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Global Corporate Venturing

GCVI Summit: Riding the innovation wave

INSIDE

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EDITORIAL

Diversity brings strength to the industry

James Mawson, editor-in-chief

An ancient Greek proverb says: “Society grows stronger when old people plant trees they know they will not sit under.” Given how long it takes to develop a new energy source or transform healthcare or change how we communicate with each other more clearly it can feel like corporate venturers are planting these seeds.

But some germinate and grow more quickly. At last month’s Global Corporate Venturing & Innovation Summit, there were many shared points of wisdom and reflections on pain points as well as potential deals to collaborate.

One of the pain points to be tackled earliest has been the diversity issue within the venture capital industry and the startups they back. Tracy Isacke at Silicon Valley Bank was among those giving Global Corporate Venturing feedback concerning the relative lack of diversity at our events five or so years ago, which helped us recognise we were unconsciously biased towards male speakers as the easiest route to filling an agenda.

Her encouragement and that of others has helped us unbias our approach – though more can still be done – but our process has been aided by change in the venture ecosystem, as more female and diverse investors are recruited and promoted. As in much of the overall innovation capital ecosystem, corporate venturers are leading the way.

Harvard academics Sophie Calder-Wang and Paul Gompers noted at the Stanford Financing of Innovation Summit at the end of November that there had been a “great stagnation” in numbers of female entrepreneurs and VCs over the past 30 years – going from 7.2% to 10.7% and 5.8% to 8.9%, respectively, from 1994 to 2016).

Among CVCs, however, more than a fifth of the top-ranked professionals, as judged by the GCV Powerlist 100, are women, and and that figure could be higher at the next awards being held at the UK’s Houses of Parliament in London on May 23 during the GCV Symposium.

More than a third of those coming through the ranks are women, according to the GCV Rising Stars 2019 awards presented ahead of the GCVI Summit at the Monterey Aquarium gala reception.

But the broad base of the CVC profession still consists mainly of men – the GCV annual survey found three-quarters of 86 firms were primarily or exclusively male.

The broad base of the CVC profession still consists mainly of men – the GCV annual survey found three-quarters of 86 firms were primarily or exclusively male

More than purely numbers, however, it has been impressive to watch, as Isacke identified on stage in her panel alongside Karen Kerr from GE Ventures, Meghan Sharp from BP Ventures and Katherine Resteiner from Intel Capital, how the conversation has so rapidly moved from questions about whether there is an issue, to why there is an issue, and then to how the issue can be addressed.

Isacke, along with Kiran Malhotra, director of venture capital relationships at law firm Fenwick & West, organised the Women in Venture lunch before the summit to facilitate connections among female attendees.

The cultural change reflects society more broadly, and as CVCs join boards and find opportunities from a wider group of entrepreneurial types, so the entrepreneur base will change and start to reverse what Victor Hwang at Kaufman Foundation notes has been a slow reversal in the numbers of startups in the US.

Diversity is a long-term strength for CVCs and hence for the broader venture ecosystem. GCV is keen to continue supporting this and other changes to the industry as it prepares for the headwinds of an economic downturn. The GCV Leadership society’s advisory board, chaired by Intel Capital president Wendell Brooks, has noted greater focus on the industry’s professionalism, the people coming in and retained by CVC units, and closer partnerships between corporations and other venture investors. The board identified the challenges faced by the industry, and acting as an agent of change for other venture managers, CVCs will reap multiple rewards.

For a full report on the wide-ranging GCVI Summit discussion topics, *see special report*.

Let us know how we can continue to evolve and improve, and tell us about your achievements and contributions to improving the world. ◆

NEWS

Saijou steps up to chairman at YMVSV


Saijou

Hiroshi Saijou, CEO and managing director of Japan-based Yamaha Motor's corporate venturing arm, Yamaha Motor Ventures & Lab in Silicon Valley (YMVSV), has been made chairman. Saijou, a founder of YMVSV who featured on GCV's 2016 and 2018 Powerlists, will also be general manager of new business development at Yamaha Motor. George Kellerman, formerly chief operating officer and general partner at YMVSV, will take on Saijou's previous roles.

Kellerman told Global Corporate Venturing: "We launched a new $100m fund last month and moved to a larger office with a garage and workshop space two months ago, so we are definitely growing and expanding our influence within Yamaha Motor. We are putting an increased emphasis on investing and we are going to be opening two to four international branch offices over the next year or two. Hiro is moving to Yamaha Motor USA to become general manager of new business development, which will become the internal organisation to which YMVSV can hand off startups and projects."

Eneco brings in Baneke to head corporate venturing

Eneco Innovation and Ventures, Netherlands-based energy utility Eneco's corporate venturing arm, has promoted investment director Leonie Baneke to head of the unit. Baneke joined Eneco as an M&A adviser in 2014 before becoming an investment director at Eneco Innovation & Ventures in January 2016, six months after its launch. The vehicle focuses on investments in smart home, intelligent building and domestic renewable energy technology developers.

Smith splits from Verizon Ventures


Smith

Mark Smith, an executive director at US-based telecoms firm Verizon's corporate venturing arm, Verizon Ventures, has stepped down. Smith joined the unit in 2007 and was a GCV Rising Star in 2017. His relationship with Verizon dates from 1995, when he joined its predecessor company, Bell Atlantic.

Finn marches on to March Capital


Finn

Meredith Finn, previously a senior director at Salesforce Ventures, the corporate venturing arm of enterprise software provider Salesforce, has joined venture capital firm March Capital as a partner. A GCV Rising Star last year, Finn helped set up Salesforce's $50m Impact Fund in 2017, having joined the unit two years before. She told Global Corporate Venturing: "I am going to be focused on enterprise software broadly while at March, going back to my core focus while at Salesforce." March Capital has raised a $157m second VC fund and a $145m second opportunity fund, according to securities filings.

NabVentures nets Ranjan as CEO

NabVentures, the new investment arm of India-based development bank National Bank for Agriculture and Rural Development (Nabard), has hired Rajesh Ranjan as chief executive. Ranjan comes from India-based private advisory equity firm CapAleph Fund where he was a director as well as head of investments.

Established in December 2018, NabVentures will invest in early to mid-stage companies with a food, agribusiness and rural development focus. The unit will rely on capital from Nabard, which is already involved in the rural development space, to fund startups keen to find socially enterprising ideas and solutions for the rural communities. Nabard has also committed to launching agricultural product-focused incubators in India, two of which have already been set up.

NTT Docomo Ventures calls in Asada

NTT Docomo Ventures, the corporate venturing unit operated by telecoms firm NTT Group's mobile network subsidiary, NTT Docomo, has hired Ken Asada as managing director. Asada comes from Intel Capital, semiconductor and data technology provider Intel's corporate venture capital subsidiary, where he was a Japan-based investment director.

Intel Capital hired Asada as an investment manager in 2011 before promoting him to investment director two years later. His primary focus was robotics and artificial intelligence venture opportunities in Japan. He told Global Corporate Venturing: "At NTT Docomo Ventures, I am tasked with venture investment activities and collaboration with startups on behalf of the entire NTT Group."

NEWS

Zeaske seeks out Echo Health position

Jessica Alderman Zeaske has left her position as director of healthcare investments at GE Ventures, power and industrial equipment producer General Electric's corporate venturing fund, to become a partner at Echo Health Ventures, a US-based joint investment venture formed by health services provider Cambia Health and health insurer Blue Cross and Blue Shield of North Carolina's Mosaic Health Solutions unit.

At GE Ventures, Zeaske worked with and took board seats at two portfolio companies – data aggregation and analytics technology developer Arcadia and health analytics marketplace Apervita – both of which addressed data issues in the healthcare industry in novel ways, she said. Prior to joining GE Ventures, Zeaske was a principal at healthcare-focused venture capital firm Lemhi Ventures for more than eight years.

Taub takes IQT partner position

Steve Taub has left GE Ventures, power and industrial equipment producer General Electric's corporate venturing unit, to become a partner at In-Q-Tel, the US intelligence community's venture capital fund.

Taub had been a managing director at GE Ventures since 2017, having joined another General Electric subsidiary, financial services unit GE Capital, in 2006, before moving to GE Ventures in 2012. Taub will be based in Waltham, Massachusetts, to explore the greater Boston ecosystem.

Comcast's Yang to hang at Omers

Michael Yang has left Comcast Ventures, the corporate venturing arm of US-based mass media group Comcast, where he was a managing director for nine years, to join Omers Ventures, the venture capital arm of Canada-based pension fund Ontario Municipal Employees Retirement System (Omers), as a US-based managing partner.

At Comcast Ventures, Yang led investments in healthcare, internet-of-things and virtual reality technology. Omers Ventures hired Yang to run its new office in Silicon Valley. It focuses on technology, media and telecoms deals.

Lee lands CFO role at SoftBank Ventures Asia

Seung Lee has been made chief financial officer at SoftBank Ventures Asia, the corporate venturing subsidiary recently rebranded by Japan-based telecoms and internet group SoftBank. Lee has joined after a 15-year stint at investment banking firm Morgan Stanley, where he advised on mergers and acquisitions and helped the firm raise capital for corporate clients. In addition to managing SoftBank Ventures Asia's funds and limited partners, Lee will lead the financial operations of the unit's offices in China, Singapore and Silicon Valley.

Alexandrian dives into Canopy Rivers

Canopy Rivers, the corporate venture capital arm of Canada-based medical marijuana producer Canopy Growth, has promoted Narbe Alexandrian, its former vice-president of business development, to president.

The unit, which went public in September 2018, recently led a $9m convertible debt financing round for plant-based food and beverage producer Greenhouse Juice and a $12.1m series A round for cannabis-focused data analytics platform provider Headset immediately before Alexandrian's promotion. Since becoming president, he has helped Canopy Rivers provide $1.1m in seed capital for Herbert Works, a Canada-based cannabis beverage and edibles-focused platform operator. Before joining Canopy Rivers, Alexandrian was a senior associate at Omers Ventures, the venture capital arm of Canada-based pension fund Ontario Municipal Employees Retirement System, for more than three years from 2014.

Robinson returns to Greenwich BioMedical

Perry Robinson, managing director of investments for insurance firm Guardian Life's $100m corporate venturing arm, GIS Strategic Venture Capital, has rejoined US-based venture capital firm Greenwich BioMedical Digital Health Ventures.

Robinson founded Greenwich BioMedical in 2002 and was managing director until 2016, two years after joining GIS. He has returned to the firm as a managing partner and will oversee investments in digital health and artificial intelligence (AI). During his four-year term at GIS Strategic Venture Capital, he has funded and advised companies at board level in biotech, digital health and financial technology.

NEWS

Shrestha seeks out Atrium Health

Rasu Shrestha has left his position as chief innovation officer at healthcare system University of Pittsburgh Medical Center (UPMC) to join another healthcare provider, Atrium Health, as chief strategy officer. Having joined UPMC in 2007 as medical director of radiology informatics, Shrestha spent almost 12 years at the organisation and led its innovation strategy from 2014 as chief innovation officer.

He was concurrently an executive vice-president at UPMC's investment arm, UPMC Enterprises, where he oversaw investments in startups focusing on healthcare intelligence. In his new role he will develop enterprise strategy and lead Atrium's innovation efforts, making healthcare discoveries and technologies more accessible.

Menlo Ventures hires Qualcomm's Haghighi

Houman Haghighi, formerly head of business development at Qualcomm Ventures, mobile semiconductor producer Qualcomm's corporate venturing arm, has joined venture capital firm Menlo Ventures as a business development partner.

Haghighi joined Qualcomm Ventures in 2011 and has overseen investments in robotic gaming platform Reach Robotics, robotic arm developer Carbon Robotics, deep learning technology producer Clarifai and cybersecurity technology producer AttackIQ. He also founded and headed Qualcomm Robotics Accelerator in association with TechStars.

Haghighi will work with Menlo Ventures' acceleration scheme, Fuel, and will also engage with the firm's portfolio, which includes Uber, Bitsight and Roku, to explore partnerships that could facilitate extra funding and build a network of potential partners for portfolio companies.

Doddala ascends at TIAA to head fintech strategy

US-based financial services firm TIAA has promoted Raja Doddala, managing director of its business-to-business digital division, to head its financial technology strategy and development branch.

Doddala joined TIAA in 2016 to head the digital team at its institutional financial services department, implementing self-service sales, mentoring new hires and managing storefront website. In his new role, he will develop TIAA's fintech strategy by exploring innovative technologies and investment opportunities in digital technology.

Before joining TIAA, Doddala spent a decade at US-based convenience retail chain 7-Eleven, where he held various senior roles, co-founding its corporate venturing unit, 7-Ventures, in 2013 as senior director of services and new ventures.


Doddala

Parfett finds Scentre on departure from Qantas

David Parfett, former head of airline operator Qantas's Innovation and Ventures unit, has joined Australia-based shopping centre operator Scentre Group as general manager of strategy and business development.

He originally joined Qantas in 2011 as a senior manager of group strategy before being promoted to head of strategy and innovation in 2014 and eventually running the corporate's Innovation and Ventures team from late 2016. He helped Qantas form its innovation and ventures strategy, and set up corporate venturing unit Qantas Ventures in 2017 to make investments in early and growth-stage technology developers. In his new role, Parfett will help Scentre, the owner of shopping centre chain Westfield, establish its own corporate venturing arm.

Rez reaches for Sky investment role

Eva Rez, formerly an investor at seed-stage venture capital fund Episode 1 Ventures, has joined UK-based media company and broadcaster Sky as a senior investment manager. She told Global Corporate Venturing this would be her first corporate venturing appointment.

She added: "Corporate VCs are becoming the next big thing. More and more big corporates realise the importance of digitisation or other leading trends in their industry and embrace innovation as part of their core activities. Also, more and more founders find the contribution of CVCs very helpful as it comes with patient capital, a lot of industry expertise, access to data, infrastructure and opening doors to the big fish in one's market."

Rez spent six months at Episode 1, scouting, evaluating and proposing investments in UK-based deep tech developers. She also established and diversified relationships with incubators, accelerators and other VCs. Before that she chaired the education committee at the Hungarian Venture Capital Association.

NEWS

Wuttke walks back to Almirall

Francesca Domenech Wuttke, previously managing director of US-based pharmaceutical firm Merck & Co's Merck Global Health Innovation Fund (GHI) subsidiary, has joined pharmaceutical company Almirall.

Wuttke

Wuttke headed Almirall's corporate development strategy team for a year before joining Merck GHI in 2016, and has become chief digital officer on her return. During her earlier tenure at Almirall, she focused on medical device and pharmaceutical M&A deals. Now she will instigate and implement the company's end-to-end digital strategy, reporting to Almirall chief executive Peter Guenter.

While at Merck GHI, Wuttke led Europe-based investments. She was a GCV Rising Star last year.

Williams leaves Shell for NGIF

Tyler Williams has left Shell Ventures, the corporate venturing unit of petroleum supplier Shell, to become an executive committee member of Canada-based investment partnership Natural Gas Innovation Fund (NGIF). Williams had been an investment principal at Shell Ventures since 2017, having joined the corporate in 2013 before taking a Canada-based global technology leader position in 2015 to lead the development of its industrial internet-of-things strategy. Shell Canada joined six other Canada-based gas producers in pledging C$3m ($2.26m) to support NGIF's initiative to back companies attempting to develop cleaner methods of power generation using gas.

Guzel goes to principal role at BMW

BMW i Ventures, the corporate venturing subsidiary of Germany-based automotive manufacturer BMW, has promoted senior associate Baris Guzel to principal. Guzel joined BMW i Ventures in 2017 after six months as a venture capital associate at VC firm Presidio Partners. He had previously spent a year working as a technology investment banking associate at financial services firm Deutsche Bank.

Foxconn's McCabe joins Future Family

Jen McCabe, formerly a US-based director of investments and strategic business development for China-based contract electronics manufacturer Foxconn since 2016, has joined fertility startup Future Family, which provides services including egg freezing and in vitro fertilisation. McCabe will be head of business development.

McCabe was previously a director of business development and alliances at supply chain electronics manufacturer Flex's US-based innovation unit from 2015 to 2016, overseeing investments in the robotics space. She also has entrepreneurial experience, having founded Factorli, a mid-level consumer electronics manufacturing hub backed by US-based real estate and development investment firm DTP, in 2013.

WarnerMedia Investments closes book on deals

US-listed media group WarnerMedia has shuttered its corporate venturing unit, WarnerMedia Investments, according to Digiday, citing sources. Formed in 1998 as Time Warner Investments, WarnerMedia Investments was rebranded following the conversion of its parent company from Time Warner to WarnerMedia in June 2018, when it was acquired by telecoms firm AT&T.

The vehicle has built a substantial new media and media technology portfolio that includes in-game communication software producer Discord, valued at more than $2bn, and fantasy sports platform and fellow unicorn FanDuel, as well as NextVR and Conviva, which have each raised more than $100m. Exits include online streaming management company Maker, acquired by Disney for $500m in 2014, advertising technology provider Adify, picked up by Cox Enterprises in a $300m deal in 2008, and content monetisation platform PlaySpan, bought by Visa in a $190m deal in 2011.

However, the unit has ceased to invest, sources told Digiday, and Allison Goldberg, a senior vice-president who was also the unit's managing director, has left, according to an automated email response.

A fall in the valuation of new media companies has stung WarnerMedia Investments, whose last recorded investment was in video app development platform You.i TV in November 2018. Digital media properties and portfolio companies Mashable and Mic have both sold for fractions of their past value in recent months.

The unit's portfolio is currently being managed by Priya Dogra, executive vice-president of strategy and corporate development for WarnerMedia, and could be sold to another investor, sources said. However, Dallas Business Journal claimed the unit would be absorbed into WarnerMedia Innovation Lab, a new incubator and partnership hub headed by Jesse Redniss, formerly executive vice-president of data strategy and product innovation for Warner subsidiary Turner.

NEWS

Atias makes Bold move at L'Oréal

Muriel Atias, formerly project director of M&A corporate finance for France-based cosmetics producer L'Oréal, has joined its corporate venturing unit, Business Opportunities for L'Oréal Development (Bold), which was established in December last year. Bold hired Atias as chief investment officer, and will take minority stakes in companies developing marketing, research and development, retail and supply chain-focused technologies.

Atias was project director for nearly five years, managing turnover from L'Oréal's real estate, industrial and R&D investments. Previously she worked for France-based banking group BNP Paribas for a decade, holding various roles in corporate finance.

General Electric weighs up GE Ventures divestment

US-based industrial and power technology producer General Electric (GE) intends to divest its corporate venturing unit, GE Ventures, according to MedCity News, citing sources.

GE Ventures was launched in 2013 as a successor to the firm's GE Capital unit – which still operates as a financial services provider – as well as a clutch of separate funds that focused on areas such as healthcare and energy, with a brief to invest $150m a year on behalf of its parent.

Since its formation, GE Ventures has been led by CEO Sue Siegel, now also General Electric's chief innovation officer, and has built a substantial portfolio that includes dynamic glass producer View and 3D printing technology providers Carbon and Desktop Metal. The overall value of the unit's portfolio is what is preventing it from being shut down rather than spun off, according to one source, who suggested it could be transferred to venture capital firm Mohr Davidow Ventures.

GE is in the process of a long-term reorganisation that involves it selling many of its subsidiaries. – 27 of GE Ventures' 86-strong portfolio operate in the healthcare sector, and the prospective sale of GE's healthcare activities could be related to any decision on GE Ventures' future.

The news comes in the wake of a series of high-profile departures from GE Ventures in the past year, including managing director Lisa Suennen, managing director of healthcare investments Noah Lewis and director of healthcare investments Jessica Zeaske.

SoftBank reshuffles CVC activities in Asia

Japan-based telecoms and internet group SoftBank has rebranded its SoftBank Ventures Korea unit to SoftBank Ventures Asia to reflect a wider geographical focus.

Founded in 2000, SoftBank Ventures Korea initially formed part of a network of corporate venturing vehicles that included SoftBank China Venture Capital, New York-based SoftBank Capital – since spun out as SBNY – and Softbank UK Ventures. The unit initially focused on South Korea-based investments but expanded its remit in 2011 to take deals elsewhere in Asia. It has now backed some 250 companies.

The rebranded unit will also make early-stage investments in the US and Europe. It is has offices in China, Israel and the US as well as South Korea, and is hiring staff for a second Chinese office and a branch it plans to open in Singapore.

Hana Financial hits the venture capital space

South Korea-based financial services firm Hana Financial Group has set up ₩1trn ($894m) fund of funds Hana Ventures to provide debt financing to venture capital firms, NewsWorld has reported. The fund plans to deploy the capital by 2021, targeting VC firms investing in biotech and information, communication and technology. The company has put up ₩100bn for a fourth Industrial Revolution fund expected to be formally established in Q1 2019 as part of the initiative. In addition to supplying loans, Hana is also seeking to make direct investments in investment vehicles.

Verily to expand Partner Space

Verily, the US-based life sciences subsidiary of internet and technology group Alphabet, is expanding its investment activities to include more startups following a $1bn investment, according to TechCrunch. Partner Space, Verily's investment and collaboration scheme, is to increase the number of startups it hosts from six or eight companies to up to 15, Andy Harrison, head of business and corporate development and ventures lead at Verily, told TechCrunch.

The initiative typically invests in series A or B rounds and offers portfolio companies the opportunity to work in its San Francisco campus in a move to foster collaboration. Verily raised $1bn recently, in a round led by private equity firm Silver Lake, that included Ontario Teachers' Pension Plan and two undisclosed investment management firms.

NEWS

Midea initiates fund with $293m target

China-based appliance manufacturing group Midea has raised $104m for an investment fund with a targeted close of RMB1bn ($147m) to RMB2bn, China Money Network has reported, citing a regulatory filing. Guangdong Midea Smart Technology Industrial Investment Fund has a $44m commitment from an unnamed wholly-owned investment arm of Midea. Other limited partners have not been named.

The fund will focus on areas such as intelligent manufacturing, smart home, retail and new energy. It will be managed by an asset management vehicle formed in June 2018. Midea invested $1.4m for a 49% stake in this vehicle. The remaining 51% is owned by an undisclosed investment management firm which supplied $1.5m.

Von Tobel leaves NM to start Inspired Capital

Alexa von Tobel, previously chief innovation officer for life insurance provider Northwestern Mutual, has formed early-stage technology venture fund Inspired Capital. Von Tobel, the fund's managing partner, will join forces with Mark Batsiyan, a partner at Northwestern Mutual's corporate venturing arm, NM Future Ventures, for just over two years, who has taken the same position at the new firm. Inspired Capital plans to raise $200m for its first fund, according to a securities filing.

Von Tobel founded financial planning platform LearnVest in 2008 as CEO. Northwestern Mutual acquired LearnVest in 2015 as part of a deal in which she was appointed chief digital office and chief innovation officer for the corporate as well as head of NM Future Ventures' investment committee. NM Future Ventures has hired Souheil Badran, formerly president of Americas for e-commerce group Alibaba's financial services affiliate, Ant Financial, to take over Von Tobel's duties. He will become an executive vice-president.

Corporates help ATM Capital get $200m deposit

E-commerce group Alibaba's Electronic World Trade Platform and online listings platform 58.com have co-anchored a $200m first close for a fund launched by China-based venture capital firm ATM Capital, according to 36Kr. The corporates were joined by private investors, including Xiaochuan Wang, chief executive of search engine provider Sogou. ATM Capital has not disclosed a a target or closing date.

ATM Capital will focus on early and growth-stage investments in logistics, retail, media and financial technology developers operating in Southeast Asia. The firm's founding partners are Tony Qu, an associate director at Alibaba Capital Partners for five years to 2012 who went on to CDH Investments before founding Bat Capital, and Jeeves Jiang, former CEO of smartphone producer Coolpad Indonesia.

Axa Venture Partners accepts $150m for second fund

Axa Venture Partners (AVP), the corporate venturing arm of France-headquartered insurance group Axa, has raised $150m for the first close of its second early-stage fund. AVP Early Stage II has already collected more capital than its predecessor, which closed at $110m in 2015.

Formerly known as Axa Strategic Ventures before rebranding in April 2018, AVP now manages $600m in assets and has backed more than 40 companies. It invests through growth and early-stage funds as well as ASV Diversified, the $175m fund-of-funds scheme it launched in late 2017.

The new fund will target pre-revenue and early-revenue companies with a focus on financial technology and digital health, as well as enterprise software, consumer technologies and services aimed at small and medium-sized enterprises. It will initially invest up to $6m in each startup and will offer business development opportunities.

Raystone Capital raises $148m for AI fund

Raystone Capital, the investment arm of China-based mobile games developer Raystone, has closed its latest growth fund at RMB1bn ($148m), according to China Money Network. 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. The government-owned vehicles contributed 25% of the total. Shenzhen Longgang District Venture Capital Guiding Fund and Shenzhen government-backed fund of funds Kunpeng Fund also participated.

Founded in 2009, Raystone Capital operates as Raystone's asset management branch, and focuses on sectors such as clean technology, new materials and consumer-focused technologies. The latest fund will target China-based growth-stage companies working on artificial intelligence technologies that could be used in sectors such as smart manufacturing and digital healthcare.

NEWS

Magenta implements $100m fund

Magenta Venture Partners, an Israel-based venture capital firm co-founded by diversified conglomerate Mitsui & Co, has been launched with a $100m target for its first fund. The firm achieved an initial close in October 2018 and expects to complete fundraising this year. Apart from Mitsui, backers include lighting equipment producer Koito Manufacturing.

Early-stage startups based in Israel are the primary focus. Magenta will seek out opportunities in the automotive, mobility, artificial intelligence, smart cities, industry 4.0, enterprise software and fintech sectors. Mitsui is represented at Magenta by general partners Hiroshi Takeuchi and Atsushi Mizuno – the latter is an investment director at corporate venturing unit Mitsui Global Investment.

The other two GPs are co-founders Ori Israely and Ran Levitzky. Israely was director of investments at Motorola Solutions Venture Capital, a subsidiary of communications technology provider Motorola Solutions, until November 2018, while Levitzky was a principal at VC firm Viola Ventures until October. Ron Shvili, chief technology officer and vice-president of technology and information systems for telecoms group Cellcom, has joined Magenta's advisory board.

"We also leverage our investors to analyse and validate investments, assist the portfolio and help all the startups we engage during this process."

Sapphire lures corporates for $115m sports fund

Sapphire Ventures, the US-based venture capital firm spun out of software producer SAP, has launched a $115m fund backed by SAP that will invest in sports, media and entertainment startups.

City Football Group, the holding company that owns football teams including Manchester City and New York City FC, is the fund's anchor investor, while baseball league Major League Baseball, US football franchise New York Jets and ice hockey team San Jose Sharks are among the limited partners. Others include apparel manufacturer Adidas, entertainment producer Anschutz Entertainment Group, mass media conglomerate Sinclair Broadcast Group, financial services firm Bank of Montreal, basketball team Indiana Pacers, funds affiliated with the owners of American football team San Francisco 49ers, venture capital firm Intersect Ventures, investment fund Wise Ventures and private investors Jeremy Jacobs and Jeff Vinik.

Sapphire Sport will participate in series A and B rounds, making initial commitments of $3m to $7m. It is targeting portfolio companies in areas including next-generation media, sports betting and data analytics, digital fitness, eSports and gaming. It will be led by managing director Michael Spirito, who joined Sapphire Ventures in October 2018 after four years as head of business development and digital media at Fox Sports.

Motley Fool Ventures magnifies fund to $145m

US-based financial advisory service The Motley Fool has raised $145m for its VC unit Motley Fool Ventures, Technical.ly has reported. Founded in 1993, The Motley Fool provides financial and investment insights through various platforms including online media platforms and podcasts, in addition to running mutual funds and supplying more precise advice through a premium service.

Motley Fool Ventures said it had secured capital from some 800 limited partners, surpassing the initial $100m target revealed in a July 2018 regulatory filing.

The vehicle is being run by managing director Ollen Douglass and is investing in companies from seed to series B that have between $500 and $5m of annual revenue.

BMS and Celgene combine in $74bn deal

Bristol-Myers Squibb (BMS) has agreed to acquire another US-listed pharmaceutical company with corporate venturing assets, Celgene, in a cash-and-share deal that will create a $74bn firm. BMS will take 69% of the combined company's shares while Celgene will get the remaining 31%, with the transaction expected to close in March.

The deal is expected to create a firm with a strong presence in oncology, haematology, cardiovascular activities, immunology and inflammation, but its strategic investment plans are unclear. Neither group has a dedicated corporate venturing unit.

BMS has not been among the most active pharmaceutical investors but it has built a portfolio that includes cancer and fibrosis drug developer Galecto Biotech, bacteria-based medicine developer Vedanta Biosciences and the urology-focused Taris Biomedical. It has been a relatively eager buyer, paying nine-figure amounts to acquire corporate-backed companies, including IFM Therapeutics, Padlock Therapeutics, iPierian and Flexus Biosciences – the latter backed by Celgene – in recent years.

Celgene has also made some big acquisitions but it has a far larger range of investments, having backed substantial rounds for companies such as oncology therapy developers Antengene and Sutro Biopharma, and messenger RNA startup Gotham Therapeutics.

NEWS

Lilly Asia Ventures lands $100m for Fund V

Lilly Asia Ventures, a corporate venturing subsidiary of US-based pharmaceutical firm Eli Lilly, has received $100m for its latest fund from pension fund Los Angeles County Employees' Retirement Association, DealStreetAsia has reported. LAV Biosciences Fund V, has a targeted close of $750m, according to a securities filing. It follows the LAV Biosciences Fund IV fund which closed at $450m in August 2017.

Founded in 2008, Lilly Asia Ventures invests in life sciences and healthcare technology developers with a focus on biopharmaceuticals, human therapeutics, medical devices and diagnostics. The unit is stage-agnostic and invests in Asia, with a particular focus on China, but is increasing its exposure to US-based portfolio companies that have a "China angle", according to its website.

Providence Ventures produces $150m second fund

Providence Ventures, the strategic investment vehicle of US-based healthcare provider Providence St Joseph Health, has unveiled a $150m second fund. The unit was formed in 2014 with an initial $150m to invest in developers of healthcare technology that could be utilised within its parent's health system.

It also incubates startups at the hospital. Providence Ventures said it intended to increase its team, operating from a Seattle head office and a Silicon Valley satellite, this year as it targets investments in fields such as healthcare IT, medical devices and technology-enhanced care services.

Corporates help Set Ventures ready third fund

Netherlands-based venture capital firm Set Ventures has secured commitments from petroleum producer Shell, energy utility PTT Group and banking group BNP Paribas for the €75m ($85.5m) Set Fund III. Other investors are Energiiq and BOM Brabant Ventures, funds managed by Dutch development agencies InnovationQuarter and De Brabant Development Agency respectively, family office Korys, Finnish-state backed fund Sitra and the European Investment Fund. Shell contributed through corporate venturing vehicle Shell Ventures.

Founded in 2007, Set Ventures is an energy technology-focused vehicle that invests up to €6m a time in European businesses focused on energy generation, distribution, storage and efficiency. Set Fund III will make early growth-stage investments in startups using smart software and services-based business models.

Circularity rounds up corporates for growth fund

Corporates Philips, Henkel and Axa are among inestors in UK-based private equity firm Circularity Capital's growth fund which as closed at its £60m ($76.6m) hard cap. Electronics and medical equipment provider Philips, chemical and consumer goods producer Henkel and insurance firm Axa's Axa Investment Management subsidiary were joined by BNP Paribas Fortis, the Belgian arm of banking group BNP Paribas, as well as unnamed family offices. Founded in 2014, Circularity Capital makes equity investments in growth-stage Europe-based businesses that address production and consumption challenges.

Indico Capital gets $47m influx

Indico Capital Partners, a Portugal-based venture capital firm formed by former staff of corporate venturing fund Caixa Capital, has achieved a €41m ($47m) first close for its inaugural fund.

The firm is led by managing general partner Stephan Morais, formerly head of Caixa Capital, financial services firm La Caixa's venture capital arm, and general partner Ricardo Torgal, previously an investment manager at Caixa Capital. The team is completed by Cristina Fonseca, co-founder of cloud-based contact centre software provider Talkdesk, who is a venture partner.

Indico is targeting €46m. EU-owned small and medium-sized enterprise financing agency the European Investment Fund is a cornerstone investor. Other backers includie Portuguese state-owned investment firm Instituição Financeira de Desenvolvimento's Portugal Tech initiative, VC firm Draper Esprit and unnamed pension funds, education and research institutions, wealth managers, high-net-worth individuals and entrepreneurs.

Indico will back startups in Spain and Portugal, with a focus on the latter, and make early-stage investments ranging from €150,000 to €5m per company. It will fund companies from the pre-seed and series A-stages through to later rounds. Targets include business-to-business software-as-a-service platforms, artificial intelligence, financial technology, cybersecurity, marketplaces and business-to-consumer platforms.

NEWS

Genesia generates $45m for second fund

Japan-based venture capital firm Genesia Ventures has collected $45m for the first close of its second fund, having secured commitments from several corporates, DealStreetAsia has reported. Investors include Mizuho Bank and Mizuho Capital, subsidiaries of financial services firm Mizuho Financial Group, as well as machine-leasing service JA Mitsui Leasing, payment services firm Marui Group, internet company Mixi and real estate developer Tokyu Fudosan's TFHD Open Innovation Program.

The fund is more than halfway to its $80m target, seeking a final close in September this year, according to Genesia's website. Genesia will initially focus on investments in seed and pre-series A stage companies, supplying up to $5m for each startup, Genesia Ventures principal Yuto Kono told DealStreetAsia. The focus is economy and digital media businesses, and technologies such as artificial intelligence, robotics and drones, as well as digital innovations redefining traditional industries such as telecoms, publishing and real estate. Portfolio companies will be based in Indonesia, Vietnam and Singapore, but Genesia plans to expand to other countries in Southeast Asia at a later date.

Sheba Medical seeks $45m for Triventures fund

Sheba Medical Centre, an Israel-based hospital and medical complex also known as Tel HaShomer, is looking to raise up to $45m for a strategic investment fund managed by venture capital firm Triventures.

Triventures Arc, the corporate venturing arm of Sheba Medical Centre's Arc Innovation Centre, will make seed-stage investments in what the firm describes as "data-driven transformational health" companies. Targeted areas include smart medical devices, healthcare-focused cybersecurity technology and virtual hospitals, as well as startups applying big data and artificial intelligence to healthcare. Portfolio companies will have access to Sheba's enterprise data warehouse, as well its clinicians, researchers and patients.

The hospital said it had formed strategic partnerships with, among others, internet technology provider Google, pharmaceutical firms Novartis and Johnson & Johnson, electronics and healthcare equipment maker Philips and accountancy and consulting firm Deloitte.

