

Global Corporate Venturing







Dentons nyc/sf



Quinn Li, Qualcomm Ventures

GCV Digital Forum

Understanding what the community wants to achieve



Christie Pitts, Backstage Capital

GCV Digital Forum review

Spacs mania unpicked

Japan blossoms

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As telecommunications connect our ever more digitised world it is one of the most highly competitive sectors. Telecom companies must continually make significant outlays of capital and innovate, to stay afloat and remain relevant.

Kaloyan Andonov reveals that with high levels of competition and high capital requirements, the telecoms sector has been among the most technologically disrupted ones. This is why industry incumbents are likely to continue to look for synergies and partnerships with other service providers, including young and innovative businesses.



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Global Corporate Venturing

Editorial

History rhymes rather than repeats



By James Mawson Editor-in-chief

There are sometimes seminal moments to capture the zeitgeist. One that could be about to happen is when venture capital-backed companies account for half of total US stockmarket capitalisation.

Already, venture-backed companies account for 41% of market cap and, given they are responsible for 62% of US public companies' research and development (R&D) spending and a surge in flotations in the past year through the special purpose acquisition company mania to buy corporate venture-backed startups (see analysis), it seems only a matter of time until they cross the 50% threshold. The six largest US companies (Apple, Microsoft, Alphabet (Google), Amazon, Facebook and Tesla) by market capitalisation at the end of last year received most of their early external financing from venture capitalists.

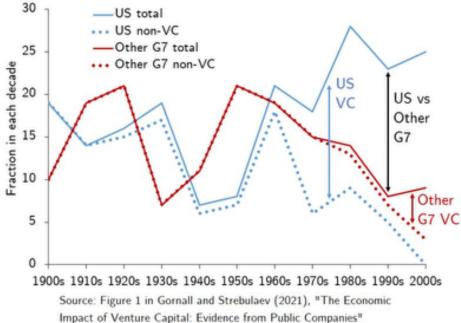
They collectively have contributed over \$7 trillion to the US stock market over the past decade and accounted for more than onequarter of the US stock market growth over that period, according to academics Will Gornall and Ilya Strebulaev at University of British Columbia and Stanford University, respectively, in their paper, The Economic Impact of Venture Capital: Evidence from Public Companies. Among public companies founded within the past 50 years, VC-backed companies account for half in number, three quarters by value, and more than 92% of R&D spending and patent value, the academics added.

Strebulaev said while the creation and growth of companies was generally lumpy, because of macroeconomic trends and fluctuations (and in the long-term because of impact of other forces such as wars), "the VC industry adds a large layer of creative activity on top of this lumpiness". as a natural experiment, the academics suggests "the US VC industry is causally responsible for the rise of one-fifth of the current largest 300 US public companies and that three-quarters of the largest US VC-backed companies would not have existed or achieved their current scale without an active VC industry".

The blurring of public and private capital markets in terms of liquidity, flow between them and potentially governance is seminal.

The Economist recently highlighted an interesting paper by

Number of Top Public Companies Founded in each Decade in the US and Other G7 Countries



https://papers.ssrn.com/abstract=2681841

The US did not spawn top public companies at a higher rate than other large, developed countries prior to Employee Retirement Income Security Act of 1974 and its reforms that decade to allow commitments to venture capital (VC) funds, but produced twice as many after it. Using those reforms Xavier Gabaix and Ralph Koijen, of Harvard and the University of Chicago respectively, about how flows of money move stock prices.

This has always been pretty selfevident in the private markets but less so for public markets. The standard picture for share prices, as the Financial Times noted last month, is one in which stock prices reflect only information (or at least beliefs) about fundamental value, ie some version of future cash flows, rather than supply and demand, that is – flows.

The standard model was developed during a period of relatively high retail shareholdings – the era of so-called people's capitalism – but since the 1980s the rise of market capitalisation of the main indices reflects institutional investors.

These big buyers are often the pension funds, life assurers, banks and mutual or exchangetraded funds working under strict mandates governing their portfolio mix. When an investor gives such a fund a fresh \$1 to invest in stocks ("money going in"), the fund must put it to work according to its mandate, the FT notes. When a retail shareholder invests through Robinhood in a stock it is more discretionary based on the price or alternatives available, such as going out to a restaurant or having a meme to talk about to friends online through covid-19 lockdown.

By contrast, the flow of money going in or out of VC relatively has clearly always impacted valuations.

During the first golden age of VC investing – the silicon and software era from 1980 to 1997 – VCs posted average quarterly returns of 22% as there was relatively little money around immediately after the change in pension fund regulations at the start of that period.

Research by University of Chicago economists Steve Kaplan and Antoinette Scholar found that VC funds outperformed the S&P 500 on a capital-weighted basis over the same time period.

But the Netscape flotation in 1994 and subsequent boom in initial public offerings (IPOs) for lossmaking startups quickly saw a 250% increase in VC-backed deals between 1997 and 2000 and a quintupling of investment dollars as limited partners flocked to commit to VC funds.

The dot-com implosion after the millennium meant few exits and hence less interest in backing VC funds to do new deals.

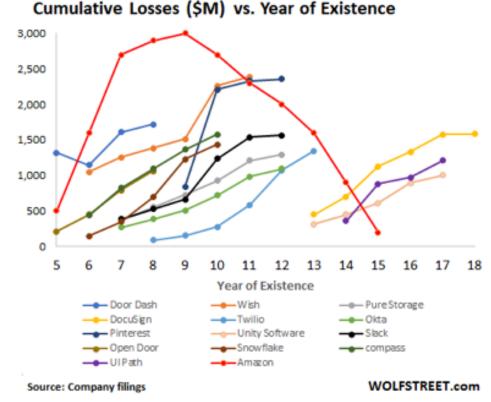
From 17 IPOs per week in the US in 2000 this dwindled to 15 IPOs in 2008 and 2009 combined while the total number and value of investments in 2009 (2,800 deals raising an aggregate \$17bn) was less than the year-2000 peak of nearly 8,000 deals raising \$100bn, according to Thomson Reuters.

