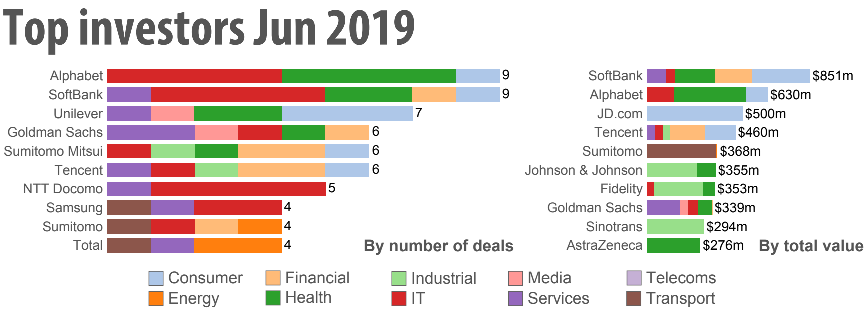
The US came first in the number of corporate-backed deals, hosting 88 rounds, while Japan was second with 38, China third with 29 and the UK fourth with 19.







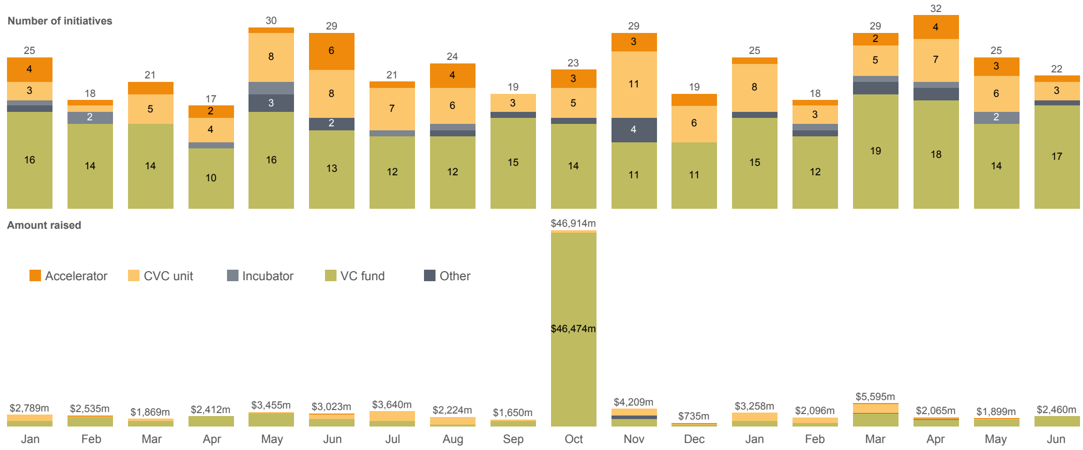
The leading corporate investors by number of deals were diversified internet conglomerate Alphabet, telecoms firm SoftBank and consumer goods producer Unilever. In terms of involvement in the largest deals, SoftBank topped the list along with Alphabet and e-commerce firm JD.com



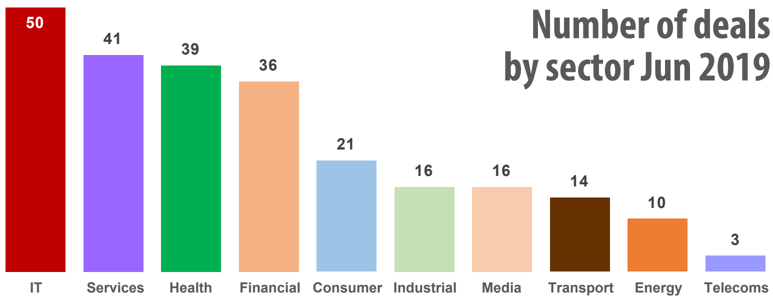
GCV Analytics reported 22 corporate-backed funding initiatives in June, including VC funds, newly launched venturing units, incubators, accelerators and other. This figure suggested a slight decrease over May which registered 25 such initiatives. The estimated capital raised in those initiatives stood at $2.46bn, up 26% from the estimated $1.9bn of the previous month.

MONTHLY ANALYSIS

Fund initiatives Jan 2018-Jun 2019



Number of deals by sector Jun 2019



Deals

Emerging businesses from the IT, services, health financial and consumer sectors led in raising largest number of rounds during the sixth month of 2019. The most active corporate venturers came from the financial services, IT, industrial and services sectors, as shown on the heatmap.

Deals heatmap Jun 2019

	Financial Services	IT	Industrial	Services	Media	Consumer	Telecoms	Health	Transport	Energy
North America	36	24	13	8	12	8	4	16	7	8
Asia	39	19	14	19	8	14	8		7	
Europe	15	7	4	4	7	3	5	4	1	2
Middle East	2	2	4	1		1	1		2	
South America		4		1	1		3			
Africa	1				2					
Eastern Europe					1					

China-based electronics recycling service Aihuishou raised a funding round sized at more than $500m, led by JD.com. Tiger Global Management, Morningside Venture Capital, GenBridge Capital, Tiantu Capital and Fresh Capital also participated in the round. As part of its investment, JD.com will merge its own second-hand e-commerce platform, Paipai, with Aihuishou. JD will become the largest shareholder in Aihuishou through the transaction, which valued the merged business at more than $2.5bn. Founded in 2011, Aihuishou operates a consumer-to-business platform that enables individuals to sell used electronics such as laptops and mobile phones through an online bidding process. Aihuishou then extracts rare materials from the devices and sells them back to manufacturers.

China-based electric car developer Bordrin Motor collected RMB2.5bn ($362m) from a consortium led by Silver Saddle Equity Investment Management, an investment arm of chemicals, oil and fertiliser conglomerate Sinochem International. The round included power tools manufacturer Positec and Sumitomo Corporation Equity Asia, a corporate venturing division of diversified conglomerate Sumitomo. Prosperity Investment, Pukou High Investment, Yuanxing Investment, China Science & Merchants Investment Management and other, unnamed investors also contributed to the round. Founded in 2016, Bordrin Motor is developing smart electric vehicles. The funding will go to product development and marketing activities.

Brazil-based fitness membership service Gympass secured a reported $300m in a funding round led by SoftBank Vision Fund, the $98.6bn investment vehicle managed by SoftBank. SoftBank's $5bn Latin America Fund also participated, as did growth equity firm General Atlantic, investment group Valor and venture capital firm Atomico. Founded in 2012, Gympass operates a corporate fitness platform for employers to offer gym membership as a benefit to staff. The company has partnered fitness providers in 566 cities across the Americas and Europe, covering almost 47,000 gyms.

Ouyeel, an online steel trading platform created by China-based iron and steel producer China Baowu Steel, secured RMB 2.02bn ($294m) in funding from investors including its parent company. Logistics service Sinotrans, steel provider

MONTHLY ANALYSIS

Top 10 investments Jun 2019					
Company	**Location**	**Sector**	**Round**	**Size**	**Investors**
Aihuishou	China	Consumer	E and beyond	$500m	Fresh Capital | GenBridge Capital | JD.com | Morningside | Tiantu Capital | Tiger Global Management
Bordrin Motor	China	Transport	–	$362m	China Science & Merchants Investment Management | Positec | Prosperity Investment | Pukou High Investment | Sinochem International | Sumitomo | undisclosed investors | Yuanxing Investment
Gympass	Brazil	Consumer	–	$300m	Atomico | General Atlantic | SoftBank | Valor Investment Group
Ouyeel	China	Industrial	–	$294m	Baoshan Iron & Steel | Beijing Jianlong Heavy Industry | Benxi Steel Group | China Merchants Group | China Structural Reform Fund | Citic Securities | Sinotrans
ADC Therapeutics	Switzerland	Health	E and beyond	$276m	AstraZeneca | Auven Therapeutics | Redmile Group | undisclosed investors | Wild Family Office
Carbon	US	Industrial	–	$260m	Adidas | Arkema | Baillie Gifford | Fidelity | Johnson & Johnson | JSR | Madrone Capital Partners | Sequoia Capital | Temasek
Collective Health	US	Health	–	$205m	Alphabet | DFJ Growth | Founders Fund | G Squared | Maverick Ventures | Mubadala Ventures | New Enterprise Associates | PSP Investments | SoftBank | Sun Life Financial
Creditas	Brazil	Financial services	–	$200m	SoftBank
Hupu Sports Shanghai Media	China	Media	Stake purchase	$182m	Bytedance
Yanolja	Singapore	Services	D	$180m	Booking Holdings | GIC

Benxi Group and industrial and mining group Beijing Jianlong Heavy Industry were joined by Citic Securities, China Merchants Group, the government-owned China Structural Reform Fund, and Baoshan Iron and Steel, a subsidiary of Baowu Steel. Founded in 2016, Ouyeel operates a cross-border platform covering 27 countries and regions that allows users to trade steel and related products and commodities, while businesses can enhance their supply chain capabilities. The company also offers supply chain credit and credit insurance through partners, as well as services such as maritime shipping, warehousing and processing.