Japan Airlines propels $70m to strategic fund

Aviation company Japan Airlines (JAL) has launched the $70m Japan Airlines Innovation Fund to invest in startups in Japan and the rest of the world.

The vehicle will invest over 10 years, collaborating with and co-creating startups developing technologies or services that enhance the travel experience. JAL said it would use the fund to provide comprehensive air mobility services by offering consumers novel ways of travelling and an improved experience. US-based venture capital firm Translink Capital will manage the fund on behalf of JAL, providing deal-sourcing expertise and helping the fund finalise investments.

Evergy revamps branding for investment affiliate

Great Plains Energy, a US-based energy utility operating under umbrella company Evergy, has rebranded its investment affiliate, GXP Investments (GXPI), as Evergy Ventures.

Founded in 2015, GXPI has provided funding for North America-based developers of emerging technologies with the potential to transform the electricity sector. The unit's core focus has been on digital utility technology such as smart sensors and analytics platforms, connected mobility services, smart cities technology, distributed energy resources and intelligent connected buildings. Over the past three years, GXPI has invested a total of more than $50m in 13 companies.

Great Plains Energy merged with electric utility company Westar Energy in May 2018 to form umbrella company Evergy.

Bridgestone tracks Iris Capital for partnership deal

Bridgestone Europe, a subsidiary of Japan-headquartered tyre manufacturer Bridgestone, has formed a partnership with venture capital firm Iris Capital to invest in mobility technology. The partnership is intended to help enhance the corporate's digital strategy and will involve it working with France-based Iris to invest in mobility services, industry 4.0 and digital transformation technology developers in Europe, the Middle East and Africa. Bridgestone Europe will also work with Iris Capital's corporate investors, including automotive parts supplier Valeo, telecoms firm Orange and advertising firm Publicis.

NEWS

SAP declares No Boundaries for investments

Germany-based enterprise software producer SAP has unveiled the No Boundaries initiative, allocating 40% of the investable capital of its existing SAP.io Fund to startups led by women and minorities.

The $35m corporate venturing fund was launched in 2017 to invest in early-stage companies and has made more than 15 investments to date. SAP expects to back and incubate at least 200 startups internationally through No Boundaries within the next five years. No Boundaries will offer access to curated mentoring and exposure to the corporate's technology, support for integration with SAP applications and opportunities to collaborate with SAP clients.

The corporate's accelerator SAP.io Foundries will also be scaled up with a focus on inclusive entrepreneurship. The program has supported nearly 100 startups to date, approximately a third of which were founded or led by women or minority entrepreneurs.

Barclays to give startups a Rise

UK-based bank Barclays has launched venture capital fund Rise Growth Investments to back cohorts in its fintech accelerator with up to £10m ($13.2m). Barclays Accelerator, powered by Techstars, was formed in 2014 and hosts classes in New York, London and Tel Aviv in partnership with accelerator operator Techstars. The accelerator is intended to provide financial technology projects with connections and expertise from Barclays decision-makers. Techstars already offers Barclays Accelerator participants up to $120,000 in certain locations.

JG Summit makes commitment to Ascent

Singapore-registered investment firm Ascent Capital Partners has closed a private equity fund backed by conglomerate JG Summit Holdings, having raised more than $50m, according to DealStreetAsia. Ascent Myanmar Growth Fund I LP will concentrate on investments in Myanmar. Among the backers are Singaporean government-owned investment firm Temasek and the multilateral Asian Development Bank, the latter supplying $10m.

MásMóvil hooks up Másventures accelerator

Spain-based telecoms company MásMóvil is seeking startups for new accelerator Másventures, targeting high-potential businesses in the telecoms industry, El Español has reported.

Másventures will help startups access expertise, mentoring and finance with the aim of promoting telecoms entrepreneurship and innovation. The initiative will include product testing and the opportunity to meet investors. MásMóvil said it was an opportunity to feed back the experiences of innovation it has gained as a new entrant in Spain's telecoms industry in 2006.

The company began life as a mobile virtual network operator before developing into Spain's fourth-largest telecoms operator on the back of a merger with peer Ibercom in 2014.

Mayo Clinic and ASU fuel MedTech Accelerator

Arizona State University has teamed with medical centre Mayo Clinic to launch US-based medical device and healthcare technology accelerator Mayo Clinic-ASU MedTech Accelerator. The initiative will train participants to devise bespoke business development plans that lay the foundation for future collaborations with both the university and the clinic, as well as the chance to seize go-to-market and investment opportunities. Participants will be encouraged to remain based in Arizona. The accelerator is open to early-stage businesses in its target fields as well as growth and late-stage companies eyeing healthcare as an adjacent market for new products and services.

CTA sets up $10m diversity fund

US-based trade body Consumer Technology Association (CTA) has launched a $10m venture capital fund to invest in firms and funds that concentrate on underrepresented demographic groups. The fund will back companies and investment vehicles that focus on, or are founded by women, people of colour and other minority groups.

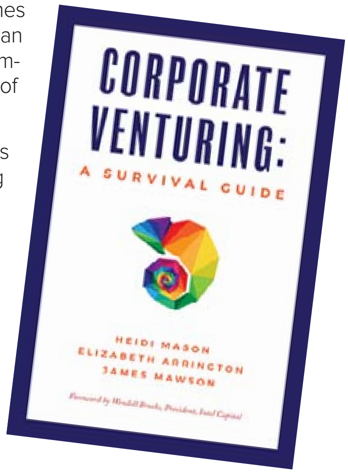
NEWS

SleepScore beds in venture investment scheme

US-based sleep monitoring technology developer SleepScore Labs has initiated a partnership with SleepScore Ventures, a new initiative to fund sleep-focused startups. SleepScore Labs was created in 2016 by medical device maker ResMed, asset management firm Pegasus Capital Advisors and physician Mehmet Oz to research technologies associated with sleep and overall health. The company has created a mobile app and smart products powered by ResMed to monitor, track and analyse sleeping patterns. SleepScore Ventures will invest in seed and early-stage companies developing new technologies to help improve the quality of sleep.

Book: Corporate Venturing: A Survival Guide

Corporate Venturing: A Survival Guide – by Heidi Mason, Liz Arrington and James Mawson with a foreword by Wendell Brooks, president of Intel Capital – is a lean practical guide to developing high-performance corporate venturing programs. A compilation of straight-talk rules around what matters most, why and when, with profiles of leading CV programs that demonstrate real impact and staying power.



Corporate venturing has earned a position of respect among portfolio companies and partners for the value it delivers, and CVC leaders are now involved setting corporate strategy, joining the handful of high-level executives who determine a company's future course.

But corporate venturing is hard to do well and in a way that lasts. Even when high-performing teams closely follow the best practices derived from other programs' models and professionals' experiences, and impeccably execute everything required for program and team development, they are often impeded – even stopped dead in their tracks – by unpredictable events and decisions totally independent of their programs and outside their control.

The authors bring to bear decades of pioneering experience to create a shorthand guide for CVC professionals and parent company management as they craft and scale venturing programs. It also provides valuable insight for the startup teams, as well as the many investment and business partners with which CVC programs connect. ◆

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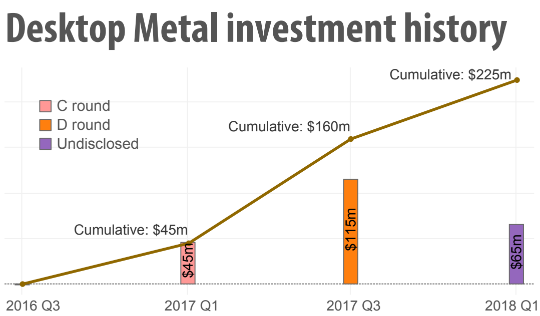
Analysis: Desktop Metal melts hearts

Kaloyan Andonov, GCV Analytics

US-based metal 3D printing company Desktop Metal closed a $160m round led by Koch Disruptive Technologies, a subsidiary of chemicals and energy conglomerate Koch Industries.



Other corporate backers participating in the round included GV, corporate venturing vehicle of internet conglomerate Alphabet, electronics producer Panasonic and hardware provider Techtronic Industries. Existing traditional VC investors, including Lux Capital, New Enterprise Associates and Kleiner Perkins also participated. The fresh funding will be used to further develop the company's additive manufacturing technology and scale it.

Founded in 2015, Desktop Metal has developed 3D metal printers for use in both offices and large-scale industrial settings. Its system for metal parts can print alloys including reactive metals. It claims the process is 100 times faster than laser powder-bed fusion systems, while producing parts at 5% of the cost.

Before this round, the company had raised $255m in corporate-backed rounds, according to GCV Analytics. Previous backers include carmakers Ford Motor Company and BMW, industrial product and appliance producer General Electric and oil and gas supplier Saudi Aramco, 3D printer manufacturer Stratasys and home improvement retailer Lowe's. ◆

NEWS

Analysis: Transport disruption increases

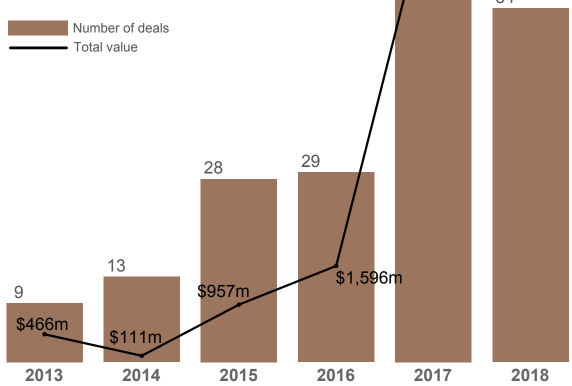
Kaloyan Andonov, GCV Analytics

China-based smart car developer Byton, previously backed by car dealer China Harmony New Energy Auto Holding and retail group Suning, is reportedly seeking to raise at least $500m at a valuation above $4bn before it is expected to go public this year.

The company raised that amount last year in a series B round that featured automotive manufacturer FAW Group and battery producer Contemporary Amperex Technology. The series C round will be the last for the company before plans to go public, according to Byton CEO Carsten Breitfeld.

Founded in 2016 as Future Mobility, Byton builds smart, electric vehicles with a gesture-based control system, a driver-assistance system, 49-inch dashboard screen and augmented reality mirrors instead of rear-view mirrors. Byton plans to start production of its sports utility vehicle, M-Byte, by the end of this year, having already built some 100 prototypes for testing.

Corporate-backed deals in connected electric and autonomous cars 2013-18



Transport, including the automotive space, is one of the ripest sectors for disruption. In 2017 the number of corporate-backed rounds involving technologies for connected, autonomous and electric vehicles rose to 70 deals worth an estimated total of $7.93bn. Last year, GCV Analytics tracked a smaller number of deals (54), though the total estimated capital was $7.02bn, suggesting rising valuations of such enterprises. ◆

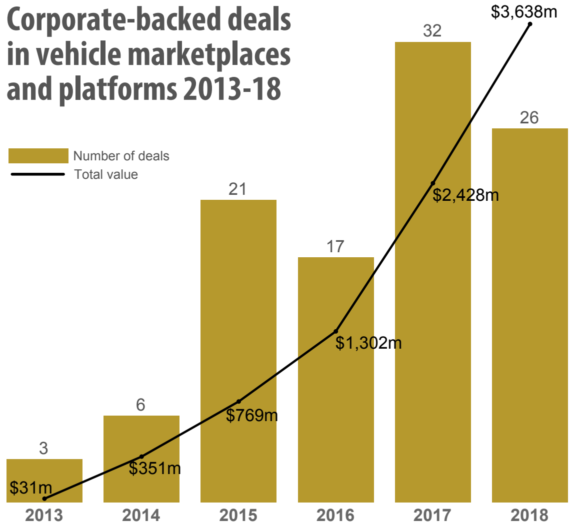
Analysis: Vehicle marketplaces thrive

Kaloyan Andonov, GCV Analytics

Car marketplace CarDekho raised a $110m series C round, featuring CapitalG, the growth-stage investment arm of internet technology conglomerate Alphabet. The round included venture capital firm Sequoia Capital and hedge fund Aquila Capital, which co-led it, as well as financial services firm Axis Bank, investment firm Hillhouse Capital and family office RNT Associates.

The transaction reportedly valued the India-based platform at $400m to $500m. Previous corporate backers are digital marketing firm Dentsu and media group Bennett, Coleman & Co. CarDekho is expected to use the capital to strengthen its market position in used car financing and insurance.

Corporate-backed deals in vehicle marketplaces and platforms 2013-18



Founded in 2007, CarDekho runs an online marketplace for new and used vehicles that includes detailed specifications on each model as well as video and photographic content. The platform is active in India, Indonesia, Malaysia, the Philippines and the United Arab Emirates. The company has partnered more than 4,000 dealerships, automotive manufacturers and financial institutions for purchase financing and auto insurance. ◆

SECTOR FOCUS

Services sector continues to grow

Kaloyan Andonov, reporter, GCV Analytics

Services play a dominant role in most mature and emerging modern economies, having taken over manufacturing and agriculture in importance. The World Bank's 2011 World Development Indicators showed that the services sector accounted for almost 71% of global GDP in 2010.

According to a World Travel and Tourism Council report – Travel and tourism: economic impact 2018 – the total contribution of the tourism and travel industry to global GDP was $8.272 trillion (10.4% of world GDP) in 2017. The same publication forecast its rise to $12.45 trillion (11.7% of world GDP) by 2028. Providing services related essentially to leisure, this subsector is cyclical in nature and its growth has been fuelled by rising purchasing power and disposable income on a global level, though such factors vary across geographies.

GCV Analytics defines the services sector as encompassing accommodation and travel, human resources, education, business and legal consultancy services, communication and market research services, logistics and supply chain services, real estate, classifieds and review platforms and other subsectors.

There has been a slowdown of innovation in travel tech and accommodation. According to research on the travel tech startup landscape by Phocuswright, the number of new "startups being founded is slowing in the last few years, coinciding with a significant increase in the amount of investment flowing into maturing businesses", the latter being broadly defined and encompassing the now-unicorns of the sharing economy like Uber and AirBNB and their ilk.

Despite much talk about focus on delivering unique customer experience, the report notes that travel startups "that provide some kind of booking-related service have secured the vast majority of funding and account for over 40% of the new companies on the scene". Offering convenience to customers is still a winner.

Another subsector of services prone to cyclical fluctuations is real estate. The 2018 Summer Global Real Estate Outlook, by investment bank Morgan Stanley, concluded that despite certain market turbulence but thanks to strong global economic growth in recent years, peppered with diverging interest rate policies and currency volatility, the investment environment for commercial real estate is still positive.

The report, however, warned that it may "require increased levels of caution and prudence given the abundance of available capital and cycle maturity". Emerging new technologies in real estate have been shaped by both market conditions as well as by shifts in consumer behaviour. The convoluted processes of buying, selling and owning properties are fertile ground for innovation on every side of a transaction, particularly in a space as cyclical as real estate.

The advent of e-commerce, along with digitisation of consumption and other disruptive technologies have created opportunities for logistics service providers, which have found themselves forced to adapt and shift their business models. As the 2018 Global Logistics Report by Eye for Transport notes, retailers and consumers expect the supply chain to be more digitised, smarter and faster.

One of the problems of this subsector of services is that growth has been driven by e-commerce and its expanding customer base, which may bring a slowdown should demand drop. On the technological side, digital transformation remains the main challenge, with 60% of logistics service providers developing or purchasing online freight and tech platforms and more than half of them (52%) considering blockchain a game-changer, according to the report.

Education services are also expected to grow and open up opportunities for edtech developers and service providers. A report on edtech by Startup Genome predicts there will be 1 billion additional students worldwide by the middle of this century. This prediction is underpinned by population growth trends in emerging economies, mounting participation in education, more time spent at school as well as a growing need for reskilling and further professional development due to digital and automation disruption in labour markets. Global education expenditure is forecast to grow 8% annually to $8 trillion by 2020, according to the report.

Technology has helped democratise education and made learning resources more accessible and available. Not only is academic and scholarly content increasingly digitised but many university courses are now available through massive open online courses accessible on a mobile device. Technology will need to meet the challenge of increasing demand for education in the coming years.

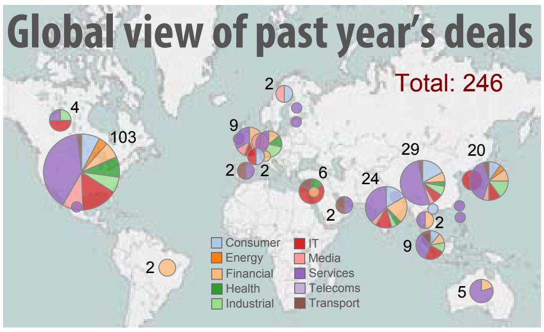
The global market for consulting services, estimated at $250bn, is among the most mature subsectors of services. It has been growing since the end of the last recession, according to an analysis by Consultancy.uk. The article notes, however, that growth rates "differ between the more mature markets and emerging economies".

It is a cyclical market, closely linked to global economic conditions – flourishing in boom times and suffering market corrections. As far as innovation in it is concerned, overall trends in IT and computing technologies – whether it is big data, automation, machine learning or artificial intelligence – not only bring operation efficiencies but also fuel profound shifts in the workplace. This is expected to continue as those technologies advance.

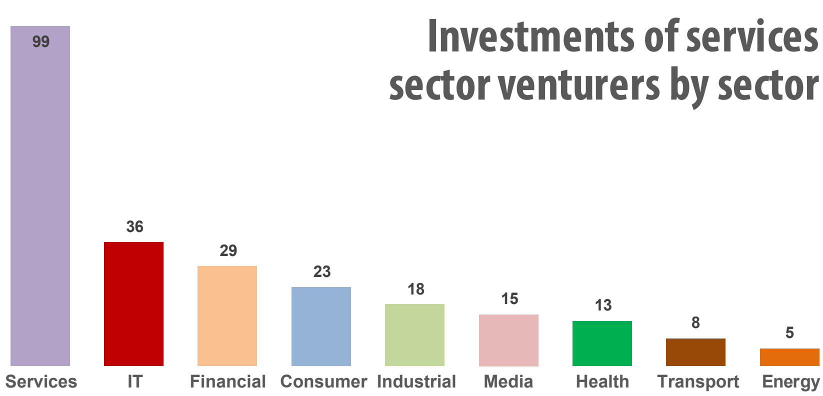
Legal services is also open to technological disruption that may streamline work. As Baretz and Brunelle's 2018 legal tech go-to-market report states, in recent years "sustained pricing pressure from corporate clients and rapid technological leaps have combined to create the present environment in which law firms and corporate legal departments are not just open to technology-based solutions to problems formerly overcome by brute lawyer-hours, but actively inviting them in". However, the report finds that legal startups face many challenges and in most cases do not have a firm grasp of a go-to-market strategy, to which it attributes the high failure rates (75%) of venture-backed legaltech startups.

Another subsector with many opportunities is human resources. According to a report by Grand View Research, cited by consultancy firm CFirst, the world's human resources (HR) industry is expected to reach $30bn in size by 2025. The more generationally diverse workforce of today is now blended, bringing together freelancers and full-time employees in need of constant skill updates driven by digitisation, and values more schedule and workplace flexibility. In this context, technologies such as artificial intelligence, machine learning and automation, augmented and virtual reality, big data and cloud computing play an indispensable role in helping HR managers and recruiters meet the increasing demands and challenges of their workforce. The report expects an increase in the demand for HR management solutions.

For the period between January and December 2018, GCV reported 246 venturing rounds involving corporate investors from the services sector. A considerable number of them (103) took place in the US, while 20 were hosted in China, 24 in India and 20 in Japan.



Many of those commitments (99) went to emerging enterprises from the same sector, mostly education and edtech, human resources tech, logistics services and real estate, with the remainder going into companies developing other technologies in synergies with the sector – 36 deals in the IT sector (artificial intelligence, big data and analytics, enterprise software, VR and AR technology), 29 in financial services and fintech (primarily payment technologies, alternative lending, financial software, personal finance applications and insurance) and 23 in consumer enterprises (mostly e-commerce and food delivery businesses).



The network diagram overleaf, illustrating co-investments of services corporates, shows the wide spectrum of investment interests of the sector's incumbents. The commitments range from real estate portal (Lianjia) and women-only coworking spaces (The

SECTOR FOCUS

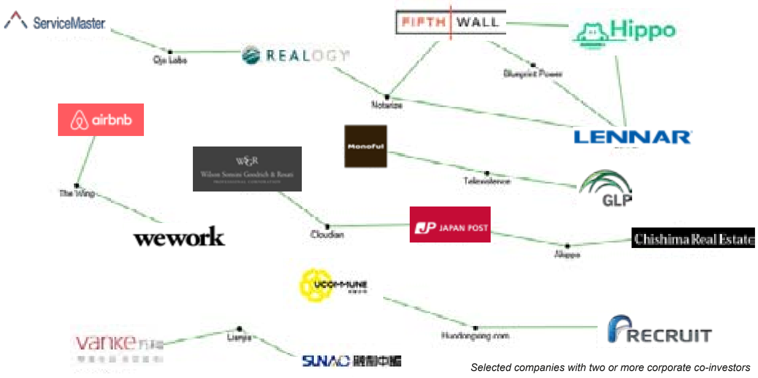
Wing) through online event facilitators (Huodonxing) and parking spot reservation apps (Akippa) to online platforms to notarise documents (Notarize), cloud storage providers (Cloudian), AI-based natural language understanding and personalisation technology (Ojo Labs) and even smart grid systems for smart buildings (Blueprint Power). All these co-investments match the specific technological needs of incumbent corporations in the sector, as outlined above.

On a calendar year-on-year basis, total capital raised in corporate-backed rounds went up significantly from $3.72bn in 2017 to $6.84bn in 2018, an 84% surge. The number of deals also grew, by 43% from 172 deals in 2017 to 246 by the end of 2018.

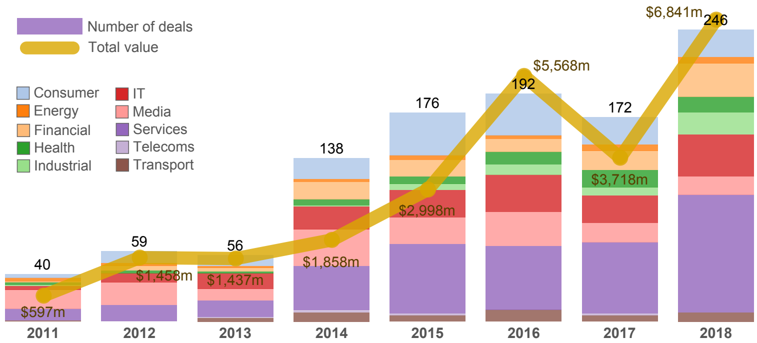
The 10 largest investments by corporate venturers from the services sector were necessarily concentrated in the same industry.

The leading corporate investors from the services sector in terms of largest number of deals were classifieds listing operator Info Edge, human resources firm Recruit Holdings and education services provider Tal Education Group. The list of services corporates committing capital in the largest rounds was topped by home builder Lennar, Info Edge and property developer Sunac China Holdings.

Co-investments of services sector venturers 2017-18

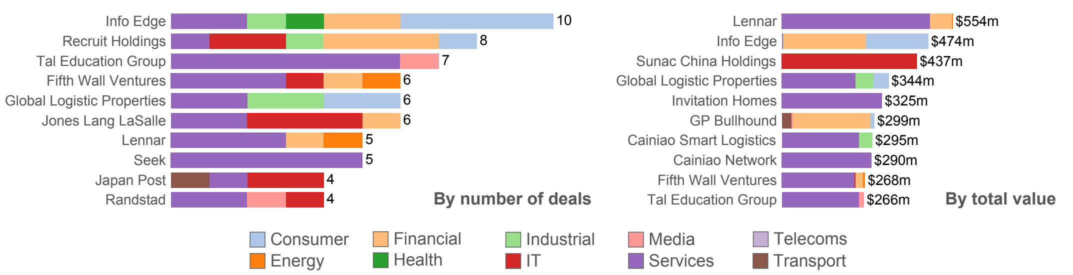


Deals by services sector investors 2011-18



The most active corporate venture investors in emerging business service companies were diversified internet conglomerate Alphabet, telecoms firm SoftBank and e-commerce company Alibaba.

Top services sector investors 2018



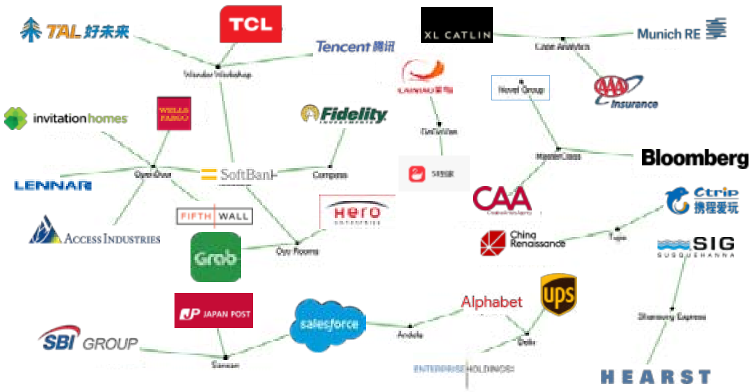
Top investors in services enterprises 2018

SECTOR FOCUS

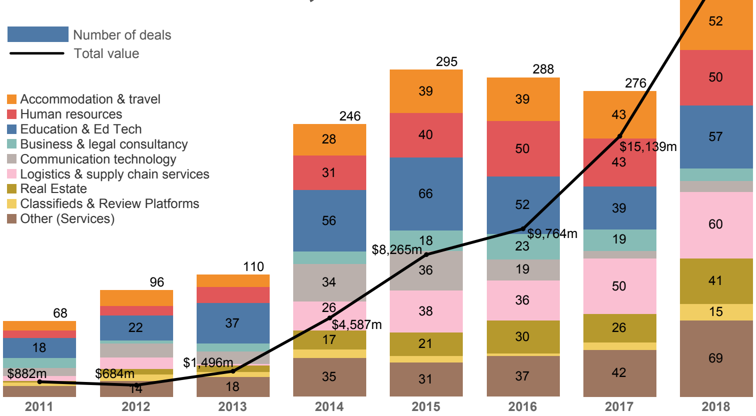
Services businesses in the portfolios of corporate venturers varied, ranging from accommodation and travel (Tujia and Oyo Rooms), real estate tech (Cape Analytics and OpenDoor) through education and edtech (Wonder Workshop and MasterClass) and human resources (Andela) to logistics and supply chain services (GoGoVan, Shansong Express and Deliv). This is illustrated by the network diagram of corporate co-investments in such companies.

Overall, corporate investments in emerging services-focused enterprises rose from 276 rounds in 2017 to 365 by the end of 2018, a 32% increase. The estimated total value of investments also went up, from $15.14bn in 2017 to $24.23bn last year.

Corporate co-investments in services enterprises 2017-18



Services sector deals by subsector 2011-18



Deals

Services sector corporates invested in large multimillion-dollar rounds, raised by enterprises in the same sector as well as financial services and transport.

New Leshi Smart Home, the smart TV affiliate of conglomerate LeEco, received $437m in funding from corporate investors, among them real estate developer Evergrande, Sunac China Holdings, retail group Suning Holdings as well as consumer electronics manufacturers Lenovo and TCL. The round was co-led by e-commerce group JD.com and internet company Tencent. Formerly known as Leshi Zhixin Electronic Technology, New Leshi Smart Home is a subsidiary of China-based consumer electronics producer LeEco. It manufactures internet-connected smart televisions. The company has signed a commercial agreement with Tencent that enables it to supply media content owned by Tencent in return for a slice of the resulting membership and advertising revenue.

US-based online real estate marketplace Opendoor raised $325m in a series E round co-led by Lennar, conglomerate Access Industries and venture capital firm General Atlantic. Property manager Invitation Homes also participated in the round. Access Industries took part through investment arm Access Technology Ventures. Founded in 2014, Opendoor has created an online real estate sales platform that offers help with valuation, and once fees have been agreed its staff conduct an assessment of the property to ascertain whether any work is required.

Cainiao Networks, the logistics division of Alibaba, paid $290m for a stake in China-based retail delivery service Dianwoda. Cainiao will cooperate with Dianwoda on warehousing services as well as the provision of local and intercity deliveries. Founded in 2009, Dianwoda operates an outsourced delivery service that connects shops with drivers. It focuses on delivering food and other consumer goods from supermarkets. The company claims to have signed up of more than 3 million drivers in more than 300 Chinese cities, and to have attracted more than a million stores as clients, processing almost 100 million deliveries a day.

China-based delivery services provider GoGoVan raised $250m from investors including Cainiao and local services platform 58 Daojia. Venture capital firm InnoVision Capital led the round, which also featured the government-backed Russia-China Investment Fund. GoGoVan runs an app-based marketplace for delivery services, connecting drivers with clients who need packages delivered. It merged with 58 Suyun, a competitor spun off from 58 Daojia. The company is present in Singapore, South Korea and Taiwan as well as China.

Info Edge and SoftBank co-invested in a $238m series F round for India-based online insurance marketplace PolicyBazaar and its sister company, financial product comparison platform PaisaBazaar. Info Edge provided $45m through an undisclosed special purpose vehicle, increasing its stake in ETechAces, the owner of both platforms, from 9% to 13%. Launched in 2008, PolicyBazaar is an online platform where insurance policies from a range of providers can be com-

SECTOR FOCUS

Top 10 deals by services corporate investors over the past year

Company	Location	Sector	Round	Size	Investors
New Leshi Smart Home	China	IT	–	$437m	Evergrande Group | JD.com | Lenovo | Sunac China Holdings | Suning Commerce | TCL Group | Tencent
OpenDoor	US	Services	E and beyond	$325m	10100 Fund | Access Industries | Andreessen Horowitz | Coatue | General Atlantic | GGV Capital | Invitation Homes | Khosla Ventures | Lakestar | Lennar | New Enterprise Associates | Wells Fargo (Norwest Venture Partners)
Dianwoda	China	Services	Stake purchase	$290m	Cainiao Network
GoGoVan	China	Services	–	$250m	58Daojia | Cainiao Smart Logistics | Hongrun Capital | InnoVision Capital | Qianhai Fund of Funds | Russia-China Investment Fund
Policybazaar	India	Financial services	E and beyond	$238m	Info Edge | SoftBank | True North Venture Partners
Hyperchain Technologies	China	Financial services	B	$234m	China SDIC Gaoxin Industrial Investment | Xinhu Zhongbao | undisclosed investors
Juma Peisong	China	Services	C	$216m	Global Logistic Properties | Sino-Ocean Group
Grab	Singapore	Transport	E and beyond	$200m	Booking Holdings
Careem	United Arab Emirates	Transport	–	$200m	Al Tayyar Travel Group | Kingdom Holding | Rakuten | STV Group
DadaABC	China	Services	C	$100m	Tal Education Group | Tiger Global Management
SenseTime	China	IT	C	$620m	Fidelity | Hopu Investments | Qualcomm | Silver Lake | Tiger Global Management | undisclosed investors
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

pared and bought. It is responsible for almost 300,000 transactions a month and received nearly 100 million visitors in 2017. PaisaBazaar was set up in 2014 and performs a similar function for lending and investment products. It offers more than 300 such products from 75 partners.

China-based blockchain technology company Hyperchain Technologies raised RMB1.5bn ($234m) in a round led by real estate developer Xinhu Zhongbao. The round included China SDIC Gaoxin Industrial Investment and a range of unnamed backers. Founded in 2016, Hyperchain is developing an enterprise-level blockchain platform that includes features such as data trading, supply chain financing and securities asset management. The company is targeting sectors including healthcare, energy, trade, logistics and government.

China-based urban delivery services provider Juma Peisong received RMB1.5bn in a series C round backed by logistics company Global Logistic Properties. Investment firm Sino-Ocean Group also participated. Founded in 2011, Juma Peisong operates an urban delivery service offered through 137 offices in 61 Chinese cities. The funding will support the company's expansion plans, including a recruitment drive, and product and services development.

Travel and accommodation reservation platform Booking Holdings, formerly Priceline, invested $200m in Singapore-based ride and mobile services provider Grab as part of a strategic partnership. Booking will offer Grab's services through its apps, while Grab customers will be able to book accommodation on Booking.com and Agoda. The funding was reportedly part of a larger round, which had reached $2bn, after Grab had already received $1bn from car manufacturer Toyota in addition to commitments from Ping An Capital, a subsidiary of insurance firm Ping An, and Mirae Asset–Naver Asia Growth Fund, a joint venture involving internet company Naver and investment bank Mirae Asset Daewoo. Founded in 2012 as GrabTaxi, Grab operates an on-demand ride service as well as food, package and shopping delivery in Singapore, Indonesia, the Philippines, Malaysia, Thailand, Vietnam, Myanmar and Cambodia.

Careem, a United Arab Emirates-based ride-hailing platform, raised $200m from existing investors including travel agency Al Tayyar and e-commerce firm Rakuten. STV, the venture capital fund anchored by telecoms firm Saudi Telecom, and investment holding company Kingdom Holding were among the participants. The round reportedly valued the company at about $2bn. Careem's on-demand ride service serves 120 cities in the Middle East, North Africa Turkey and Pakistan, and has accumulated 30 million registered users.

China-based online education services provider DadaABC raised $100m in a series C round backed by Tal Education and investment firm Tiger Management. Founded in 2013, DadaABC offers one-on-one English language courses to users aged four to 16. The classes are provided by native English speakers and tailored to existing curricula. The company has attracted tens of thousands of users in China, Japan, France and Germany.

There were other interesting deals in emerging services-focused businesses that received backing from the corporate investors of other sectors. Most of those companies were based in China, with Tencent and SoftBank the most frequently involved.

The SoftBank Vision Fund invested $3bn in one of its biggest portfolio companies, US-based workspace provider WeWork, which will receive the first $1.5bn in the form of warrants giving the Vision Fund the opportunity to buy WeWork

SECTOR FOCUS

Top 10 investments in emerging services enterprises over the past year

Company	Location	Round	Size	Investors
WeWork	US	Stake purchase	$3000m	SoftBank
JD Logistics	China	–	$2500m	China Development Bank | China Life Insurance | China Merchants Group | China Structural Reform Fund | Hillhouse Capital Management | ICBC International | Sequoia Capital | Tencent | undisclosed investors
Manbang Group	China	–	$1900m	Alphabet | China Reform Holding | GSR Ventures | Sequoia Capital | SoftBank | Tencent | Ward Ferry
Oyo Rooms	India	–	$1000m	Lightspeed Venture Partners | Sequoia Capital | SoftBank | undisclosed investors
Huitongda	China	–	$717m	Alibaba
Ziroom	China	A	$621m	Sequoia Capital | Tencent | undisclosed investors | Warburg Pincus
DoorDash	US	D	$535m	GIC | Sequoia Capital | SoftBank | Wellcome Trust
WeWork China	China	B	$500m	Hony Capital | SoftBank | Temasek | TrustBridge Partners
VIPKid	China	D	$500m	Coatue | Sequoia Capital | Tencent | Yunfeng Capital
Compass	US	E and beyond	$400m	Fidelity | Institutional Venture Partners | Qatar Investment Authority | SoftBank | Wellington Management

stock at $110 a share. Founded in 2010, WeWork oversees a network of flexible workspaces in more than 30 countries on five continents. The spaces are leased from landlords and rented to businesses or individuals by the desk or office. The company is also moving into managment of housing, leisure and educational spaces.