The past decade, of course, has seen this momentum swing back to abundance led by strategic investors initially and increasingly by institutional investors directly backing startups rather than indirectly through VC funds.

The second quarter of 2021 seems to be just another page in this bullish story, with virtually every metric tracked by GCV Analytics reaching a record high.

The number of rounds was 49% higher than in Q2 2020, with capital up 161%.

GCV Analytics tracked 1,263 funding rounds involving corporate venturers during the second quarter of this year, a 49% surge above the 846 rounds recorded in Q2 2020. The estimated total investment dollars stood at \$75.04bn, up nearly 161% from



the \$28.69bn recorded during the same period last year.

Comparing Q2 2021 with the previous quarter, there was a significant increase in the deal count, going up 23% from the 1,025 in Q1 this year. Estimated total investment also went up by 32% from \$56.74bn.

This meant the first half of the year registered a total of 2,288 deals with an estimated total capital deployed of \$131.78bn, which is more by value than the peak 12 months for venture in the year 2000.

If the flow of money signifies signals a return to the dot com bubble era of rising valuations then a crash could follow when fundamentals reassert themselves.

According to The Economist's calculations, those startups that have floated in 2021 made a cumulative loss of \$25bn in their latest financial year.

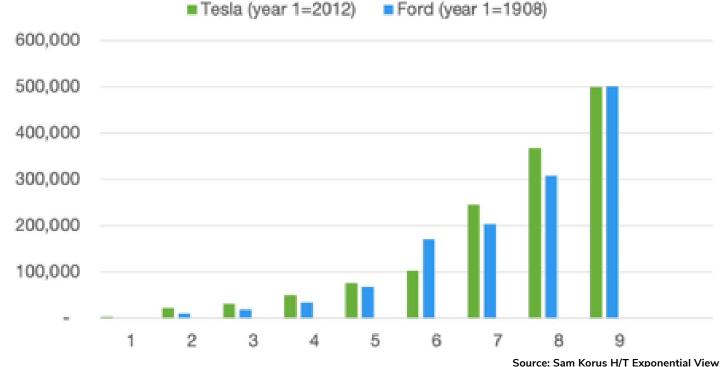
Comparing the cumulative losses over time of selected startups that did float found many of these startups have huge valuations even as often their losses are growing, according to Wolf Street. Other than Pinterest, none of the startups in this chart suggest they are close to a turnaround in cumulative losses, analyst Jeffrey Funk said.

Negative earnings will sap even the most ardent spirits over time.

The froth has this summer already come off the special purpose acquisition companies that listed in search of the more speculative, venture-backed startups to buy.

But history tends to rhyme rather than repeat.

The ultimate flow of capital underpinning private capital markets comes from their blurring with public markets. The drag from lack of liquidity and higher bid-ask spreads in secondaries markets shows the clear improvements



that can come from greater transparency and efficiency of allocating capital and resources to those who can use it best – whether in public or private hands.

If this continues as expected through decentralised finance and other initiatives then the level of deal and fundraising activity could be expected to remain high.

And it is clear the innovation trends and patterns that drew in the strategic investors from 2010 onward are still there. Whether in healthcare, financial services, energy, commerce, industry, communication and media or any other sector the waves of disruption are bigger and coming perhaps faster than ever before.

To take one example, electric vehicle maker Tesla sales are on par with early Ford Model T sales, according to Sam Korus's analysis.

And Tesla is more than a maker of cars. Tesla is making impressive progress in artificial intelligence with a cost advantage that is nearly an order magnitude better than peers, according to semiconductor analyst, Dylan Patel.

"From core research to chips to the company's ability to handle training data, Tesla is stepping ahead of the competition, and demonstrating the power of its increasingly integrated model," according to Azeem Azhar's Exponential View blog.

The power of innovation comes less from a good idea or business model but developing multiple ideas across multiple sectors. And here corporate venturing is the nexus to drive mergers and acquisitions, research and development and innovation by tracking multiple sectors for threats and opportunities.

The key is to remain committed and avoid the swings into and away from the industry. Moving earlier or later stage or into or away from countries or sectors as values dictate is understandable and reflects strategy as much as tactical awareness. But the hard work Source. Sam Korus H/T Exponential view

remains building a skilled team able to source, manage and exit deals and landing the value created back into the parent as well as the entrepreneur's hands.

Consistently achieving this is hard but as we emerge from the summer months the tools to network. learn and share are coming back onstream so we at Global Corporate Venturing look forward to seeing you at the GCVI Summit and our other in-real life and hybrid events, helping your professional development and benchmarking through the GCV Institute and keeping you up-todate and with the resources to advance the industry through our reports, publications, analytics and GCV Connect powered by Proseeder platform.

As ever, let us know how we can help your work making the world a better place through the efficient allocation of capital to those who can use it best and do fill in our <u>annual survey</u>.

News

Olive launches venture studio

- > Kingsoft kicks into \$154m Shunwei Capital fund
- > AgFunder ends \$21m New Carnivore fundraise
- > B2Broker launches VC fund

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

Olive, a US-based healthcare management software producer backed by internet and technology group Alphabet, has unveiled an internal venture studio called Olive Ventures.