Switzerland-based oncology drug developer ADC Therapeutics received $76m in additional series E financing, bringing the round, already backed by pharmaceutical firm AstraZeneca, to a $276m close. The additional capital was supplied by unnamed existing and new investors. The first tranche was led by private equity firm Auven Therapeutics in late 2017 and, apart from AstraZeneca, it also featured hedge fund Redmile, Wild Family Office and undisclosed additional backers. ADC is working on antibody drug conjugates that target haematological cancers and solid tumours, and has multiple assets in the clinic. The capital will support preparations for a phase 2 trial of a potential treatment for Hodgkin lymphoma. The funding will also go toward preparations for a possible biologic licence application for a candidate being developed to treat relapsed or refractory diffuse large B-cell lymphoma.

US-based digital manufacturing technology provider Carbon raised more than $260m in funding from investors including sporting apparel producer Adidas, chemicals provider Arkema, pharmaceutical group Johnson & Johnson and advanced materials manufacturer JSR. Venture capital firm Madrone Capital Partners and investment manager Baillie Gifford co-led the round, which also featured investment and financial services group Fidelity Management & Research (FRM), Temasek and Sequoia Capital. Adidas and Johnson & Johnson participated in the round through corporate venturing vehicles Johnson & Johnson Innovation – JJDC and Adidas Ventures. Carbon has created a method of additive manufacturing combining digital light projection, programmable liquid resins and oxygen permeable optics to produce 3D printed components. The cash will fund the completion of a facility to fuel research and development.

SoftBank's Vision Fund led a $205m funding round for US-based workplace health management technology provider Collective Health. The round included GV, a subsidiary of internet and technology group Alphabet, as well as financial services firm Sun Life, PSP Investments, DFJ Growth, G Squared, Founders Fund, Maverick Ventures, Mubadala Ventures and New Enterprise Associates (NEA). Collective Health supplies software that helps businesses manage their employee health plans more efficiently and easily, providing analytics tools that helps them monitor and control costs. The capital will be used to boost technology capabilities, expand its range of healthcare partners and hire more staff.

Brazil-based consumer loan provider Creditas collected $200m in funding from SoftBank, reportedly at a $700m post-money valuation. Founded in 2012 as BankFacil, Creditas operates an online lending platform that provides secured personal loans sized between R$5,000 and R$2m ($1,250 to $500,000). It has issued more than $125m in loans to date. The company accepts cars and real estate as collateral, charging an average of 2% in interest on loans secured against the former and 1.25% interest on those against the latter, undercutting rates of up to 13% typically charged on overdrafts, credit cards and unsecured loans in Brazil.

China-based sports commentary platform Hupu Sports Shanghai Media received RMB1.26bn ($182m) in pre-initial public offering funding from digital media company ByteDance. The deal gave ByteDance, the owner of short video app TikTok and aggregated news app Toutiao, a 30% stake in Hupu, making it the single largest shareholder in the business. Founded in 2004, Hupu operates a sports commentary and news portal as well as an app that delivers near real-time text updates about the US National Basketball Association and an online sports apparel marketplace called Shihuo.

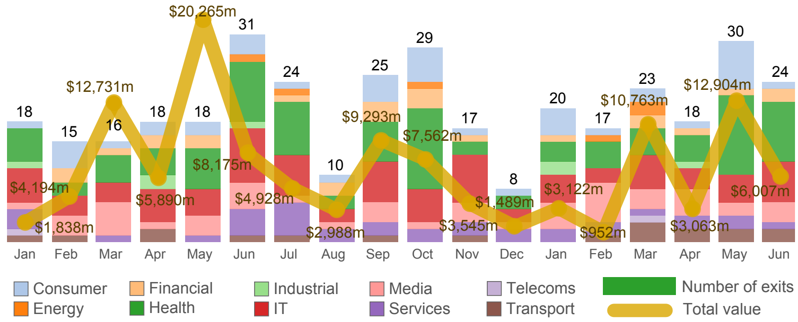
MONTHLY ANALYSIS

ByteDance and Hupu will share their respective content and aim to connect users of each other's platforms.

South Korea-based short-term accommodation services provider Yanolja received $180m in series D funding from online travel platform Booking Holdings and Singaporean sovereign wealth fund GIC. The round valued Yanolja at more than $1bn and followed reports that the company had raised as much as $200m in funding. The company is gearing up for an IPO as early as 2020. Founded in 2005, Yanolja converts rooms in guest houses, bed and breakfasts and love hotels into modern short-term accommodation aimed at millennial couples and tourists on a budget.

Exits

Exits Jan 2018-Jun 2019



In June, GCV Analytics tracked 24 exits involving corporate venturers as either acquirers or exiting investors. The transactions included 15 acquisitions and nine initial public offerings (IPOs).

The exit count figure decreased compared with May, which registered 30 exits. The total estimated exited capital also dropped, drastically, to $6.01bn versus the $12.90bn in the previous month, representing a 53% decrease. In comparison with the same month of 2018, the exits count was higher 31 and so was the estimated total capital in exits – $8.18bn.

On-demand ride provider Uber agreed to acquire United Arab Emirates-based ride hailing service Careem for $3.1bn, providing exits for e-commerce company Rakuten, telecom firm Saudi Telecom, travel agency service provider Al Tayyar, ride hailing service provider Didi Chuxing and carmaker Daimler. The deal consisted of $1.4bn in cash and $1.7bn in convertible notes, which will be reportedly convertible to Uber stock at a price of $55 per share. Uber expects to file for its IPO. Careem operates a ride hailing platform that covers more than 100 cities in the Middle East, Africa, Turkey and Pakistan in addition to a digital payment business, Careem Pay, and a last-mile delivery service called Careem Now.

US-based on-demand ride provider Lyft, which counted several corporates among its investors, raised $2.34bn in an IPOin which it floated at the top of its range. Lyft issued 32.5 million shares priced at $72.00 each. It had initially planned to issue almost 30.8 million shares priced between $62 and $68 each, before upgrading the range from to $70 to $72. The company was valued at $24.3bn in the offering. Previous corporate backers of Lyft include Alphabet, e-commerce firms Rakuten and Alibaba, carmakers GM and Jaguar Land Rover, its peer Didi Chuxing, automotive parts maker Magna and holding company Icahn Enterprise. Founded in 2012, Lyft runs a ride hailing platform that facilitated rides for some 30.7 million users in 2018, through a network of about 1.9 million drivers. It made a $911m net loss in 2018 from approximately $2.16bn in revenue.

Video-based social media platform YY completed the acquisition of one of its portfolio companies, Singapore-based social video livestreaming platform developer Bigo, for more than $1.45bn. YY paid approximately $343m in cash, with the remainder made up of shares. YY had owned approximately 31.7% of Bigo ahead of the acquisition. Founded in 2015, Bigo's flagship product is a livestreaming platform called Bigo Live. It also offers a short-form video-based social media service known as Like as well as a range of other apps such as gaming-focused streaming platform CubeTV. Bigo relies on artificial intelligence technology to remove sexually suggestive content from its platform and has unveiled plans to partner governments in order to utilise the same technology for cyber surveillance.