JD Logistics, the logistics spinoff of JD.com, closed a round at about $2.5bn from investors including Tencent and insurer China Life. The round included Hillhouse Capital, Sequoia Capital, China Merchants Group, China Development Bank Capital, China Structural Reform Fund and ICBC International as well as undisclosed additional participants. JD Logistics was formed by its parent company in April 2017 out of a logistics operation it had been running for a decade. It has seven fulfilment centres and more than 400 warehouses.

China-based trucking services marketplace Manbang Group raised $1.9bn in a round featuring Tencent and subsidiaries of Alphabet and SoftBank. The round reportedly valued the company at $6.5bn. Alphabet's investment came through its CapitalG unit while SoftBank took part through the Vision Fund. Formerly known as Full Truck Alliance Group, Manbang runs an online platform where those looking to ship goods can link to drivers with surplus space in their vehicles. It was formed by the November 2017 merger of rivals Huochebang and Yunmanman. The company's platform uses artificial intelligence to help forge connections based on routes and space.

India-based short-term accommodation provider Oyo Rooms raised $1bn in funding from investors including the SoftBank Vision Fund, which joined venture capital firms Sequoia Capital and Lightspeed Venture Partners for an initial $800m tranche. Oyo has secured other commitments for the remaining $200m. Founded in 2013, Oyo partners hotels and rebrands rooms to offer a standardised service including toiletries and fresh linen that users can book through its website and app. The company also offers its partner hotels staff training, and takes a commission on bookings. It has expanded across India, where its network has grown to 125,000 rooms, and into Malaysia, Nepal, the UK and China.

Alibaba made a RMB4.5bn investment in Huitongda Network, a spinoff from China-based retail chain Jiangsu Five Star Appliances. Alibaba supplied the funding through a strategic partnership deal that will involve the companies collaborating on technology, logistics, warehousing and supply chains. Founded in 2010, Huitongda provides e-commerce and marketing services to a network of about 80,000 rural bricks-and-mortar retailers in 15,000 Chinese towns.

Ziroom, a China-based operator of an accommodation rental services platform, secured RMB4bn in a series A round featuring Tencent. The round was led by private equity firm Warburg Pincus and included venture capital firm Sequoia Capital and seven undisclosed additional investors. It valued the company at $3.1bn. Founded in 2011 by real estate agency Homelink and spun off in 2016, Ziroom leases apartments from owners and lets them to tenants through an online platform having carried out renovation work on the properties.

SoftBank led a $535m series D round for US-based delivery services provider DoorDash. Venture capital firm Sequoia Capital, charitable foundation Wellcome Trust and Singaporean sovereign wealth fund GIC also participated in a round that reportedly valued the company at $1.4bn post-money. DoorDash runs a last-mile delivery service for restaurants that operates in more than 600 US and Canadian cities.

SoftBank was among the investors co-leading a $500m series B round for WeWork China, co-working space provider WeWork's Chinese offshoot. Growth equity firm Trustbridge Partners, private equity firm Hony Capital and Singaporean government-owned Temasek co-led the round, which valued the company at $5bn. WeWork China has built a network of 40 work spaces in three Chinese cities.

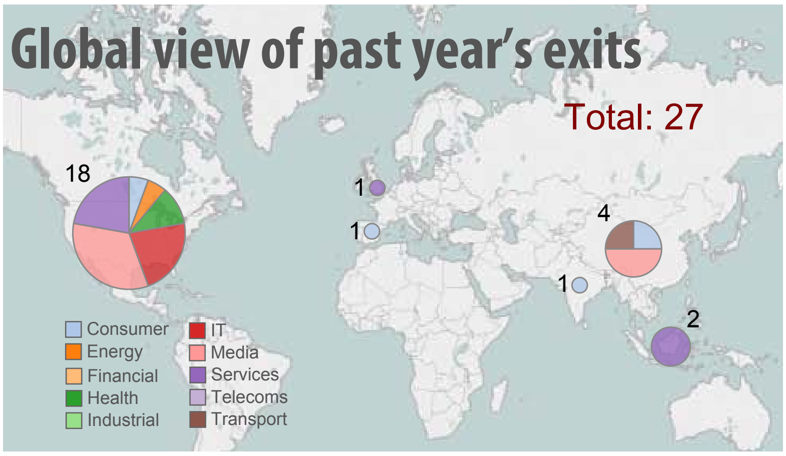
China-based online tutoring service VIPKid raised $500m in series D-plus funding from a consortium co-led by Tencent, Coatue Management, Sequoia Capital and Yunfeng Capital. The transaction reportedly valued VIPKid at RMB20bn. Founded in 2013, VIPKid operates a platform that offers real-time one-to-one English tutoring. It employs more than 40,000 teachers from North America and has attracted more than 300,000 students in 35 countries. The funding will enable the company to add more educational content.

SECTOR FOCUS

US-based online real estate transaction platform Compass received $400m in series F capital from a consortium co-led by the SoftBank Vision Fund and sovereign wealth fund Qatar Investment Authority. The round included Fidelity Investments and valued Compass at $4.4bn post-money. Founded in 2012, Compass operates an end-to-end luxury online real estate brokerage across 21 markets in the US. The platform had attracted more than 7,000 estate agents by last year.

Exits

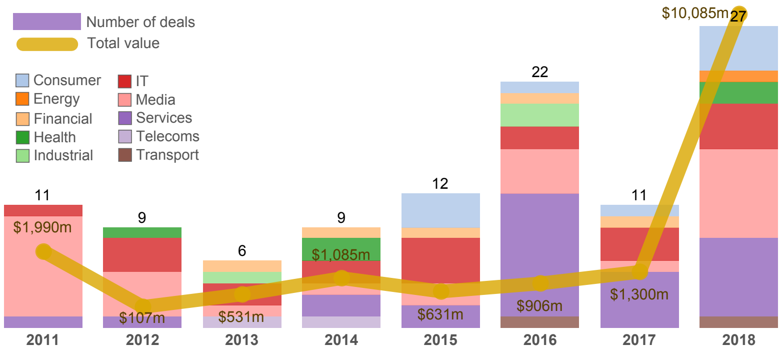
Corporate venturers from the services sector completed 27 exits between January and December last year – 18 acquisitions, eight initial public offerings and a stake sale.



China-based consumer electronics producer Xiaomi raised $4.72bn in an IPO on the Hong Kong Stock Exchange. The company priced roughly 2.18 billion shares at the low end of the HK$17 ($2.17) to HK$22 range previously set, valuing 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.

Exits by services sector investors 2011-18



Seven cornerstone investors invested $548m in the offering, including logistics firm SF Express, mobile chip manufacturer Qualcomm, telecoms company China Mobile, state-owned China Merchants Group and investment firm CICFH Entertainment. Founded in 2010, Xiaomi designs and manufactures smartphones as well as other electronic devices such as smart home products, tablets and televisions.

Local services platform Meituan-Dianping agreed to purchase China-based bike rental service Mobike for $2.7bn. The transaction was reportedly being brokered by Pony Ma, chief executive of Tencent, which also owns a stake in Meituan-Dianping. Earlier investors in Mobike included travel services provider Ctrip, hospitality chain Huazhu Hotels, contract manufacturer Foxconn, Hillhouse and Temasek, among many other. Founded in 2015, Mobike operates an app-based, dockless bike sharing service that has attracted hundreds of millions of registered users.

US-based digital signature technology provider DocuSign floated in a $629m IPO in which Alphabet and mass media group Comcast both sold shares. The shares were priced at $29, above the $24 to $26 range the company had set, giving it a market capitalisation of more than $4.4bn. The company issued just more than 16 million shares on the Nasdaq Global Select Market, for almost $466m of proceeds, while shareholders sold almost $164m of shares in the offering. Its many previous corporate backers include Recruit, Second Century Ventures – a venture capital fund formed by the US National Association of Realtors – chipmaker Intel's corporate venturing arm Intel Capital, computer producer Dell and telecoms firm Deutsche Telekom, Alphabet's subsidiary GV and Comcast Ventures, the venturing arm of Comcast. Other corporate backers were NTT Finance, owner of telecoms firm NTT, Samsung Ventures, BBVA Ventures, and conglomerate Mitsui. DocuSign has developed an e-signature platform it claims has hundreds of millions of users, including some 370,000 businesses.

Enterprise software provider OpenText agreed to acquire US-based application and data management software developer Liaison Technologies for about $310m, allowing corporates to exit, among them logistics firm UPS's Strategic Enterprise Fund and the Global Health Innovation Fund, a vehicle of US-based pharmaceutical firm Merck & Co. Founded in 2001, Liaison produces software that helps a base of more than 4,000 enterprise customers integrate their business

SECTOR FOCUS

Top 10 exits by services corporate investors over the past year

Company	Location	Sector	Exit type	Acquirer	Size	Investors
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
Mobike	China	Transport	Acquisition	Meituan-Dianping	$2.7bn	Bertelsmann | Bocom International | Ctrip.com | Farallon Capital Management | Hillhouse Capital Management | Hon Hai | Huazhu Hotels Group | ICBC International | Joy Capital | Panda Capital | private investors | Qiming Venture Partners | Sequoia Capital | Temasek | Tencent | TPG | Warburg Pincus
DocuSign	US	IT	IPO		$629m	Accel Partners | Alphabet | Bain Capital | BBVA | Brookside Capital | ClearBridge Investments | Comcast | Cross Creek Advisors | Dell | Deutsche Telekom | EDBI | Frazier Technology Ventures | Generation Investment Management | Ignition Partners | Intel | Kleiner Perkins | Mitsui | NTT Docomo | Recruit Holdings | Salesforce | Samsung | Sands Capital | Sapphire Ventures | Scale Venture Partners | Second Century Ventures | Sigma Partners | Telstra | Visa | Wasatch Advisors | Wellington Management | WestRiver Capital
Liaison Technologies	US	IT	Acquisition	Open Text	$310m	Accenture | Forté Ventures | Merck & Co | UPS | Verdane Capital
MetaPack	UK	Services	Acquisition	Stamps.com	$230m	Brainspark | Index Ventures | WPP
BabyTree	China	Media	IPO		$217m	Alibaba | Chenshan Capital | China Merchants Wealth | Fosun Group | Matrix Partners | Tal Education Group | undisclosed investors
Domo	US	IT	IPO		$193m	Andreessen Horowitz | angel investors | Benchmark | Bezos Expedition | BlackRock | Dragoneer Investment Group | Fidelity | Founders Fund | GGV Capital | Glynn Capital Management | Greylock Partners | Hummer-Winblad | Institutional Venture Partners | Mercato Partners | Morgan Stanley | Salesforce | Sorenson Capital Partners | SV Angel | T Rowe Price | TPG | Viking Global Investors | WPP
VictorOps	US	IT	Acquisition	Splunk	$120m	Costanoa Venture Capital | Foundry Group | JF Shea (Shea Ventures)
Aptinyx	US	Health	IPO		$102m	Adage Capital Management | Adams Street Partners | Agent Capital | Bain Capital | Beecken Petty O'Keefe & Company | Frazier Healthcare | Goudy Park Capital | HBM Healthcare Investments | Longitude Capital | LVP Life Science Ventures | Nan Fung Group | New Leaf Venture Partners | Northwestern University | Osage University Partners | Partner Fund Management | PathoCapital | Rock Springs Capital
500px	US	Media	Acquisition	Visual China Group	$17m	Andreessen Horowitz | Creative Artists Agency | FF Venture Capital | Harrison Metal Capital | private investors | Rugged Ventures | Visual China Group

applications and manage data. The company's Alloy platform includes a cloud-based monitoring and visualisation tool for business and transaction activity, and a data mapping and translation system that Merck uses in clinical trials.

Logistics software producer Stamps.com agreed to acquire MetaPack, a UK-based e-commerce delivery services provider backed by public relations services group WPP, for £175m ($230m). Founded in 1999, MetaPack operates an online platform on which e-commerce businesses can organise logistics, and is responsible for delivering more than 550 million packages each year. The company relies on a network of some 450 mail carriers and 5,000 logistics services across the world. Clients can also access features such as worldwide order tracking, a streamlined returns process and carrier optimisation and monitoring systems.

Babytree, a China-based social parenting media and e-commerce platform backed by corporates TAL Education, Alibaba and diversified conglomerate Fosun, raised $217m in its Hong Kong IPO. The company priced its shares at HK$6.80, at the bottom of a range that had HK$8.80 at the upper end. Babytree had hoped to secure up to $1bn at a valuation of $3bn to $5bn, but its valuation dipped to $1.5bn. Babytree has created an online community in which parents share their experiences, seek advice and find information such as vaccination checklists and dietary guides for mothers. It also operates an e-commerce platform and video-sharing app WeTime.

SECTOR FOCUS

Domo, a US-based business management platform developer backed by WPP and customer relationship management software provider Salesforce, went public in a $193m IPO on the Nasdaq Global Market. The offering consisted of 9.2 million shares at $21 each, towards the upper end of the $19 to $22 range set earlier. Founded in 2010, Domo has developed a cloud-based platform that incorporates detailed data from every part of a business while securely connecting to each of its systems, enabling executives to run it, or employees to perform work, on mobile devices.

VictorOps, a US-based IT incident management platform backed by property developer JF Shea, agreed to an acquisition by big data software developer Splunk for about $120m in cash and stock. JF Shea had invested through corporate venturing unit Shea Ventures. Founded in 2012, VictorOps has created an incident management platform that helps IT staff solve problems. The platform will be integrated into Splunk's offering.

Aptinyx, a US-based neurologic disorder drug developer backed by property and healthcare group Nan Fung Group raised about $102m when it floated on the Nasdaq Global Select Market. The company issued 6.4 million shares at $16 each, at the top of the IPO's $14 to $16 range, giving it a $520m market capitalisation. Founded in 2015, Aptinyx is developing synthetic small molecules for treating disorders of the brain and nervous system. It will put $15m of the proceeds into phase 2 studies its candidate targeting diabetic peripheral neuropathy and fibromyalgia.

VCG Hong Kong, a subsidiary of image licensing service Visual China Group, acquired one of its portfolio companies, Canada-based photography-focused social community 500px, which had also received backing from Creative Artists Agency. VCG paid $17m for 500px, which had raised about $22m. Founded in 2009, 500px has built an online community of 13 million users on which photographers can share and license their images. VCG has distributed content on behalf of 500px since 2015, and the companies jointly launched Chinese platform 500px.me the same year.

Global Corporate Venturing also reported a exits from emerging services-related enterprises that involved corporate investors from other sectors.

Recruit agreed to acquire online recruitment and employment assessment platform Glassdoor for $1.2bn, giving an exit to CapitalG, Alphabet's growth equity arm. Glassdoor has built an online platform that enables employees to give feedback anonymously on the companies for which they work while also accessing new job possibilities. The company had 59 million monthly active users by January 2018, and reviews of more than 770,000 businesses that incorporate features such as photos, salary information and interview questions. Glassdoor will operate independently as part of Recruit's human resources technology division.

US-based architecture software developer Autodesk agreed to acquire US-based construction software developer PlanGrid for $875m. PlanGrid had cloud services provider Box and Alphabet among its previous backers. Established in 2011, PlanGrid has developed and runs a collaboration platform that makes it possible for general contractors, subcontractors, architects and owners to work together on projects in real time. The company claims its platform is used in more than a million projects in 90 countries. Autodesk intends to integrate PlanGrid into its building information modelling software Revit, and construction management platform Bim 360.

Tongcheng-eLong, a China-based online travel agency backed by corporates Tencent, Ctrip and Dalian Wanda, raised $180m in an IPO on the Hong Kong Stock Exchange. The company issued about 143 million shares at HK$9.80 each, near the bottom of the IPO's HK$9.75 to HK$12.65 range. Previous reports suggested it was targeting $1bn, but that goal was reduced to $233m. Tongcheng-eLong was created through the merger of LY.com, an online travel services provider also known as Tongcheng Network, and online travel agency eLong. The company's online platform allows consumers to book hotel accommodation and travel.

Wellness business software producer Mindbody agreed to acquire Booker Software, a US-based developer of salon

Top 10 exits from services enterprises over the past year

Company	Location	Exit type	Acquirer	Size	Investors
Glassdoor	US	Acquisition	Recruit Holdings	$1.2bn	Alphabet | Battery Ventures | Benchmark | DAG Ventures | Dragoneer Investment Group | Sutter Hill Ventures | T Rowe Price | Tiger Global Management
Plangrid	US	Acquisition	#N/A	$875m	Alphabet | Box | Founders Fund | Sequoia Capital | Tenaya Capital | Y Combinator
MetaPack	UK	Acquisition	Stamps.com	$230m	Brainspark | Index Ventures | WPP
Tongcheng-eLong	China	IPO	#N/A	$180m	Ctrip.com | Dalian Wanda Group | Tencent
Booker	US	Acquisition	Mindbody	$150m	Bain Capital | First Data | Grotech Ventures | Jubilee Investments | Revolution | TDF Ventures | Vital Financial
Qeeka Home	China	IPO	0	$137m	Baidu | Cachet Group | Jianxin Capital | Orchid Asia | Oriza Holdings | Seagull Capital | Suzhou Industrial Park
Liulishuo	China	IPO	0	$72m	Cherubic Ventures | GGV Capital | Hearst | International Data Group | RTA Capital | TrustBridge Partners
BrightFunnel	US	Acquisition	Terminus		Bloomberg | Crosslink Capital | Karlin Ventures | Resolute.vc | Salesforce | Tekton Ventures
UrbanIndo	Indonesia	Acquisition	99.co		Accenture | East Ventures | Gree | IMJ Corporation
WorkMarket	US	Acquisition	Automatic Data Processing		Accenture | Foundry Group | Industry Ventures | Silicon Valley Bank | SoftBank | Spark Capital | Union Square Ventures

SECTOR FOCUS

and spa management software, allowing payment technology provider First Data to exit. Mindbody will pay "approximately" $150m in a deal that will incorporate cash and the assumption of unvested option awards. Founded in 2010 and formerly known as GramercyOne, Booker has built an end-to-end software offering for spas and beauty salons that includes online booking and payment, customer relationship management, automated marketing and staff management tools.

Qeeka Home, a China-based home design services platform backed by internet group Baidu, raised HK$1.07bn when it floated in Hong Kong. The company priced its shares at HK$4.85, below the IPO's HK$6.80 to HK$9 range, giving it a market capitalisation of $748m. Founded in 2007, Qeeka Home is the owner of Qijia, which claims to be China's largest online home design and construction services marketplace, connecting users to a network of more than 7,500 service providers in 290 cities.

Liulishuo, a China-based English-teaching platform backed by media group Hearst, raising $71.9m in an IPO on the New York Stock Exchange. The company issued 5.75 million American depositary shares at $12.50 each. Incorporated in 2012 as Laix, Liulishuo has developed an interactive English language learning course that uses artificial intelligence to assess students' spoken and written skills. It claimed to have served 83.8 million people by mid-2018.

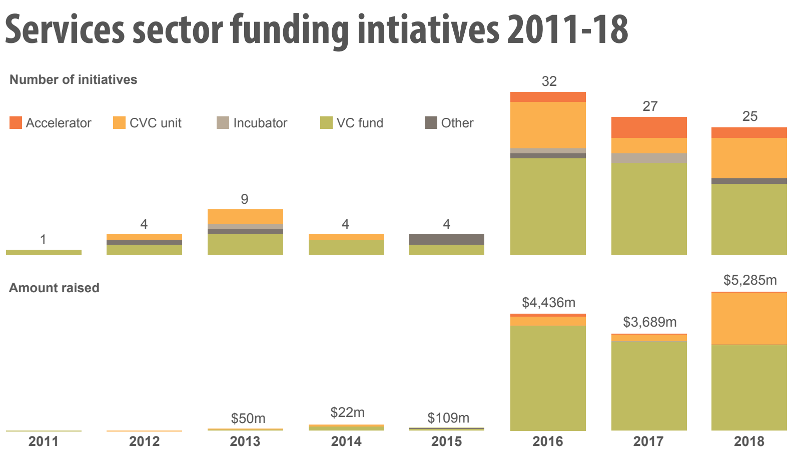
Account-based marketing software producer Terminus paid an undisclosed amount to acquire US-based marketing analytics provider BrightFunnel, giving exits to Salesforce and media company Bloomberg. BrightFunnel has created a business-to-business software platform that provides marketing analytics and intelligence for enterprises, allowing marketers to measure the impact that online and offline activity has on revenue.

Digital media company Gree exited Indonesia-based property listings portal UrbanIndo in an acquisition of undisclosed size by real estate portal 99.co. Founded in 2011, UrbanIndo operates an accommodation listings platform that advertises properties for sale or lease. It has about 1.2 million active property listings and includes new homes listed by developer. The company's service will be integrated with 99's property listings business in Singapore, allowing the latter to expand its position in Southeast Asia. 99 had 150,000 listings on its platform before the deal.

Consulting firm Accenture and SoftBank exited US-based workforce management technology provider WorkMarket in an acquisition of undisclosed size by human resources software producer ADP. Founded in 2010, WorkMarket has built a software platform that helps businesses find and vet independent contractors and freelancers, and integrate them with the full-time workforce.

Funds

Throughout 2018, corporate venturers and corporate-backed VC firms investing in the business services sector secured over $5.28bn via 25 funding initiatives, including 14 VC funds, eight new venturing units, two accelerators and one other initiative. On a calendar year basis, funding initiatives dropped slightly in number from 32 in 2016 to 27 in 2017 and then 25 by the end of 2018. Total estimated capital, however, followed a different path – up 43% from the $3.69bn in 2017.



Singapore-based logistics provider Global Logistics Providers launched a $1.6bn investment fund to target the logistics services ecosystem in China. The fund will be managed by Hidden Hill Capital, the private equity arm of the corporate's local subsidiary, GLP China, and limited partners include unnamed insurance providers and long-term institutional investors, such as investment firm China Post Capital. Hidden Hill Modern Logistics Private Equity Fund claims to be the only fund in China dedicated entirely to the logistics sector and will target innovative companies in the space. The company currently has $50bn of assets under management, much of which is concentrated in real estate, and it expects to establish additional funds in the future.

China-based oil, gas and chemicals supplier Sinopec formed investment firm Sinopec Capital with RMB10bn. In addition to emerging areas such as new energy, advanced materials and artificial intelligence, Sinopec Capital will invest in and smart manufacturing and supply chain technologies. Although Sinopec did not state directly that the vehicle would invest in startups, its activities will cover equity investments and management as well as project investments and asset management.

China-based venture capital firm Fortune Venture Capital secured RMB4.63bn for its latest renminbi-denominated fund,

SECTOR FOCUS

Services sector funding initiatives over the past year

Funding initiative	Type	Funds raised	Location	Focus	Investors
Hidden Hill Modern Logistics Private Equity Fund	VC fund	$1.6bn	China	Transport, services	China Post Capital | Global Logistics Providers | Hidden Hill Capital
Sinopec Capital	CVC unit	$1.48bn	China	Energy, IT, industrial, services	Sinopec Engineering Group
Unnamed Fortune VC fund	VC fund	$667m	China	IT, media, consumer, telecoms, services, industrial,	Century Golden Resources | Fortune Venture Capital
RET Ventures I	VC fund	$108m	US	Services	Aimco | Boardwalk Real Estate Investment Trust | Cortland | Essex Property Trust | GID | Mid-America Apartment Communities | Real Estate Technology Ventures | Starwood Capital Group | UDR
JLL Spark	CVC unit	$100m	India	Services	Jones Lang LaSalle
Evolv Ventures	CVC unit	$100m	US	Consumer, services	Kraft Heinz
Sinovation Fund IV	VC fund	$50m	China	IT, services, consumer	BBVA | Sinovation Ventures
Singha Ventures	CVC unit	$25m	Thailand	Consumer, health, services	Singha Corporation
Talkdesk Innovation Fund	VC fund	$10m	US	Services	Talkdesk
WeWork Creator Fund	VC fund		US	Services	WeWork
Propel Asia	Accelerator		Singapore	Services	District6 | Jones Lang LaSalle | Lend Lease | MeshMinds

from limited partners including property developer Century Golden Resources Group. Financial services firm Industrial and Commercial Bank also investors, as did Shenzhen Yunneng Fund, Kpeng Capital and the city of Shenzhen's guidance fund. Founded in 2000, Fortune VC focuses on consumer services, technology, media and telecoms, consumer goods, agricultural technology and cleantech.

US-based early-stage venture capital firm Real Estate Technology Ventures closed its first fund at $108m with commitments from real estate investment trusts Aimco, Boardwalk, Essex Property Trust, MidAmerica and UDR. Real estate investment holding companies Starwood Capital Group, Cortland and GID also backed the fund. Between them, the limited partners own or manage almost a million rental units. Real Estate Technology Ventures will focus on real estate technology developers that can help the fund's investors manage their portfolios. Startups will be able to tap into the expertise and networks of the limited partners to accelerate their growth.

Real estate developer and property manager Jones Lang LaSalle unveiled corporate venturing arm JLL Spark, equipped with $100m Founded in 2017, JLL Spark is focusing on the property technology sector and will invest in startups developing products and services around real estate development, management, leasing, investing and improving tenant experience. Portfolio companies can access JLL's expertise and will benefit from the corporate's business lines and clients for feedback and distribution. The fund is led by co-chief executives Mihir Shah and Yishai Lerner. JLL Spark will generally invest from hundreds of thousands of dollars to a few million at seed and series A stage but may also consider later-stage opportunities or other initiatives.

US-based packaged food producer Kraft Heinz launched strategic investment vehicle Evolv Ventures with up to $100m. The fund will be headed by Bill Pescatello as managing partner. Pescatello was hired from venture capital firm Lightbank, where he had been a partner since 2011. Evolv Ventures will target developers of e-commerce, logistics and supply chain services technology as well as direct-to-consumer projects. Its formation followed Kraft Heinz's launch of accelerator Springboard.

Thailand-based beverage producer Singha Corporation formed $25m corporate venturing vehicle Singha Ventures to back startups and venture capital funds. Singha Ventures, which was registered in Hong Kong in mid-2017, will operate as an independent subsidiary and will not require board approval for investments. The fund will target consumer product brands in addition to retail and logistics services as well as enterprise healthcare and renewable energy technology developers and service providers. It will limit its involvement in portfolio companies to stakes under 25%.

US-based customer service software provider Talkdesk launched corporate venturing initiative Talkdesk Innovation Fund with $10m. Founded in 2011, Talkdesk supplies software for business call centres, improving audio quality on calls while simplifying the process by introducing tools that can, for instance, enable operatives to view details on each customer without switching tabs. Talkdesk created the fund to advance the customer service industry by giving startups in the sector the resources needed to bring their technology to market more quickly.

WeWork launched the WeWork Creator Fund to invest in startups focusing on areas such as the future of work, according to sources. The amount of capital committed to the fund was not disclosed. It will be head by WeWork's head of M&A, Emily Keeton. Read more on this in the People section.

Real estate firms Jones Lang LaSalle and Lendlease launched Singapore-based property technology accelerator Propell Asia, along with co-working space District6 and creative design incubator MeshMinds. Propell Asia will select five startups from the region to enter a 10-week accelerator program. They will each be eligible for a S$20,000 ($14,600) grant. Participating startups are expected to have products applicable to property management, real estate transactions, construction management or data collection, science and analysis.

People

Saijo

Eggen

Joe Saijo, formerly president and managing director of Recruit Strategic Partners, a corporate venturing subsidiary of Recruit, launched a VC fund with Patrick Eggen, who left mobile chipmaker Qualcomm's corporate venturing unit, Qualcomm Ventures, where he was managing director for North America. The fund, Counterpart Ventures, will provide between $2m and $8m for companies and is stage-agnostic. Saijo had joined Recruit Strategic Partners in 2012 and headed the unit.

Jens Schulte, formerly head of corporate venturing at PostFinance, the financial services arm of Switzerland's national postal service Swiss Post, was promoted to head of M&A for its parent. Schulte will join forces with Thierry Golliard, who heads open innovation and venturing. Schulte's connection to the company began in December 2011 when he was hired as a senior project manager for M&A. PostFinance appointed Schulte head of corporate venture capital in 2016, and he was promoted to head of future banking, overseeing innovation, growth and corporate venture capital, in 2017.

WeWork tasked Emily Keeton with leading the new WeWork Creator Fund, reportedly investing in startups focusing on areas such as the future of work. As managing director, Keeton will run a five-person team. Keeton joined WeWork in 2017 as global head of M&A, and the company has since made a string of acquisitions. Before joining WeWork, Keeton spent nine months as head of M&A for digital media holding company IAC. Keeton was also co-founder and CEO of Flavour, a restaurants review app that raised $1.1m from investors including media company Scripps Networks Interactive before being acquired in 2015.

Haymes

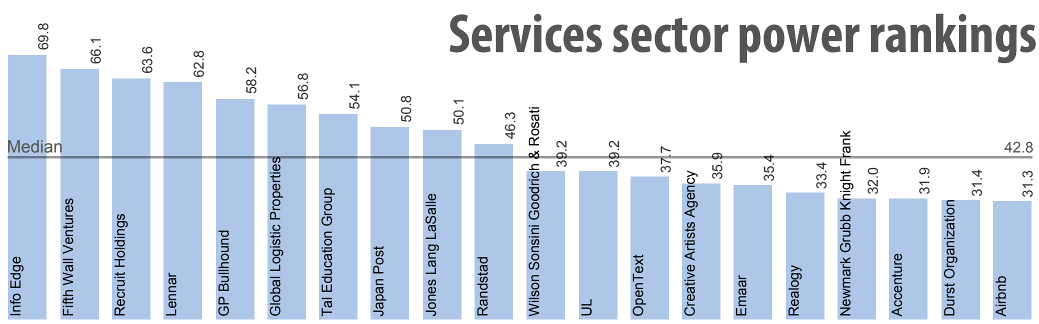
Bruce Haymes, managing director at Nielsen Ventures, the corporate venturing unit run by media information provider Nielsen, left to pursue an "opportunity elsewhere". Nielsen hired Haymes as senior vice-president of global business development and M&A in 2008 and he led more than $2bn in acquisitions and investments. Haymes subsequently led Nielsen's early-stage investment and accelerator programs linking the corporate's long-term strategies with externally developed businesses and founded and launched Nielsen Innovate in Israel. Haymes's role on that side of Nielsen's business development was reportedly taken on, at least initially, by John Burbank, who oversees Nielsen's global corporate development and strategic innovation as well as Nielsen Ventures.

Pietras

Brian Pietras, former head of technology ventures at UK-based outsourcing company Hays, joined US-based enterprise human resources and finance management software provider Workday as vice-president of corporate strategy. At Hays, which he left in October 2017, Pietras's deals included a limited partner commitment in Seedcamp's third fund and the series A round for background checks service Onfido. His past experience includes time at units run by consumer goods producer Unilever and energy utility Centrica. Workday relaunched Workday Ventures as its $250m corporate venturing fund.

Suennen

Lisa Suennen, previously a managing director at GE Ventures, corporate venturing unit of industrial conglomerate General Electric, joined US-based legal and consulting firm Manatt Phelps & Phillips to lead its corporate venturing fund. In addition to overseeing its strategic investments, Suennen will manage Manatt's digital and technology businesses, which span digital media, financial technology and education. Suennen's experience in the healthcare technology sector is also expected to strengthen the consulting capabilities of the firm's health-focused policy and strategic advisory subsidiary, Manatt Health. GE Ventures hired Suennen in 2016 and she led its healthcare investments until her departure in 2018. She was one of three team members to rank joint second in GCV's 2018 Rising Stars list. Suennen said: "Joining Manatt allows me the unique opportunity to continue to work to my strengths in healthcare and venture capital, while expanding more broadly across technology in other industries"

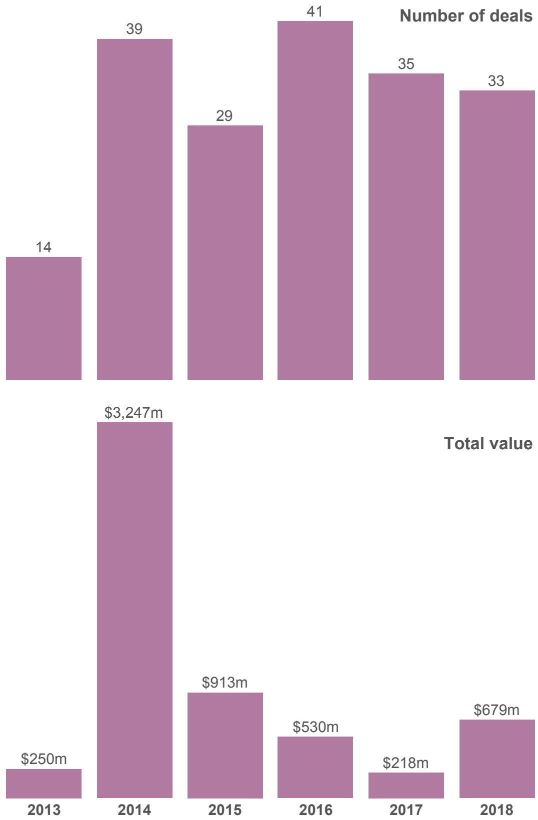


SECTOR FOCUS

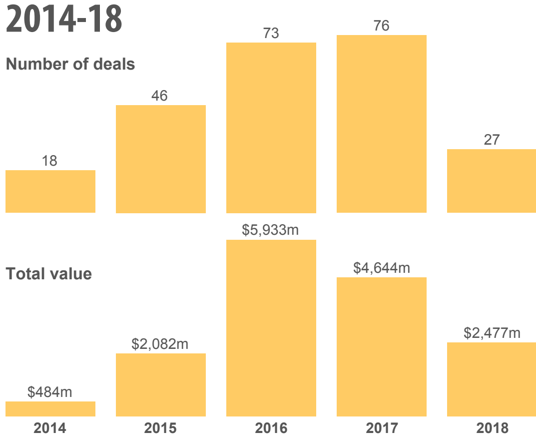
University and government backing

Commitments to university spinouts in the business services sector are reported in our sister publication, Global University Venturing. By the end of last year, 33 rounds were raised by university spinouts, slightly fewer than the 35 in the previous year. The level of estimated total capital deployed in 2018 was $679m, considerably higher than the $218m in 2017.