Through the unit, Olive seeks to provide funding and development support for digital healthcare startups. Participating companies will have access to its technology and insights to accelerate the development and commercialisation of their products.

Olive Ventures is already working with two companies: Violet, the creator of a digital banking platform for health patients with large medical bills, and Rotera, a developer of artificial intelligence-equipped healthcare automation tools.

Kingsoft kicks into \$154m Shunwei Capital fund

Shenzhen Shunying Private Equity Investment, a sub-fund of China-based venture capital firm Shunwei Capital, is looking to raise RMB1bn (\$154m) for a new fund from investors including software producer Kingsoft, DealStreetAsia reported last month.

Kingsoft has agreed to make a \$77m capital commitment and will own a 50% stake in the vehicle, according to a stock exchange filing.

Jiaxing Shunchuang Investment, possibly an affiliate of adhesive product maker Jiaxing Shunchuang, has agreed to pay \$76m for a 49.9% stake, and Shunwei Capital's affiliate Tianjin Shuncheng Investment Management will provide the remaining funds.

AgFunder ends \$21m New Carnivore fundraise

US-based agriculture-focused investment and media platform AgFunder closed its New Carnivore fund at \$21m, with commitments from food processor Archer Daniels Midland (ADM) and real estate investment trust Alexandria Real Estate Equities.

ADM and Alexandria Real Estate Equities committed capital to the vehicle through investment subsidiaries ADM Ventures and Alexandria Venture Investments, respectively. A number of unnamed corporate, institutional and high-net-worth investors also backed the fund.

The oversubscribed New Carnivore fund is investing in companies developing alternative protein products such as plant-based meat, dairy and materials.

B2Broker launches VC fund

B2Broker Group, a Russia-based liquidity and technology provider for the crypto and FX markets, has launched a \$5m venture fund, B2Broker VC, to focus on external investments.

The vehicle will mainly invest in companies involved in financial technology, IT development and automation, along with products and services that complement B2Broker's existing activities, such as marketing services and products for the brokerage market.

B2Broker VC will make investments in the form of both equity funding and convertible debt financing to maximise flexibility. B2Broker Group had already been investing through an internal corporate venture fund since 2017, focusing on developing its own specific projects, and has deployed over \$15m to date.

Yossix rides to corporate venturing vehicle

Japan-based restaurant chain operator Yossix Holdings has formed a corporate venture capital and mergers and acquisitions arm called Yossix Capital with an undisclosed amount of capital. Founded in 1985, Yossix focuses on the food and beverage and construction sectors, running sushi eateries and izakayas – Japanese pubs – under several brands, and building and designing stores and food catering establishments across its home country.

The group intends to use its experience in the food service and infrastructure industries to enter the child and elderly care space.

The fund will invest in or acquire companies strategic to its core businesses, particularly developers of food technology, business property interior design and retirement home services.

Alconix hammers out corporate venturing fund

Japan-based non-ferrous metal product manufacturer Alconix has formed a ¥3bn (\$27.3m) corporate venturing subsidiary dubbed Alconix Ventures.

Founded in 1981 as Nissho Iwai Non-Ferrous Metals, Alconix produces and sells non-ferrous metal materials, particularly aluminium and copper-based products.

Alconix Ventures' first fund, Alconix Global Innovation



Japan-based restaurant chain operator Yossix Holdings has formed a corporate venture capital arm called Yossix Capital

Investment Business Limited Partnership, is set to operate for 10 years and will target developers of advanced materials and manufacturing technologies.

The unit will leverage Alconix's resources and external advisers' fund management know-how, and its parent firm intends to incorporate ideas and technologies developed by its portfolio companies into its business.

Centauri Fund collects K-Growth commitment

Centauri Fund, an investment vehicle jointly formed by telecommunications firm Telkom Indonesia and financial services firm KB Financial Group, has received KRW10bn (\$8.5m) from fund-of-funds manager Korea Growth Investment Corporation (K-Growth), e27 has reported.

The \$150m fund was launched in December 2020 and focuses on early-stage companies in Southeast Asia with the potential to apply their business models overseas. It initially invests between \$1m and \$5m in rounds from pre-series A to series B stage.

The fund is managed by KB Financial Group's KB Investment subsidiary and MDI Ventures, the corporate venturing arm of Telkom Indonesia.

MDI Ventures managing partner Kenneth Li and KB Investment CEO Kim Jong Pil head up the vehicle, which typically invests in the machine learning and financial technology sectors.

V Fund vaults to RMB fund's first close

China-based private equity firm V Fund has held a first close of its latest renminbi-denominated fund with commitments from a number of unnamed corporates, DealStreetAsia has reported.

The firm's assets under management now stand at \$1.5bn following the first close. The latest fund's limited partners include undisclosed conglomerates, publicly-listed companies, investment firms and governmentbacked funds.

Founded in 2014, V Fund typically invests across a range of industrial technology and manufacturing sectors. The new vehicle is set to deploy capital across the automotive, intelligent manufacturing, semiconductor and corporate services sectors.

Fontinalis wraps up \$104m fund

US-based mobility-focused venture capital firm Fontinalis Partners has closed its third fund, Fontinalis III, at \$104m with commitments from limited partners including car manufacturer Ford.

Over 30 limited partners made commitments into Fontinalis III, including corporate investors in the automotive and insurance industries, as well as institutional investors, family offices and individuals.



Fontinalis' third fund, includes car maker Ford

The vehicle will focus on seed to series B rounds, targeting mobility specialists and enabling technologies that it deems as having an outsized impact on mobility. It has reportedly already made five series A investments and participated in six seed rounds.