Verano, a US-based vertically integrated cannabis group backed by cannabinoid therapy developer Scythian Biosciences, agreed to an $850m acquisition by its peer Harvest Health and Recreation. The all-stock transaction assumes a Harvest share price of C$8.79 ($6.57) and is set to close within the first half of the year. It is subject to customary closing conditions including shareholder approval. Verano operates licensed cannabis cultivation and manufacturing facilities, produces a wide range of cannabis products such as edibles, extracts and concentrates, and owns dispensaries under the brand name Zen Leaf.

Online classified listings operator 58.com agreed to sell part of its stake in China-based automotive marketplace operator Chehaoduo to an unnamed third-party investor for more than $713m. The corporate did not identify the purchasing investor, but it released the news on the same day as Chehaoduo secured $1.5bn in funding from SoftBank Vision Fund. The transaction is subject to unspecified closing conditions. 58.com will continue to own a minority shareholding in Chehaoduo once the deal closes. Chehaoduo was spun out of classified marketplace Ganji in 2015 and runs two distinct offerings: second-hand vehicle auction and trading platform Guazi and after-sales services platform Maodou.

Application services provider F5 agreed to acquire US-based app development technology producer Nginx for approximately $670m in a deal allowing telecoms firm Telstra to exit. Nginx was founded in 2011 to market the open-source web

MONTHLY ANALYSIS

Top 10 exits Jun 2019

Company	Location	Sector	Type	Acquirer	Size	Exiting investors
Careem	United Arab Emirates	Transport	Acquisition	Uber	$3.1bn	Abraaj Group | Al Tayyar Travel Group | Beco Capital | Coatue | Daimler | DCM | El Sewedy Investments | Endure Capital | Kingdom Holding | Kuwait Investment Authority | Lumia Capital | Rakuten | Saudi Telecom | SQM | STV Group | Wamda Capital
Lyft	US	Transport	IPO	–	$2.34bn	Alibaba | AllianceBernstein | Alphabet | Andreessen Horowitz | Baillie Gifford | Coatue | Didi Chuxing | Fidelity | Founders Fund | Icahn Enterprises | Jaguar Land Rover | Janus Capital Management | Janus Henderson Investors | Kingdom Holding | KKR | Magna | Mayfield | Ontario Teachers' Pension Plan Board | PSP Investments | Rakuten | Senator Investment Group | Third Point Ventures
Bigo Technology	Singapore	Media	Acquisition	YY	$1.45bn	Bertelsmann | Gaorong Capital | Morningstar | Ping An Insurance | private investor | YY
Verano	US	Consumer	Acquisition	Harvest Health and Recreation	$850m	Scythian Biosciences
Chehaoduo	China	Transport	Stake sale	–	$713m	58.com | undisclosed investors
Nginx	US	IT	Acquisition	F5	$670m	BV Capital | E.Ventures | Goldman Sachs | Index Ventures | MSD Capital | New Enterprise Associates | private investor | Runa Capital | Telstra
Mist	US	Telecoms	Acquisition	Juniper Networks	$405m	Alphabet | Cisco Systems | Kleiner Perkins | Lightspeed Venture Partners | NTT Docomo | Wells Fargo
Figure Eight	US	IT	Acquisition	Appen	$300m	Microsoft | Salesforce
PowerVision	US	Health	Acquisition	Alcon	$285m	Advanced Technology Ventures | Aisling Capital | Alcon | ATV Capital | Correlation Ventures | Frazier Healthcare Ventures | Johnson & Johnson | JP Morgan | Lexington Partners | Medtronic | Panorama Capital | VenRock
OrthoSpace	Israel	Health	Acquisition	Stryker	$220m	Johnson & Johnson | Smith & Nephew

server and application delivery software of the same name. The company offers a premium version helping enterprises deliver content rapidly and securely, and the software is used in some 375 million websites, often for load balancing, where multiple workloads are distributed across several computing platforms. The company's brand will continue to exist independently post-acquisition, but its product will be strengthened by F5's security and cloud technology.

IT networking technology provider Juniper Networks agreed to acquire Mist Systems, a US-based developer of artificial intelligence (AI)-equipped wireless networks, for $405m, allowing corporates Alphabet, networking equipment manufacturer Cisco and telecoms firm NTT to exit. Founded in 2014, Mist has created a wireless platform that utilises AI to make wifi more reliable and predictable. It also features an AI assistant called Marvis that can help with troubleshooting while supplying precise data on how the network is operating and how clients are acting. Juniper is acquiring the company in order to expand its capabilities in the cloud-managed wireless networking space.

Figure Eight, a US-based artificial intelligence (AI) technology developer backed by software producers Microsoft and Salesforce, agreed to an acquisition by machine learning datasets provider Appen for $300m. Appen will pay $175m upfront and up to $125m in an additional payment next year, contingent on its 2019 performance. Founded in 2007, Figure Eight has built a machine learning software platform it claims can annotate text, image, audio and video up to 50 times faster than through human labour alone. The datasets are used to train artificial intelligence algorithms. The company was initially formed as Dolores Labs, before rebranding as CrowdFlower and, in February 2018, announcing a final name change, to Figure Eight.

Alcon, an eyecare subsidiary of pharmaceutical firm Novartis, agreed to buy US-based eyecare technology developer PowerVision, a portfolio company of pharmaceutical firm Novartis, in a $285m transaction. Alcon intends to further develop the product and advance it through clinical trials to prepare it for commercial availability. Founded in 2002, PowerVision is developing an intraocular lens (IOL) implant aimed at improving the sight of elderly patients suffering from cataracts and presbyopia, a condition that gradually reduces the eye's ability to actively focus. The implant is inserted into the eye's capsular bag and reacts to the natural contractions of the eye muscles to help make fluid thicker when viewing nearer objects and thinner when focusing on farther distances.

Medical technology provider Stryker acquired Israel-based shoulder implant developer OrthoSpace for up to $220m, enabling Johnson & Johnson and medical equipment manufacturer Smith & Nephew to exit. The all-cash deal consisted of an upfront payment of $110m from Stryker, followed by future milestone payments that could reach $110m. OrthoSpace has created a biodegradable balloon implant that helps reduce shoulder pain and improve the range of motion in the joint for patients with rotator cuff injuries. The product fits between bones in the shoulder to reduce friction. It has been approved in the EU and is currently undergoing clinical studies in the US. ◆

Note: Monthly data can fluctuate as additional data are reported after GCV goes to press

QUARTERLY ANALYSIS

This is our data snapshot based on investment activity over the past three months. To verify reported deals, we contact about 300 corporate investors each quarter – roughly 18% of the CVCs we cover, which account for most of the deals made public.

More deals and fewer dollars in the second quarter

Kaloyan Andonov, reporter, GCV Analytics

In the second quarter (Q2), GCV Analytics tracked 781 funding rounds involving corporate venturers, near the all-time record number (796) registered in the first quarter and representing a nearly 6% increase over the 745 rounds recorded in Q2 2018. The estimated total investment stood at $29.6bn, down 41% from the $50.4bn recorded during the same period last year.

The US hosted the largest number of funding rounds and nearly half of them (319), while Japan came in second with 104 deals, China third with 73 deals, India and the UK joint fourth with 46 each.

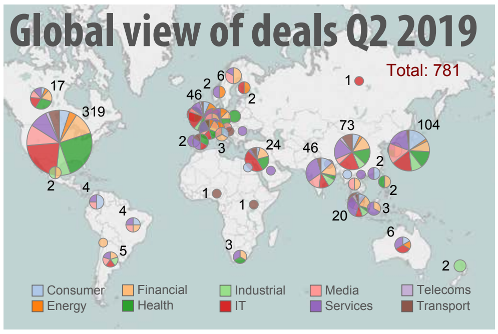
When comparing Q2 2019 with the preceding quarter, there was a slight decrease in deal count, going down from 796. Estimated total investment, however, went down considerably from $35.9bn, by 18%.