Deals in university spinouts 2013-18



Government-backed deals in services 2014-18



NestAway, an India-based accommodation rental platform, received $51m in a round featuring UC-RNT, the investment fund established by University of California and entrepreneur Ratan Tata. UC-RNT committed $16m to the round, which included investment bank Goldman Sachs, through subsidiaries in India and Hong Kong, Tiger Global Management and IDG Ventures India. Founded in 2015, NestAway has created an online marketplace where homeowners can let their property. The company acts on behalf of landlords, organises viewings and oversees rent collection. NestAway typically charges a 10% to 12% commission on monthly rent payments but neither landlord nor tenant pay a brokerage fee. It currently manages 15,000 properties in 10 cities.

Kidaptive, a US-based developer of personalised learning systems for children spun out from Stanford University, closed a $19.1m series C round co-led by educational publisher Woongjin ThinkBig and VC firm Formation 8. Founded in 2011, Kidaptive has created a cloud-based adaptive learning platform that brings together data from different learning-based sources so that a student's progress can be assessed more effectively. The system also enables learning targets to be set to increase student engagement. It will use the new funding to add a range of machine learning-based tools.

Celect, US-based retail analytics technology spinout from Massachusetts Institute of Technology, closed a $15m series C round led by NGP Partners, the venture capital firm founded by communications technology manufacturer Nokia. Family office Fung Capital also took part in the round together with investment firm Activant Capital and VC firm August Capital. Founded in 2012, Celect has launched cloud-based predictive analytics platform Inventory Optimization Suite that allows retailers and brands to forecast buying trends so they can adjust stock merchandising, allocation and fulfilment schedules.

Kahoot, a Norway-based educational game developer based on research at Norwegian University of Technology and Science, tripled its valuation to $300m in seven months with a Nkr127m ($15.3m) funding round. The round was led by investment vehicle Datum Invest and included undisclosed additional investors based in the Nordic region, co-founder and chief executive Åsmund Furuseth told TechCrunch. Founded in 2013, Kahoot runs an online platform with more than 70 million monthly active users, allows them to create games focused on any educational subject. The underlying concept was first proposed by Alf Inge Wang, a professor at the university, whose student Morten Versvik then led the research that resulted in the formation of Kahoot.

Innovations in the services sector naturally catch the attention of governments and related investors, as new technologies and business models in some of the subsectors, such as education, tourism and legal services, are linked with the public sphere. However, there was a considerable drop in such investments last year – 27 rounds worth an estimated total of $2.48bn compared with 76 rounds estimated at $4.64bn in 2017. ◆

SECTOR FOCUS

Interview: Akihiko Okamoto, Recruit Strategic Partners

Okamoto, head of Recruit Strategic Partners, spoke to GCV's Robin Brinkworth about helping startups enter the Japanese market and leveraging data to aid their growth

Recruit Strategic Partners (RSP), is the corporate venturing arm of Japanese human resouces (HR) behemoth Recruit Holdings, run through the parent company's research and development department.

The unit focuses on investing in technology-based businesses in order to build a new non-HR "business pillar" in the next 10 years. For Akihiko Okamoto, this means the team "never make an investment if we cannot expect any strategic return. We believe financial return and strategic return can be compatible". The fund is supported solely by Recruit Holdings, with annual investment capital of between $50 to $100m. Total assets under management are now over $200m.

Okamoto and RSP report directly to the Recruit's CEO, while also having authority to make investment decisions, meaning RSP can move swiftly. According to Okamoto, RSP is looking at companies "that have the potential to become game-changers of existing industries".

He added: "We are currently focusing on artificial intelligenc (AI), robotics, the internet of things and blockchain. We are also keen on fintech and business applications that can potentially support small to medium-sized businesses (SMBs), since we believe we can contribute a lot to the growth and efficiency of the Recruit Group's core SMB customers."

"Recruit can become the best partner for American or European startups for entering the Japanese market"

Many of the testimonials on RSP's website are about bringing western startups into the Japanese market, in part because, as Okamoto says, Recruit is not just about HR. He said: "Recruit is a leading company that has built overwhelmingly strong customer bases – both business and consumer – not only through HR, but also internet media business in non-HR verticals such as housing, dining, beauty salons, travel and school education. These media businesses have the number-one market share in Japan in terms of revenue, profit and transaction volume.

"I believe Recruit can become the best partner for American or European startups for entering the Japanese market, based on our knowledge and experience."

RSP's advantage is furthered by the volume of online transaction data Recruit holds from its other business units, and its strong customer base. Like many other CVCs, RSP also has what they call a "business success team", designed to provide hands-on support and integration as startups enter Japan. That and RSP's agility relative to other Japanese CVCs mean Okamoto believes RSP has a unique package.

However, Okamoto and RSP are not open to every startup looking to enter Japan. Okamoto personally feels there are too many overvalued AI startups. For Okamoto, here is where Recruit's strengths really come to the fore:

"AI is a technology that needs to be trained with real data. In that sense, Recruit's transaction data and customer base play an important role in determining the quality of AI startups' technologies. On the other hand, blockchain has great potential to become a breakthrough technology. Lots of startups will transfigure blockchain into a practical technology infrastructure."

Publicly, RSP has been quiet over the past few months, with its last major deals including healthcare robotic relay company Savioke's $17m series B, and India-based online lending platform Rubique Technologies' latest round, reported as being between $15m and $20m. Both deals were announced in the middle of last year. While RSP already has a sizeable portfolio – nearly 60 companies, with 10 successful exits and eight IPOs – Okamoto is now seeking to add to that, with another pair of deals in the pre-announcement stage. ◆

SPECIAL REPORT

Riding the innovation wave of disruption

The fourth annual Global Corporate Venturing & Innovation (GCVI) Summit in Monterey, California on Wednesday and Thursday, January 30-31 – reporters Kaloyan Andonov, Edison Fu and Thierry Heles

Day 1 of the summit

In the morning, **Tim Lafferty**, chief operating officer of Mawsonia, publisher of Global Corporate Venturing, Global University Venturing and Global Impact Venturing, gave opening remarks to kick off the first day of the summit, welcoming the 831 corporate venturers and industry experts present at this year's event, understood to be the world largest CVC-themed gathering to date.

Sue Siegel, chief innovation officer of industrial conglomerate General Electric and CEO of GE Ventures, was the first keynote speaker. Siegel, who this year became chairwoman emeritus of the event, joked that "if you have not respected me until now, in the Asian cultures you respect your elders, so now is your chance to respect me".

Siegel acknowledged "it has been a year that has been fairly tumultuous for many of us" – recognising, as other speakers would do later, that the economy is now facing headwinds. Corporate venturers, Siegel said, "are ambassadors that serve as the bridge between the entrepreneurial ecosystem – entrepreneurs and venture capitalists – and our corporate entities, which sometimes view them as a threat" and while challenges may lie ahead, she declared that "corporate venturing is a discipline that is here to stay".

Siegel also took the opportunity to implore the audience – particularly men – to support diversity and ask themselves what they have done to increase it, noting that "our strength lies in our diversity".

Anthony Lin, senior managing director of Intel Capital, spoke on behalf of **Wendell Brooks**, president of Intel Capital and co-chairman of the GCVI Summit, who had to bow out of the event due to a family emergency.

Lin noted that "as an industry, we are better when we work together" and offered some figures illustrating Intel Capital's successes over the past three decades – a total of $12.3bn had been invested in more than 1,500 companies to date

SPECIAL REPORT


Bonny Simi, Jetblue; Anthony Lin, Intel;
Adrian Cockroft, Amazon; Sue Siegel, GE

and the unit had achieved some 660 exits.

Picking up on Siegel's call for diversity, Lin said 22% of new investments made by Intel Capital last year had backed startups led by women or underrepresented minorities.

Lin also acknowledged that "we are in for interesting times ahead" but that there were opportunities in the challenges to come. Intel Capital had therefore enacted changes, with the division now financially focused, though the unit still ensured each deal would be strategically relevant and that it exercised "extreme due diligence".

Intel Capital had also formulated its investment thesis upfront, Lin added, and its focus included areas such as artificial intelligence (AI), the cloud and data centres, analytics, 5G and communications, autonomous technology and software.

The unit had also changed its compensation model, moving to a carry-pool model, and had developed seven core principles – communicate and collaborate, debate hypotheses, act with transparency, share risks, develop the next generation, be ethical and have fun.

On developing the next generation, Lin reminded the audience of the *open letter* signed by Brooks and several other members of the GCV Leadership Society in April 2018 asking corporate venture capital units to hire women and underrepresented minorities as interns.

Lin concluded his speech with a video on an Intel Capital's portfolio company, Joby Aviation, an electric air taxi company that was also backed by Toyota AI Ventures, a corporate venturing arm of carmaker Toyota, and JetBlue Technology Ventures, the investment subsidiary of airline JetBlue.

This was an example of the co-investment strategy with other CVCs developed by Intel Capital, which GCV Analytics data shows to be the most active syndicate member with other corporations, and a proponent of the GCV Connect collaboration and deal-sharing platform for members of the GCV Leadership Society.

Bonny Simi, president of JetBlue Technology Ventures and co-chairwoman of the GCVI Summit, discussed how she set up the unit she heads in January 2016, saying her story was for those "who have not been in CVC for 35 years".

Since joining JetBlue three years ago, Simi has grown the unit to a team of 12, who have made 22 investments – typically backing series A rounds and focusing on the intersection of technology and travel.


John Riggs, PwC;
David Jen, Google X

Simi said: "CVC is most definitely a team sport." She added that when she set up the division she had no prior knowledge of the area but reached out to incubator Mach 49 for initial input, before receiving a LinkedIn message from **Heidi Mason**, co-founder and managing partner at consultancy Bell Mason Group, who has recently penned a book – Corporate venturing: A survival guide – along with **Elizabeth Arrington**, partner at BMG, and **James Mawson**, chief executive of Mawsonia and editor-in-chief of GCV. Mason offered to help Simi and connected her to Siegel,

Glynna Christian, Orrick; Raj Singh, JetBlue; Jon Lauckner, GM; Meghan Sharp, BP; Tony Cannestra, Denso

and from there it was "all open doors", Simi said.

The first mark of success, Simi continued, came when she realised that both Intel Capital and Verizon Ventures, the corporate venturing arm of mobile telecoms firm Verizon, were co-investors in one of JetBlue's portfolio companies.

Simi, who remains an active captain with the airline and occasionally flies her team herself, concluded that the unit operated on several core principles. She said: "It is all about the team. You need to offer a strong value proposition to the parent company and the startups, and you need to get the word out about what you do." The latter, she added, was achieved by each team member being required to give public speeches throughout the year.

Adrian Cockcroft, vice-president of cloud architecture strategy at Amazon Web Services (AWS), e-commerce and cloud computing firm Amazon's cloud storage and computing business, gave a keynote presentation. As new ideas would often face hurdles placed to avoid risk, Cockcroft explained how AWS dealt with risk to foster innovation. He said Amazon had developed a culture that made continuous innovation possible and how other corporates could employ its ideas to benefit and encourage creativity.

Amazon's culture of innovation focused on customers and long-term thinking through trial and error. Cockcroft said AWS drew lessons from other innovators, such as video-streaming service Netflix and ride-hailing app developer Uber, in terms of market creation. He added that Amazon currently had 50 million deployments a year, thousands of teams, microservice architecture, continuous delivery and multiple environments.

Amazon's growth strategy included value, selection and convenience. Quoting **Jeff Bezos**, Amazon's CEO, who said "you must be stubborn on the vision, but flexible on the details", Cockcroft said Amazon was willing to be misunderstood before its ideas were eventually accepted. Some strategies included 66 price reductions since 2006, introducing 1,430 new services and features in the 2017 financial year which resulted in millions of monthly active customers.

Scott Lenet, Touchdown

"Working backwards is a process to obtain clarity," Cockroft said. He considered it important to know the customers and one of the ways Amazon improved the experience both internally and externally was to include customer surveys and stakeholder surveys with difficult questions.

A panel discussion focused on delivering on promises. Moderated by **Sue Siegel**, the panel reprised **Adrian Cockcroft**, **Anthony Lin** and **Bonny Simi**. They talked of numerous ways parent organisations invested in and interacted with startups through their CVC arms.

Lin affirmed it was vital to connect startups back to the parent organisation, while Simi stressed the importance of diverse team-building and how mutual learning played a key role.

Simi said: "It is hard to hire someone – they not only have to have talent you look for, but they also need to match the company's culture. I have always said the final candidates need to be diverse – particularly women and people of colour. It is easy to go for that first candidate that you really like but insist on diversity – that is a challenge for all of you – and build a team bond. Be sure to build your team diversely as a part of the equation."

Cockroft said although Amazon had the Alexa CVC fund, entrepreneurs partnered Amazon because of its quick thinking and

SPECIAL REPORT


Tracy Isacke, SVB; Meghan Sharp, BP; Karen Kerr, GE; Kathie Resteiner, Intel

agility. He said a crucial difference between traditional and corporate VCs was that the latter were often affected by larger organisations and went through transformations as corporate strategies shifted.

Lin said different corporates contributed to divergent values and CVC units often reflected their respective parents' core belief. Misconceptions that CVCs moved slower due to their strategic nature were also gradually being dispelled.

With regard to geographic trends, Simi said every CVC had its own focus. For example, JetBlue, headquartered in New York with its CVC unit in Silicon Valley, was about to expand to Europe, starting from London where the tech scene is thriving. China, Latin America and India's ecosystems were also waiting to be ventured.

Cockroft said one ought to visit these countries and regions to change preconceived notions. He considered Bahrain as the gateway to the Middle East because the country was building a digital economy to cope with eventual oil depletion. Siegel added that in certain Middle Eastern countries, a considerable percentage of the population was younger than 30.

Lin agreed that Europe's tech scene was growing, specifically in London, Paris and Berlin, so Intel was focusing on these new markets.

A panel discussion on supporting end-to-end innovation with CVC on the frontlines was moderated by **Mark Radcliffe**, senior partner at US-based law firm DLA Piper, featuring **Jacqueline LeSage Krause**, managing director of Munich Re/HSB Ventures, the strategic investment arm of Germany-based reinsurance firm Munich Re and its US-based HSB (Hartford Steam Boiler) subsidiary, and **Rob Coppedge**, chief executive of US-based strategic investment vehicle Echo Health Ventures, a joint venture formed by healthcare provider Cambia Health and health insurer Blue Cross and Blue Shield of North Carolina.


Quinn Li, Qualcomm

On how parent organisations assessed the success of CVCs, Coppedge said Echo Health Ventures had two measures – financial returns for parent companies and the number of commercial contracts. LeSage Krause said, in her case, strategic goals came first, then fulfilling financial return targets.

She mentioned Munich Re's newest fund – the Ergo fund – and explained that although it had the same process as other investment units developed by an investment committee, a different theme and type of engagement with startups were in place.

Martin Haemmig, adjunct professor at the Centre for Innovation & Technology Management in Germany and the Netherlands, presented his data on the impact corporate investors have on startups by pointing out the advantages as well as potential disadvantages of having corporate backers. Haemmig said having had a corporate backer in a round tended to result in a larger median size of deals as well as larger valuations in IPOs and acquisitions. However, he noted that companies with corporate investors took longer to exit and having corporate backing often resulted in lower median IPO multiples.

In a keynote interview, **Mark Leahy**, co-chairman of the startups and VC group at law firm Fenwick & West, interviewed **Michael Redding**, managing director of Accenture Ventures, the corporate venturing arm of consulting company Accenture.

Leahy encouraged Redding to speak of Accenture's approach to investing in startups. Redding said that historically the push for venturing at his corporate parent came with a realisation that, in addition to inorganic growth via M&A, Accenture needed to generate organic growth as a professional

George Hoyem, In-Q-Tel; Jeff Herbst, Nvidia

services firm of global stature.

He said: "We aspire to be the textbook example of a corporate strategic investor. We are doing it entirely to support our parent's business. If there is no partnership with the startup, there is no investment." Redding added that financial performance of portfolio companies and the venturing unit would be tracked every quarter, albeit not part of the investment decision. "There is no specific investment target. The primary metric is revenue growth generated for the corporate parent," he said.

Redding, however, warned about the problem of corporates falling into the trap of becoming "dumb money" by explaining that a red flag had to be raised if potential portfolio companies were trying to "pick only certain types of investors in their syndicates and looking for the dumb money rather than the smart money".

He also explained Accenture's value proposition to startups. "Our pitch is that a startup should want our money because they want Accenture, the world's number-one professional services firm, which can leverage its vast network of established corporations across industries to help them scale and accelerate their revenue growth." He said this did not necessarily come with strings attached. "We do not expect exclusivity in partnerships but we expect to be the primary partner."

Nagraj Kashyap, corporate vice-president and global head of M12, the corporate venturing unit of software producer Microsoft, was interviewed on the main stage by **Greg Heibel**, partner at law firm Orrick, about the venturing unit he heads and the future of corporate venture capital. Kashyap said of M12: "We set it up as a completely independent venturing arm. We are very focused on enterprise software and helping the startups."

Apart from having a significant degree of autonomy, M12 had team members in San Francisco, Seattle, New York and London. Kashyap also explained how his team counted on the support of key people and senior leaders in the C-suite to ensure Microsoft works with the startups. Kashyap called it "curating engagement".

Most of the interview, however, revolved around the outlook for 2019 and challenges to corporate venturing. Kashyap said that during the upcycle over the past eight to nine years, the CVC industry "has grown along with the market and we will see a slowdown, but I do not think it is going to be very dire". He said it would constitute a test of how the market perceived CVCs in times of downturn. "What we can control is the message we relay about our role and what we can actively do. When the time comes for follow-on rounds, we have to make sure we participate. We have to make sure the CVC class of 2019 is not like the one of 2001, which shut down its units."

Kashyap encouraged a more proactive approach among CVCs. "It is not going to be a smooth ride but, unlike previous cycles, there is a lot of capital to be invested now. This would be a good time to double down and buy, as we expect some valuations to go down and have down rounds."

Kashyap also touched on the issue of attracting and retaining talen. "A lot of sophisticated people are moving to financial VC funds, so there is a bit of a talent shortage."

He also called for the application of best practices to ensure that, as investors, CVCs are on the side of the startups. He advised avoiding deal structures, such as those featuring rights of first refusal, that may make startups more reluctant to have CVCs on their investment syndicates. "We are on the side of the entrepreneurs, there is really no reason to demand such rights. It is harmful not only for the startups but also for our strategic goals. If, as a community, we adopt such best practices, we can do as investors better than traditional VCs."

Polly Flinn, executive vice-president and general manager of

Mike Redding, Accenture

SPECIAL REPORT

Ira Ehrenpreis, DBL

retail group Giant Eagle, was interviewed on the main stage by **Scott Bowman**, managing director at advisory firm Clareo, about supporting innovation from within the C-suite.

Flinn described Giant Eagle as an "85-year-old startup" operating supermarkets and convenience stores. She said that with new retailers such as Walmart and Amazon, the traditional retail model – how shopping was done and how fast customers received goods – was being disrupted. She said it was important to be open-minded about innovation to address longer-term challenges.

"I participate in the venture capital portion of the business, focusing on the next five to 10 years," she said, adding that when it came to sourcing innovation it was no longer "necessarily about acquiring companies but about acquiring capabilities".

Ira Ehrenpreis, founder and managing partner at venture firm DBL Partners, was interviewed by **Tami Hutchinson**, vice-president at Intel Capital, about how traditional venture capital firms would continue to syndicate with corporate VCs. Ehrenpreis said "not all CVCs are the same". He noted that a key criterion to identifying a company with good potential that had corporate backing lay in understanding that "the best companies do not look just for money but for great partners". He also warned that it was "very easy for either VCs or CVCs to overestimate their own importance".

Ehrenpreis joined the call to promote diversity – an important aspect that was often overlooked.

Shankar Chandran, vice-president of the Samsung Catalyst Fund of electronics manufacturing corporation Samsung, was interviewed by CVC veteran Claudia Fan Munce, former head of the venturing unit of computing company IBM and currently an adviser at VC firm New Enterprise Associates. They talked about working with traditional VC firms as co-investors.

Chandran said Samsung used venturing as a strategic tool to look for new large markets and developments that could disrupt its lines of business in order to gather market intelligence and understand the startup community better. He said he saw investing and helping emerging innovative businesses to work with the corporate parent as a way of bringing "a tremendous amount of intelligence quotient into Samsung".

Touching on one of the major themes of the summit, Chandran shared some reflections on what could be done to sustain the pace of corporate venturing in a downcycle. He said Samsung had been venturing for over 20 years with various funds and units and that the most valuable lesson was "to make sure to work with people you trust, as it is a business based on trust". He said trust was the foundation stone of collaboration between venture investors. Despite the way in which a corporate venturer like Samsung could help a startup to scale, Chandran noted that "sometimes there is lack of affinity between people".

The last morning session was the first of several on transport and advanced mobility. It was led and moderated by **Sobhan Khani**, vice-president of internet of things and mobility at US-based startup accelerator and corporate innovation platform Plug & Play Tech Centre. The session featured **Michael Cohen**, investment partner at SAIC Capital, a venturing subsidiary of Shanghai Automotive, **Marco Marinucci**, head of Hella Ventures, the venturing arm of automotive parts manufacturer Hella, **Meghan Sharp**, managing director of America at BP Ventures, and **Roman Vasilev**, director at Mobility X, a subsidiary of automotive interior maker Yanfeng.

Sharp, Cohen and Marinucci said they had brought some of their portfolio companies to the summit to provide them with opportunity to

Polly Flinn, Giant Eagle; Scott Bowman, Clareo

SPECIAL REPORT


Rob Coppedge, Echohealth; Jacqueline LeSage Krause, Munich Re

pitch and raise additional funding from corporate investors. The participants in the discussion spoke of engaging business unit leaders with startups and how their approaches to doing so differed within their broader organisations.

The discussion also covered co-investing with other corporate venturers. Sharp noted that BP Ventures had co-invested multiple times with competitors. “The mindset is to collaborate now, then compete later. Sometimes we have had deals with five corporates on the table and we are not afraid to have our competitors co-invest with us,” she said.

During the luncheon presentation, **James Mawson** gave an update based on data from the latest World of Corporate Venturing report, focusing on how corporations were investing with each other and increasingly using corporate venturing strategies as part of a wider innovation toolset of mergers, acquisitions, research and development, and linking this to public market investments and partnerships. Mawson explained how corporate venturing activities – at a record high last year – were changing the concept of venture, and corporates could benefit from the innovation tools to create and add value.

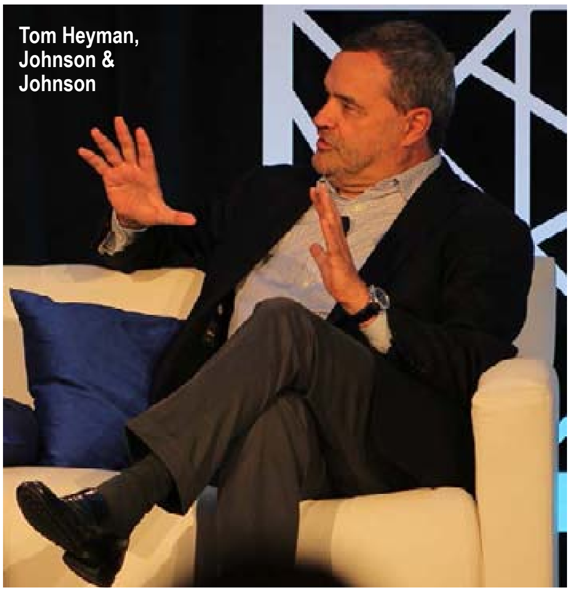
Jody Thelander, founder of consultancy firm J Thelander Consulting, gave her annual presentation of compensation data in the CVC sector that in 2018 attracted almost 900 survey respondents. She provided an overview of income trends, pointing out that incentives, beyond regular bonuses, were dominated by corporate stock, although carried interest, phantom carry and a combination of stock and carry were also used by some CVC units.

New hires for CVC units, Thelander added, primarily came from venture capital firms, followed by other CVC divisions, investment banks, private companies and private and growth equity firms.

Scott Lenet, founder and president of venture capital firm Touchdown Ventures, followed Thelander’s presentation with a talk on the importance of benchmarking. Lenet noted that a corporate venturing operation survived an average of four years before being wound down by the parent company, but that it took an average of seven years to generate a return on investment.

He offered a range of recommendations to increase CVCs’ success rate, including a focus on professionalisation to increase the parent company’s confidence in the unit’s efforts.

He added that innovation programs, including CVC units, incubators and accelerators, that aligned with industry best practices were more likely to build a positive recommendation in the ecosystem, provided continuing value to the parent company, attracted more resources and sustained a longer-term continuous program. He listed 10 essential elements for a CVC – goals, strategy, infrastructure, dealflow, evaluation, transacting, management, commercial deals, alignment and communications.


Tom Heyman, Johnson & Johnson

Shawn Atkinson, partner at law firm Orrick, interviewed **Matt Garrett**, managing partner of enterprise software developer Salesforce’s corporate venturing subsidiary, Salesforce Ventures.

Garrett said his unit had been building its international efforts in Canada, Australia and Europe, the Middle East and Africa. California, Garrett added, remained the single most significant source for dealflow, but even in the US, more investments were being made across the country and, together with the increased international focus, he predicted this trend would continue.

In particular, Garrett said New York was “exploding” for Salesforce, as startups learned that it was easier

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to retain talent if engineers were farther from the Silicon Valley ecosystem where they could be easily poached.

Garrett was confident about the year ahead, saying Salesforce, as a platform company and an enterprise software producer, was well positioned to weather any storms. Salesforce Ventures remained bullish, he said, and continued to hear from its clients how important enterprise software was, as every company was having to go through digital transformation.

He said his unit had made more than 300 investments to date and said he was particularly proud of a recent deal involving Narvar, a post-purchase consumer engagement platform, which raised $30m in a series C round from Salesforce Ventures and others in August last year. Salesforce Ventures, Garrett added, put every deal under a significant degree of scrutiny.

Sue Siegel, General Electric

Jim Fischer, a partner at law firm Drinker Biddle & Reath, interviewed panellists **Tom Heyman**, president of Johnson & Johnson Innovation–JJDC, the strategic investment vehicle for medical product group Johnson & Johnson (J&J), and **Barbara Dalton**, senior managing partner and vice-president of worldwide business development at Pfizer Ventures, pharmaceutical firm Pfizer's corporate venturing arm.

They discussed how their funds were structured and how healthcare innovation came about through corporate venturing. J&J Innovation's focus was biotech and medical devices, while Pfizer Ventures' was therapeutics. They both agreed that investing in healthcare was a long-term commitment.

A panel with emerging markets leadership as its theme featured Brazil's market experience. **Luiz Henrique Noronha**, healthcare-focused multi-stage investment partner at DNA Capital, interviewed **Flavio Pripas**, corporate venture officer at internet-focused early-stage venture capital firm Redpoint eVentures, and **Rodrigo Menezes**, founding partner at law firm Derraik & Menezes Advogados.

The panellists concurred that despite a global downturn, Brazil's corporate venturing and entrepreneurial activities had been growing exponentially, and the Brazilian government was spearheading the effort to incorporate the country into the global innovation capital ecosystem.

In a panel focused on automobility leadership, **George Kellerman**, CEO and managing director of Yamaha Motor Ventures and Laboratory Silicon Valley (YMVSV), the venturing arm and lab subsidiary of Japan-based carmaker Yamaha, was interviewed by **Faisal Rashid**, partner at Fenwick & West.

Kellerman spoke about YMVSV's evolution. He said the fund was launched three and a half years ago and was meant to invest off the balance sheet with some challenges in the initial stages. He said the fund was structured as a traditional partnership with a 2% management fee and a carried interest compensation structure. The investment horizon of the fund was five to 10 years, focusing on four broad areas – mobility, agtech, ageing population and aerotech, including unmanned aerial vehicles, satellites and rockets.

Kellerman said he had increased the size of his team from six people to 14. While strategic in orientation, the purpose of the fund was at least to return the cost of capital. There were three major strategic criteria for investments – solving a major social challenge, leveraging Yamaha's capabilities in the near term and accessing major future valuables.

Rodrigo Menezes, Derraik and Menezes; Flavio Pripas, Redpoint e.Ventures; Luiz Felipe Noronha, DNA Capital

SPECIAL REPORT

A panel revolving around the oil and gas industry explored the evolution of CVC and corporate incubation through the experience of three firms – Shell Ventures, the venturing arm of Anglo-Dutch oil and gas major Shell, industrial conglomerate Schneider Electric and Mach49, an accelerator helping corporations create, build and launch ventures from within their organisations.

The session was co-moderated by **Geert van de Wouw**, vice-president of Shell Ventures, and **Steve McGrath**, investment director at Shell Ventures. It included **Linda Yates**, CEO and founder of Mach49, **Paul Holland**, general partner at Foundation Capital, and **Heriberto Diarte**, head of corporate ventures and external innovation at Schneider Electric.

Each participant spoke about the unique challenges in venture investing or implementing other innovation tools in their organisations. Van de Vouw said that in addition to equity investment, Shell Ventures had also been involved in growing spinouts, which was "really hard to do, so it had better be worth the effort".

Diarte spoke of Schneider Electric's innovation toolkit and Yates talked about Mach49, which claimed to be the only incubator and accelerator in Silicon Valley helping corporations set up venturing units and run accelerators or incubators. Holland brought the perspective of a traditional venture capital firm.

The final part of the first day was the GCV Awards ceremony *(see report)*.

Day 2 of the summit

The second day was opened by **Mark Radcliffe**, senior partner at law firm DLA Piper, who invited **Michael Redding**, head of Accenture Ventures, and **Quinn Li**, senior vice-president and global head of Qualcomm Ventures, on stage.

Li, a co-chairman of the summit, noted that Qualcomm Ventures had invested in the parent company's broader ecosystem, citing mobility, automotive and the internet of things as particular areas of interest. He also declared that in Qualcomm's view, "mobile is going to be the most pervasive artificial intelligence platform" and that he was "very excited about this trend".

"It has been a great ride," he said, having overseen the unit for three years and having celebrated several big exits over the past 12 months – smartphone maker Xiaomi, smart doorbell manufacturer Ring and on-demand ride-hailing company 99.

Qualcomm Ventures was primarily interested in identifying future technology trends for its parent, investing in potential and current customers as well as in business partners with a view to driving the ecosystem forward. Li conceded that quantitative measuring was hard, because it was almost impossible to figure out whether a portfolio company became a client of the parent corporation because an investment was made or whether they would have become a customer anyway.

It was important, therefore, that a corporate venture capital unit followed three rules – senior management had to be on board, there had to be a very clear plan and the team had to be disciplined about it, and there had to be a long horizon because returns would not be generated for five to six years.

While the size of Qualcomm Ventures' operation may be the envy of some – the team is spread across seven regions internationally – Li noted that this caused its own set of problems, particularly when it came to arranging an all-hands conference call.

Victor Hwang, senior vice-president of entrepreneurship at non-profit Kauffman Foundation, took the stage to provide an overview of his organisation's work in supporting entrepreneurs through schemes such as investing in training programs and helping to shape policy. Hwang pointed out that entrepreneurs, not corporations, were the ones who created

University of California pitches

University of California held its third annual UC Entrepreneur Pitch Competition at the GCVI Summit to recognise creative approaches that revolutionise contemporary business models.

UC faculty, alumni and students were invited in November to submit pitch videos and materials explaining their vision and strategy. Nearly 150 entrepreneurs from all 10 UC campuses competed in this year's contest. Company models represented a range of industries, including technology, healthcare, energy, agriculture and transportation. More than 30% of the competitors represented companies founded by women.

The 12 finalists pitched to two panels of corporate investors who served as judges, as well as to an audience of more than 800 people. The judges selected Byron Shen of Velox Biosystems as the early-track winner and Jason McKeown of Neurovalens as the late-stage winner, each receiving a $15,000 cash prize.

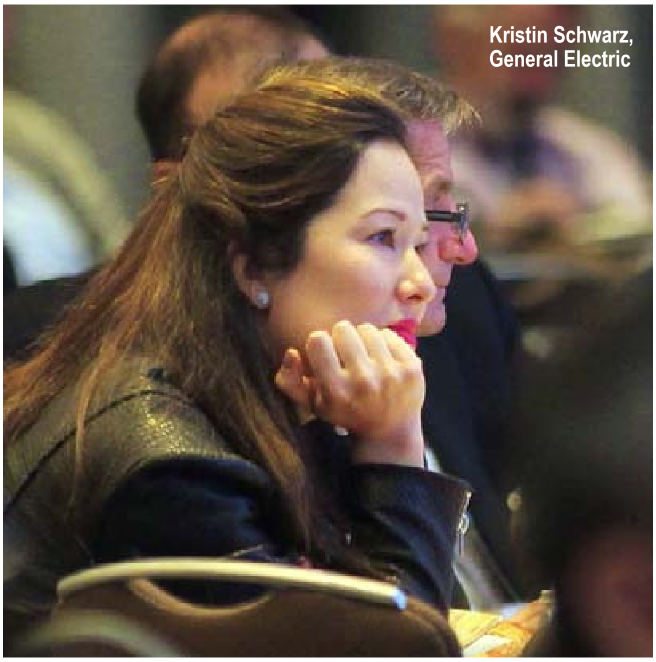
Christine Gulbranson, UC senior vice-president for innovation and entrepreneurship, and UC chancellors representing the campuses of the finalists, congratulated the entrepreneurs in a *video message* and said: "The UC community is full of entrepreneurs and startups creating groundbreaking products and revolutionary companies, so we created two tracks for this year's competition.

"I am so impressed with the innovations in our ecosystem. There is not an industry we are not tackling. These finalists embody the bold range of innovative, market-driven and impactful initiatives our entrepreneurs are undertaking."

Each of the 12 finalists was paired with a mentor to help them prepare for their pitch. This year's mentors were:
Linda Elkins, chief technical officer, Gore Innovation Centre at WL Gore & Associates
Jay Eum, co-founder and managing director, TransLink Capital
Albert Kim, head of Ericsson Ventures
Pramila Mullan, principal director, Accenture
Hash Pakbaz, senior director of emerging businesses and principal, Lam Research Capital at Lam Research
Bonny Simi, president, JetBlue Technology Ventures

The UC awards were supported by ClearAccess IP, P&G Ventures and Lam Research.

SPECIAL REPORT



jobs and drove productivity, and cautioned that "we are at a four-decade low for new businesses being launched", before adding that "it is a silent crisis in this country".