GSK Next sets up healthcare incubator

GSK Next, the innovation arm of pharmaceutical firm GlaxoSmithKline (GSK)'s Consumer Healthcare business, is setting up a startup studio called Re/Wire Health Studio alongside venture capital firm R/GA Ventures.

The studio is being set up as a platform to discover, incubate and scale healthcare-focused companies, particularly as it relates to diagnostic solutions. Its main focus areas will include oral health, women's health and mental resilience.

Applications are being sought from early and growth-stage companies around the world whose technologies could disrupt consumer healthcare markets. Six will ultimately be chosen to take part in the process.

R/GA Ventures will be responsible for the operation of the studio, which will look to identify opportunities to team up with GSK and benefit from market access and other resources to scale on a global level.

Henkel helps enrich Richland Capital Fund III

Henkel Adhesive Technologies, a subsidiary of consumer goods conglomerate Henkel, has committed an undisclosed amount to China-based investment firm Richland Capital's third fund through its Henkel Tech Ventures vehicle. Richland Capital Fund III targets developers of advanced materials, manufacturing equipment and digital technologies in addition to digital business models.

Its limited partners (LPs) also include corporate venturers Saint-Gobain, Solvay Ventures and Asahi Kasei Ventures.

Refinable readies \$150,000 investment vehicle

Hong Kong-based non-fungible token (NFT) marketplace Refinable has formed a \$150,000 development fund targeting blockchain-powered gaming technology developers, Tech in Asia has reported.

Founded earlier this year, Refinable operates an NFT-fuelled digital content trading platform on Binance Smart Chain, the blockchain contract service of crypto exchange Binance.

The marketplace enables users to buy and sell works of graphic art with unique signatures to prove their authenticity. Binance had joined YouTube personality MrBeast to provide \$3m in funding for the startup in April 2021.

AppWorks reaches \$150m close for Fund III

Taiwan-based startup accelerator

and venture capital firm AppWorks has closed an oversubscribed \$150m third fund featuring a range of corporates among its limited partners.

Insurers Cathay Life, Fubon Life and TransGlobe Life, property developer Hongtai Group, flash memory chipmaker Phison Electronics, mobile network operator Taiwan Mobile and IT original design manufacturer Wistron contributed to Fund III, as did Axiom Asia Private Capital and Taiwan's National Development Fund.

Founded in 2009, AppWorks targets entrepreneurs in the greater Southeast Asia region, which includes its home country. It concentrates on developers of artificial intelligence and blockchain-equipped mobile commerce technology as well as hardware and software for the internet of things.

Dream Sports blows whistle on \$250m fund

India-based fantasy sports game operator Dream Sports has launched a corporate venture capital arm called Dream Capital with \$250m in cash, the Economic Times has reported.

Dream Sports runs Dream11, an

online fantasy sports game that allows users to assemble teams for individual rounds of league games in sports such as cricket or football in order to win money.

The newly formed fund will invest in early-stage companies across areas such as gaming, sports and fitness technology, and the deals are expected to support Dream Sports' expansion into adjacent areas to fantasy sports. The capital has come from its balance sheet.

Northwestern Mutual moulds \$100m inclusion fund

US-based financial services group Northwestern Mutual has formed a \$100m vehicle dubbed Impact Investing Fund targeting black entrepreneurs based in the city of Milwaukee, in the state of Wisconsin.

The fund will focus on developers of physical and social infrastructure, capital access for private and enterprise customers and sustainable development in neighbourhood and community planning.

Impact Investing Fund has also put up \$30m for venture capital vehicles investing in black, African American and other minority groups, including financial services firm Siebert Williams Shank's Clear Vision Fund.



AppWorks concentrates on developers of blockchain-equipped mobile commerce technology

Scotts Miracle-Gro seeds cannabis investment vehicle

US-headquartered lawn and garden product manufacturer Scotts Miracle-Gro launched a corporate venture capital arm last month called The Hawthorne Collective to invest in companies in the cannabis industry.

The fund is an offshoot of The Hawthorne Gardening Company, a subsidiary formed by Scotts Miracle-Gro in 2014 to serve the cannabis industry with hydroponic and indoor gardening products. The United States first began legalising cannabis on a state level in 2012.

Hawthorne Collective's first move has been to issue a \$150m sixyear convertible note to Canadalisted investment and acquisition firm RIV Capital that would give it a 42% stake upon conversion.

The deal will make RIV the focal point of investments not currently in Hawthorne Gardening Company's immediate domain, though it will not have any direct involvement in RIV's operations.

SoftBank Vision Funds post \$2.14bn profit

Telecommunications and internet group SoftBank's Vision Funds booked a ¥236bn (\$2.14bn) annual profit in the first quarter of 2021, according to earnings results published in August.

The news came after SoftBank increased the size of its Vision Fund 2 to \$40bn in July this year, securing consumer electronics manufacturer Apple and software producer Microsoft as limited partners, having first boosted its size from \$10bn to \$30bn two months before. South Korea-based e-commerce platform Coupang, a Vision Fund portfolio company, floated on the New York Stock Exchange (NYSE) in March in a \$4.55bn initial public offering at a \$63bn market capitalisation and helped book over \$20bn in paper profits for the fund.

Corporates help Cowin raise \$150m for fund

China-based venture capital firm Cowin Ventures has secured more than \$150m for an oversubscribed dollar-denominated fund from limited partners featuring locomotive builder CRRC Times and logistics services group Xiamen Xiangyu.

China's Ministry of Science and Technology's Innovation Fund Management Centre, SDIC Chuanghe National Emerging Industry Venture Capital Guiding Fund and Oriza Holdings also committed capital, as did unnamed funds of funds and family offices.