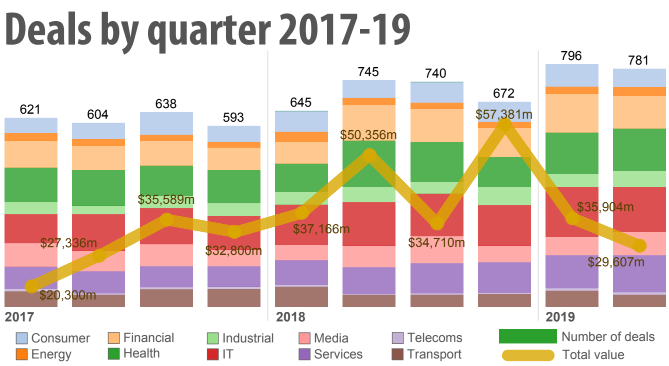
If comparing the first half (H1) of this year with the same period of 2018, we also observe slightly mixed results with growth in deal count but considerable drop in total estimated capital in the corporate-backed round. H1 2019 registered a total of 1,577 deals, up 13% from the 1,390 in H1 2018. Total dollar volume, however, fell to $65.51bn, down 25% from $87.52bn of the first half of last year.

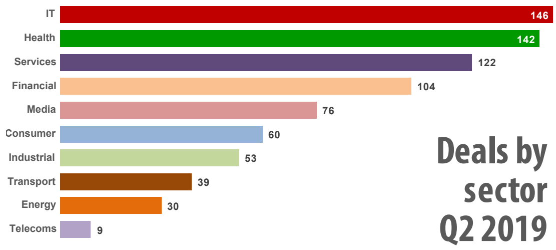
Emerging enterprises from the IT, health, services, financial and media sectors proved the most attractive for corporate venturers, accounting for at least 100 deals each. The top funding rounds by size, however, were raised mostly by companies from the transport, services and consumer sectors, as discussed below.

The most active corporate investors, in turn, came from the financial services, IT, media, industrial and services sectors, as illustrated by the deals heatmap.

The leading investors by number of deals were diversified internet conglomerate Alphabet, telecoms firm SoftBank and financial





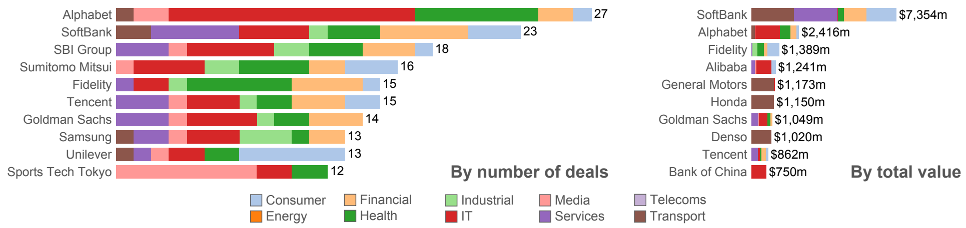


Deals heatmap Q2 2019

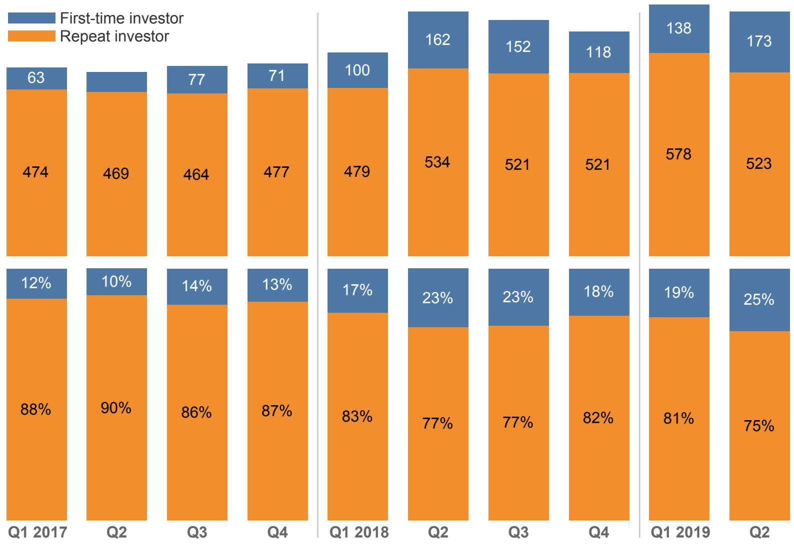
	Financial services	IT	Media	Industrial	Services	Health	Consumer	Telecoms	Transport	Energy
North America	118	73	51	50	23	55	23	22	20	14
Asia	102	59	40	31	40	4	35	26	17	8
Europe	44	17	18	11	16	11	7	8	4	6
Middle East	7	7	1	7	2	2	1	3	2	2
South America	1	5	2		2			5		1
Australia / NZ	2				4		1		1	
Africa	3		2			1			1	
Eastern Europe			1							

QUARTERLY ANALYSIS

Top investors Q2 2019



First-time vs repeat corporate investors 2017-19



services SBI Group. The list of corporate venturers involved in the largest deals by size was also headed by SoftBank, Alphabet and financial services firm Fidelity.

Most of the corporate investors taking minority stake in the second quarter were investors that have done at least one deal before (75%). However, it is noteworthy that one out of every four (25%) of corporates was disclosing their first minority stake deal in this quarter, particularly led by Japan-based groups. There appears to be a trend of newcomers to venturing – whether with a specific venturing unit or not – comprising roughly a fifth to a fourth of all corporate investors, since 2018. In previous years, like in 2017, the proportion of first-time corporate investors was consistently lower than 20%, as GCV Analytics data suggest.

Deals

Most of the funding from the biggest rounds reported in the second quarter went to emerging enterprises from transport, services and consumer sectors. Three of the top 10 rounds were above $1bn, with SoftBank being the most often found investor in those top rounds.

US-based autonomous driving software developer Cruise Automation secured $1.15bn in funding from investors including carmaker General Motors (GM). Fellow carmaker Honda and SoftBank's near-$100bn Vision Fund also participated in the round, which also featured investment manager T. Rowe Price Associates. The round valued Cruise Automation at $19bn post-money. GM acquired Cruise for $1bn in 2016, three years after it was founded, and spun it back off in 2018. Cruise is working on software that will enable driverless cars to process data from their sensors and adapt accordingly, particularly in electric vehicles such as GM's Chevrolet Bolt hatchback.

SoftBank invested $1bn in Colombia-based logistics platform Rappi. The corporate's $5bn Innovation Fund, which it is currently in the process of raising, supplied half the capital while its Vision Fund provided the other $500m. Founded in 2015, Rappi operates an on-demand delivery service that was present in 35 cities across Argentina, Peru, Chile and Uruguay as well as its home country, as of the end of 2018. The company collects and delivers orders of consumer goods and is diversifying into other areas such as medicine deliveries and the establishment of a digital payment platform.

US-based ride hailing company Uber spun off its autonomous driving subsidiary, Uber Advanced Technologies Group (Uber ATG). The company received $1bn of backing from three corporate venturing investors. Car components manufacturer Denso and car maker Toyota committed jointly $667m, while the SoftBank Vision Fund provided the remaining $333m. The round reportedly valued Uber ATG at $7.25bn post-money. Uber ATG is a subsidiary of Uber's which is developing autonomous vehicle technologies including sensors and systems geared with object perception, motion and prediction planning, mapping as well as data visualisation technology.