Today, Hwang said, three out of 1,000 people decided to become entrepreneurs – half the rate seen in previous decades. It was also about what the remaining 997 people decided to do – going to a restaurant or backing a crowdfunding campaign were all critical roles that everyone could play to help drive the innovation ecosystem. Hwang concluded by inviting feedback from the audience about how the organisation could support entrepreneurs further.

Those who took the microphone included **George Hoyem**, managing partner of In-Q-Tel, the venture capital affiliate of the US intelligence community, and **Jeff Farrah**, general counsel of US trade body the National Venture Capital Association (NVCA) *(see box on government)*.

Farrah said: "There are precious few of us focused on early-stage companies because a lot of the lobbyists in Washington are with your corporate parents." That meant startups were often forgotten about, a challenge NVCA was trying to tackle. He spoke about the challenges of the Committee on Foreign Investment in the US (CFIUS), an interagency committee that considered international investments and acquisitions through the lens of national security issues and had the power to unwind deals after the fact.

The agency's remit had been expanded significantly last year with implications for startups, Farrah said. The law now required basic mandatory filings when there was investment by an overseas entity in an area deemed critical, such as satellite technology, because this gave a foreign entity access to the technology, provided it with a board seat and involved it in substantive decisions about the technology. There were significant fines for breaches of the rules.

Hoyem noted that he was aware of a recent series A round where the US Department of Treasury confiscated the equity purchased by an overseas investor and was now auctioning it with all the rights – such a measure, he said, would put the startup at high risk of failure.

The problem did not affect merely corporate venture capital units based in the US, Farrah explained. "If you are the CVC of an overseas company, then there is every chance that you will be considered a foreign person under the CFIUS. That puts you one step closer to a filing."

Government

An invitation-only roundtable discussion involving leaders from Brazil, Canada, Finland, Russia and the US explored the role of corporate venturing in boosting their innovation capital ecosystems. The conversation was held under Chatham House rules.

Farrah said the NVCA was trying to narrow the scope of what the Department of Commerce was looking at but he cautioned that as startups increasingly developed advanced technologies, they may also fall under export control, which could hamper their growth and an exit for any CVC investors.

Tracy Isacke, head of corporate relationship management at financial services firm Silicon Valley Bank, welcomed **Karen Kerr**, executive managing director of GE Ventures, **Meghan Sharp** of BP Ventures and **Katherine Resteiner**, chief of staff at Intel Capital, for a discussion on inclusivity and diversity.

Resteiner picked up on Brooks's intern challenge, mentioned the previous day by some of her colleagues, and noted that Brooks liked "throwing out challenges" and that even she did not always know what the challenge was going to be before he uttered it on stage.

Kerr noted that GE Ventures was "very purposeful" about diversity, with 60% of the team diverse, but this was not true of the portfolio. Kerr said GE had been trying to change this, bringing in an entrepreneur-in-residence, developing a framework and launching a tool called Flux that offered a curated media library with materials to develop inclusive teams. Delegates were invited to test the tool.

Sharp had a similarly challenging reality to face, noting that of some 50 investments made by her unit, only two companies were led by female chief executives. On the upside, Sharp added, her team boasted many women and BP Ventures was making a difference by putting them on boards and creating diversity in startups that way.

Kerr also remarked that unconscious bias was a real threat, leading Sharp to note that even the present panel on diversity was not actually diverse, consisting of four women of whom three were white. Sharp described the diversity issue as "a messy and imperfect process".

In a keynote interview, **Harshul Sanghi**, managing director of American Express (Amex) Ventures, the corporate venturing unit of the US-based financial services company, presented the company's investment approach. He was interviewed by **Reese Schroeder**, managing director of Tyson Ventures, the corporate venturing arm of US-based meat processor Tyson Foods.

Sanghi joined Amex Ventures in 2011 and helped the digital transformation of American Express. He built the unit's team from scratch and now had a team of more than 50 people. As compliance and regulatory requirements were pressing concerns for financial institutions, Amex Ventures' portfolio companies had had a fintech focus since 2013, ranging from artificial inteligence to big data. Amex Ventures had made 15 investments, achieved 13 exits and Sanghi was involved in two deals – fintech firm Even Financial and cybersecurity software developer Menlo Security.

Maisie Devine, AB InBev

The following session focused on the innovation strategy of alcoholic beverage producer Anheuser-Busch InBev through its investment arm ZX Ventures and its sustainability accelerator scheme 100-plus Accelerator. **Maisie Devine**, global director of 100-plus Accelerator and an investor at ZX Ventures, was interviewed by **Anthony Nicalo**, entrepreneur-in-residence at Canada-based startup co-creation company Highline Beta.

Devine said the accelerator focused on initiatives such as water stewardship, product upcycling, farmer productivity and green logistics to build sustainable companies that would leave a long-term impact.

In the following session – crossing the chasm of AI innovation – **Jeff Herbst**, vice-president of business development at graphics processing unit (GPU) technology provider Nvidia, spoke to interviewer **George Hoyem** about Nvidia's GPU Ventures. The unit focused on deep learning, AI and data science solutions. Herbst said Nvidia's GPU platforms could help entrepreneurs develop data analytics, healthcare, virtual reality and AI-empowered autopilot vehicles. Its 21 portfolio companies could be divided into three categories, data science, AI and self-driving cars.

A session focusing on advanced mobility, energy and travel technologies was chaired by **Tom Whitehouse**, GCV contributing editor, and **Glynna Christian**, partner at law firm Orrick. Speakers included **Tony Cannestra**, director of corporate ventures at automotive parts manufacturer Denso, **Meghan Sharp** of BP Ventures, **Raj Singh** managing director of JetBlue Technology Ventures, and **Jon Lauckner**, president of General Motors' GM Ventures.

As mobility was gathering momentum, Cannestra said: "It is good to have a hype, but the performance of our investments is important. The hype drives up valuations."

Sharp said BP Ventures pledged investments in autonomy and electric vehicles last year and its efforts in UK-based charging points network operator Chargemaster evidenced that.

Lauckner spoke of the ride-sharing trend, saying: "There is a lot that startups can contribute, but there is a limit as well." He continued: "We do think about scale, what the startups' business model looks like. They might need to work with our suppliers, because it is really hard for startups to start from nothing."

Singh said he also loved the hype. He said there were many deals in which JetBlue Technology Ventures would not invest, but he added: "For us, it is important that somebody wins to help grow and change the ecosystem. Losing money is not strategic. Put companies in touch with suppliers and save more money."

Singh added that the VC model was collaborative, but JetBlue Technology Ventures sought to differentiate itself by bringing advantages to startups such as customer base and infrastructure in addition to capital.

After this session, there was a related breakout session in which corporate and venture-backed businesses from the energy, advanced mobility and travel space gave presentations, while leading CVCs provided insights and participated in discussion.

Boris Maslov, CEO of iGlass Technology, presented his company. iGlass has developed thin flexible transparent electrodes as well as matching electrochromic materials and devices with a range of market applications. It has created a new category in smart window appliances – digital blinds, a transparent, flexible and durable film with digitally tunable light transmission, which it claims performs better than traditional blinds. They can be installed easily on existing window, turning it into a smart window connected to smart home or smart office systems. It can also be used in augmented reality glasses.

Impact

A roundtable discussion on corporate-impact investing was held under Chatham House rules.

The core focus of interest was the new idea of entrepreneurs being agents for change with CVCs as curators of quality dealflow and interest in impact for financial or strategic returns or both.

Governments and development finance institutions, such as United States Agency for International Development (USAid), a partner of the roundtable, can facilitate this process of change to make sure its tasks of safety, population wellbeing and economic development are being met, and by convening the right actors and helping to scale good entrepreneurs by leveraging CVC portfolio companies and encouraging corporate change.

The initial discussion was about what people mean by impact, with a general agreement that a degree of ambiguity rather than a strict definition was fine. Attendees then explored how the groups that already had a corporate impact fund had set one up, in particular the tools offered through the Impact Engagement Project among others, and the role of senior leadership in creating the vision and bandwidth.

Other corporations with a CVC fund were interested in whether the impact label was useful for their own goals, as their investments in emerging markets or sectors could be seen as impact-focused but they had yet to apply the term.

A third group of CVCs were interested in setting up a corporate venturing unit but had yet to commit.

The final part of the discussion was on how people viewed development agencies – were they helpful? Generally, only a handful had started to use development finance institutions as part of a CVC program but those that had on the whole had found them helpful for convening and follow-on money – perhaps a risk shield by providing first loss capital – but nothing too significant so far.

All agreed to share contact details and form a working committee on this topic ahead of the launch of a Corporate-Impact Engagement Program to be announced by USAid at the GCV Symposium on May 22-23, 2019 in London, UK.

Attendees included:
Wendy Lung, IBM
Brad Rock, DLA Piper
Pauli Martilla, Sitra, Finland
Maisie Devine, AB InBev
Anthony Nicalo, Highline Beta
Tian Yu, Helsinki Business Hub
Paulo Braga, Eurofarma
Moses Choi and **Jay Onda**, Orange
Julianna Zhang, IHS Markit
Rich Osborn, Telus
Willem Bulthuis, WBX Ventures
John McIntyre, American Family Insurance
Alexandra Prosszer, British American Tobacco
Lodewijk Verdeyen, Engie
Christina Catzoela, Orrick
Claudine Emeott, Salesforce
Emily Linett, Tyson Ventures
Tom Yeh
Gabriel Vasconcelos, Einstein Hospital
Mike Biddle, Evok Innovations

Ramesh Singh, CEO of US-based computational storage technology startup Agylstor, a Boeing HorizonX portfolio company, spoke of of the high-performance distributed computing platform his company has developed. It includes software and in-system hardware acceleration for processing big data in edge computing applications. The company's technology provides secure data storage and transfer for video and film production, geoscience, infrastructure mapping and aerospace applications, including autonomous systems.

Daniel Henbest, CEO of UK-based cleantech-empowered transport platform provider Intelligent Power Generation, spoke about how the company was inspired to reduce harmful emissions at low cost. It has developed a ceramic-based turbine using flameless combustion, which claims to provide electrical efficiency and a huge reduction in fuel cost. Its target markets include energy, industrial, transport and agriculture.

Edward Warren, CEO of US-based car services provider Zippity Cars, a BP Ventures portfolio company, explained how Zippity provided on-site car care. Zippity claims to free customers from the car frustrations of repair shops.

Maha Achour, CEO of US-based wireless technology developer Metawave, a Denso portfolio company, detailed how Metawave developed smart radars for self-driving cars using a long-range object detection and recognition technology that offers 3D imaging and vehicle-to-vehicle communication.

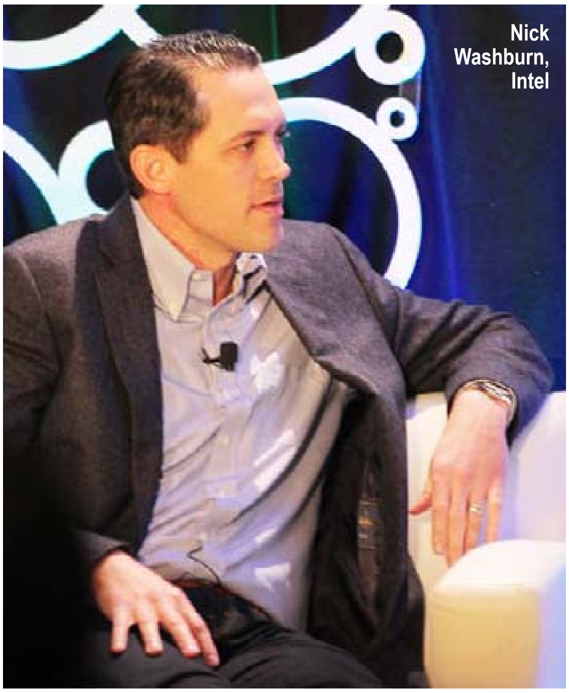
John de Souza, CEO of US-based electric vehicle charging technology developer Ample, a Shell Ventures portfolio company, showed how Ample provided a range of charging solutions for electric car fleets. It has developed a scalable and quickly deployable platform that uses autonomous robotics and smart battery technology, including smart modular batteries, autonomous battery swap robots, battery pod charging and dispensing.

JoeBen Bevirt, founder of US-based aviation vehicle developer Joby Aviation, a company backed by JetBlue Technology Ventures, said Joby was developing an electrically-powered vertical take-off and landing aircraft intended to form the basis of a five-seater taxi service. It is intended to be much quicker and quieter than traditional rotorcraft, such as helicopters, and fly up to 150 miles on a single charge.

Meghan Sharp of BP Ventures returned to the stage for the first main session of the afternoon to discuss harnessing the power of enterprise, along with **Faran Nouri**, managing director of Lam Research Capital, the investment arm of semiconductor company Lam Research, and **Stephanie Newby**, chief executive of innovation platform Proseeder, who facilitated the discussion.

Nouri remarked that CVCs "are the new kids on the block" but that she had already survived one top management change, referring to a colleague who once told her that "you are not a real corporate venturing person until you have survived a CEO change".

Her unit was considered an integral part of the corporate's innovation ecosystem, alongside divisions such as M&A



Nick Washburn, Intel

and R&D, but it was the one with the longest horizon. Lam Research Capital had to demonstrate strategic relevance for each startup and had to articulate the value the unit would bring to each potential portfolio company.

Sharp said the purpose of BP Ventures had shifted significantly since it was launched 12 years ago, having originally been set up to drive investment in alternative energy projects. When the decision was made to create a fully-fledged corporate venturing arm, there was debate about whether each business unit – cleantech, upstream and downstream – would get its own fund or whether it would all be handled centrally, but BP eventually settled on the latter.

BP Ventures experienced another shift two years ago, when it officially became part of the corporate growth strategy and its annual budget grew from $50m to $200m – though Sharp noted that her team still invested in many early-stage companies. She added that it was not simply about closing a deal but also about what support was provided afterwards.

Dominique Mégret, head of Swisscom Ventures, the telecoms firm's corporate venturing unit, had also experienced significant changes, albeit more recently. About nine months ago, Swisscom Ventures had decided to seek external investors for its fund, and that had had the positive effect of forcing a long-term perspective on to the unit.

Scalability was also a big factor in the decision to bring in external investors, Mégret added, because it was not just the parent corporate supplying money. There had been some resistance, he admitted, because the parent was worried it would lose control and it might damage reputation, but this was mitigated by setting up an investment committee that was exclusively internal.

Mégret concluded that, having made six investments from the new fund, he had yet to encounter difficulties, and was confident the model would continue to work for Swisscom even while conceding it might not work for everyone.

Rajesh Swaminathan, general manager of materials engineering company Applied Materials' corporate venturing fund Applied Ventures, discussed the challenges faced by semiconductor-related companies, such as AI, augmented reality and optics. The problem boiled down to access to equipment, materials engineering expertise and fabs, which was why the company had announced a materials engineering technology accelerator, Meta Centre, featuring an $850m investment in state-of-the-art fab.

Swaminathan said it took 25 to 30 years to get from the first mobile phones to smartphones. The first iterations were very bulky, the same problem currently faced by augmented reality devices, which was why the technology remained obscure. He said to enable augmented reality, more than a dozen innovations were needed, ranging from organic light-emitting display to solid-state batteries.

Applied Ventures had invested in more than 80 companies to date, Swaminathan continued, and had achieved 35 exits. It provided approximately $50m a year and with the Meta Centre remained committed to providing an increasing amount of support beyond capital.

On the main stage, **Amit Sridharan**, director of US venture investments and partnerships at Mahindra Partners, the venturing subsidiary of diversified conglomerate Mahindra & Mahindra, spoke of CVC practices to measure strategic value. He said the problem peaked his curiosity after graduating from Stanford Business School and realising there was little information on how to set up a corporate venturing unit. He stressed the importance of defining and measuring strategic value by breaking it down into a strategic importance element – which entailed the involvement of key stakeholders in the business units of the corporate parent – and the operational relatedness element, which was about the efficiency an emerging enterprise could bring to the operations of the corporate parent.

In fireside chat, **Gabriel Sidhom**, chief operating officer of Orange Silicon Valley, was interviewed by **Liz Kerton**, executive director of Telecom Council, which connects global communication service providers and vendors with innovations. Sidhom spoke about the evolving approach to corporate innovation at France-based telecoms firm Orange and how and why Orange had been committed to its San Francisco Bay area innovation arm for the past 20 years.

He also explained how Orange Silicon Valley had evolved from an R&D unit to launching an accelerator, Orange Fab, in 2013 and subsequently opening it to partners – Fab Force – and then setting up a corporate venturing arm making equity investments in 2015. He stressed the importance of working with business units.

Eric Budin, director at Touchdown Ventures, interviewed **Rob Martens**, president of Allegion Ventures, the venturing arm of hardware company Allegion. Martens outlined his unit's support of CVC activity, saying it had been active for five

SPECIAL REPORT

years. He described its thesis as based on people and asset management, explaining that his job revolved around integration of senior people into areas of emerging tech with which they might be unfamiliar. He also talked about adding value to portfolio companies.

Albert Vazquez, operating partner at Sway Ventures, was interviewed by **Anne Gherini**, vice-president of marketing platform Affinity. Gehrini spoke briefly of relationships being the backbone of any business and how often they were not managed well. Affinity addresses this problem through technology. Vazquez spoke of how his organisation, a traditional venture firm investing predominantly in software enterprises, employed Affinity to effect the solution. The system scraped databases, calendars and emails and identified the person within an organisation who had the highest level of connections and contacts with external people. Vazquez said Sway Ventures leveraged Affinity's solution in networking with both co-investors and entrepreneurs.


Neel Lilani, Orrick

There was a Latin America-focused track in a breakout session in the afternoon.

The first session dealt with how technology was transforming healthcare in Latin America. It was moderated by **Rodrigo Menezes** of Derraik & Menezes Advogados and featured **Leopoldo Lima**, innovation manager at health and wellness-focused incubator Eretz.Bio, **Luiz Henrique Noronha** of healthcare-focused multi-stage investment partnership DNA Capital, **Paulo Braga**, head of corporate venture at pharmaceutical firm Eurofarma, and **Barbara Alvim**, partner at tech-focused growth-stage venture capital firm Oria Capital.

Menezes spoke of the CVC activities carried out by hospitals, which could be different from a typical corporate. Lima said he was surprised hospitals were keen on innovating with novel technologies.

Braga said his $50m fund, the first pharma fund in Brazil but designed initially to be a traditional VC vehicle, sought to improve diagnosis and other aspects of the healthcare arena.

Alvim said Oria, a business-to-business tech investment firm, had few relationships with healthtech companies so far, which she hoped to improve. She added that more tech-focused entrepreneurs were emerging, as in the past one had to be a medical professional to venture into this industry.

As for the future of the healthcare business in Brazil, the panel agreed that health and productivity-related problems could be solved through healthtech and software-as-a-service.

The next panel focused on raising Latin America through innovation and was moderated by **Eric Save**, partner at law firm K&L Gates. The speakers included **Gustavo França**, innovation manager at long steel producer Gerdau, **Fabio Lunis de Paula**, partner at venture capital firm Indicator Capital, **Pierre Schurmann**, managing partner at micro-venture capital firm Bossa Nova Investimentos, and **Lodewijk Verdeyen**, CEO of energy group Engie's Chile-based accelerator and business incubator Engie Factory.

Save asked when Latin America would reach a level on a par with the US. However, Verdeyen said Latin America did not need to pursue a Silicon Valley model as the situation in the region was unique. CVC was a growing phenomenon, he added, because Latin America-based companies had a more conservative culture. For that reason, apart from Engie, Telefónica and Gerdau, most other global corporates did not focus on Latin America.

França said Gerdau, a company more than century old, was trying to modernise its business through corporate venturing, encompassing corporate innovation-related activities beyond minority stake investments. Such initiatives included corporate-backed accelerators, incubators, hackathons, innovation labs and open innovation programs. He said it was important to build a healthy ecosystem in Latin America. De Paula said corporate venturing was a tool the region had to employ to be more competitive. Schurmann said it was important to insist on implementing corporate venturing and growth was going in the right direction.

The last session was moderated by **Jayme Queiroz**, investment officer at government agency Apex-Brasil, and featured **Rafael Wadpinar**, new platforms manager and digital transformation head at Chile-based millwork company Masisa, **Javier Alejandro García Quiroga**, head of Femsa Ventures, Mexico-headquartered beverage producer Femsa's corporate venturing unit, **Flavio Pripas**, corporate venture officer at venture capital firm Redpoint eVentures, and **Peter Seiffert**, corporate venture head at Embraer Ventures, aviation company Embraer's CVC arm. They explored how corporate investors tapped into venture capital in Latin America. They agreed that the priority of CVC units, entrepreneurs and venture capitalists was to work together to foster the innovation ecosystem in Latin America. ◆

Events before the summit

The GCVI Summit was preceded by a two-day GCV Academy program in Redwood City led by **Paul Morris**, adviser to the venture capital unit at the UK government's Department for International Trade and head of the academy.

Kaloyan Andonov, GCV reporter and data analyst, also contributed to the interactive workshop, which was attended by corporate venturers based in Silicon Valley and beyond. Other guest speakers included **Lee Sessions**, managing director at Intel Capital, the venturing unit of semiconductor maker Intel, **David Horowitz**, founder and CEO at venture firm Touchdown Ventures, and **Markus Moor**, partner at Emerald Ventures, a Switzerland-based venture firm with over 20 corporate limited partners (LPs).

On Tuesday afternoon, a pre-event workshop on corporate venture capital in an uncertain economic climate took place. The workshop was hosted by **Sandi Knox**, corporate venture capital counsel at law firm Sidley Austin, and **Glenn Nash**, co-chairman of Sidley's technology practice and a member of the corporate department. They were joined by Daniela Proske, senior venture principal at BP Ventures, the venturing subsidiary of the oil and gas company.

The number of new CVC groups investing for the first time has increased steadily from 2009 to 2016 with a huge jump in 2017 and 2018, totalling more than 180 units. Knox and Poske discussed what CVCs would have to do in the context of an economic climate defined by fear, uncertainty and doubt. Proske said as the future was uncertain, it would be important for CVCs to show continuity and resilience, keeping high-level management support.

She added: "Although it is easy to start a CVC arm, that is often the first unit to be eliminated when a financial downturn hits." She highlighted the importance of gaining high-profile support from the corporate parent to achieve successful exits.

Nash highlighted key factors making CVC deals attractive in good and bad financial markets for the corporate partners, such as access to intellectual property (IP), technology, data, talent and competitive advantage. He noted that, for startups, having corporate backers is a way to gain access to new markets, capital, distribution channels, access to sophisticated compliance and regulatory experts, third-party validation, flexibility and options for the future.

Nash also said trends in CVC technology transactions included a spectrum of legal issues, such as non-disclosure agreements to protect IP. Access to data, rights to data, privacy and security issues arising from data, and liability were other issues to be addressed.

On Tuesday evening, the GCV Rising Stars awards dinner, hosted by Intel Capital and GE Ventures, took place at Monterey Bay Aquarium to celebrate this year's top 100 corporate venturers coming through the ranks. ◆

Rising Stars Russell Dreisenstock of Naspers, left, and, with James Mawson, Chris Chu of Samsung, right

Welcome to the Global Corporate Venturing Awards 2019

By James Mawson, editor-in-chief

As the corporate venturing industry grows and conducts more deals and exits of increasing importance to society and the global economy, the selection of the winners seems to become harder each year.

As Kaloyan Andonov of GCV Analytics put it in the World of Corporate Venturing 2019 – the annual review of the industry – corporate venturing has hit a new high in the past 12 months. In 2018 GCV Analytics tracked 2,775 deals worth an estimated $180.17bn of total capital raised, out of about $225bn raised by the whole VC industry (PitchBook data).

GCV Analytics also tracked $80bn garnered from 228 corporate-backed venture exits, almost half the $165bn returned by the industry overall (Preqin data), and 273 funding initiatives, becoming the second-largest source of limited partner commitments in Europe (Atomico data).

Corporate venturers brought more money to more deals and an outperformance in terms of exits, all the while helping prop up the VCs to enable them to join and syndicate with CVC-led deals. It is easy to see why corporate venturers are in such demand among government leaders, other investors and, most importantly, the entrepreneurs who realise CVCs can help with almost all their primary needs – capital, customers, product development and an exit.

Thank you to Alice Tchernookova for writing the main awards profiles but more importantly everyone in the industry and beyond for their successes in what is probably the hardest job in finance – finding and supporting the best entrepreneurs in delivering on their vision and strategies as well as finding ways to help the corporate parent seize the opportunities that change and disruption can bring.

Wherever the CVCs lie on the continuum from purely financial returns-focused to purely strategic, there are challenges.

As the subtitle to the book, A Corporate Venturing Survival Guide, published for this year's Global Corporate Venturing & Innovation Summit by lead authors Heidi Mason and Liz Arrington, has it: "It is not the biggest or fastest that survives but the most adaptable to change."

There will be challenges ahead and need for the industry and individuals to continue to change, but as the industry looks ahead with a judicious mix of optimism and realism let us also reflect on the past year through these awards – for which a thank-you to Christina Riboldi and all those who have worked on them – and celebrate all that has been achieved.

Lifetime Achievement: Barbara Dalton, Pfizer

After a quarter of a century of healthcare investing, Barbara Dalton, senior managing partner of Pfizer Ventures, has won the Global Corporate Venturing Lifetime Achievement Award 2019.

One sign of her wisdom is being able to focus on what works while being able to leave the rest.

Earlier this month she, along with tens of thousands of others, spent three days at the J Morgan healthcare conference in San Francisco. However, rather than scurrying between the multiple venues and discussions – the agenda for the industry's premier event runs to 10 pages – she stayed in the Pfizer-occupied hotel and worked the 7am to 11pm days receiving delegations.

There were plenty of people wanting advice from Dalton, leader of the world's largest pharmaceutical company's corporate venturing unit and also vice-president of its worldwide business development function under senior vice-president Doug Giordano.

This is a consolidating industry. Earlier in the month Bristol-Myers Squibb agreed to acquire Celgene in a $74bn cash-and-stock deal weeks after peer Shire agreed Takeda's $59bn offer and GlaxoSmithKline (GSK) announced it was investing $5bn in cancer biotech Tesaro, which was just before US pharmaceutical company Eli Lilly announced its biggest takeover yet – an $8bn deal for cancer drug specialist Loxo Oncology.

For Pfizer, therefore, being able to deliver the next generation of hits can make the difference between growth and a share price big enough to acquire rivals, or being a takeover target.

Dalton has certainly done her share. While Pfizer's venture returns are undisclosed, Dalton said "it is significant and would put us in the top quartile for most biotech VC funds".

Performance analyst Cambridge Associates noted a 26.8% internal rate of return (IRR) net of fees for initial biotech investments made during the decade of 2006-16, which outperformed the venture capital asset class as a whole by more than 500 basis points for realised – exited – investments, while the top quartile had a 3.5-times return on invested capital.

This is part of a long-term pattern of success for Dalton. UK-based pharmaceutical company GlaxoSmithKline's SR One corporate venturing unit had a 10% to 20% IRR over 17 years from 1985 to 2002 – including the period when Dalton worked there from 1993, according to a research paper.

Founded by Peter Sears in 1985, SR One first invested on behalf of Smithkline Beckman before a series of mergers resulted in GlaxoSmithKline. Dalton became president in 2001 when Brenda Gavin, who took over from Sears in 1999, moved on to co-found Quaker BioVentures.

After formally leaving SR One in 2003, Dalton joined EuclidSR Partners, a $260m venture firm set up in 2000 and backed by GSK. EuclidSR grew out of a partnership between Euclid Partners, a venture capital firm, and SR One, and Dalton and other SR One principals invested on behalf of both GSK and EuclidSR until their departure in 2003. She worked at EuclidSR until the start of 2007 – an era typified by difficulty of floating or selling portfolio companies following the dot.com bubble – and has now spent a dozen years at Pfizer.

Her Pfizer profile says she has managed more than 30 fund investments and 80 diverse company investments in the US and Europe, and has had direct investing responsibility for biotechnology therapeutic and platform companies, as well as some healthcare IT and service businesses. She currently has responsibility for Pfizer's investments in Accelerator NYC, Artios Pharma, Complexa, Cydan, Imara, Ixchelsis, Lodo, Magnolia, Morphic Therapeutic, Petra Pharma, and Rhythm Pharmaceuticals.

One of Dalton's latest deals, for example, was joining the board of US-based biopharmaceutical firm Complexa after a $62m series C round in July.

Founded in 2012, Complexa is working on a therapy for focal segmental glomerulosclerosis, an orphan disease affecting the kidney, as well as one for rare disease pulmonary arterial hypertension.

But for corporate venturers, financial returns are usually only table stakes to align with VCs and avoid being a cost centre to the parent. The potential for greater support to portfolio companies through connecting them to the corporation and, vice versa, providing strategic insights and options to the parent offer a dimension of added-value investing.

GSK had relationships with about 50% of portfolio companies at the time of her departure from SR One, while Dalton said Pfizer was "probably about 25% and there are always discussions ongoing with portfolio companies".

She added: "Right now about 15 portfolio companies are talking to someone in the organisation. We have been as high as 45% with relationships, but the more new companies you add, that number drops because it take time to generate those connections."

Options for the parent in the longer term are also important. While strategic shifts and breakthroughs in science and business models may make a portfolio company redundant, they can also result in some becoming important partners from adjacent or noncore peripherals.

Dalton gave an example of three SR One-backed portfolio companies – Aquila, Ribi and Corixa.

GSK bought Corixa, which had acquired Ribi, the inventor of a substance that enhances the body's immune response to an antigen. GSK had earlier licensed Ribi's invention for use in a vaccine of its own, while Ribi had acquired another company, Aquila, to boost its search for an alternative to the sole regulated antigen enhancement substance, based on aluminium.

The whole process, however, took more than a decade leading to US Food and Drug Administration approval in 2009 of Cervarix for the prevention of some cervical pre-cancers.

At Pfizer, Dalton inherited a portfolio focused on areas outside the drugs company's core therapeutics area, such as in diagnostics, but has moved the ventures portfolio into that space as well as into adjacencies.

Barbara Dalton, receives her award from Blake Ilstrup of Orrick

Initially founded in 2004 as Pfizer Venture Investments, by last year the corporate venturing unit had grown to a portfolio of more than 40 companies and had invested approximately $500m.

In June, the parent company said it was planning to invest $600m in biotech and other emerging technologies through the renamed unit, Pfizer Ventures, with early-stage neuroscience companies as a focus. The renaming was part of a restructuring effort that combined Pfizer Venture Investments with research and development equity investment vehicle R&D Innovate.

Initial areas of interest include neuro-degeneration, neuro-inflammation and neuro-metabolic disorders, with approximately $150m allocated to such startups.

Pfizer Ventures already has at least six neuroscience-focused startups in its portfolio – Aquinnah, Autifony, Cortexyme, MindImmune, Mission Therapeutics and Neuronetics – and is one of several healthcare corporates to have backed the $190m Dementia Discovery Fund in 2015.

Pfizer Ventures will continue to invest in areas that are of strategic interest to its parent, including oncology, inflammation, immunology, rare disease, internal medicine and vaccines, as well as in companies working on novel approaches to drug discovery, development and manufacturing.

But as part of last summer's restructuring and larger fund size, Pfizer Ventures added existing Pfizer executives Denis Patrick, Laszlo Kiss, Margi McLoughlin, Chris O'Donnell and Nikola Trbovic, a GCV Rising Star 2019, to its team. They joined Elaine Jones and William Burkoth who had worked under Dalton as Pfizer Venture Investments' small team.

The personnel challenges of building and leading a team are hard to overstate. Dalton said: "You need a partnership of equals with different skills. The personnel dynamics are critical and it is a very different job from being a corporate manager. Elaine and I came more from a science background while Bill was our first hire from venture capital and startups.

"In the new job [adding R&D Innovate to form Pfizer Ventures] we have brought in the internal network with the corporation. I told them all: 'You are here for life.' I look for those with the social and intellectual drive who can get along in a team. You have to go to the cocktail parties and cold call. This not the usual scientist's skill."

It was an aptitude Dalton herself showed early on. Dalton, who has a PhD in microbiology and immunology from Medical College of Pennsylvania, now the Drexel University College of Medicine, began her career as a research scientist pursuing anti-inflammatory drug discovery research at SmithKline and French Research Laboratories.

Her "serendipity" in finding corporate venturing came as she volunteered to help SR One with due diligence. "I did not plan on a career in venture capital. I was in the immune-oncology lab and when asked by SR One I said it would be great if immune-suppression could be achieved. Twenty-five years on and it is still correct. I tracked the very small community then in the 1980s and helped others in the space.

"I then learned on the job about investments. Peter Sears worked alongside me as a mentor so I could learn about the business world, something he had not done before. But he realised that, like him, I had no MBA and in the lab had been so far removed from the business world.

"Peter had great foresight and knew how to manage the organisation as he had grown up in the company and been number two to the CEO. No doubt the success of that group going from fund commitments in 1981 to direct investments from 1985 was because for its first 10 years he reported directly to the CEO and you don't mess with what the CEO wants.

"The great challenge of CVC is not finding a company or being a good investor and choosig people, but it is managing things inside the corporation whose core business is so different from venture investing. Managing the relationship is the point of friction in whatever industry.

"You have to define what is strategic, set expectations and deliver strong financial returns, too, to be in the best position with VCs. Setting expectations is hardest as people change. A CVC's portfolio is like an archaeological dig of corporate strategy at the time and its changes.

"My second great mentor was Brenda Gavin – her view of how to form a picture of the company and the role of the people in it. The networks, going out in an evening, was what you needed to do, and if you smell like a VC you get invited to their parties. Biotech is a syndication world, not a corporate my-way-or-the-highway one. She and Peter believed in the corporation as a good citizen, and joining the chambers of commerce."

This is something Dalton has taken to heart. She established the corporate venture capital group within US trade body the National Venture Capital Association, has been on the board of the Alzheimer's Disease Research Foundation, the NYBio organisation, and currently chairs the healthcare group of the Partnership Fund for New York City.

And, unlike many VCs who prefer to invest only in companies within Tesla-driving distance of their home or office, Dalton said: "Coming from Philadelphia, we would go anywhere with good science. It is hell on family life."

But it is a first-rate position from which to see the big changes still affecting the industry ever since 1976 when 29-year-old venture capitalist, Robert Swanson, famously parlayed a 10-minute appointment with biochemist and genetic engineer Herbert Boyer into a three-hour meeting over beers that led to the creation of Genentech.

In Dalton there remains a pioneering spirit reaching back to almost the very origins of the biotech industry, and one that is still determined to fight the flight from risk in investing and continue to back visionaries from all regions and backgrounds able to attack the big problems of healthcare with a different approach. The path to her door remains well-trodden as a result.