Founded in 2009, Cowin Ventures focuses on technology, media and telecommunications as well as healthcare investments for developers based in its home country in addition to North America and Europe.

Corporations commit to Elevate Future Fund

US-based venture capital firm Energy Impact Partners has raised more than \$60m for its Elevate Future Fund, from corporate limited partners including corporates Microsoft, Southern Company, Fortis, Alliant and Xcel.

The fund will back underrepresented entrepreneurs and communities advancing the low carbon economy, including supply decarbonisation, electrification, technology-enabled infrastructure, intelligent demand, reliability and resilience. The news follows reports earlier in August Xcel would co-chair the fund.

In addition to its direct investments, the Elevate team said it would form partnerships with technology accelerators and universities, including historically black colleges, to nurture talent, promote infrastructure and support systems to retain talent from underrepresented groups.

Zain sets up ventures unit with first deals

Kuwait-based telecommunications firm Zain Group has set up a corporate venturing unit and struck its first deals.

Zain Ventures will invest in digital innovations in electronic services. Its parent company had already committed to venture capital funds for firms such as Colle Capital Partners, Wamda, EarlyBird Venture Partners and Middle East Venture Partners.

The unit's first deals are Pipe the US-based developer of a digital trading platform for recurring revenues, and Swvl, a USheadquartered mobility service provider for mass transit in emerging markets.

McCluskey sets up CMFG Ventures' impact fund

Cuna Mutual Group, the US-based financial services provider formerly known as Credit Union National Association, has committed \$15m to set up a minorities-focused impact investment fund through its corporate venturing unit, CMFG Ventures.

Elizabeth McCluskey, who had joined CMFG Ventures from Impact Engine, a women-owned and led



venture capital and private equity firm, will run the Discovery Fund.

The vehicle will invest in earlystage companies with diverse founding teams targeting the financial technology industry.

CMFG Ventures has invested more than \$200m in 28 companies over the past five years, primarily focusing on series A and B rounds.

SoftBank commits to Housenbold's new fund

SoftBank's second, \$30bn Vision Fund reportedly plans to invest \$100m in a new fund started by Jeffrey Housenbold, former managing partner at telecommunications and internet group SoftBank's first, near-\$100bn Vision Fund, according to the Financial Times.

Honor Ventures aims to raise between \$500m and \$600m for investments in consumer tech startups, according to a presentation viewed by the Financial Times. This would make it one of the largest first-time venture funds at its targeted size.

Honor would look to invest between \$20m and \$50m in each deal and accept no more than \$1bn in capital, according to the presentation.

Pascucci raises debut fund with five corporations

Energy Capital Ventures (ECV), a US-based venture capital firm targeting the natural gas distribution industry, has raised \$45m for its debut fund with commitments by five publiclytraded utilities.

ECV said it would work collaboratively with its corporate limited partners: Avista Utilities, Black Hills, NiSource, Southwest Gas and Spire. The fundraising came after NGIF Capital, a Canada-based venture capital firm focused on natural gas-related technology ultimately owned by industry association Canadian Gas Association, completed a C\$50m (\$39.7m) second close of its debut fund in July.

Vic Pascucci III, managing general partner of ECV and former head of corporate venturing at financial services provider USAA, set up ECV last year.

Shiseido sets up venture fund in China

Japan-headquartered cosmetics brand Shiseido has set up a corporate venturing unit in China called Shiseido Beauty Innovations Fund that will be managed by venture capital firm Boyu Capital.

Shiseido said it was the first fund based in mainland China to have a beauty company as a sole limited partner. It will back emerging Chinese cosmetics and wellness brands as well as developers of products in related areas such as e-commerce services and consumer experience technology.

Shiseido established its China Business Innovation and Investment Office in Shanghai in 2019 under Carol Zhou as



Boeing has spun off its CV unit

an operational hub to promote innovations in existing businesses and new business development.

Games Fund adds \$17m in commitments

US-based venture capital fund The Games Fund has added \$17m from limited partners including mobile game publishers Scopely and Com2us to its coffers, VentureBeat has reported.

The Games Fund expects to close the vehicle at \$50m later this year and will invest in developers of mobile, PC and console games, in both Europe and the US.

Maria Kochmola and Ilya Eremeev started the fund having both previously worked at Russia-listed internet group Mail.ru's My.Games division, which had started a game-focused fund called MGVC.

Kochmola had been the investment director at MGVC since its inception in 2017, and she led more than 35 investments (with six exits).

Boeing spins off HorizonX with AE Industrial

Boeing, a New York-listed plane maker, has spun off its corporate venturing unit, HorizonX Ventures, in a secondaries deal with AE Industrial Partners (AEI), a capital provider to the aerospace industry with \$3.5bn in assets under management.

The move follows a similar restructuring of peer Airbus's 67 innovation vehicles into the Airbus InnovationX unit under Christian Lindener and Airbus Ventures under managing partner Thomas d'Halluin over the past 15 months as covid-19 impacted travel.

The independent and expanded venture capital group, AEI HorizonX, will initially manage the 40 portfolio companies backed by Boeing and then look to make new investments. Its size has not been disclosed.

The current HorizonX Ventures team, led by Brian Schettler – a GCV Powerlist 2020 award winner – since its launch in 2017, will move to AEI HorizonX with its current portfolio. Schettler will lead the new platform and become a partner at AEI.

Angelini Pharma commits to Lumira-managed funds

Angelini Pharma, part of the privately owned Angelini holding company based in Italy, has set up its corporate venturing group with an initial \$35m.

The Angelini Lumira Biosciences Fund (ALBF) will be managed by Lumira Ventures, a Canada-based life sciences-focused venture capital firm. Angelini Pharma has also committed \$5m as a limited partner in Lumira Ventures IV, a \$220m life sciences fund, announced in June.