UK-based supply chain financing provider Greensill received $800m in funding from the SoftBank Vision Fund. The

QUARTERLY ANALYSIS

Top 15 investments Q2 2019

Company	Location	Sector	Round	Size	Investors
Cruise Automation	US	Transport	–	$1.15bn	General Motors | Honda | SoftBank | T Rowe Price
Rappi	Colombia	Consumer	–	$1bn	SoftBank
Uber ATG	US	Transport	–	$1bn	Denso | SoftBank | Toyota Motor
Greensill	UK	Services	–	$800m	SoftBank
Megvii Technology	China	IT	E and beyond	$750m	Abu Dhabi Investment Authority | Alibaba | Bank of China | Industrial and Commercial Bank of China | Macquarie
DoorDash	US	Services	E and beyond	$600m	Coatue | Darsana Capital Partners | Dragoneer Investment Group | DST Global | Sands Capital | Sequoia Capital | SoftBank | Temasek
Deliveroo	US	Consumer	E and beyond	$575m	Amazon | Fidelity | Greenoaks Capital | T Rowe Price
UiPath	US	IT	–	$568m	Accel Partners | Alphabet | Coatue | Dragoneer Investment Group | Institutional Venture Partners | Madrona Venture Group | Sands Capital | Sequoia Capital | T Rowe Price | Wellington Management
Beijing Qianxin Technology	China	IT	Stake purchase	$548m	China Electronics Corporation
Aihuishou	China	Consumer	E and beyond	$500m	Fresh Capital | GenBridge Capital | JD.com | Morningside | Tiantu Capital | Tiger Global Management
Rivian	US	Transport	–	$500m	Ford Motor
GetYourGuide	Germany	Services	E and beyond	$484m	Korelya Capital | Lakestar | SoftBank | Temasek | Zürcher Kantonal Bank
PayPay	Japan	Financial Services	–	$419m	SoftBank
Bordrin Motor	China	Transport	–	$362m	China Science & Merchants Investment Management | Positec | Prosperity Investment | Pukou High Investment | Sinochem International | Sumitomo | undisclosed investors | Yuanxing Investment
Gympass	Brazil	Consumer	–	$300m	Atomico | General Atlantic | SoftBank | Valor Investment Group

transaction reportedly valued Greensill at $3.5bn, more than doubling its previous valuation of $1.64bn in 2018. The Vision Fund also obtained board seats as part of the deal. Founded in 2011, Greensill provides supply chain finance to clients in North America, Europe, Africa and Asia, working with financial services firms and institutional investors to supply capital. Greensill has extended more than $60bn in financing to date, covering more than 8 million clients across 60 countries. It also owns Germany-based commercial lender Greensill Bank, having acquired and rebranded financial services firm NordFinanz Bank in 2014.

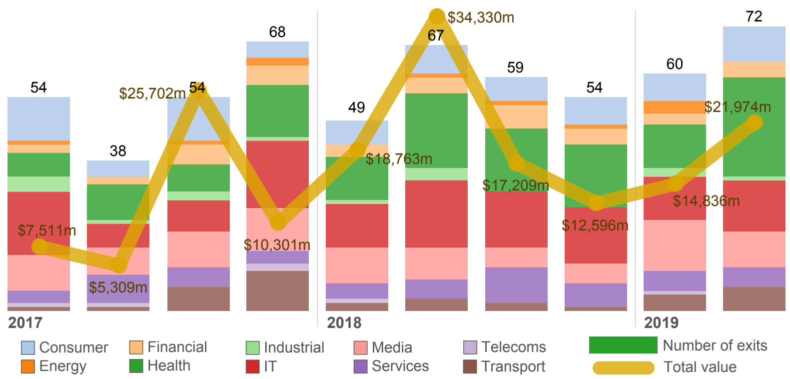
China-based facial recognition software provider Megvii received $750m in series E funding from investors including e-commerce group Alibaba at a valuation of more than $4bn. The round was led by a $200m investment from Bank of China Group Investment, the private equity arm of state-owned financial services firm Bank of China. Investment banking firm Macquarie Group, sovereign wealth fund Abu Dhabi Investment Authority and ICBC Asset Management, a division of financial services firm Industrial and Commercial Bank of China, filled out the investors. Megvii provides a software platform known as Face++ which uses artificial intelligence technology to identify faces, people and objects. The technology is used in consumer devices and retail.

Exits

GCV Analytics tracked 72 corporate-related exits during the second quarter of 2019, including 41 acquisitions and 31 initial public offerings (IPOs), including the long-awaited IPOs of ride hailing service providers Uber and Lyft.

Top exiting corporates this quarter include technology and internet companies like Alphabet, real estate investment trust Alexandria and financial services firm Goldman Sachs which reported at least five exits each.

Exits by quarter 2017-19



QUARTERLY ANALYSIS

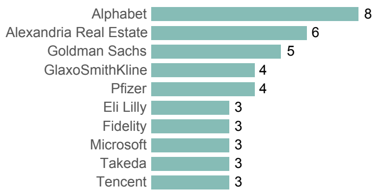
Top 15 exits Q2 2019

Company	Location	Sector	Type	Acquirer	Size	Exiting investors
Uber	US	Transport	IPO	–	$8.1bn	Alphabet | Axel Springer | Baidu | Benchmark | Bennett Coleman & Company | BlackRock | Dragoneer Investment Group | Fidelity | Kleiner Perkins | Lone Pine | Menlo Ventures | Microsoft | New Enterprise Associates | Qatar Investment Authority | Saudi Arabia's Public Investment Fund | Sequoia Capital | SoftBank | Summit Partners | Toyota | TPG | Valiant Capital | Wellington Management
Looker	US	IT	Acquisition	Alphabet	$2.6bn	Alphabet | Cross Creek Advisors | First Round Capital | Geodesic Capital | Goldman Sachs | Kleiner Perkins | Meritech Capital | PivotNorth Capital | PremjiInvest | Redpoint Ventures | Sapphire Ventures | undisclosed investors
Pinterest	US	Media	IPO	–	$1.43bn	Andreessen Horowitz | Bessemer | Fidelity | Firstmark Capital | Goldman Sachs | Rakuten | SV Angel | Valiant Capital | Wellington Management
Harry's	US	Consumer	Acquisition	Edgewell Personal Care	$1.37bn	Alliance Consumer Growth | Grace Beauty | Highland Capital Partners | SV Angel | Temasek | Thrive Capital | Tiger Global Management | Wellington Management
Tilos Therapeutics	US	Health	Acquisition	Merck & Co	$773m	ShangPharma | undisclosed investors
Trilogy Education Services	US	Services	Acquisition	2U, Inc	$750m	City Light Capital | Exceed Capital Partners | Highland Capital Partners | Macquarie | Prudential | Rethink Education
CrowdStrike	US	IT	IPO	–	$612m	Accel Partners | Alphabet | General Atlantic | Institutional Venture Partners | March Capital Partners | Rackspace | Telstra | Warburg Pincus
Twistlock	US	IT	Acquisition	Palo Alto Networks	$410m	Dell | Iconiq Capital | Polaris Venture Partners | Rally Ventures | TenEleven Ventures | YL Ventures
Wave	Canada	Financial Services	Acquisition	H&R Block	$405m	Business Development Bank of Canada | CRV | HarbourVest | Inkef Capital | National Australia Bank | Ontario Municipal Employee Retirement System | OurCrowd | Portag3 Ventures | Royal Bank of Canada | Social+Capital | undisclosed investors
Samanage	US	IT	Acquisition	SolarWinds	$350m	Gemini Israel Ventures | Innovation Endeavors | Marker | Morgan Stanley | Salesforce | Silicon Valley Bank | Vintage Investment Partners | Viola Ventures
BridgeBio Pharma	US	Health	IPO	–	$349m	Aisling Capital | American International Group | Cormorant Asset Management | Hercules Technology Growth Capital | Janus Capital Management | KKR | Perceptive Advisors | Sequoia Capital | undisclosed investors | Viking Global Investors
Therachon	Switzerland	Health	Acquisition	Pfizer	$340m	Bpifrance | Cowen Group | Inserm | New Enterprise Associates | Novo | OrbiMed | Pfizer | Tekla Capital Management | Versant Ventures
RealReal	US	Consumer	IPO	–	$300m	Broadway Angels | Canaan Partners | DBL Partners | E.Ventures | Great Hill Partners | Greenspring Associates | Greycroft Partners | Industry Ventures | InterWest | NextEquity Partners | Novel Group | Panarea Capital | Perella Weinberg Partners | Sandbridge Capital | Springboard Fund
Drivy	France	Transport	Acquisition	Getaround	$300m	Alven Capital | Bpifrance | Cathay Innovation | Index Ventures | Mobivia Group (Via-ID) | Nokia
Adaptive Biotechnologies	US	Health	IPO	–	$300m	Alexandria Real Estate Equities | BD Biosciences | Casdin Capital | Celgene | Genentech | Illumina | Laboratory Corporation of America | Matrix Capital | Microsoft | Rock Springs Capital | Senator Investment Group | Tiger Global Management | undisclosed investors | Viking Global Investors

The total estimated amount of exited capital in Q2 2019 was $21.84bn, considerably higher than the $14.84bn in Q1 but significantly lower than the figure from the same quarter last year ($34.33bn). The top four recorded exits stood above the $1bn mark.