IPO of the Year: DocuSign

A leading company in the e-signature and digital transaction management space, San Francisco-based DocuSign went public in April last year, with a market capitalisation of more than $4.4bn.

Founded in 2003, DocuSign helps organisations connect and automate how they prepare, sign, act on and manage agreements, aiming to accelerate the process of doing business. As part of its cloud-based system-of-agreement platform, the company offers e-signature services enabling users to sign documents electronically on practically any type of device. Claiming to be "simplifying people's lives", DocuSign claims to have more than 425,000 customers and millions of users in 180 countries worldwide.

In April last year, the e-signature company floated in a $629m upsized public offering that enabled several shareholders either to exit or to reduce their stake in the group. Shares were priced at $29, above the $24 to $26 range originally set, boosting DocuSign's market capitalisation. The company issued 16 million shares on the Nasdaq Global Select Market, yielding around $466m, while shareholders sold $164m of shares in the offering.

In the year preceding its IPO, DocuSign more than halved its net loss to $52.3m while increasing its revenue by 36% to around $518m. Since 2003, the group had gathered an estimated total of $525m from numerous rounds, including a $300m series F in 2015, which featured chipmaker Intel's CVC arm, Intel Capital, as well as computer producer Dell and telecoms firm Deutsche Telekom. The round, in which DocuSign was valued at $3bn, was completed by hedge fund Brookside Capital, alternative investment firm Bain Capital's VC branch Bain Capital Ventures, global equity manager ClearBridge Investments and sustainable investment manager Generation Investment Management.

In 2009, DocuSign had raised a $12.4m series C led by new VC investor WestRiver Capital, joined by existing VC investors Ignition Partners, Frazier Technology Ventures and Sigma Partners, which had already provided a $10m series B in 2006. The following year, VC investor Scale Venture Partners led a $27m round, completed by the same three investors and by enterprise software provider Salesforce's venturing arm Salesforce Ventures.

In 2012, internet conglomerate Alphabet's subsidiary GV – then Google Ventures – provided $8.2m of the $55.7m that DocuSign received in a series D round joined by Comcast Ventures, investment arm of global telecoms group Comcast, as well as fellow VC firms Sapphire Ventures – formerly SAP Ventures – Kleiner Perkins and Accel.

A further joint investment of $85m featuring many of DocuSign's existing investors brought its valuation up to $1.6bn in 2014. The same year, the company secured $115m in series E funding featuring NTT Finance, owner of telecoms firm NTT, Samsung Ventures and BBVA Ventures, respective investment vehicles of electronics maker Samsung and bank BBVA, and human resources firm Recruit and conglomerate Mitsui, among others.

As part of DocuSign's IPO, GV sold 407,000 shares representing a total $11.8m, diluting its stake from 1.4% to 1%. Comcast Ventures, meanwhile, divested 48,000 shares for $1.4m, equating to 10% of its stake. Sigma Partners, which was DocuSign's largest shareholder at the time, sold $24.9m of shares and came out with a 10.8% stake, down from 12.7%. Real estate-focused VC Second Century Ventures, which had become a shareholder in 2009 by investing an undisclosed sum, made $46.4m from its share sale, reducing its stake from 4.1% to 2.6%. The other selling investors were Ignition ($22.7m with a 9.8% stake post-IPO), Frazier ($14.4m – 6.1%) and Scale ($14m – 2.9%). Morgan Stanley and JPMorgan acted as lead book-running managers for the IPO.

Following the transaction, DocuSign's shares rapidly rose by almost 50%, which, according to GCV, was yet another illustration of the fact that IPOs were back with a bang for tech companies.

Shortly after going public, the group acquired SpringCM, a cloud-based document generation and contract lifecycle management software company based in Chicago, for approximately $220m in cash.

Dan Dal Degan, CEO of SpringCM, said: "SpringCM shares DocuSign's passion for transforming and automating the foundation of doing business – the agreement process. That is what we have been focused on since inception, and it is why we power the contract lifecycle management processes for more than 600 of the world's leading companies – including ADP, Aetna, Facebook, Hilton, Lenovo, Spotify and the US Department of Agriculture. By joining forces with the market leader, we can continue to simplify and accelerate the process of doing business, and drive innovation both before and after agreements have been 'docusigned'."

While DocuSign's shares reportedly dipped 20.2% in October, according to S&P Global Market Intelligence, company CEO Dan Springer shared his "very optimistic" outlook on the future, with the recent acquisition of SpringCM representing "a big opportunity to sell much larger products to a much larger customer base", he said.

Others on the shortlist

Home24	Pinduoduo
Dropbox	Orchard Therapeutics
Meituan-Dianping	StoneCo

M&A of the Year: Prexton Therapeutics

Having emerged from the Merck Serono Entrepreneur Partnership Program in 2015, Prexton Therapeutics raised a total $41m of funding before it was acquired by pharmaceutical firm Lundbeck for an estimated $1.1bn last year.

Founded in 2012, Prexton has been developing a small-molecule modulator named Foliglurax that could be used for oral treatment of Parkinson's disease. The modulator acts by stimulating a specific or neurotransmitting target, which in turns activates a compensatory neuronal system in the brain that is largely unaffected by the disease. Its main goal is to treat motor symptoms of the illness, such as resting tremor, muscle rigidity and uncontrolled movement.

The acquisition enabled an exit by Germany-based pharmaceutical company Merck, which had been backing the group since inception, mainly through its corporate venturing unit Merck Ventures, now M Ventures. As it emerged from the Merck program in 2015, Prexton raised a $10m series A round featuring MS Ventures, the venture arm of Merck's biopharmaceutical division Merck Serono, as well as VC firms Sunstone Capital and Ysios Capital, which co-led the round. In 2017, VC investors Forbion Capital Partners and Seroba Life Sciences co-led a $31m series B financing that featured M Ventures as well as VC firms Ysios Capital and Sunstone Capital.

Jasper Bos, who had been head of healthcare at M Ventures and a Prexton board member at the time of the exit, said: "Prexton was co-founded by M Ventures as part of our efforts to support Merck in mitigating the effects of the closure of the Merck Serono site in Geneva. For this, Merck set up the Entrepreneur Partnership Program, a plan to support former Merck Serono employees who intended to become biotech entrepreneurs.

"The program, which was managed by M Ventures, included support in setting up companies, financing,

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support in licensing assets, education and more. Examples of companies that were supported as part of this program are Prexton, Asceneuron, ObsEva and Calypso Biotech.

"For Prexton, M Ventures took a very hands-on approach, both in setting up the company, drafting the business plan, negotiating all licences needed from Merck and Domain, and financing these companies. After completion of the seed financing of Prexton by M Ventures, I was assigned not only to be a board member, but to become part of company management, and I acted as an interim head of strategy and business development, where my main task was securing follow-on series A financing.

"For the first three years of its existence, Prexton Therapeutics was financed fully by M Ventures, and after this period formed a derisked investment proposition for financial VCs for the series A financing, which was quickly followed by a €29m ($33m) series B financing led by Forbion and Seroba. We are proud to have been able to contribute to Prexton, and to have been at the birth of a company that became one of the largest acquisitions in the Parkinson's space."

Merck's Sven Harmsen with the M&A award

In a statement at the time, he said: "The sale of Prexton Therapeutics to Lundbeck is a very strong validation of our model of founding companies based on spinning off assets from Merck and managing them very actively as a shareholder. We are very excited to see the program being acquired by Lundbeck, a leading company in the field of neurology, and feel this is a strong confirmation of the investment thesis on which Prexton was founded in 2012 – namely that the company has a highly promising therapeutic approach for the symptomatic treatment of Parkinson's disease and dyskinesia."

By acquiring Prexton, Lundbeck obtained global rights to Foliglurax, which entered clinical phase 2 testing in 2017. Lundbeck was to make an upfront payment of €100m, complemented by a further payment of €805m in development, regulatory and sales milestones to the group of owners.

Anders Götzsche, executive vice-president and chief financial officer at Lundbeck, said: "Foliglurax addresses high unmet needs for effective treatments for Parkinson's patients with its potential indication, fitting perfectly within Lundbeck's core areas. This treatment option also appears to be highly interesting for patients, physicians and payors."

Lundbeck recently saw its shares plunge by 30% as a result of disappointing results for a new schizophrenia treatment it had been testing, according to the Copenhagen Post, and was now "pinning its hopes" on Foliglurax, as well as on an Alzheimer's treatment currently in phase 1. Data from Foliglurax's phase two is expected to be available in the first half of 2019.

Others on the shortlist

Flipkart	Duo Security
Ele.me	Izettle
Mobike	Flatiron Health

Investment of the Year under $50m: Maana

Marketing itself as a platform that accelerates knowledge discovery to increase profitability for industrial oil and gas companies, US-based Maana recently won GCV's inaugural award for energy-tech corporate venturing investment of the year, presented during its Venture Houston conference in November. Now Maana has gone one stage further and won the Sub-$50m Investment of the Year award across all industries.

This award celebrates the role of corporate venturing in furthering three crucial energy trends – widening the group of industries participating in the transformation of energy, extending the geographic reach of new energy-relevant technology, and accelerating the uptake of new energy-relevant technology by large corporations.

Founded in 2012, Maana rapidly became a household name among large industrial companies for the provision of big data analytics services. Nominated as a technology pioneer by the World Economic Forum in 2017, the company, which has built an advanced analytics platform collating data for businesses on their internal operations and processes, describes its mission as follows: "Maana enables subject-matter experts to mathematically model their knowledge and combine that with data from across silos to create artificial intelligence (AI) applications that help employees make better and faster decisions."

Using tools such as semantic search and deep learning, the company's technology has been identified as a key enabler of digital transformation for international corporations worldwide.

Speaking to tech-focused publication the Innovator in Davos early in 2018, Babur Ozden, CEO and co-founder at Maana, said: "More and more large companies are starting to speak the same language. They want to know 'Can I use my data to influence all the decisions I make?' What digitisation means is that can they use that data in a uniquely different way, and the number-one thing they would look at is what kind of impact it can have on their top or bottom lines."

In December 2017, Maana raised $28m of series C funding co-led by investment banking firm China International Corporation and investment group Eight Square Capital, which brought the firm's total raised funding to date to $68m. The deal included Maana's existing investors Intel Capital, GE Ventures, Chevron Technology Ventures, Saudi Aramco Energy Ventures and Shell Technology Ventures, as well as new investors Sino Capital, a private equity firm, and Accenture Ventures, the venturing unit of management consulting firm Accenture. According to GCV, the final value of the round reached $33.3m in February last year.

Saudi Aramco Energy Ventures, the venture arm of oil and gas supplier Saudi Aramco, had previously led the company's $26m series B round, investing alongside Shell, Chevron, General Electric, Intel and VC firm Frost Data Capital.

Chevron, General Electric, Intel and Frost had also contributed to Maana's $14m first round of funding when the group emerged from stealth in 2015 – a series A that was also joined by energy company ConocoPhillips's investment unit ConocoPhillips Technology Ventures.

On closing the series C round, Ozden said the new capital would be used to scale the business globally and support its growing Fortune Global 500 customer base. "This funding, combined with the strategic alliance Maana has established with Accenture, demonstrates the demand for Maana's cutting-edge AI-driven knowledge technology as a key enabler of digital transformation at the world's largest industrial companies," he said.

Mid-sized Investment of the Year: Katerra

Currently valued at over $3bn, Katerra, which aims to revolutionise the construction sector with its technology, is said to be the most well-funded construction tech startup.

Speaking to Forbes in a recent interview, Katerra's co-founder and executive chairman Michael Marks, who previously served as interim CEO at automotive company Tesla and as CEO of supply chain services Flex – previously Flextronics – for 13 years, described the group as a fully integrated turnkey supplier that designs, engineers and constructs buildings, and whose goal is to streamline the entire building process with time and cost-efficient services.

Marks said: "While most construction projects involve hiring a developer who then subcontracts each task, from the walls to the countertops to the windows, Katerra is choosing to do it all."

Katerra's activity thus spans design, software and building engineering, manufacturing, supply chain and construction. The large-scale prefabricated structures produced by the group – such as wall panels with built-in windows, for instance – have already helped secure $1.3bn in bookings for new construction, spanning multi-family, student and senior housing as well as hospitality facilities, according to the group.

With a valuation now exceeding $3bn, Katerra recently benefited from a boost to its balance sheet, with telecoms and internet company SoftBank having led a $865m investment in the company last year, investing from its $100bn SoftBank Vision Fund. Other new investors in the series D round included global investment management firm Canada Pension Plan Investment Board, VC firm Navitas Capital, real estate group DivcoWest, Bahamas-based private investment firm Tavistock Group and another private investment fund managed by Soros Fund Management. Existing investors, meanwhile, included electronics manufacturer Foxconn, consumer internet investment group Greenoaks Capital, VC firms DFJ Growth and Khosla Ventures, and hedge fund Moore Capital Management.

The series D round, which was to fund Katerra's manufacturing expansion and further investment in research and development, brought the total raised by the company since it was created in 2015 to $1.09bn. Previous rounds included a $130m series C provided by Foxconn, Greenoaks, Khosla, DFJ, Moore Capital and private investment management firm Paxion Capital Partners in 2017. The company, which had just emerged from stealth, was valued at around $1bn at the time.

Commenting on the series D, Jeffrey Housenbold, a managing partner at the SoftBank Vision Fund who, as part of the transaction, joined Katerra's board, said: "The $12 trillion construction industry is extremely fragmented with tens of thousands of companies using minimal levels of technology. While labour-productivity growth has skyrocketed in the overall global economy, construction]has averaged only 1% annual productivity growth over the past two decades." In other words, as co-founder Marks put it, the sector is "ripe" for digital disruption.

Housenbold added: "Katerra is leveraging the latest technologies to radically transform the way people build. Drawing on his experience leading Flextronics, Marks's unique vision and talented team are taking the great lessons of electronic manufacturing and applying them to an industry that is in dire need of change. We are excited to support Katerra as they expand across markets and geographies and unleash a new wave of productivity."

Large Investment of the Year: Lyft

Having significantly increased its market share in the US in recent years, on-demand transportation company Lyft recently appointed JPMorgan to lead its planned IPO at an estimated valuation of $15.1bn. It is an almost Lazarus-like tale for Lyft – competitor Uber's former CEO Travis Kalanick had turned down an offer to acquire Lyft in 2014 in exchange for 18% of Uber, according to analysis site Stratechery.

Based in San Francisco and operating in the US and Canada, Lyft progressively earned itself the status of main contender to Uber, which remains the number-one ride-hailing app in its home market but has failed to kill off its closest local rival. Lyft reportedly doubled its number of rides more recently, having recorded an average 10 million rides a week in 2017, and an estimated 550 million rides in total last year, according to financial publication Forbes.

Founded in 2012, Lyft has been marketing itself as a more ethical and customer and driver-friendly alternative to other cab-hailing services, having, for instance, been the first to offer users the ability to tip drivers via the app. While Uber and Lyft continue their head-to-head competition to dominate the US market, both should be going public in 2019, with Uber's valuation currently projected at around $120bn for its IPO. Bloomberg reported that Lyft had hired advisory firm Class V Group to prepare for taking pitches from potential underwriters from September 2018.

Having recently hit the billion rides milestone, Lyft has so far secured $4.4bn in equity funding through numerous rounds, the most recent of which was a $600m series I round in June 2018 led by financial services group Fidelity Management and Research, with participation from hedge fund Senator Investment Group. The investment, which considerably increased the company's valuation, also included corporate backers General Motors, Alphabet, Alibaba, Rakuten and Magna International.

Earlier last year, automotive systems maker Magna International invested $200m in Lyft to seal a partnership in which the two collaborate on autonomous driving research and development. Valued at $11.7bn at the time, Lyft was already working on and testing driverless car technology at a dedicated research centre in Silicon Valley, California. Swamy Kotagiri, Magna's chief technology officer, said at the time: "There is a new mobility landscape emerging and partnerships like this put us at the forefront of this change. Lyft's leadership in ride-sharing and Magna's automotive expertise make this strategic partnership ideal to effect a positive change as a new transportation ecosystem unfolds."

Lyft first secured corporate backing through a $250m series D round in 2014, attracting e-commerce group Alibaba as well as Andreessen Horowitz, Founders Fund, Coatue Management, Third Point Ventures and Mayfield Fund. Alibaba returned the following year for a $680m series E round, joined by e-commerce firm Rakuten, internet group Tencent, on-demand ride provider Didi Chuxing and conglomerate Icahn Enterprises.

Automotive manufacturer General Motors then led a $1bn round in early 2016 that featured Alibaba, Didi Chuxing, Janus Capital and Kingdom Holding, before Lyft obtained $600m from Rakuten, AllianceBernstein, Baillie Gifford, Janus Henderson and KKR in April 2017. InMotion Ventures, the investment division of carmaker Jaguar Land Rover, provided $25m in June 2017 before CapitalG, the growth equity arm of diversified conglomerate Alphabet, led a $1.5bn round for Lyft in December the same year. Fidelity also took part in the December round alongside Rakuten, AllianceBernstein, Baillie Gifford, KKR, Janus Henderson and Ontario Teachers' Pension Plan.

In more recent news, the car-hailing service in October last year acquired autonomous driving software developer Blue Vision Labs from Alphabet's venture arm GV in a deal reportedly sized at $72m. Shortly afterwards, the group announced its partnership with carpooling service Scoop, mostly aiming at supplementing the latter's offering to customers working for large corporations such as LinkedIn, Symantec or Samsung.

Others on the shortlist

Juul Labs
Coupang
Bytedance
JD Finance
WeWork

New Entrant of the Year: Severstal Ventures

In May last year, Russia-based steel, energy and mining company Severstal announced the launch of Severstal Ventures – a corporate venture fund investing directly as well as through other funds in advanced materials and associated technologies, in Russia and abroad.

The previous February, Severstal appointed George Gogolev as head of disruptive innovation to support the creation of a CVC unit. Gogolev was director of corporate innovation and technology transfer role at state-owned fund of funds Russian Venture Company, where he started in 2012 as head of high-tech products market development before moving through a variety of roles.


George Gogolev of Severstal receives his award from James Mawson

Severstal Ventures' launch came alongside the news that Cyprus-based subsidiary Melsonda Holdings had invested an undisclosed sum in advanced materials-focused VC firm Pangaea Ventures' fourth fund, which had hit half its $105m target by January 2017.

Within three months of Gogolev's arrival at Severstal Ventures, the CVC arm struck its first deal. In October last year, it helped complete a first close for Chrysalix RoboValley Fund, a vehicle with a $120m target managed by Canadian VC firm Chrysalix Venture Capital, targeting technologies using smart systems to drive the energy transition.

But the challenges of launching a unit is hampered by government concerns, putting a premium on resilience, networks and transparency to entrepreneurs and co-investors.

Severstal Ventures is one of the first venture funds in the metallurgy space. It was created by one of the world's most efficient steel companies to look for disruptive technologies and identify new points of growth or threats in a mature industry.]

The company said it classified opportunities and threats as technologies with the potential to swing the steel market in Severstal's core segments of construction and energy by 5% or more either up or down.

In the first year, the ventures team focused on developing a coherent strategy, creating new internal procedures and building the pipeline. It made two LP investments in well-established multicorporate funds in the materials and industrial space – Pangaea and Chrysalix – and started looking deeply into a number of deals. However, the tightening of US regulations on foreign investment into startups slowed down the investment process, Severstal said.

Commenting on the unit's creation, Andrey Laptev, director of business development and corporate venture projects and former head of corporate strategy at Severstal, said: "Innovative technologies can significantly disrupt the processes, products and business models of global industrial companies. It is crucial to actively monitor breakthrough trends, identify and implement potential opportunities and mitigate any possible risks. In that sense, investments in VC funds provide unique access to a vast range of projects. With Severstal Ventures, our focus will be on technologies that are ready for rapid implementation, and we will aim to collaborate with these startup projects at operational level."

The CVC fund, which does not have a set size, will ideally close around five deals a year, with plans to deploy roughly $20m to $25m a year, according to Gogolev, who said its first direct deals were being affected by US regulations. Speaking to GCV in July last year, he said: "Severstal decided to create this unit to look first of all for radical innovations and to avoid missing any huge opportunities or threats. We classify opportunities and threats as anything that can take away or generate 5% in one of our core sectors – energy, including oil and gas, and construction – as a 5% move in either of those markets represents billions of dollars."

Targeting opportunities in Russia and abroad, the fund's primary area of investment is materials, including bulk materials as well as materials for the construction, energy and automotive industries at large. The unit is also looking at coatings, as well as production technologies with a special focus on large-scale 3D steel printing for construction, while keeping an eye on mining and steelmaking technologies.

Aiming to deliver better returns to its shareholders, Severstal will mostly focus on the unit's financial performance, with goals to bring sizeable cashflows with every new partnership or joint venture. In order to implement a consistent strategy, Severstal Ventures makes sure to maintain a dialogue with its parent company throughout the process. Gogolev said: "We are doing a major strategic initiative within the corporation, talking to all the teams, middle and senior managers included."

As head of the unit, who sees Severstal as "the most efficient steel company in the world", he is also keen to create a culture of speed and foster rapid decision-making within the team – a feature which, according to him, will make the company an attractive partner for startups.

Others on the shortlist

Alliance Ventures

Schneider Electric Ventures

Sinopec Capital

Binance

Fund of the Year: Swisscom Digital Transformation Fund

Launched in July last year, Swisscom Digital Transformation Fund is Swisscom Ventures' first investment vehicle open to third-party institutional investors.

Founded in 2005 by recurring GCV Powerlist nominee Dominique Mégret, Swisscom Ventures is the corporate venture arm of Switzerland-based IT and telecoms group Swisscom – a government majority-owned company with a market cap of $24.6bn and a Forbes Top Regarded Company 2018.

Dominique Mégret of Swisscom

Originally focused on strategic impact for its corporate parent, the entity invests across core telecoms and IT services, as well as in new technology with a potential to transform the company's activity. More recently, Swisscom Ventures also took an interest in emerging technologies such as digital health, the internet of things (IoT), artificial intelligence, wearables and fintech. In 2016, the unit created a Sfr10m ($10m) dedicated fintech fund to provide early-stage and series A financing for startups operating in the areas of collaborative economy, access and identification, blockchain financial applications and digitisation of small and medium-sized enterprises. In addition to that, Swisscom promotes fintech startups through initiatives such as Kickstart Fintech Accelerator, DigitalZurich2025 or Swisscom Startup Challenge.

Swisscom Ventures manages two main funds. Its domestic Early Stage Fund backs startups in seed to series A stages. It usually starts with small entry tickets below Sfr1m and follows with additional investment of up to Sfr5m. Covering areas as diverse as digital media and cleantech, the fund aims to encourage the emergence of Swiss technology leaders by leveraging the country's innovation centres and providing funding exclusively to Swiss companies.

The International Fund, invests in information and communication companies at every stage of development. Entry tickets usually vary between $500,000 and $1m and can be increased to $5m in subsequent rounds. With this vehicle, Swisscom Ventures typically co-invests alongside large VC firms able to finance a global market rollout. As of 2016, the unit had completed around 20 deals overseas, mostly in Silicon Valley.

Following an evergreen model, through which returns from deals are reinvested in new portfolio companies, the unit has a total investment capacity of Sfr10m to

Sfr20m a year, according to Mégret. This amount is, however, likely to increase each year as more and more companies are sold by the unit. Between 2016 and 2018, Swisscom Ventures completed a dozen exits in a variety of sectors, including infrastructure and cloud, the internet of things, fintech, security and enterprise solutions.

Byy 2018, the venture arm had invested a total of $100m in about 50 startups since inception and closed around 20 exits. One of the most recent was the sale of Switzerland-based business software provider Bexio for a reported $110m last year. Some of the unit's most recent investments include an $11m series B round co-led with private equity and VC firm ETF Partners for Swiss drone developer Flyability, and a $5m series A round for Bangalore-based cloud infrastructure startup Rtbrick, co-led with Deutsche Telekom Capital Partners.

A new addition to the Swisscom Ventures family of funds was made last year as the unit launched the Digital Transformation Fund – the first of its vehicles open to external backers. The parent company provided about a quarter of the total $199m raised for the oversubscribed fund, while the rest came from institutional investors. Targeting early to late-stage companies, the fund expects half its dealflow to arise from Switzerland and will also seek opportunities in the US, Europe and Israel. The vehicle emerged amid greater activity in Switzerland, as almost $940m was invested in local startups in 2017 – 3% more than the previous year. According to the Swiss Private Equity & Corporate Finance Association, local pension funds currently manage more than $800bn of assets, of which roughly 1.5% are invested in private equity and venture capital.

Perhaps peculiar to Swisscom's case, as opposed to CVC arms spun out of their parent company after raising external money, Swisscom Ventures continued to operate as an in-house unit, maintaining a strategic traction with its corporate parent. Speaking to GCV in a past interview, Mégret said: "When we first started 10 years ago, it was all about strategic value creation, but with time, financial performance becomes more tangible. That is when you need to deliver financial value to remain credible. It then becomes a balancing act between the financial and strategic dimensions, between more or less mature businesses, and between core business areas like telecoms and IT and longer-term adjacent ones."

He added: "Swisscom Ventures is a startup within a corporation. We see ourselves as a profit centre and try to achieve maximal impact with minimal team costs. This is key to being independent-thinking and long-term sustainable."

As industry peers start to develop alternative models to leverage corporate cash with financial investors, finding the right mix of financial and strategic returns should indeed be a priority for the Swiss group.

Others on the shortlist

Telstra	Motley Fool
Sky Ocean	Unilever's New Voices

Unit of the Year: Salesforce Ventures

In early December Salesforce Ventures announced two new $100m funds in Canada and Japan, both aiming to boost startup innovation that is part of the global Salesforce ecosystem.

Often seen as the most prominent corporate venturing player in the enterprise space, Salesforce Ventures was largely shaped by John Somorjai, executive vice-president of corporate development and Salesforce Ventures, and Matt Garratt, managing partner.

Somorjai has been at Salesforce, a US-listed customer relationship management service provider, since 2005. He has been leading the evaluation, deal execution and integration of Salesforce's corporate strategic transactions, including M&A and investments. Salesforce Ventures was founded in 2009 and Somorjai hired Garratt from venture capital firm Battery Ventures in 2013 to run it.

Salesforce has deployed a series of funds over the years. One of the first was the $50m Lightning Fund, now fully invested and focused on entrepreneurs and companies building transformative apps and components on the Salesforce Lightning Platform. Built on the Lightning fund's success, the $100m Salesforce Platform Fund was launched in 2017, with goals to speed up the development of platform components driven by artificial intelligence (AI). Salesforce simultaneously revamped its independent software vendor program, creating the AppExchange Partner Program to bring more developers into the company's app economy.

A variety of vehicles were subsequently launched, resulting in the unit having no fewer than seven active funds of between $50m and $100m. In 2017 alone, the unit launched four specialist funds with a total investment capacity of $250m. Apart from Platform Fund, these included the $50m Impact Fund, $50m AI Innovation Fund, and $50m System Integrator Trailblazer Fund, investing in cloud consulting companies looking to expand their Salesforce services.

Introduced at the end of last year, the Japan Trailblazer

SPECIAL REPORT


Matt Garratt of Salesforce receives his award from James Mawson

initiative was not the first of its kind. A few months earlier, following a commitment made by Salesforce to invest $2bn in Canada over the next five years, the unit launched the $100m Canada Trailblazer Fund, targeting local cloud services startups. At the time Somorjai said: "There is incredible innovation happening in Canada today and we want to encourage and empower the next generation of enterprise cloud startups in the region." Creating region-specific funds seems to have become a habit for the unit – in 2015, it had already formed a $100m Europe, Middle East and Africa vehicle to support European and Israeli startups.

The Trailblazer funds are not the only elements that made 2018 a special year for Salesforce Ventures. A fair number of portfolio companies went public, yielding a number of record exits. In April, US-based digital signature specialist DocuSign, backed by a variety of investors, including Salesforce Ventures, floated in a $629m IPO giving a market cap of $4.4bn. The same month, file storage platform Dropbox closed its IPO at $869m.

In July, business intelligence and data visualisation provider Domo went public with an IPO of $193m at a $2.3bn valuation. A few months later, it was online survey management platform SurveyMonkey's turn to float at $207m as underwriters took up the overallotment option and bought an extra $27m in shares. Within a fortnight, business planning software provider Anaplan provided the unit with yet another lucrative exit, floating at $264m at a $2.1bn market cap. It is also worth noting that 2017 was just as glorious a year for Salesforce Ventures on the IPO exit front, as three of its unicorn portfolio companies went public.

Another noteworthy event last year was the acquisition of publicly-listed app development software producer Mulesoft in a deal that valued it at $6.5bn. Salesforce Ventures was an investor in the group's $37m series E round in 2013 and $50m round in 2014, before returning to lead its $128m series G the following year. Mulesoft has doubled in value since it went public in 2017 in a $221m IPO at a market cap of $2.9bn.

Salesforce Ventures was also an investor in a number of deals last year, including a $47m round for documentation software producer Conga, a $35m series C round for sales assistance software developer Highspot, and a $51.5m round for cloud banking specialist NCino. The $350m deal in which business communications technology supplier Vonage acquired customer service technology provider NewVoiceMedia from Salesforce Ventures in September was another element that helped the unit finish 2018 on a high note.

Salesforce Ventures has completed more than 280 investments across 18 countries with at least $1bn of equity committed, while its venture unit had established offices in the US, the UK and Japan.

Given its capacity to return money from more than a dozen IPOs, and with more than 50 acquisitions under its belt, there would seem to be no shortage of money for Salesforce Ventures to continue its good work.

Others on the shortlist

Tencent
SoftBank
Intel
Swisscom
Munich Re

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Barbara Burger
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David Gilmour
BP Ventures

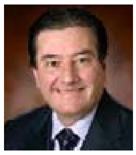
Jacqueline LeSage Krause
Munich Re / HSB Ventures

Jeffrey Li
Tencent

Michael Redding
Accenture Ventures

Jaidev Shergill
Capital One

Bonny Simi
JetBlue Technology Ventures



Bill Taranto
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INTERVIEW

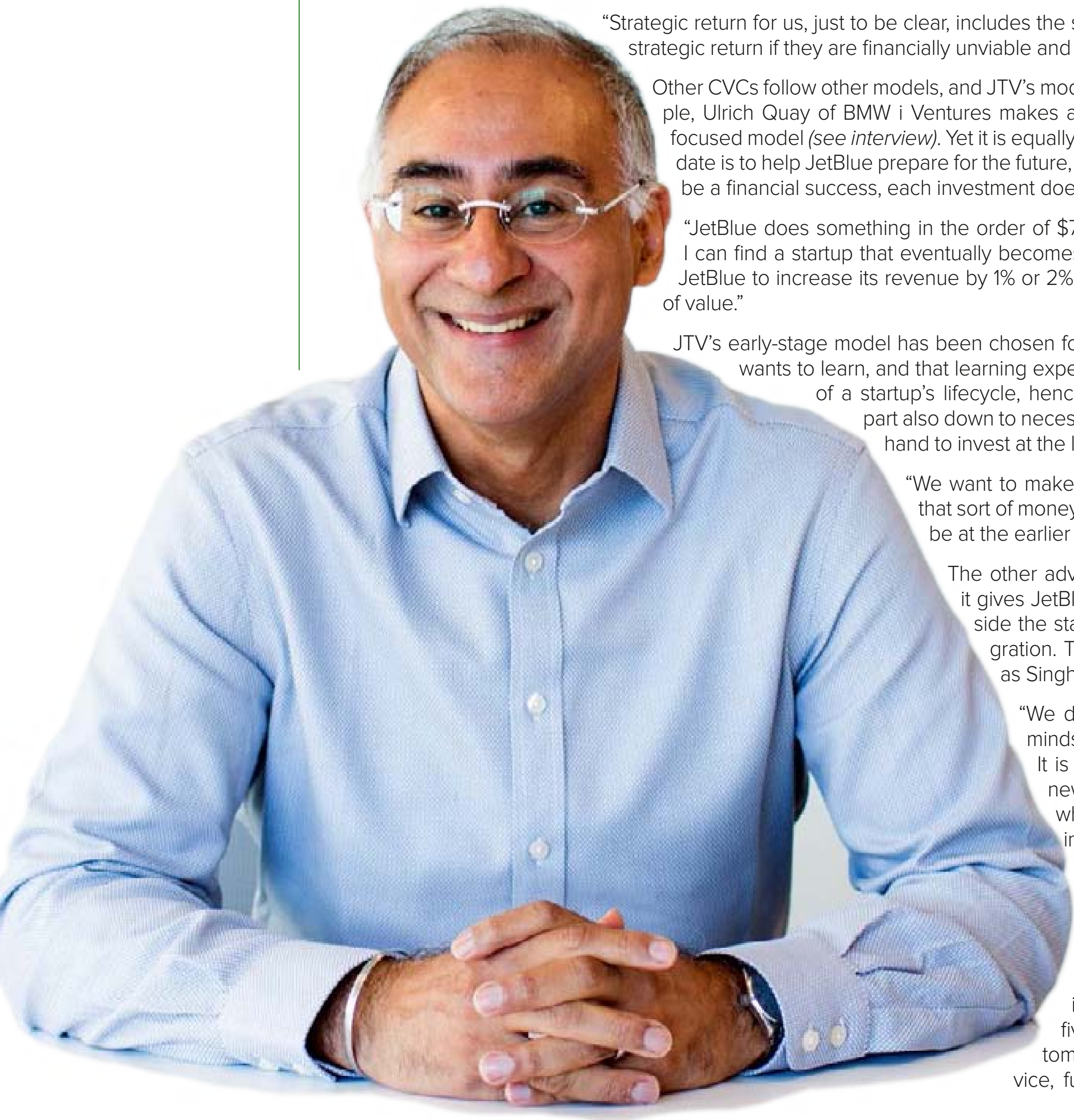
JetBlue flies high with the help of startup insights

Raj Singh, managing director at JetBlue Technology Ventures, spoke to Robin Brinkworth about JetBlue's strategic model, its partnerships, and how they ensure alignment with JetBlue's business units

Raj Singh has an exquisitely English accent, all Hollywood villain and wood-panelled walls. It is received pronunciation at its finest, now somewhat incongruously settled in San Francisco's innovation ecosystem, surrounded by rhotic American English and California's infamous uptalk. But Singh stands out, not for his accent, but the work he does running the investment team of US airline JetBlue's highly specialised strategic corporate venture capital unit.