ALBF will invest in early-stage companies in Canada and the US that are developing pharmaceutical therapies for central nervous system disorders (CNS) and rare diseases.

Best Buy commits \$10m to BIPOC firm

Consumer electronics retailer Best Buy has committed \$10m to USbased venture capital firm Brown Venture Group's inaugural fund, which is targeting a \$50m close.

Brown Venture Group was founded in 2018 to support entrepreneurs of colour that have encountered difficulties in accessing capital and experienced economic barriers to contribution. The firm invests exclusively in startups led by Black, Latino and Indigenous entrepreneurs who are developing emerging technologies in a variety of sectors, including clean energy and retail, across the US.

In addition to the financial backing provided, Best Buy plans to work together with Brown Venture Group with the aim of developing a stronger community of diverse suppliers.

Arise attracts Metrodata Electronics

Arise, the Indonesia-based investment fund co-founded by telecoms firm Telkom Indonesia's corporate venturing unit MDI Ventures, has achieved a first close thanks to limited partners including IT company Metrodata Electronics, according to DealStreetAsia.

LPs that have backed the first close also include unnamed corporates, family offices and private investors. The fund has a \$40m target, but it is unclear how much has been secured to date.

Arise was formed by MDI Ventures in partnership with venture capital firm Finch Capital in November 2020. The fund aims to invest in 25 technology companies across Southeast Asia over the next three



Best Buy has committed \$10m to Brown

years, with at least five investments to be made by the end of this year.

The vehicle will invest between \$250,000 and \$3m per deal, and will also back very early-stage startups where founders are still formalising their ideas and building teams.

Trimble constructs \$200m corporate venturing fund

US-based engineering firm Trimble formed a \$200m corporate venture capital subsidiary last month to back early and growthstage companies operating in the agricultural, construction, geospatial and mobility industries.

Trimble Ventures will concentrate on areas including artificial intelligence-equipped hardware and software tools, augmented, virtual and mixed reality systems, automation and robotics technology, blockchain, the internet of things, data analytics and sustainability.

Founded in 1978 as Trimble Navigation, the firm initially provided satellite navigation hardware and software processing products before adding industrial technologies to its offerings covering agriculture, construction, logistics and geospatial applications.

Moderne Ventures closes second fund on \$200m

US-headquartered early-stage venture capital firm Moderne Ventures has held a \$200m final close for its second fund, with commitments from several real estate firms.

The fund's LP base includes real estate developer Greystar, real estate services firm Realogy, real estate investment trusts AvalonBay Communities, Camden Property



Trust and JBG Smith and real estate association Leading Real Estate Companies of the World, as well as alternative asset manager Oaktree Capital Management.

The fund invests in startups developing technology across the real estate, finance, insurance and home services sectors. It has already inked seven deals, deploying tickets between \$4m and \$7m in late seed to early series B rounds, targeting companies with revenue in the \$2m to \$10m range, according to TechCrunch.

Harvest Capital collects \$124m

China-based private equity firm Harvest Capital has raised \$124m from real estate logistics provider GLP and venture capital firm Sequoia Capital China, both of them new limited partners, DealStreetAsia has reported. It is unclear which fund specifically GLP and Sequoia have invested in.

Founded in 2007, Harvest Capital now has approximately \$3bn in

assets under management, with a portfolio that includes companies such as local services listings platform Meituan, ride hailing services provider Didi Chuxing and insurer Taikang Insurance.

The firm previously attracted \$74m from Hongtai Hengye Investment in 2018, before achieving a first \$464m first close of its consumer service investment fund.

Xcel Energy elevates EIP's latest fund

US-based electricity and natural gas utility company Xcel Energy has committed an undisclosed amount to venture firm Energy Impact Partners' latest fund, dubbed Elevate Future Fund.

In addition to being a limited partner, Xcel will co-chair the vehicle, which aims to support clean energy companies owned by diverse and underrepresented groups in the sector.

The Elevate fund has already made three investments in US-based companies with diverse founders. One of the commitments was in ChargerHelp, an on-demand repair services app for electric vehicle charging stations, owned by black women. The fund also invested in Project Canary, an international environmental standards developer, and injected capital into HopSkipDrive, a provider of safe and dependable youth transportation for schools, districts, government agencies and families.

Klarna kicks off two initiatives

Sweden-headquartered payment software provider Klarna launched a £3m (\$4.2m) initiative dubbed Small Business Support Package last month to help 100 UK-based retail small and medium-sized enterprises overcome the covid-19 pandemic.

The support package includes free use of Klarna's products for a year along with passes for coworking spaces operator WeWork three months and £15,000 worth of media support to aid customer acquisition. The package equates to over £30,000 of support for each of the hundred businesses.



US-based electricity utility company Xcel Energy has committed an undisclosed amount to venture firm Energy Impact Partners' latest fund

Alongside the Support Package, Klarna also launched an accelerator programme, featuring a number of free training masterclasses with industry experts from various partners including WeWork and Shopify among others. The first of the sessions was held earlier that month, boasting more than 400 attendees.

ICL targets food tech and agtech

Israel-headquartered specialty minerals and chemicals company ICL has launched its ICL Planet Startup Hub innovation platform.

The programme, which will provide investment as well as mentoring, will target early to growth-stage startups in the food tech and agriculture tech space.

The initiative is premised on addressing critical global needs and making a positive and sustainable environmental impact.

Corporates help report Headline Asia's \$100m vehicle

Japan-based venture capital firm Headline Asia has closed its fourth vehicle at more than \$100m featuring various corporate limited partners (LPs), DealStreetAsia has reported.