Uber, the US-based on-demand ride service backed by a range of corporate investors, raised $8.1bn when it floated on the New York Stock Exchange. The company priced 180 million shares at $45.00 each, near the foot of the $44 to $50 range it had set. It was the largest public offering since Alibaba raised $25bn in 2014, and valued the company at $82.4bn. Digital payment services firm PayPal bought an additional $500m of shares through a private placement. Uber´s previous corporate backers include SoftBank, carmaker Toyota, its China-based peer Didi Chuxing, software provider Microsoft, internet company Baidu, media groups Axel Springer and Bennett Coleman & Co, as well as GV, a corporate venturing subsidiary of Alphabet. Founded in 2009, Uber operates a ride hailing platform with 91 million monthly active users that ties into adjacent services such as food and freight delivery.

Top exiting investors Q2 2019



Internet technology provider Google agreed to pay $2.6bn to acquire Looker, a US-based data analytics technology provider backed by CapitalG, Alphabet's corporate venturing unit formerly known as Google Capital. Looker has built a platform that can take business intelligence data from a range of sources and use a proprietary data modelling code language to unify it, allowing it to be used in other applications, analysed together more thoroughly and more easily shared. The company's technology will be added to Google's cloud computing services provider, Google Cloud, expanding the breadth of its business analytics capabilities.

Pinterest, the US-based social media platform backed by e-commerce firm Rakuten, raised $1.43bn when it floated on the New York Stock Exchange. The company priced 75 million shares at $19.00 each, above the $15 to $17 range it had set earlier, giving it a reported market cap of $12.6bn. Founded in 2009, Pinterest runs an online platform with more than 250 million monthly active users where people can post and share images they like with each other. It initially concentrated on building user numbers but has ramped up advertising revenue in recent years.

Harry's, a US-based razor retailer backed by beauty product distributor Grace Beauty, agreed to an acquisition by consumer products supplier Edgewell Personal Care for $1.37bn. Edgewell agreed to pay approximately 79% of the amount in cash and the remainder in common stock. Harry's shareholders will own approximately 11% in Edgewell following the transaction. Founded in 2013, Harry's runs an online platform that sells men's grooming products, including razors, shaving cream and post-shave balm as well as face wash and lotion, on top of accessories such as razor stands and wash bags. Customers sign up for a subscription service and regularly receive blades and shaving gel, selecting a frequency of every two months to every five months.

Tilos Therapeutics, a US-based biopharmaceutical company established by pharmaceutical firm Boehringer Ingelheim and hospital network Partners HealthCare, was acquired for up to $773m by pharmaceutical group Merck & Co. Merck will, through an unnamed subsidiary, purchase all outstanding shares in Tilos and make an upfront payment, with additional contingent milestone payments. Other details on the size were not disclosed. Tilos is developing treatments targeting TGFβ, a small protein that plays a crucial role in immune and stem cell regulation. It is hoping to develop antibodies aimed at cancer, fibrosis and autoimmune diseases. The company was co-founded by Boehringer Ingelheim's corporate venturing subsidiary, Boehringer Ingelheim Venture Fund, and Partners Innovation Fund, the strategic investment arm of Partners HealthCare, in 2016.

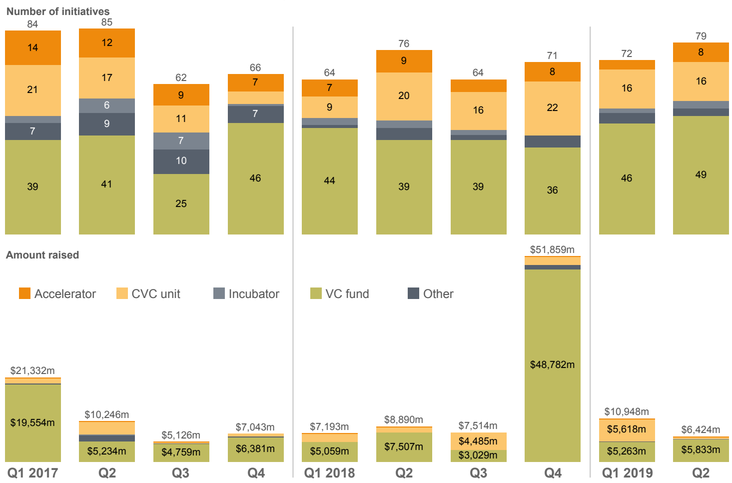
Funding initiatives

Corporate venturers supported a total of 79 fundraising initiatives in the second quarter of 2019, comparable to the 76 initiatives reported during the same period in 2018. The estimated total capital raised, $6.42bn, however, was considerably lower (28%) than last year's Q2 figure of $8.89bn.

The initiatives in question included 49 announced, open and closed VC funds with corporate limited partners (LPs), 16 newly launched corporate venturing units, eight corporate-backed accelerators and three incubators, among other.

Germany-based public-private partnership High-Tech Gründerfonds (HTGF) closed its third corporate-backed fund at $375m after securing €3m ($3.5m) from the co-founders of backpack and fashion label Fond Of. Founded in 2005, HTGF backs early-stage startups and typically provides up to $3.5m per portfolio com-

Fund initiatives by quarter Jan 2018-Jun 2019



QUARTERLY ANALYSIS

Top 10 funding initiatives Q2 2019

Fund	Type	Size	Country	Sector	Investors
HTGF III	VC fund	$375m	Germany	Unspecified/ sector-agnostic	Altana | B Braun | BASF | Bayer | Boehringer Ingelheim | Büfa | CEWE Color | Deutsche Post DHL | Dräger | Drillisch | Evonik Industries | EWE | Fond Of | Franz Haniel & Cie | Germany's Federal Ministry for Economic Affairs and Energy | Hettich | High-Tech Gruenderfonds | KFW | Knauf | Körber Group | Lanxess | Media + More Venture | Phoenix Contact | Postbank | Qiagen | Robert Bosch | RWE Innogy | Sapphire Ventures | Schufa | Wacker | Werhahn | Wilh
Cathay Innovation unnamed fund	VC fund	$358m	France	Consumer	Accor | BioMérieux | Bpifrance | Cathay Capital | Groupe ADP | Groupe Dassault | JCDecaux | Kering | Michelin | Pernod Richard | SEB | Valeo
DTCP Fund	VC fund	$350m	Germany	IT, telecoms, media	Carl Zeiss | Deutsche Telekom | HarbourVest | SK Telecom
Globis Fund VI	VC fund	$321m	Japan	IT, financial	Globis Capital Partners | Sumitomo | Tokio Marine
Northleaf Venture Catalyst Fund II	VC fund	$223m	Canada	Unspecified/ sector-agnostic	Bank of Montreal | Business Development Bank of Canada | Canada Pension Plan Investment Board | Manulife Financial | Sun Life Financial | TD Bank | The Northleaf Venture Catalyst Fund
JD Logistics Fund	VC fund	$218m	China	Services	JD Logistics | JD.com
Yunfeng Investment III	VC fund	$210m	China	Unspecified/ sector-agnostic	Suning Commerce | Yunfeng Capital
Indo-Japan Emerging Technology & Innovation	VC fund	$187m	Japan	IT, industrial, services	Development Bank of Japan | Mizuho Financial | Nippon Life | Reliance Industries | Reliance Nippon Life Asset Management | Suzuki Motor
The Fund	VC fund	$186m	Japan	Unspecified/ sector-agnostic	Mizuho Financial | Signifiant
MUFG Innovation Partners	VC fund	$180m	Japan	Financial services	Mitsubishi UFJ Financial

pany, though it has the option to supply more capital to particularly promising opportunities. It has backed more than 540 startups to date and celebrated more than 100 exits. The partnership has been investing from its third fund since achieving an initial $275m close in mid-2017. Its LPs include 32 corporate backers as well as Fraunhofer Society, development bank KfW and Germany's Federal Ministry for Economic Affairs and Energy. Corporates backers include Boehringer Ingelheim Venture Fund, pharmaceuticals and chemicals producer Bayer, maritime industry group Wilh and conglomerate Werhahn, among many other.