Singh is managing director at JetBlue Technology Ventures (JTV), set up in early 2016. The unit is a balance-sheet investor, committing up to $3m for non-control positions in early-stage startups. The unit has made 21 investments so far, seeking to serve an entirely strategic mandate. While JetBlue is an airline, the conception of the venture unit is to provide, in Singh's words, "strategic value to JetBlue as a travel provider writ broadly". He continued: "When we think about our mandate, it is really about travel, transportation and hospitality. It does not have to be airline or aviation-specific".

JTV's team is 12 strong, with six focused on delivering strategic value to the portfolio companies, including integration into JetBlue itself. The other six, which Singh leads, constitute the investment team. JTV does not typically take board seats. It does not take control positions. Neither acquisition nor financial returns are goals – the sole focus is strategic return, although Singh does clarify this.



"Strategic return for us, just to be clear, includes the startup doing well, because there is no strategic return if they are financially unviable and do not exist in a couple of years."

Other CVCs follow other models, and JTV's model is not to everyone's taste. For example, Ulrich Quay of BMW i Ventures makes a powerful case for a more financially-focused model *(see interview)*. Yet it is equally hard to reject Singh's case. JTV's mandate is to help JetBlue prepare for the future, and while he wants each investment to be a financial success, each investment does not exist in a vacuum.

"JetBlue does something in the order of $7bn of revenue a year [2017 figures]. If I can find a startup that eventually becomes a supplier to JetBlue and that allows JetBlue to increase its revenue by 1% or 2%, I am delivering $70m to $140m worth of value."

JTV's early-stage model has been chosen for two reasons. The first is that JetBlue wants to learn, and that learning experience is most intense in the early part of a startup's lifecycle, hence the focus on series A deals. It is in part also down to necessity. JetBlue does not have the cash on hand to invest at the levels of some of the more august VCs.

"We want to make our dollars count. Our sweet spot for that sort of money, to have an impact, means we need to be at the earlier stage."

The other advantage that investing early has is that it gives JetBlue time to develop the product alongside the startup to get it to a viable stage of integration. This is particularly important in aviation, as Singh pointed out.

"We do not have a minimum-viable-product mindset in aviation. The thing has to work. It is not as big an issue if it is some great new way of accounting, but it is an issue when it comes to active stuff that will be in the air."

For many, JetBlue is an airline, a transportation company. For insiders, JetBlue is a travel operator. That means that to look after JetBlue's strategic imperatives, Singh's brief is surprisingly broad. His team invests around five tentpole themes – seamless customer journeys, magnificent customer service, future of maintenance and operations,

INTERVIEW

improving loyalty, distribution and revenue, and evolving regional travel. The result is a relatively technology-agnostic portfolio, with Singh looking for the best fit.

"Throughout the five themes, we do not focus on technologies. There are a lot of interesting technologies underlying things, but we do not chase artificial intelligence or blockchain or whatever it happens to be. We are looking for technologies that solve the issues that interest us."

Singh welcomed the innovation that Uber and AirBNB have brought to the travel sector, glad to see VCs recognising potential in the future of mobility. He is particularly excited by the concept of flying taxis and a busy actively managed airspace, while acknowledging that these are still a few years away. Currently, the innovations Singh can bring to JetBlue are not frontpage deals, but sensible pragmatic solutions to existing business problems. Speaking to that, Singh gave the example of the second theme, customer service.

"You may have had an experience of going up to a gate agent to ask about your flight being delayed, only to have the agent not know about the delay until you show them the notification on your phone's app."

Ensuring that crew members have all the information at their fingertips minimises the disconnect between crew and representatives on the ground, JetBlue's offices and customers. The underlying technology could be anything from wearables to a big data lake, but the key aim is to enable crew members to do the best job they can.

Singh calls the third theme, maintenance and operations, the "iceberg", because it involves things that an ordinary traveller might not see. JTV's work here is about improving the nuts and bolts of a travel provider, such as using predictive maintenance to replace a soon-to-fail component, which means better reliability, fewer delays and happier customers.

"We are easy to work with and friendly – we build good relationships with the startups we are in"

Whether a startup can identify legal risks or create tailored products for consumers out of existing assets, the aim is for technology to step in and integrate with JetBlue. For that to happen, JTV must bridge the gap between the startup and the business units effectively. JTV's investment team derives its mandate from the investment committee, which is mostly from the C-suite, and then brings prospective investments back to the committee. Meanwhile, the strategic team, in Singh's words, "walk the halls at HQ" in New York to ensure alignment with the business units themselves.

"One of the manifestations of that is what we call innovation sprints. In these 12-week engagements, we partner a business unit leader and say: 'We will help you meet your strategic goals.'"


Bonny Simi

This regular exercise identifies pain points and objectives, looking for startups or technologies that help the business units meet those objectives, and then integrating and implementing the technology or startup into the business unit. Organisational alignment is one thing, but Singh said the team had a "secret weapon" beyond that – Bonny Simi, JTV's president.

"She is a JetBlue officer, and she has been at JetBlue for 15 years. She understands the day-to-day of how JetBlue operates. She is in the loop in the strategy setting, the day-to-day, even sometimes in the board meetings."

All this talk of alignment is not just marketing to Singh. It is why he joined the group, as he feels that it allows the unit to deliver on the promise of being a CVC. Four of the portfolio companies are now suppliers to JetBlue, with three more at proof-of-concept stage. JTV's dealflow is typical for a CVC, and having a strong network is part of that, something that Singh attributes to an underrated quality. "We are a nice bunch of people. We are easy to work with and friendly – we build good relationships with the startups we are in and that should not be underestimated."

Singh thinks few other companies in the travel space are doing similar work but believes more will be soon. In order to stimulate that, JTV has started a partnership program for companies within the travel industry that are not direct competitors, such as international airlines, hotels, airport operators and other transportation companies. Air New Zealand was the first partner, and the aim is to bring other partners into the Silicon Valley ecosystem, curated by JetBlue.

"We are seeing a lot of deals, close to 4,000 in the three years I have been here. Let us bring those deals to [prospective partners], not necessarily for investment, although that is possible if they are interested, but for proof of concept and eventual implementation. JetBlue cannot consume all the deals we do because we are going at such a pace, but if we have other partners who are interested, that increases our value proposition to startups."

Looking ahead, Singh said he hoped to expand the partnership program across the travel industry while continuing to deliver value to JetBlue through new investments and potential exits, although Singh admitted that venture capital was a long game and exits would take time. ◆

INTERVIEW

BMW sets store by financial opportunity

Ulrich Quay, managing partner of BMW i Ventures, spoke to Robin Brinkworth about his investment ethos, the technologies BMW invests in, and how the fund operates

BMW i Ventures is a €500m ($570m) corporate venture capital fund seeking financial and strategic goals in equal measure, aiming to give motor manufacturer BMW insights into the market and future business models, while also acting as quickly and effectively as a financial investor.

BMW is the sole backer but the fund is a distinct unit, not working off the balance sheet. What this means in practice is that Ulrich Quay can pursue solely financial deals, but not solely strategic deals – financial value has to be there. Quay backs the financial focus of the fund, saying the goals are "on par with the top VCs in the valley". He does not say that lightly, having worked with a different setup from 2011 to 2016 before the organisation was restructured.

"We can see the difference – on the one hand, deal quality, but also the quality of the team. We have been able to hire very good people and have processes that are identical to the processes of financial investors."

The structure gives Quay and his team full autonomy to make investment decisions, although Quay points out that just because they do not need business unit buy-in, it does not mean they do not leverage the business units for insight and experience. The fund interacts with parent BMW at two levels – a steering committee with the board that meets twice a year, and a more operations-focused committee that Quay calls the "sounding board", which meets more regularly.

"The strategic angle comes in once we see that as an opportunity with a very good financial upside"

With a dual focus, BMW i Ventures is somewhat technology-agnostic. When asked how he prioritised deals by technology sector as a CVC unit whose corporate parent is an automotive company, Quay said: "We mostly structure deals around financial opportunity." This seems to be at odds with Quay's stated 50-50 split between strategic and financial goals. Quay added: "The strategic angle comes in once we see that as an opportunity with a very good financial upside."

Quay is happy with the structure. According to him, the portfolio is doing "extremely well", and BMW has exceeded its internal rate of return goals. The UK-based electric vehicle charging company Chargemaster, one of the portfolio companies, was sold to BP in what Quay calls a "very good exit for us". Quay also points to US-based electric scooter-sharing service Lime as an example of success.

"Lime is growing incredibly – from stealth mode from the beginning of last year to raising a huge amount with a huge valuation in just 24 months. From a financial side it is our fastest mover."

Strategically, Quay is a little more reticent, as both those deals have strategic elements to them, but both support the fund's methods and set-up. The deal with Lime, from learning about the round to final investment decision, took just 10 days.

BMW's dealflow is as one might expect, with a significant exception. The team has, as usual, inbound startups, a network and co-investors that all help to source deals. Quay also points to a system that scans the whole market and publications for investments within BMW's sector of interest. Quay does not want to be surprised by a series B he has never heard about, so the system ensures the team sees everything, and can move on anything thought to be promising, such as the Lime deal.

Working for BMW puts Quay and the unit in an interesting position, one familiar to corporate investors, as they are supporting disruptors while trying to ensure BMW is not itself disrupted. Quay clearly enjoys being in that position. "I think it is an interesting opportunity for investors because there is huge market opportunity coming up. Me wearing both hats, trying to combine those two is an interesting and exciting task.

"It is a great time to invest in companies. Six to 10 years ago, nobody wanted to work with something automotive. Now lidar [light detection and ranging] companies are able to raise hundreds of millions of dollars, when five or 10 years ago automotive was very unsexy. Now people realise it is a big market opportunity. It is something that excites me."

The fund has plenty to look forward to. The fund has another two years left in it, and after four years Quay and his team are thinking about raising a second fund. That means making sure BMW is happy to come back in, as well as bringing in other backers. Interest may not be hard to come by – Quay has not found it hard to justify his work with the success the fund has had. He puts a lot of that success down to the fund's structure, and the work that went in to finding the right set-up. Quay and the team benchmarked the venture capital industry for best practices and standards, and then replicated them.

"If anyone is struggling to get by, I would encourage everyone to do a similar benchmarking study and involve guys from their corporations. That is my advice for anyone who is looking at an expansion or for getting more autonomy. It was surprisingly easy to do it, and BMW was very open to it, because it was best practice." ◆

INNOVATIVE REGION

Germany – Mittelstand forever?

Alice Tchernookova, features editor

Germany dominates Europe as its largest and strongest economy. Last year, it ranked not only as Europe's first economic power but also as fourth worldwide with a nominal GDP of $3.68 trillion, behind Japan's $4.87 trillion.

A number of factors explain this. First, the country benefits from strong industrial activity, which last year accounted for around 23% of GDP. Sectors such as automotive manufacturing, chemicals, electrical engineering and industrial machinery have traditionally been leading the pool. With around €1.28 trillion ($1.45 trillion) of exported goods in 2017, Germany is also one of the biggest exporting countries globally.

Consisting of 16 distinct states, called länder, Germany is home to a fairly decentralised power, distributed between the federal and state governments, respectively headed by federal ministers and by the chancellor – currently Angela Merkel – who is head of state. Certain regions and cities are incidentally reputed for their specialisation in a particular field. By way of example, Munich is often called "the high-tech region", while Frankfurt is considered a financial hub and Berlin a startup and innovation hotbed.

But most of all, Germany would most certainly not be what it is now without the precious contribution of what is often described as the engine and "backbone" of its economy – the Mittelstand. Literally translating as "medium estate", the Mittelstand designates Germany's 3.7 million small and medium-sized family-owned businesses that employ between 50 and 500 people each and individually generate up to €50m of annual revenues. At present, the Mittelstand is said to provide no fewer than 70% of jobs in Germany with an estimated 31 million employees, and generates 35% of the country's corporate revenues. Could the Mittelstand be the main factor in Germany's near-full employment?

Often praised for the quality of their management, Mittelstand companies seem to have understood the pressing need to modernise and open up to new growth avenues in the face of a changing world. As the government's Industrie 4.0 initiative – aiming to move the nation from centralised to decentralised smart manufacturing – runs its own course, the small and medium-sized enterprises (SMEs) of the Mittelstand try to navigate their way through disruption.

Corporate venturing

A recent study by the Federation of German Industries (BDI) in association with Deutsche Bank showed that the Mittelstand has a growing interest in collaborating with startups. Two-thirds of 250 polled companies, which were among Germany's 4,700 largest family businesses, said they were, for example, willing to receive support in initiating contacts with startups. Some 54% of the surveyed groups also expressed their interest in developing common work and new technologies.

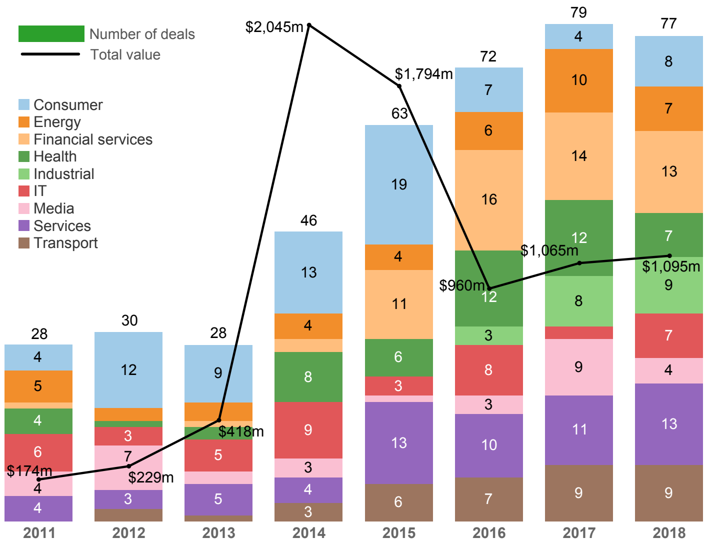
According to the BDI, almost half the country's largest family companies are already collaborating with startups, with 70% of them saying they are satisfied or very satisfied with the cooperation. Holger Lösch, deputy director general of the BDI, said: "It is a strong signal that large family businesses specifically seek exchange with startups. Working with them is a good way to keep up with development. The goal must be to turn startups into tomorrow's medium-sized businesses and to support established family businesses to remain fit for the future."

As of 2016, one in three mid-sized German companies had used digital technologies in their sales and distribution, according to the BDI, while one in five had already digitised their production. "Mittelstand 4.0 holds tremendous opportunities, especially on the international level," the BDI report read. It added: "One thing is clear – those who do not swim the tide of digital transformation today will miss out on the market opportunities of tomorrow".

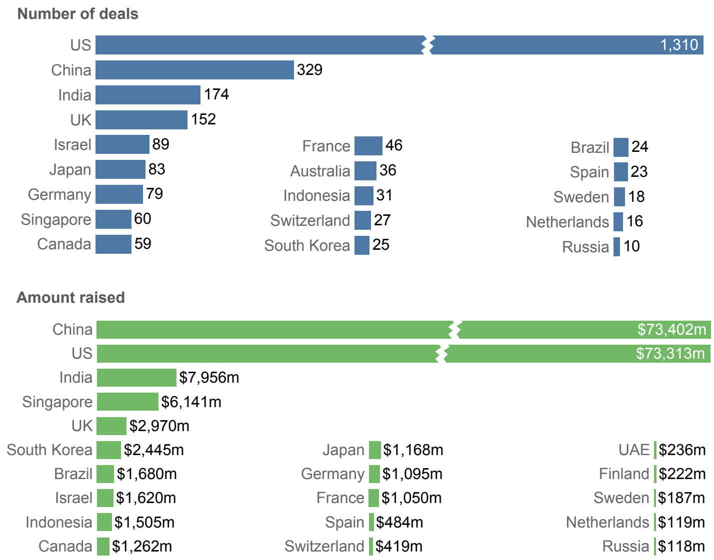
Conversely, for startups, gaining access to local Mittelstand funding is a precious financial resource, particularly in times when growth-stage funding is hard to get. According to financial publication Handelsblatt, last year the Mittelstand represented no less than €1 trillion in cumulative turnover.

Judging from the numbers, collaboration between Mittelstand and startups has so far been fruitful. The volume of corporate-backed deals since 2011 has been growing consistently, with 29 deals reported in 2011 compared with just under 80 last year. Last year also featured growth in the value of the German corporate venture capital market. After years of contraction from 2014 to 2016, values started picking up again, with $1.06bn in 2017 and $1.09bn last year. In spite of this small resurgence, values are still failing to reach the $2.04bn recorded during 2014.

Deal volume and value in Germany 2011-18



Top countries by corporate-backed deals 2018



Bernhard Mohr, who heads Evonik Venture Capital, CVC arm of speciality chemicals company Evonik, said: "We had a really strong trend around the 2000s. Twenty years ago, many large corporates in Germany had a CVC fund or activity. Then the bubble burst with the financial crisis, with many corporates leaving the VC market. A revival, however, seems to have occurred over the past five to six years, with new entities entering the market and existing ones significantly increasing their funds. Investment structures and teams have also been professionalised."

Last year, Germany ranked seventh worldwide in terms of CVC deal volume, behind countries such as Japan (83), Israel (89) or the UK (152). In terms of value, Germany came much further down the list, ranking 12th between Japan's $1.17bn and France's $1.05bn. This points to an issue that has been fairly persistent on the German market – the difficulty in gathering larger rounds at growth stage.

For Alexander Thees, managing director at the new initiative KfW Capital, a public venture unit created by state promotional bank KfW, said this was where the German venture market needed fixing. He said: "Looking at figures, we are convinced that companies need to grow significantly faster than 20 years ago. But to support their growth phase, there has to be sufficient capital. At the moment, the growth space is where the danger to fail is the biggest for startups, so that is the space we want to be in."

As one issue is often linked to another, a direct consequence of this is the relative absence of behemoths in Germany compared with other countries involved in corporate venturing. Alexander von Frankenberg, managing director at the public-private early-stage VC firm High-Tech Gründerfonds (HTGF), said: "If you look at what the German ecosystem was like 14 years ago, almost nothing was shaped yet. Today, you have multibillion-dollar startups, successful IPOs and more and more CVC players initiating new programs. Overall, the ecosystem is maturing quite rapidly and the trend is very positive.

"What we are still missing though, are the huge successes – the Googles, Facebooks and Amazons of Germany, or some companies exceeding a $100bn valuation. This is quite difficult to change, as it requires, for instance, more opportunities to go public, and the courage not to sell companies too early. But mainly, it requires larger funding rounds, and larger funds."

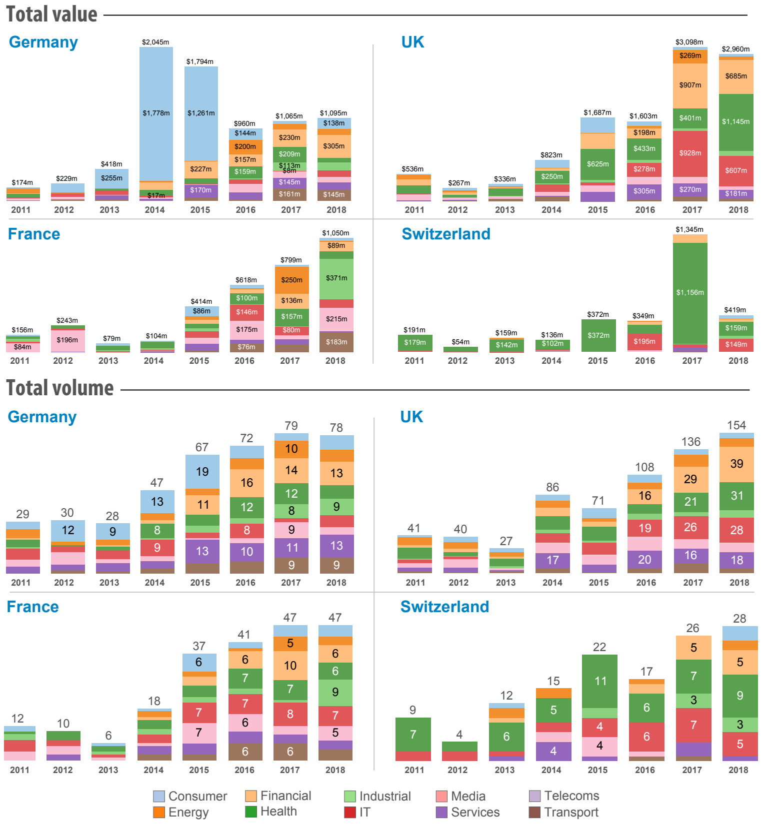
The situation has improved compared with a decade ago, said von Frankenberg, when rounds above €10m were still scarce in Germany, but the change is still too small compared with what is happening elsewhere.

In a European context, while Germany is still behind the UK in terms of both deal value and volume, it exceeds France. Last year, the UK was home to 154 CVC deals while France hosted a mere 47. The former, however, experienced a depreciation in deal values, as the total dropped from $3.09bn in 2017 to $2.96bn, while the opposite could be observed in France, where the total value of corporate investments jumped from $799 to $1.05bn from one year to the next, signifying a major upgrade in round sizes.

Although like elsewhere in Europe, the German market progressively opened itself up to foreign investors over the years, the ecosystem is still essentially Germany-centric. Among the top 25 backers since 2011, at least 18 were German. The five most significant investors over the same period were German, too. These were publishing company Georg von Holtzbrinck with 48 deals, e-commerce group Rocket Internet (38), retail holding Tengelmann (37), telecoms group Deutsche Telekom (32), and energy company RWE Innogy (13).

Of the top five investment rounds closed in

Corporate-backed deals by sector 2011-18



Strongest corporate venturers by sector

Media	Automotive	Industrial
axel springer PLUGANDPLAY Hubert Burda Media ProSiebenSat.1 Media SE SevenVentures G+J	Volkswagen Daimler AG BMW GROUP	EVONIK BASF BOSCH RWE e.on
Finance	**Retail & distribution**	**Technology**
KFW Deutsche Bank COMMERZBANK Allianz Allianz X	Henkel DHL Beiersdorf METRO GROUP PUMA adidas TENGELMANN ventures	SAP SIEMENS Deutsche Telekom

INNOVATIVE REGION

Top 10 corporate-backed deals in Germany 2011-18

Company	Sector	Round	Size	Investors
Lazada	Consumer	–	$2bn	Alibaba
Delivery Hero	Consumer	Stake purchase	$568m	Rocket Internet
HelloFresh	Consumer	Stake purchase	$126m	Rocket Internet
Rocket Internet	Consumer	Stake purchase	$580m	United Internet
Rocket Internet	Consumer	Stake purchase	$446m	Philippine Long Distance Telephone
Lazada	Consumer	D	$100m	Georg von Holtzbrinck | Investment AB Kinnevik | Summit Partners | Tengelmann | Verlinvest
Lazada	Consumer	E and beyond	$274m	Access Industries | Investment AB Kinnevik | Tesco | Verlinvest
Delivery Hero	Consumer	E and beyond	$350m	Insight Venture Partners | Kite Ventures | Tengelmann | Vostok New Ventures
Lazada	Consumer	E and beyond	$250m	Investment AB Kinnevik | Kinnevik | Rocket Internet | Temasek | Verlinvest
Rocket Internet	Consumer	–	$200m	Access Industries | Investment AB Kinnevik

Germany in 2018, four were to the benefit of Berlin-based companies – mobile banking company N26, used-car marketplace Frontier Car Group, and fintech groups SolarisBank and FinLeap. Evonik's Mohr said: "People always talk about Berlin, and it is indeed a big hub in particular for digital opportunities, but the German venture scene cannot be reduced to that. Innovation and startup founding takes places in a broader context, with regions or cities of the likes of North Rhine-Westphalia, Düsseldorf or Munich also playing a big part."

Some industry players have also started taking measures to counter this Berlin-centricity. Sebastian Borek, CEO and co-founder at non-profit ecosystem building organisation Founders Foundation, is one of them. "What we are aiming to do is build a startup ecosystem in the heart of Germany, as opposed to the state capital cities, where an ecosystem usually shapes up organically," said Borek.

Passionate about helping young entrepreneurs find their way and succeed in more remote parts of Germany, Borek co-founded the foundation just over three years ago in the North Rhine-Westphalian city of Bielefeld, home to a population of 342,000 people. He said: "I am a strong believer that we need to initiate entrepreneurship from people who have the talent to create something new, and something that paves the way for the future. The region we have chosen to focus on – Ostwestfalen-Lippe – is a place where old industry still exists, and where there are good universities and education but no infrastructure to help startups grow, no possibility for young entrepreneurs to share and develop their ideas."

> "The teams that we come across are usually very good on the technical side but often miss the commercial skillset"

Based on this concept, Borek and his team have worked to develop an ecosystem in the region, offering three types of service – networking events and hackathons such as Founders Hack, educational programs, and a six-month accelerator program helping founders develop their business in the areas of business-to-business (B2B), software-as-a-service, robotics and the internet of things. Since inception, Founders Foundation has helped to launch of 18 companies.

According to Borek, the top nine companies have garnered over €6m of total funding and now have cumulated revenues of around €10m. He added: "This area of Germany is not very well known on the international scene, but its 60 largest companies have a cumulative revenue of €70bn. These are the so-called hidden champions of the German economy, but they are also world champions. We created our platform here so that the new generation of local entrepreneurs can thrive in a perfect environment, taking advantage of all the available resources."

But in spite of all these efforts and of a slight increase in corporate venturing activity in Germany over the past two years, some aspects of the ecosystem remain improvable. Ingo Ramesohl, managing director at industrial goods company Robert Bosch's venturing unit Robert Bosch Venture Capital – which has now fully invested its third €150m fund and is looking at an expansion into China – said: "There is a sort of seeder-feeder mechanism that has to be followed in order to create a successful ecosystem with large exits. One of the key elements, alongside having a high-end educational system – a seeder – solid government back-up and decently-sized funds – both feeders – is having an entrepreneurial mindset and culture."

This, some local players argue, is an aspect that still needs work in Germany. Philipp Thurn und Taxis, CEO and founder of Constantia New Business, investment arm of diversified industrial group Constantia Industries, said: "The teams that we come across are usually very good on the technical side, with highly-qualified engineers, but often miss the commercial skillset that should come with it. This has to do with the European and German DNA [as opposed to the US one].

"It is a cultural thing – we like to build things, but we do not like to sell things, as that bears a somewhat negative connotation for young engineers. We need to change that image culturally, as a good business founder is also a good salesman."

At Founders Foundation, Borek shares the sentiment. "Germany ranks well in terms of scientific research, and German engineering is used at large in other countries. But what we often lack is the ambition to build businesses out of our knowledge and research. This might be one of our greatest challenges – in most fields, we are very good at execution, but not so good at sales. While most countries would test a product on the market before bringing it to full completion,

INNOVATIVE REGION

a German engineer or entrepreneur would prefer working on it extensively first, making sure that it is absolutely perfect and fully functional."

He said arguably, from a business point of view this tactic was not the most strategic. "I believe this way of functioning would be very hard to break. It is embedded in our culture, in the way we behave. In Germany, we are brought up with the idea that it is better to build things and to have them in substance, rather than making broken promises."

Government venturing

Government venturing is no new element to the German ecosystem. Asked when the state had understood the key role VC could play in the country's economic development, HTGF's Alexander von Frankenberg said: "I think they already got that in the early 1990s, when they started setting up programs supporting high-tech funds. Those early programs were only moderately successful, with some of them actually losing most of their money. But once the bubble burst in the 2000s, it became very obvious that there was a funding gap, especially in the seed segment, as startups were struggling to even get initial funding."

The creation of HTFG in 2005 was one answer. Initiated by former chancellor Gerhard Schröder and resulting from a collaboration between the Federal Ministry for Economic Affairs and Energy and three corporates – BASF, Deutsche Telekom and Siemens – the entity was set up as an independent public-private VC firm.

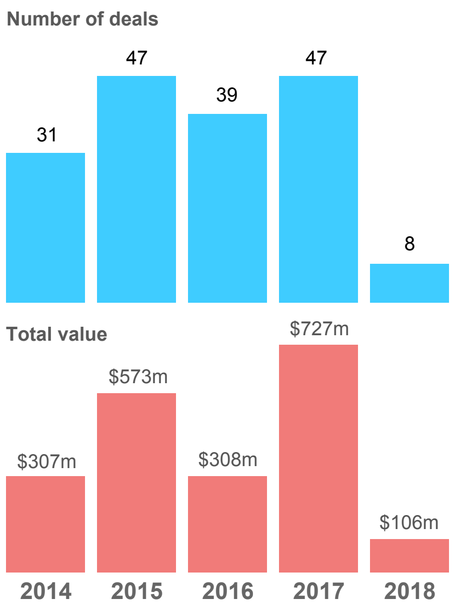
Von Frankenberg recalled: "There was a lot of research coming out of research institutes and universities at the time, but very few high-tech startups were being financed. Around the years 2004-05, only around 20 startups had managed to get seed financing. So eventually, a team of experts came up with a proposal to set up a dedicated fund for high-tech startups."

Focusing on seed and early-stage investments, the Bonn-based firm targets high-potential tech-driven startups with investments and co-investments of up to €1m in the first round and up to €3m in total. To date, HTGF has invested about €892.5m through three funds, including HTGF I (€272m) and HTGF II (€304m), and claims to have helped incept 500 startups. The fund also reports injections totalling €1.5bn into its portfolio companies from external investors through follow-on rounds, as well as 90 exits.

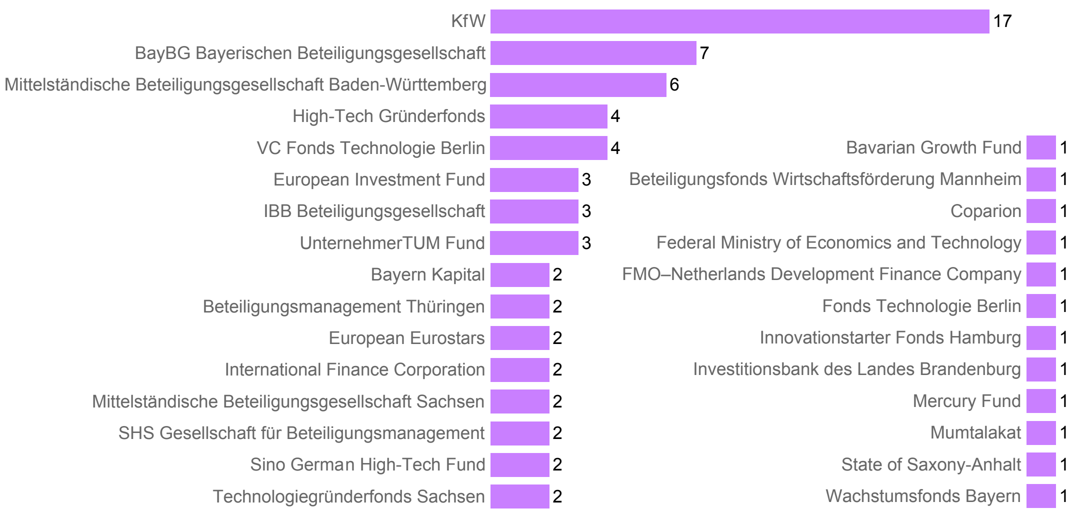
Other public investors in HTGF include KfW and Fraunhofer-Gesellschaft (the Fraunhofer Society), a German research organisation involving 72 institutes. But what started out as a government vehicle is now practically a public-private partnership functioning similarly to a CVC fund, according to von Frankenberg.

He said: "There have always been commitments coming from the industry, but the government was to be the majority shareholder

Government-backed deals in Germany 2014-18



Top government investors in Germany 2014-18



Top 10 government-backed deals in Germany 2011-18

Company	Round	Sector	Subsector	Size	Investors
Heliatek	D	Energy	Renewable energy	$89m	Aqton | BASF | BNP Paribas | CEE Group | eCapital | Engie | High-Tech Gründerfonds | RWE Innogy | RWE Innogy | TU Dresden | Wellington Partners
eGym	C	Consumer	Hygiene, beauty	$45m	Highland Europe | HPE Growth Capital | undisclosed strategic investors
Mister Spex	–	Consumer	Consumer	$40m	DN Capital | Goldman Sachs | High-Tech Gründerfonds | Scottish Equity Partners | Xange
Rigontec	A	Health	Pharmaceuticals	$32.3m	High-Tech Gründerfonds | MP Healthcare Venture Management | Sunstone Capital | Wellington Partners
BrandMaker	–	Services	Services	$30m	Pinova Capital | SME Fund
Thermondo	–	Energy	Energy	$24m	Eneco | Holtzbrinck Ventures | Investitionsbank Berlin | Vorwerk
Heliatek	C	Energy	Renewable energy	$23m	Aqton | BASF | eCapital | High-Tech Gründerfonds | Robert Bosch | RWE Innogy | Technologiegründerfonds Sachsen | Wellington Partners
Outfittery	D	Consumer	Fashion, apparel, accessories	$22m	High-Tech Gründerfonds | Highland Europe | Holtzbrinck Ventures | Mangrove | Northzone | Octopus Ventures | U-Start
Babbel	C	Services	Education, edtech	$22m	Nokia | Reed Elsevier | Scottish Equity Partners | VC Fonds Technologie Berlin
Outfittery	–	Consumer	Fashion, apparel, accessories	$20m	High-Tech Gründerfonds | Northzone

from the beginning. In the first fund, we had corporate commitments of €17m – a fairly small share for a €272m fund. But the industry share now comes up to about 34% in HTGF III."

Last year, HTGF closed its third fund at €316.5m, above its €310m target, with participation from 32 companies in the industrial and economic sectors. Some of the big names included pharmaceutical groups Boehringer Ingelheim, Bayer and B Braun, as well as Evonik, BASF, Robert Bosch and retail group Schwarz.

Von Frankenberg added: "Some of them already have their own CVC activity, but for those who have limited resources, HTGF can be a great help. Through us, they can outsource some of their investment activity, and we can provide them with access to deals, technology and industry trends. Meanwhile, for the government, we provide a precious insight into the ecosystem."

HTGF's contribution to the German ecosystem has reportedly helped create 10,000 jobs and generate significant tax revenues.

"When it comes to writing bigger cheques, we just do not have the firepower at this stage"

While HTGF may be the government's biggest contribution to the ecosystem to date, other state-backed funding sources exist. For example, Coparion was set up jointly by KfW and the Ministry for Economic Affairs and Energy in 2016, aiming to support growth-stage startups within the technology and fintech sectors. With an investment capacity of €225m, the structure invests mostly alongside private players. Companies can receive up to €10m, usually through several financing rounds ranging between €500,000 and €3m. Speaking to KfW about the group's investment strategy, Coparion managing director Christian Stein said: "There is no set list of criteria to tick off, but recipients should have some sort of initial success. This could be in the form of an innovative technology, or of reliable customer relations or sales."