Diversified conglomerate Abico Group, digital media company Gree's Strive fund (formerly Gree Ventures), social media platform operator Mixi and retail group Otto contributed to the fund, as did state-owned National Development Fund of Taiwan and private investor Kotaro Chiba.

Founded in 2009 as Infinity Ventures before rebranding as Headline Asia in May this year alongside fellow VC firm E.Ventures (formerly BV Capital), the firm focuses on early-stage internet, e-commerce and financial technology developers based in northeast Asia.

Airwallex founders launch \$200m strategic fund

The founders of Australia-based payment technology provider Airwallex are seeking \$200m for a venture capital fund which will back companies utilising its payment infrastructure.

Airwallex operates a crossborder payment platform which enables businesses to trade internationally by managing payments, expenses and budgets globally across a range of markets and currencies.

The fund, dubbed Capital 49, will raise capital from Airwallex's founders as well as external backers, and will invest in areas such as e-commerce, softwareas-a-service, digital technology, business services and financial technology. It has so far backed two undisclosed companies.

ANZ spins off its innovation unit

Australia-based financial services provider ANZ Bank has spun off corporate venturing unit ANZi and rebranded it as 1835i Group.

The renamed 1835i Group will operate as an independent company with two branches: 1835i Creation Lab and 1835i Ventures. The moves comes three years after ANZi was founded.

ANZ will remain the sole investor in funds managed by 1835i (the name is a nod to the foundation of ANZ in 1835 in London when the Bank of Australasia was established under Royal Charter).

NGIF closes debut fund

NGIF Capital, a Canada-based venture capital firm focused on natural gas-related technology ultimately owned by industry association Canadian Gas Association, has completed a C\$50m (\$39.7m) second close of its debut fund.

NGIF Cleantech Ventures conducted a C\$35m first close in April and said it raised an additional C\$15m in the subsequent 12 weeks.

This close adds committed capital from energy groups ARC Resources, Tourmaline Oil and Tidewater Midstream and Infrastructure, all of which took part in the first close.

MUFG starts \$185m second fund

MUFG Innovation Partners, the corporate venturing unit for Japanbased financial services provider Mitsubishi UFJ Financial Group, has launched its second fund with ¥20bn (\$185m).

The fund focuses on global financial technology startups with "strong business synergies with MUFG's banking, brokerage, trust banking, credit card and other financial businesses," according to Nobutake Suzuki, president and CEO of MUFG Innovation Partners, who rejoined the group in 2018.

The second fund also targets non-financial businesses and environmental and social-related startups which can collaborate with MUFG, he added.

RxCelerate explores corporate venturing

RxCelerate, a UK-based contract research organisation (CRO) for drug discovery and development,

has set up a corporate venture capital fund called RxCapital.

The vehicle will invest up to £1m (\$1.2m) in each company it backs and is targeting developers of therapeutics for unmet medical needs. Investments come with no requirement for the company to use RxCelerate's services.

RxCapital has made its first investment, participating in a \$35m series A round for US-based Rivus Pharmaceuticals alongside VC firm Longitude Capital and multicorporate-backed investment fund Medicxi. Rivus is developing HU6, a potential metabolic disease treatment currently in phase 2 clinical trials.

Otsuka sets up health and wellness fund

Otsuka, a Japan-based pharmaceutical and nutraceutical products manufacturer, has formalised its corporate venturing unit in the United States.

Otsuka Nutraceutical Emerging Ventures (Once Ventures) will target brands in the health and wellness space by investing in developers of active nutrition, supplements, plant-based foods and healthy beverage brands across North America looking for series A or B financing. Les Hine, CEO of Once Ventures, said: "We want to encourage and nurture [their] entrepreneurial spirit by offering young companies and their leaders access to Otsuka's technical expertise, market knowledge and capital."

Airbus flies into Seraphim

Aerospace manufacturer Airbus and Richard Branson, founder of conglomerate Virgin, have bought shares in UK-headquartered space technology investment firm Seraphim Space Investment Trust.

The deal was part of a £178m (\$247m) initial public offering for Serpahim, which operates as a fund.

Branson has set up Virgin Galactic within the wider Virgin organisation to take tourists into space, while Airbus had previously committed to Seraphim's \$95m closed-ended space technology fund in 2017.

Panakès holds \$180m first close for Fund II

Italy-based venture capital firm Panakès Partners has achieved a \$180m first close for its second fund with a commitment from pharmaceutical firm Menarini.

The Purple Fund was anchored by the European Investment Fund and FoF VenturItaly, a fund-offunds managed by VC firm CDP Venture Capital.

The vehicle is also backed by unnamed Italy-based banking foundations, pension funds, life science companies and the Cogliati, Colombo, Rovati, Petrone, Re and Bassani families.

Fifth Wall adds corporations to latest fund

New York-listed housing provider Invitation Homes and property manager Ivanhoé Cambridge have committed to US-based venture capital firm Fifth Wall's Climate Technology Fund.

The fund will invest in technologies focusing on decarbonisation within real estate. It is stage agnostic and will target areas such as materials, construction, operations and revitalisation.

Ivanhoé Cambridge has committed \$85m in total across four Fifth Wall funds, including vehicles it manages that cover retail and real estate technology in North America and Europe.

GMA Network sets up venture unit

Philippines-based media group GMA Network has formed a corporate venturing unit dubbed GMA Ventures.



Italy-based Panakès Partners has achieved a \$180m first close for its second fund with a commitment from pharmaceutical firm Menarini

GMA Ventures will operate as a holding company owned by GMA to invest in technology startups in addition to participating in mergers and acquisitions and launching strategic partnerships. It will invest domestically and internationally.