Cathay Innovation, the venture capital arm of France-based private equity firm Cathay Capital, reached a €320m ($358m) first close of a €500m fund, securing capital from several corporates. The LPs include hospitality chain Accor, airport operator ADP, biotech firm BioMérieux, diversified conglomerate Dassault, outdoor advertising company JCDecaux, luxury goods producer Kering, appliance maker SEB, tire manufacturer Michelin, alcoholic beverage producer Pernod Richard and automotive components supplier Valeo. French government-owned investment bank BPIfrance also threw its weight behind the fund. Cathay Innovation was established in 2015 to invest in startups based in Europe, North America and China, supporting portfolio companies through multiple rounds. The venture capital operation has grown to 30 staff across offices the cities of Paris, San Francisco, Beijing and Shanghai.

DTCP, the investment arm of Germany-based telecoms firm Deutsche Telekom formerly known as Deutsche Telekom Capital Partners, secured external investors for a $350m fund. The corporate launched its first fund in 2014 as a successor to T-Venture, its corporate venture capital arm since 1998, supplying $140m to take the total provided by Deutsche Telekom across various funds to $620m at the time. South Korea-based telecoms firm SK Telecom and optical systems producer Zeiss are LPs in the new fund, as are private equity firm HarbourVest Partners and investment manager Neuberger Berman. The new fund will invest at growth stage, providing $5m to $50m in funding to enterprise software developers operating in areas like 5G technology, the internet of things, cloud and network infrastructure, artificial intelligence, cybersecurity and marketing. It will also invest in other funds.

Japan-based venture capital firm Globis Capital Partners unveiled a ¥36bn ($321m) first close for its sixth fund, with commitments from various LPs including insurance provider Sompo Japan Nipponkoa Insurance. Tokio Marine Asset Management, the investment management arm of insurance firm Tokio Marine, also backed the fund, dubbed Globis Fund VI, as has financial holding company Sumitomo Trust through its Japan Vintage Fund 2019. Financial services firms Sumitomo Mitsui Banking Corporation and Bank of Yokohama are also among the LPs, as are the state-owned financial institution Development Bank of Japan and small business services provider Organisation for Small and Medium Enterprises and Regional Innovation, Japan. The Globis Fund VI has a $335m target size. Institutional investors are expected to make up 80% of the fund's LPs. The fund will invest up to $45m in each portfolio company and has set a goal of supporting seed-stage companies all the way through to the unicorn stage when they achieve a $1bn valuation. Globis Fund VI will focus on technologies such as artificial intelligence, the internet of things and blockchain, and will also offer assistance with management development and staff recruitment.

QUARTERLY ANALYSIS

Canada-based investment firm Northleaf Capital Partners closed its latest fund at its C$300m ($223m) hard cap with the help of several corporate LPs. Northleaf Venture Catalyst Fund II reached its final close following commitments from insurance provider Manulife and BMO Capital Partners, the private equity arm of the Bank of Montreal, as well as high net worth individuals and undisclosed family offices. The new capital added to a December 2018 initial close that featured insurance and asset management group Sun Life, financial services firm Toronto-Dominion Bank, Canada Pension Plan Investment Board and BDC Capital, the VC investment arm of the state-backed Business Development Bank of Canada. A minimum of 80% of the fund's capital will be invested in Canada-based VC and growth-oriented funds, with up to 20% mandated to funds based outside the country. Up to 25% will be set aside for direct investments, of which 80% will be allocated to Canada-based companies. Founded in 2009, Northleaf manages more than $12bn in venture capital, private equity, private credit and infrastructure commitments.

JD Logistics, the logistics services provider spun off by China-based e-commerce group JD.com, raised RMB1.5bn ($218m) or a strategic investment fund. JD Logistics and JD.com itself are among the 0LPs, along with several undisclosed public companies and government-led fund. The vehicle will focus on the logistics sector and will complement JD.com's existing investment team, which has a remit to invest in a wider array of industries. The entity also adds to a fund launched by JD.com's property management arm in partnership with Singapore's sovereign wealth fund, GIC, which had secured $698m as of February. JD Logistics was spun off in 2017, when it began offering its delivery and warehousing services to external clients.

China-based retail group Suning agreed to provide up to $210m for a fund being raised by China-based private equity firm Yunfeng Capital with a $2.5bn target. Suning will provide the money through a wholly-owned subsidiary known as Suning International, and has already committed more than 61.4% of the capital. The fund, Yunfeng Investment III, will seek additional LPs as it looks to reach its target. Founded in 1990, Suning is the biggest retail store operator in China. It specialises in consumer electronics and household appliances as well as office equipment, and operates both brick-and-mortar stores and an e-commerce platform. Suning previously partnered Yunfeng, which was co-founded by Alibaba's founder, Jack Ma, for a separate vehicle called Yunfeng IK Co-Invest in January 2019, committing $50m to that fund.

Investment manager Reliance Nippon Life Asset Management (RNAM) will manage a $187m fund of funds, backed by several Japan and India-based corporates. The LPs for the vehicle, dubbed Indo-Japan Emerging Technology & Innovation, include insurance firm Nippon Life, automotive manufacturer Suzuki, financial services firm Mizuho Bank and state-owned financial institution Development Bank of Japan. RNAM is promoted by Japan-based Nippon Life and Reliance Capital, the financial services arm of India-headquartered conglomerate Reliance Group. It holds 85.8% of the fund's share capital. Indo-Japan Emerging Technology & Innovation is intended to invest in 15 to 25 India-focused venture capital funds, with the resulting capital eventually boosting sectors such as the internet-of-things, artificial intelligence, business-to-business software and robotics technology.

Japan-based investment firm Signifiant harnessed financial services firm Mizuho Financial Group to launch a ¥20bn ($186m) growth investment vehicle dubbed The Fund to back growth-stage companies. Mizuho Capital, the venture capital arm of Mizuho Bank, will own 33.3% of the vehicle while the rest will be held by Signifiant. In addition to providing capital for The Fund, the banking group will look to complement Signifiant's business development initiatives through its consumer networks and resources. The Fund intends to invest several billions of yen (¥1bn = $9.3m) in each round to take a minority stake in portfolio companies. It will focus on startups at growth stage prior to their initial public offering and will offer management and financial assistance to achieve smooth and continuous growth once they have gone public. Signifiant will also provide assistance for portfolio companies in executing business and financial strategies, organisational management and governance, while The Fund will offer strategic support.

Japan-based financial services firm Mitsubishi UFJ Financial Group (MUFG) launched a ¥20bn ($180m) fund to focus on financial technology startups in Southeast Asia. The bank already invests through a venture capital arm known as Mitsubishi UFJ Capital, but set up a new unit called MUFG Innovation Partners (MUIP) to oversee strategic fintech investments and the formation of strategic partnerships. The new ¥20bn vehicle will invest in Japan and Southeast Asia, where it will focus on fintech startups that are looking to enter its home country. The fund will also explore more cutting edge technologies such as artificial intelligence, the internet of things and quantum computing. ◆

REVIEW

PitchBook seeks the golden mean of corporate venturing

The latest note by data provider PitchBook found that, in the context of growth in corporate venture capital, the most active CVC arms it examines have shown a strong historical performance and corporate-backed portfolio companies have reaped benefits in the form of higher exit chances and lower bankruptcy rates

Kaloyan Andonov, reporter, GCV Analytics

Unlike traditional venture capital firms, corporate venturers are in the unique position to facilitate help, know-how and expertise to their portfolio companies. Because of their knowledge dominion through the talent pool of the corporate parent, it may be argued that corporate venturers are potentially successful investors to keep an eye on within the realm of the riskiest asset that is venture capital.