A number of state-backed vehicles also exist at regional level.

Despite these contributions, some industry players agree that government support is weak in some areas. Evonik's Mohr said: "Germany has always been great at academia and at birthing smart ideas and individuals, and with support coming from the state we have managed to stabilise early-stage funding sources. But when it comes to writing bigger cheques, we just do not have the firepower at this stage."

Launched at the end of last year, KfW's venture investment vehicle KfW Capital has vowed to try to fix this problem. The bank said: "The creation of the subsidiary and the expansion of the group's investment business were based on an idea to enhance the market for VC financing as a driving force for the German economy."

It also resulted from a resolution passed by the German parliament in March last year that gave the Ministry for Economic Affairs and Energy, KfW and the Ministry of Finance a mandate to encourage more company founders in Germany. At the time, official reports estimated the growth financing segment to be short of €500m to €600m a year. The goal was also to double KfW's investment in venture capital and debt to reach €200m a year by 2020. This was to be achieved with financial support from the European Recovery Program (ERP) Special Fund, created in the aftermath of the Marshall Plan launched after World War II.

Structured as a fund of funds, KfW Capital investments range from follow-on funds run by experienced fund management companies to first-time funds, with the condition that any vehicle receiving support must invest at least the same sum in German tech companies at a further stage. KfW Capital aims to invest €2bn over the next 10 years, with a maximum of €25m per German or European venture capital or debt fund. Alexander Thees, who co-heads the new structure, said: "The launch of KfW Capital was about expanding our activity and making it more visible through an independent entity, but it was also a way to streamline processes and decision-making to be more in line with the VC industry."

This is not KfW's first shot at venture investment. In 2015, the group launched the ERP Venture Capital Fund Investment program, which has since committed a total of €265m to 18 VC funds. "KfW Capital makes investments pari passu with private investors, contributing a maximum of 19.99% to a fund's capital," Thees said. "In a sense, KfW Capital builds on what KfW restarted four years ago with the ERP Venture Capital Fund. As a whole, KfW has been engaged in VC fund investment for almost 20 years In the late 1990s, we witnessed our first significant investment boost, but we subsequently withdrew from the market following the recession." KfW Capital, which is now also responsible for the ERP Venture Capital Fund investments, will close its first investment this year.

University venturing

According to the German Centre for Research and Innovation, which in line with the government's wish to internationalise science and research has established subsidiaries in Brazil, Japan, Russia, the US and India, a large number of organisations participate in the development of innovation in Germany. Among these are the technology transfer departments within scientific organisations and universities, development agencies for innovation and technology parks. SMEs, the centre says, also play an important part in creating new products and services.

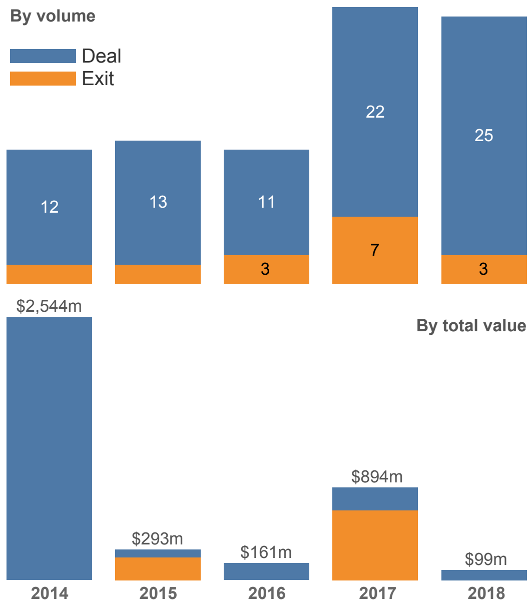
To help kickstart the Mittelstand's development in the 1940s, the Fraunhofer Society was created as a partnership between universities and companies that would ease the process of applying research. Now consisting of 72 German institutions and focused on various sectors, the society is one of Europe's largest applied research and development institutions, with 25,000 employees and an annual research budget of €2.3bn. While the state partly backs the institutes, 70% of their funding is earned through contract work for government-sponsored projects and companies.

Max Planck Society for the Advance of Science consists of 84 institutes conducting research in the natural, life and social sciences, and humanities. Max Planck Innovation is the unit in charge of commercialising inventions and technologies coming out of the institutes. A team within the organisation also helps researchers create of business models.

Other organisations include the German Association of Innovation, Technology and Business Incubation Centres, nurturing 150 incubators, innovation, technology and business centres as well as scientific technology parks, which are now home to 5,800 companies and 46,000 employees and which claim to have contributed to the formation of 17,400 new businesses.

Helmholtz Association of German Research Centres is another innovation cluster, distributing funding from the Ministry of Education and Research to 19 autonomous research centres and evaluating their effectiveness against international standards. As part of the association, Hemholtz Institutes provide strategic partnerships between Helmholtz centres and universities within specific areas of research. Each institute can receive institutional funding of €3m to €5m a year. The group's technology transfer department is in charge of applying research results.

Deals and exits from university spinouts in Germany 2014-18



Leibniz Association, which connects 89 independent research centres and focuses on social, economic and ecological issues, offers collaboration with universities through the Leibniz Science Campi program. Founders Foundation's Borek said: "Germany has a long tradition of producing groundbreaking technology and innovation. Universities are heavily involved int research too, although as opposed to what is done in other countries they do not tend to make direct investments in spin-offs."

Founders Foundation has developed its own initiative to collaborate with universities – Science-to-Business Lab. The program offers half-day workshops to students and researchers to help them commercialise ideas.

Institutions producing most spin-offs include the technical universities RWTH Aachen and Dresden University of Technology, and public research university Karlsruhe Institute of Technology. University of Stuttgart and Frankfurt's Goethe

Top 10 university-backed deals in Germany 2011-18

Company	Sector	Round	Size	Investors
Bayern Digital	Services	Tech transfer	$2.5bn	Bavaria
Lilium Aviation	Transport	B	$90m	Atomico | LGT | Tencent
Heliatek	Energy	D	$89m	High-Tech Gründerfonds | RWE Innogy | TU Dresden
ResearchGate	IT	C	$35m	Bill Gates
Rigontec	Health	A	$32.3m	Boehringer Ingelheim | High-Tech Gründerfonds | MP Healthcare Venture Management | NRW Bank | State of North Rhine-Westphalia | Sunstone Capital | Wellington Partners
Heliatek	Energy	C	$22.5m	BASF | eCapital | High-Tech Gründerfonds | Robert Bosch | RWE Innogy | Technologiegründerfonds Sachsen | Wellington Partners
SuppreMol	Health	D	$20.6m	Biomedical Catalyst Fund | MIG | Santo Holding
Omeicos Therapeutics	Health	C	$19.5m	Falck Revocable Trust | Fonds Technologie Berlin | Forbion Capital Partners | High-Tech Gründerfonds | KfW | Remiges Ventures | SMS Group | Vesalius Biocapital
Silexica	IT	B	$18m	DSA Invest | EQT Ventures | Merus Capital | Paua Ventures | Seedfonds Aachen
Cardior Pharmaceuticals	Health	A	$16.5m	BioMedPartners | Boehringer Ingelheim | Bristol-Myers Squibb | High-Tech Gründerfonds | Life Sciences Partners

University also have tech transfer offices, with the latter placing a focus on biotech. HTGF's von Frankenberg said: "Universities are now much more open to supporting students and researchers in setting up their company. I would say you can find great deals all over Germany, as each region has its own strength, but a big focus is generally placed on high-tech and biotech."

Among all German universities, the champion is Technical University of Munich (TUM) and its Centre for Innovation and Business Creation. More commonly known as UnternehmerTUM, the centre employs 200 people to offer incubation services and educating students on entrepreneurship and venture. It has also launched its own venture fund, Unternehmertum Venture Capital Partners backing European B2B-focused startups with tickets ranging between €500,000 and €3m.

"Universities are now much more open to supporting students and researchers in setting up their company"

Meanwhile, the TUMentrepreneurship project, endowed with €2.7m from the Federal Ministry for Economic Affairs and Energy, encourages the creation of spin-offs in the fields of information and communication technology, medtech, cleantech and life sciences.

Established in 2010 by private patrons and business owners, TUM University Foundation is another TUM entity set up as a non-profit organisation with a €20m endowment to attract talent and support promising young scientists. TUM claims to be helping the creation of an average of 70 companies a year and to be one of Germany's three most active universities in the field of patents.

Overall, German universities "are advancing quite nicely", as von Frankenberg put it. Last year, the Ministry of Education and Research announced it would award funding to 48 institutions, including 35 universities of applied sciences and 12 universities and colleges of education. The funding was to be given through the Innovative Hochschule program set up in May 2016, targeting small to medium-sized universities and institutes of technology. The program is set to provide a total of €550m by 2027 to boost technology transfer capabilities and support partnerships with local industry, with the overall effect of bolstering regional ecosystems. "But there is still some way to go," von Frankenberg added.

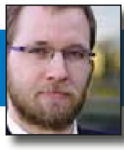
Industry players agree more could be done to incentivise business creation and popularise the entrepreneurial path within schools and universities. "The issue," said Founders Foundation's Borek, "is that in Germany, most universities are publicly funded, which means they do not have the same financial resources as US or UK-based universities. What we have learnt through our exchanges with students is that there seems to be very little motivation for researchers to engage in business creation, as there are no substantial financial incentives for doing that."

In a set of recommendations published in 2016, the Federation of German Industries emphasised the key role played by education in developing the ecosystem, saying "schools and universities must vigorously inform their students about the opportunities and challenges of going into business and actively encourage them to go into vocational training".

The organisation also highlighted the necessity of introducing tax benefits for research as "an instrument to promote research and innovation in a broad and open way". The report went on: "All large, and the majority of small, Organisation for Economic Co-operation and Development countries have such incentives – only Germany does not. It is high time that tax incentives for research are established in this country too – only then can the Mittelstand grow more strongly, and with it, the German economy." ◆

UNIVERSITY CORNER

Lighting the match



Thierry Heles, editor

When you break a record, there are usually two questions asked of you by journalists – how did you get here, and do you think you can maintain this performance? The first is an obvious combination of a strong belief in what you are trying to accomplish, hard work and persistence. Mia Hamm, the former football player who won two gold medals for the US at the Olympic games and enjoyed seven years of success with the national team, once showed a poetic approach to her journey, saying: "I am building a fire, and every day I train, I add more fuel. At just the right moment, I light the match."

Sometimes the answer is more complex, and it takes an entire book by Michael Lewis and a film starring Brad Pitt – both titled Moneyball – to explain how one team outsmarted the entire US baseball franchise. But even in that case, the core factors were investing a lot of time, smarts and a strong belief in the goal.

The second is often more complicated to answer, because all winners are eventually toppled. But university venturing is unique in that there is no outside competition to beat – the only records that the sector breaks are its own and while there is a friendly rivalry among universities, tech transfer professionals have always shown a camaraderie and willingness to share best practices that is truly inspiring.

"OUI is not there to make money for the university – it is about creating impact"

It helps that money is a secondary concern for university venturing. Matt Perkins, chief executive of University of Oxford's tech transfer office Oxford University Innovation (OUI), said at the GUV Summit in November: "OUI is not there to make money for the university, that is not our remit. It is about creating impact."

The message is not new but, over the more than six years that Global University Venturing has been reporting on the ecosystem, tech transfer offices have become increasingly confident about shouting it from the rooftops.

Lita Nelsen, then the director of Massachusetts Institute of Technology's technology licensing office, noted in her keynote speech at the GUV Fusion conference in 2015 that technology transfer was not a money-maker and that licensing had returned only $2.6bn for a research base of $63.7bn, a rate of 4.1%. The real point of commercialising research was not even the creation of spinouts – which were a by-product of the process – but generating an economic impact.

Of course, the activities of a tech transfer office can make money. As James Wilkie, chief executive of University of Birmingham Enterprise, told GUV for its annual review last month: "Our operations were profitable and we were able to make a substantial charitable donation to our shareholder, the university."

And so it seems only right that Global University Venturing is joined by a new sister publication this year – Global Impact Venturing – that brings the impact investment community into Mawsonia's growing global network, starting with a track dedicated to impact investments last month at the Global Corporate Venturing & Innovation Summit in Monterey, California.

The same conference also welcomed back Christine Gulbranson, chief innovation officer of University of California (UC) and chairwoman of the GUV Leadership Society, to introduce the second UC Entrepreneur Startup Showcase – find a summary in the February issue of the GUV magazine.

It might be too early to predict whether universities will maintain their performance in 2019, but everyone to whom GUV spoke for its annual review was confident they would – and there is as little doubt in the minds of the editorial team as there is in those of industry leaders.

GUV will continue to help the sector grow in every way it can. To equip the publication with the necessary resources to keep growing, we have reintroduced a full paywall – and we invite any and all thoughts on how we may assist you – email me *theles@globaluniversityventuring.com*. We are humbled by and keen to live up to comments such as that of Koji Murota, chief executive of university venture fund Kyoto University Innovation Capital, who said: "I believe that GUV and GCV are going to be more important than in 2018." ◆

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.

Corporate-backed deals grow slightly in January

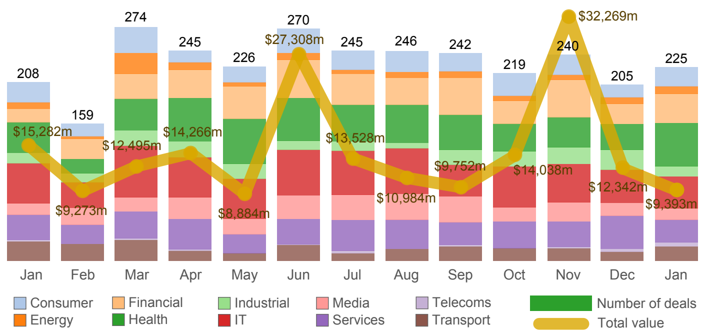
Kaloyan Andonov, reporter, GCV Analytics

The number of corporate-backed rounds in January was 225, up slightly from the 208 deals tracked in the same month last year. Investment value, however, dropped to $9.39bn – down 38% from $15.2bn in January 2018. January's figures were somewhat higher than the 205 rounds in December last year, but lower than the 240 in reported in November.

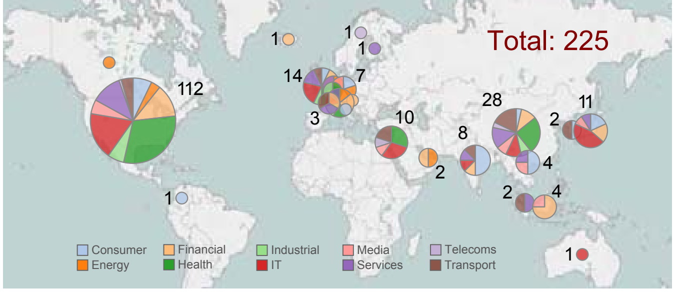
The US hosted most corporate-backed deals with 112 rounds, China was second with 28, the UK third with 14 and Japan fourth with 11. The leading corporate investors by number of deals were diversified conglomerate Alphabet, telecoms group SoftBank and real estate firm Alexandria. In terms of involvement in the largest deals, SoftBank also topped the ranking, along with financial services and investment group Fidelity and Alphabet.

GCV Analytics reported 17 corporate-backed funding initiatives in January, including VC funds, new venturing units, incubators, accelerators and others. This figure is a slight decrease compared with December, when there were 19 such initiatives. The estimated capital raised in those initiatives totalled $878m, up slightly from the $735m tracked in the last month of 2018.

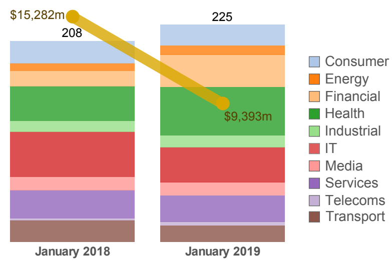
Deals by month Jan 2018-Jan 2019



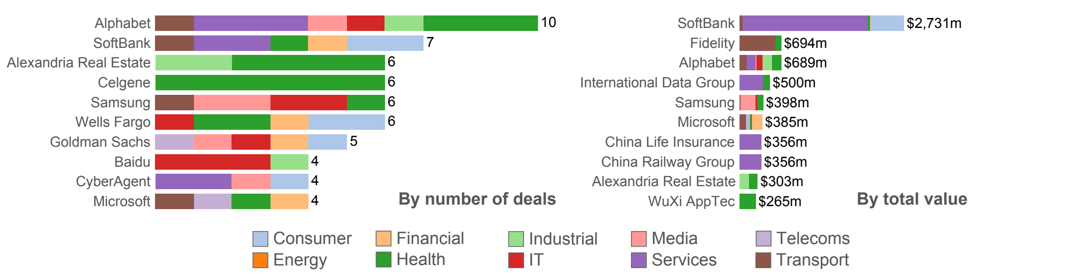
Global view of deals Jan 2019



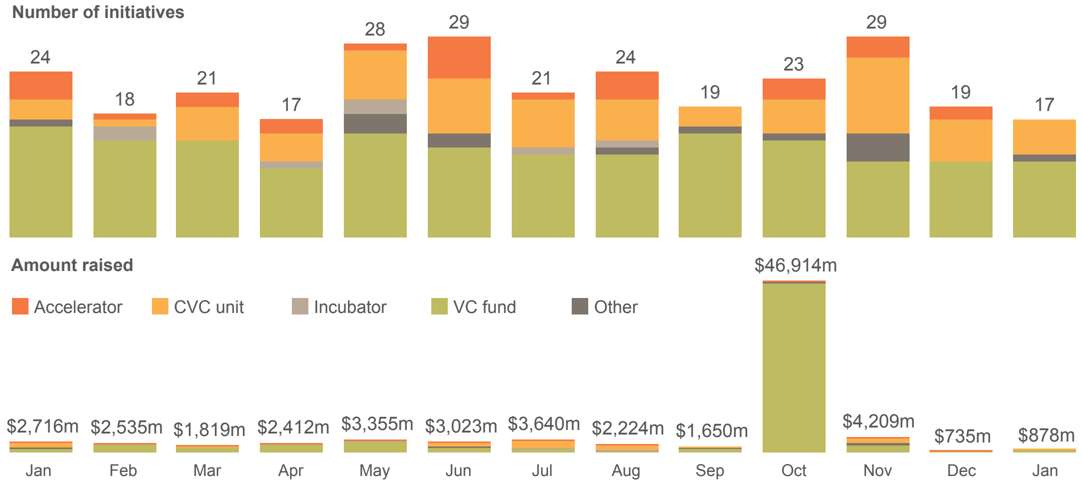
Deals Jan 2018 vs Jan 2019



Top investors Jan 2019



Funding initiatives by month Jan 2018-Jan 2019

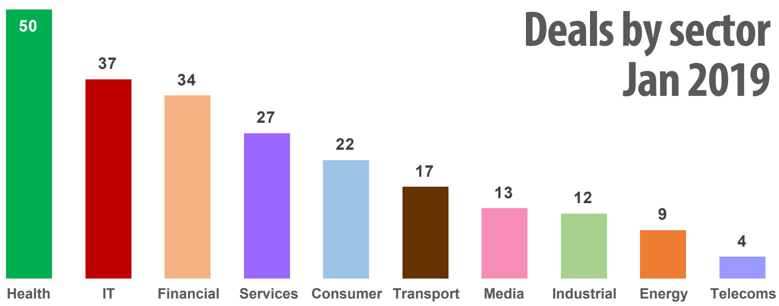


Deals

Emerging businesses from the health, IT, financial, services, consumer and transport sectors raised the largest number of deals during the first month of 2019. The most active corporate venturers came from the financial services, IT and health sectors. One of the top 10 deals was above $1bn.

SoftBank invested $2bn in US-based workspace provider WeWork, which has rebranded to the We Company, reportedly at a $47bn valuation. WeWork runs shared workspaces in cities across 30 countries, where users can access office equipment, high-speed internet, meeting rooms and free coffee under short-term flexible agreements. It made a $1.22bn loss in the first nine months of 2018 from $1.25bn in revenue.

Deals by sector Jan 2019



Deals heatmap Jan 2019

	Financial services	IT	Health	Media	Industrial	Services	Consumer	Energy	Telecoms	Transport
North America	43	26	24	14	12	12	8	7	4	4
Asia	24	18	3	11	6	4	7	1	4	1
Europe	16	3	5	2	4	2	3	5	3	2
Middle East	3	5	2	1	1			2	4	
Australia / NZ						1				
South America	1									

Bird, a US-based e-scooter rental service backed by real estate developer Simon Property Group, raised a $600m C round. At first, the round stood at $300m but it was subsequently doubled. The extension was led by Fidelity, at a reported valuation of $2bn. Founded in 2017, Bird's service enables users to book an electric scooter through an app. The vehicle can be left at the destination rathr than returned to a station. The service was present in roughly 100 cities by September 2018, when it exceeded 10 million rides.

Brainbees Solutions, the India-based operator of childcare products retailer FirstCry, secured $150m from the SoftBank Vision Fund. The investment was the first tranche of a round with a $400m target. FirstCry was valued at $850m for the first close, with the full round said to value the business at $975m to $1.1bn. Founded in 2010, FirstCry operates an online shop and 183 bricks-and-mortar stores in 29 Indian states selling toys, clothing, high chairs and parenting books. FirstCry will use the cash to scale its multimedia parenting platform and develop a range of own-brand labels.

Insurance firm China Life co-led a RMB2.4bn ($356m) series A round for China-based supply chain services provider Jusda. Investment manager CICC was the other co-leading investor through its CICC Capital unit. Venture capital group IDG Capital, engineering services firm China Railway Group as well as financial services firms Titanium Capital and Yuanhe Origin Investment also participated. Formed as an affiliate of manufacturing services firm Foxconn and rebranded in 2015, Jusda has a platform using artificial intelligence and big data to manage diversified supply chains.

MONTHLY ANALYSIS

Top 10 investments Jan 2019

Company	Location	Sector	Round	Size	Investors
WeWork	US	Services	–	$2bn	SoftBank
Bird Scooter	US	Transport	C	$600m	Accel Partners | B Capital | Craft Ventures | CRV | Fidelity | Goldcrest | Greycroft Partners | Index Ventures | Sequoia Capital | Sound Ventures | Tusk Ventures | Upfront Ventures | Valor Equity Partners
FirstCry	India	Consumer	Stake purchase	$400m	SoftBank
Jusda	China	Services	A	$356m	China Life Insurance | China Railway Group | CICC Capital | International Data Group | Titanium Capital | Yuanhe Origin Investment
BridgeBio Pharma	US	Health	–	$299m	AIG | Aisling Capital | Cormorant Asset Management | Hercules Technology Growth Capital | KKR | Perceptive Advisors | Sequoia Capital | undisclosed investors | Viking Global Investors
Dada	China	Services	D	$255m	Tal Education Group | Warburg Pincus | Yonghua Capital
Niantic Labs	US	Media	C	$245m	Axiomatic | Battery Ventures | Causeway Media Partners | Institutional Venture Partners | Samsung
Bakkt	US	Financial services	–	$183m	Boston Consulting Group | Cambridge Mobile Telematics | Eagle Seven | Galaxy Digital | Goldfinch Partners | Horizons Ventures | Intercontinental Exchange | Microsoft | Pantera Capital | PayU | Protocol Ventures | private investor
Desktop Metal	US	Industrial	–	$160m	Alphabet | Kleiner Perkins | Koch Industries | Lux Capital | New Enterprise Associates | Panasonic | Techtronic Industries
Antengene	China	Health	B	$120m	Boyu Capital | Celgene | FountainVest Partners | Qiming Venture Partners | Taikang Life Insurance Company | TF Capital | WuXi AppTec

BridgeBio Pharma, a US-based developer of treatments for genetic diseases, raised about $299m from investors including insurance and financial services group AIG. Private equity firms KKR and Viking Global Investors co-led the round, which also featured an unnamed participant described as a “blue-chip long-term investor”. Founded in 2015, BridgeBio looks to develop research conducted at pharmaceutical research groups, universities and academic medical centres, seeking treatments for genetic diseases in areas such as oncology, cardiology, neurology, genetic dermatology, endocrinology, ophthalmology and kidney disease. The company has a pipeline of more than 15 assets, each of which have already been allocated to an individual company, and four of which are nearing clinical trial.

China-based online education services provider Dada raised $255m in a series D round featuring TAL Education. Private equity firm Warburg Pincus led the round and venture capital fund Yonghua Capital participated. Founded in 2013 as DadaABC, the company operates an online tutoring platform teaching English to children aged four to 16. The company has partnered the American Tesol Institute and tailors its courses to existing curricula.

US-based augmented reality (AR) game studio Niantic secured $245m in a series C round featuring eSports platform Axiomatic and Samsung Ventures, the venturing subsidiary of consumer electronics producer Samsung. Institutional Venture Partners led the round, which included two other venture capital firms, Battery Ventures and Causeway Media Partners. The transaction reportedly valued Niantic at almost $4bn post-money. Spun off in 2015 from Alphabet, where it had been incubated since 2010, Niantic develops AR games and received the funding as it prepares to add a new title, Harry Potter: Wizards Unite, to a product range that includes Pokemon Go.

US-based cryptocurrency trading platform Bakkt received almost $183m from investors including software producer Microsoft, payment technology provider PayU and futures exchanges operator Intercontinental Exchange. The round also featured consulting firm Boston Consulting Group, crypto-asset manager CMT Digital, trading firm Eagle Seven and merchant bank Galaxy Digital. Established in August 2018 by Intercontinental Exchange, Bakkt will operate a regulated institutional-grade exchange for digital assets, initially focusing on trading and converting cryptocurrency Bitcoin to traditional currencies. The platform has been created to connect existing markets, clearing and warehousing services to an ecosystem that is expected to include merchant and consumer applications.

US-based metal 3D printing company Desktop Metal closed a $160m round, which was led by Koch Disruptive Technologies, a subsidiary of chemicals and energy conglomerate Koch Industries. Other corporate backers included GV, the corporate venturing vehicle of Alphabet, electronics producer Panasonic and hardware provider Techtronic Industries. The funding will be used to develop the company’s additive manufacturing technology and scale it. Founded in 2015, Desktop Metal has developed 3D metal printers for use in both office and industrial settings.

China-based oncology drug developer Antengene closed a $120m series B round backed by insurance company Taikang and pharmaceutical firms Celgene and WuXi AppTec. Private equity firms Boyu Capital and FountainVest Partners co-led the round. WuXi AppTec invested through corporate venturing vehicle WuXi Corporate Venture Fund. Antengene is developing cancer therapies with a focus on those with a high unmet medical need in China and the Asia-Pacific region. The company has five candidates in development, including lead assets targeting hepatitis B virus positive hepatocellular carcinoma and other types of cancer, including multiple haematological malignancies and solid tumours.

MONTHLY ANALYSIS

Exits

In January, GCV Analytics tracked 16 exits with corporate venturers participating as either acquirers or exiting investors. The transactions included one initial public offering and 15 acquisitions.

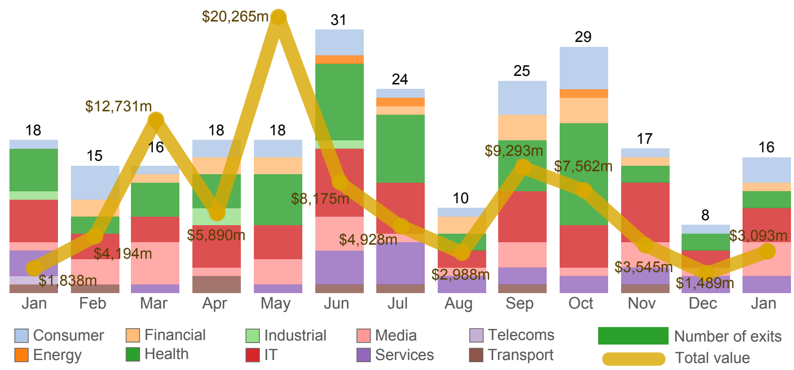
The number of exits was higher than December, when there were only eight. Total estimated exited capital amounted to $3.09bn, up 107% from the $1.49bn estimated for the previous month.

OLX Group, a classified listings subsidiary of e-commerce and media group Naspers, paid $1.16bn to increase its stake in Russia-based online classifieds and property listings platform Avito to 99.6%. Naspers had increased its stake over various funding rounds. Avito maintains an online classified listings platform with 10.3 million daily visitors covering property, consumer goods, vehicles, services and jobs. OLX covers five continents with a total of 350 million monthly active users.

Mass media company Viacom agreed to acquire US-based online television streaming service Pluto TV for $340m, enabling corporate media and entertainment groups Sky, ProSiebenSat.1, UTA, Universal Music Group, Samsung Scripps and Windsor Media to exit. Pluto has an online platform with more than 12 million monthly active users who can stream content from more than 100 customised channels through connected TVs or mobile apps. Viacom said it was buying the company to enhance its presence in new distribution platforms and advanced advertising activities.

Medical device manufacturer Boston Scientific acquired the rest of the shares in one of its portfolio companies, US-based mitral regurgitation system developer Millipede Medical, for $325m. Millipede will receive an additional $125m payment based on an unspecified commercial milestone. Founded in 2012, Millipede is developing a medical device to treat patients with severe mitral regurgitation – a condition that causes blood to flow the wrong way in the heart – who cannot tolerate open-heart surgery. The device is inserted through a transcatheter procedure and can be administered either as a standalone therapy or in conjunction with other treatments.

Exits by month Jan 2018-Jan 2019



Maoyan Entertainment, a China-based online film ticketing platform backed by corporates Enlight Media, Tencent and Meituan Dianping, raised $250m in an IPO. The company floated at the foot of the HK$14.80 ($1.89) and HK$20.40 range it had set earlier, at a $2.2bn valuation, issuing 132 million shares on the Hong Kong Stock Exchange. Formed in 2012 as a subsidiary of group buying platform Meituan, Maoyan runs an online cinema ticketing platform that had 130 million monthly active users by September 2018. The company is the exclusive film ticket vendor for Meituan Dianping, the local services platform formed by Meituan's merger with Dianping.

CloudEndure, a US-based data recovery technology developer backed by corporates including IT services provider Infosys, was acquired by e-commerce and cloud computing firm Amazon for $200m. Infosys was to divest its stake in CloudEndure for approximately $15.3m. Founded in 2012, CloudEndure has developed a cloud migration and disaster recovery platform to move data between physical, virtual and cloud-based infrastructures. The software offers continuous backups to prevent data loss.

Samsung agreed to buy Israel-based portfolio company and smartphone camera technology producer Corephotonics in a $155m deal that gave exits to several corporates, including Samsung's venturing unit Samsung Ventures, memory card maker SanDisk and hard disk provider Western Digital. Corephotonics designs dual-camera technology that helps mobile device users take professional photographs, integrating capabilities such as optical zoom, low-light performance, depth features and optical image stabilisation

E-commerce firm Alibaba acquired Germany-based Data Artisans for €90m ($103m), allowing retail group Tengelmann and semiconductor and data technology producer Intel to exit. Founded in 2014, Data Artisans has developed a data-stream processing platform based on Apache Flink, the open-source software created by the company's founders. The platform enables enterprises to build applications capable of reacting to data in real time. Alibaba had been a Data Artisans partner since 2016, and the company described it as one of the biggest contributors to its codebase.

Educational app developer Byju's acquired US-based connected toy maker Osmo in a $120m deal that provided several corporate investors with exits, including toy producer Mattel, educational publisher Houghton Mifflin Harcourt, television producer Sesame Workshop and real estate developer JF Shea. Founded in 2013, Osmo builds and sells educational toys, puzzles, board games and robots that are connected to online apps for children between five and 12.

MONTHLY ANALYSIS

Top 10 exits Jan 2019

Company	Location	Sector	Type	Acquirer	Size	Exiting investors
Avito	Russia	Services	Acquisition	Naspers	$1.6bn	Accel Partners | Kinnevik | Naspers | Northzone | Vostok New Ventures
Pluto TV	US	Media	Acquisition	Viacom	$340m	Chicago Ventures | Great Oaks Venture Capital | Luminari Capital | Pritzker Group Venture Capital | private investor | ProSiebenSat.1 | Sallfort Privatbank | Samsung | Scripps Networks Interactive | Sky | Thirdwave Capital Partners | United Talent Agency | Universal Music Group | US Venture Partners | Windsor Media | undisclosed investors
Millipede Medical	US	Health	Acquisition	Boston Scientific	$325m	Boston Scientific | undisclosed investors
Maoyan	China	Consumer	IPO		$250m	Enlight | Meituan-Dianping | Tencent
CloudEndure	US	IT	Acquisition	Amazon	$200m	Dell | Infosys | Magma Venture Partners | Mitsui | private investor | Teramips Technologies | undisclosed investors | VMWare
Corephotonics	Israel	Consumer	Acquisition	Samsung	$155m	Amiti Ventures | Beijing Singularity Power Investment Management | BetaAngels Partners | CE Ventures | CK Telecom | Hon Hai | Horizon Ventures | iVentures | LSG Industrials | Magma Venture Partners | MediaTek | Mizmaa Ventures | OurCrowd | Radiant Venture Capital | Samsung | Sandisk | undisclosed investors | Western Digital
Osmo	US	Consumer	Acquisition	Byju	$120m	Houghton Mifflin Harcourt | JF Shea (Shea Ventures) | Mattel | Sesame Workshop
Data Artisans	US	IT	Acquisition	Alibaba	$103m	BtoV Partners | Intel | Tengelmann
Sailthru	US	Media	Acquisition	CM Group	–	AOL | Benchmark | Gotham Ventures | Occam Partners | RRE Ventures | Scale Venture Partners
Quovo	US	Financial services	Acquisition	Plaid	–	Fidelity | Long Light Capital | Napier Park Global Capital | Power Financial Corporation | Salesforce

Quovo, a US-based investment and brokerage aggregation platform backed by enterprise software producer Salesforce, agreed to an acquisition by banking technology provider Plaid. Financial terms of the acquisition were not officially disclosed, but sources told Bloomberg the deal would be worth up to $200m after taking into account performance bonuses. Founded in 2009, Quovo has developed software that offers financial analytics and data management to investors with bank-level security measures, providing features such as automated clearing house payments, stress tests and internal audits. Plaid, which has developed technology enabling apps to connect to a user's bank account, will use Quovo to expand its capabilities to a wider range of assets.

US-based marketing technology provider CM Group acquired Sailthru, a US-based digital marketing software creator that had raised funding from internet company AOL's now defunct AOL Ventures unit, for an undisclosed amount. Founded in 2008, Sailthru operates a digital marketing platform that exploits artificial intelligence and predictive analytics for marketing across email, web and mobile distribution channels. The platform can automate mailshots and predict how consumers are likely to engage with a client's brand. ◆

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