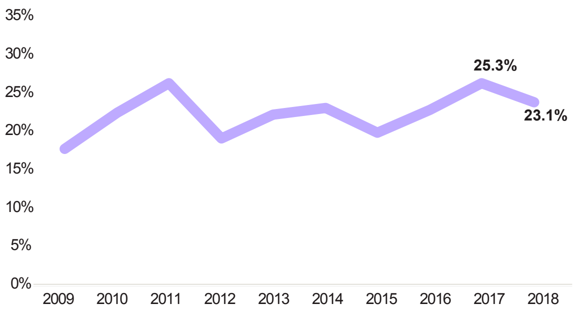
These are possibilities that have not been studied in much depth, save for a few scholarly papers. However, one recent analyst note – *The Golden Mean of Corporate Venture Capital* – put together by data provider PitchBook, makes headway by examining if the balancing of strategic and financial goals of corporate venturers could lead to golden exit and loss ratios.

The note's author Brendan Burke, senior venture capital analyst at PitchBook, reached out to Global Corporate Venturing and to me for some pointers, while preparing the note. It is, therefore, a true pleasure for me to be summarising some of its most interesting findings. Burke co-authored the report with data analyst Darren Klees of PitchBook.

After reviewing the current landscape of corporate venturing in the US and globally, the note cites findings from our latest annual survey of executives of corporate venturers that 44% of CVC funds are over $100m in size. It adds, furthermore, that out of the 80 CVC arms with recorded assets under management (AUM) on the PitchBook platform, the median AUM for US-based CVCs was $175m. The note also cites pertinent examples of CVC arms that have been equipped with significantly larger funds to emphasise that CVC arms are sufficiently capitalised to be "competitive with traditional VCs and capable of leading late-stage rounds."

However, do corporates really lead many deals? The note sheds more light on the matter through PitchBook's data. While corporates are normally co-investors – not determining deal prices or sizes – data suggest that the proportion of deals led or funded solely by them ticked up from 2015 to 2017 and stood at 23.1% by the end of 2018.

Deals led or solely backed by US CVCs as proportion of early and late-stage VC deals



Source: PitchBook

The report also examines the financial drivers of CVCs, taking as a starting point recent accounting research on the period from 1996 to 2017. The research was aiming to find correlations between the presence of a CVC program and other variables. The strongest correlations found were a positive relationship between CVC activity and R&D as well as an inverse relationship between CVC activity and capital expenditures (capex). PitchBook, in turn, found evidence to both confirm and refute certain claims in that research.

PitchBook's data indicated that both R&D and capex spending had a positive relationship with CVC activity in 2018. In a sample of 27 publicly traded corporations with CVC arms, average R&D budgets had been on the rise, with 2018 constituting the largest percentage increase since 2010. The PitchBook report supposes that this rise in R&D spending "may have trickled down to increased CVC activity." At the same time, average capex among the studied group of corporations also went up, failing to provide further evidence on an inverse relationship with CVC activity suggested by the previous study.

More interestingly, PitchBook likens the future of corporate venturing to changes in R&D accounting policy, which "may be a headwind for CVC investment." At present, corporations can deduct R&D expenses but will be required to capitalise and amortise them over five years from 2022 onward, as stipulated by the Tax Cuts & Jobs Act (TCJA). The note considers the possibility that "companies may decide to get ahead of the tax penalty in 2022 by heavily investing in R&D in the interim," which would mean less funds for R&D innovation and thus less funding for CVC programs – some-

REVIEW

thing that "could have a cooling effect on the broader VC market." The other possibility is that corporations simply allocate more funds to their venturing arms, as those normally are off their balance sheets.

The note also focuses on strategic elements of corporate venturers. It combines findings of various surveys, including Global Corporate Venturing's latest annual survey, on important strategic metrics and goals set for corporate venturing subsidiaries.

In addition to the strategic element of CVCs, the PitchBook note also touches on the question of financial performance of such investors. Citing the latest GCV annual survey results that 61% of CVC respondents reported internal rates of return (IRRs) over 11% and only 5% negative ones, its findings suggest "average CVC returns are similar to independent VCs, which have a 5-year equal-weighted IRR of 12.6% as of 2Q 2018", according to PitchBook data from other sources.

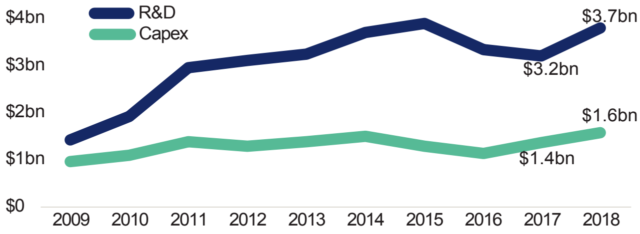
To elaborate the point, Burke and Klees dedicate a good part of the note trying to dissect the portfolio performance of three of the most reputed CVCs in the US – Intel Capital – venturing arm of semiconductor and chip maker Intel, Salesforce Ventures – of the cloud enterprise software provider Salesforce and GV – one of the venturing subsidiaries of diversified internet conglomerate Alphabet. The table, which we have reprinted here with permission, summarises the conclusions of this analysis, which is extremely hard to conduct, given disclosure limitations (neither all CVC deals nor all business shutdowns in their portfolio have been disclosed).

Finally, the note also harnesses the power of PitchBook's data to examine the impact of corporate venturers on their portfolio companies and if they actually provide extra value to them.

To gauge relative performance, the authors of the note analyse portfolio companies seeded in the period 2008-2012 that raised at least 2 rounds of funding, and find evidence that corporate-backed emerging businesses outperformed the others. Three out of every ten (31.9%) corporate-backed companies provided an exit (acquisition, buyout or IPO) within their first eight fundraising rounds, while only 9.4% declared bankruptcy. In comparison, only 21.3% of the other companies with no corporate backers achieved an exit, while 23.0% went bust.

In sum, the note is a serious attempt to evaluate corporate venturers as a class of investors relying on both previous academic research and sourcing relevant information not only via PitchBook's own platform but also through other trade publications and industry practitioners. ◆

Average R&D and capex spending for publicly-traded US CVC parent companies



Source: PitchBook

CVC strategic goals and corresponding KPIs

CVC strategic goal	KPI
Access to new technology	Number of new products introduced to market New revenue generated
Trend spotting and market intelligence	Number of deals sources and evaluated Number of sector sectors prepared
New commercial relationships	Number of pilots implemented
M&A pipeline	Number of completed acquisitions of portfolio companies by the parent company
Business model innovation	New customer segments reached New geographic markets reached

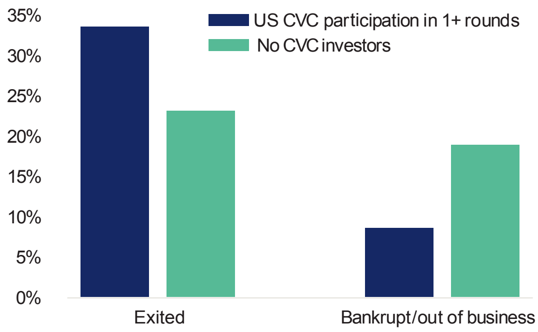
Source: Touchdown Ventures, Global Corporate Venturing & PitchBook

Performance breakdown for Intel Capital, GV and Salesforce Ventures

Benefit to parent company	Intel Capital	GV	Salesforce Ventures
Noncore technologies receiving investment	AI, IoT and cybersecurity	Life sciences, healthcare, AI and cybersecurity	AI
Enables trend spotting and market intelligence in core business	6.7% of investments in core business segment semiconductors	N/A	Focus on companies within Salesforce ecosystem
Creates commercial relationships for parent company	Some evidence of joint R&D and portfolio company utilization of Intel technology	N/A	Grows App Exchange platform of apps and services
% of parent company acquisitions from portfolio companies	15.5% (since 2008)	6.7% (since 2012)	15.6% (since 2011)
Business model innovation	Expands geographies and invests in use cases for Intel products	Gives parent company insight into strategic priorities of healthcare, mobility and AI	New customer segments and product features through App Exchange
Exit ratio for 2009-2013 investments	18.8%	21.8%	37.0%
Loss ratio for 2009-2013 investments	14.5%	12.9%	7.4%

Source: PitchBook

Exit outcomes for companies seeded in 2008-12 that raised two VC rounds



Source: PitchBook

Global Corporate Venturing