Felipe Gozon, GMA's Network chairman and CEO, is heading GMA Ventures.

Alibaba embarks on \$258m GBA Fund

China-headquartered e-commerce group Alibaba's Hong Kong Entrepreneurs Fund (AEF) is anchoring a HK\$2bn (\$258m) vehicle dubbed AEF Greater Bay Area (GBA) Fund.

GBA Fund counts undisclosed conglomerates, financial institutions and family offices among its limited partners, and is scheduled to reach its final close in the first half of 2022.

The fund will target developers of technologies in areas including deeptech and sustainability, healthcare, artificial intelligence and industry 4.0 technology. It is being managed by venture capital firm Gobi Partners.

MS&AD Ventures boosts fund to \$200m

MS&AD Ventures, the US-based

corporate venturing arm of Japan-headquartered insurance group MS&AD Holdings, has added \$80m to its fund, lifting its assets under management to about \$200m.

Formed in 2018, MS&AD Ventures invests in early-stage developers of innovative technologies and business models globally, focusing on areas including insurance, healthcare, mobility, cybersecurity and climate change.

MS&AD Ventures also helps its portfolio companies forge partnerships with MS&AD Holdings' subsidiaries in a bid to bring open innovation into the group.

Restar readies corporate venturing initiative

Japan-based electronic component manufacturer Restar Holdings has teamed up with SBI Investment, a subsidiary of financial services firm SBI, to form a corporate venture capital (CVC) fund of undisclosed size.

Founded in 2009, Restar provides contract manufacturing services concentrating on image sensors, semiconductors and electronic components. The group also runs renewable energy installations and vegetable farms. Restar-SBI Innovation will leverage SBI Investment's deal sourcing experience and back startups in Japan and elsewhere that have the potential of creating synergies with Restar. Target areas will include business digitalisation as well as medical and nursing care.

Corporates swarm to Hive Ventures fund

Taiwan-based venture capital firm Hive Ventures has reached a \$13.5m final close of its debut fund with commitments from corporates Mitac-Synnex Group, Unitech Electronics and GMI Technology, DealStreetAsia reported in July.

Diversified conglomerate Mitac-Synnex Group, automation technology provider Unitech Electronics and electronic components distributor GMI Technology contributed to the fund through unnamed investment subsidiaries, while Taiwan's National Development Fund is also a limited partner.

Hive Ventures has a particular interest in artificial intelligence technology developers but is also looking at the big data, internetof-things and software-as-aservice sectors.



Alibaba's Hong Kong Entrepreneurs Fund will anchor a fund seeking artificial intelligence developers

Ravenage flies to \$20m fund

United Arab Emiratesheadquartered video game publisher Ravenage has formed a \$20m corporate venture capital fund to partner and invest in independent game developers.

Founded in this year, Ravenage is working on in-house video games that are set to be released from September 2021. It also provides services for video game creators in areas including public relations, marketing, sales, community management, localisation and events.

The fund will identify indie game projects with teams who have the potential to forge long-term partnerships with the company.

SoftBank studies \$5bn Latin American investment drive

Japan-headquartered internet and technology conglomerate SoftBank plans to invest an additional \$5bn in the Latin American Region, Bloomberg has reported, citing people familiar with the matter.

The corporate formed a \$5bn investment vehicle targeting the region in early 2019, and the prospective funding, which would double the allocation to \$10bn, may be used to create a new SoftBank Latin America Fund or expand the size of the first, the sources said.

SoftBank also intends to expand the range of Latin Americabased companies it targets to include seed and series A-stage startups as well as publicly-listed companies. Chief operating officer Marcelo Claure, who launched the first fund, will continue to lead its Latin America-based operations.

Wells Fargo Innovation Incubator has new startups

US-headquartered financial services firm Wells Fargo has named five new participants for its technology incubator, Wells Fargo Innovation Incubator (IN2).

IN2 focuses on companies developing technologies that contribute to sustainable agricultural production, housing affordability or reducing the energy impact of commercial buildings.

Selected startups will receive \$250,000 in funding from Wells Fargo and engage in research and development activities at the US Department of Energy's National Renewable Energy Laboratory and Donald Danforth Plant Science Center.

The batch includes US-based water hardness monitoring technology developer Atlas Sensor Technologies and GrowFlux, a US-headquartered provider of horticultural lighting controllers.

Motorleaf, A Canada-based developer of AI software for measuring the carbon footprint of indoor farming operations, also features in the list, as does US-headquartered hemp seed



Wells Fargo named technology participants

producer New West Genetics and SunPath, a US-based provider of fibre optic indoor lighting.

The Trade Desk tries corporate venturing

US-listed advertising technology provider The Trade Des has unveiled a venture capital subsidiary called TD7 to fund technology startups focused on the concept of an open, transparent and competitive internet.

Founded in 2009, The Trade Desk operates an online platform through which ad buyers can create and manage digital advertising campaigns across a variety of channels including social media, mobile and television.

The fund has also made its first investment, providing an undisclosed amount for Chalice Custom Algorithms, a US-based developer of custom-made algorithms capable of integrating with automated ad buying platforms.

Prequel produces Venture Studio

US-based photo and video editing app developer Prequel has launched an investment initiative focused on artificial intelligence (AI) technology, computer vision and augmented reality-based visual art.

Founded in 2018, Prequel has developed a mobile-based app that allows users to edit videos and photos and as well as add filters and other effects.

The company plans to invest \$10m in early-stage technology startups with a particular interest in generative artists, technology development studios and projects that intersect the fields of technology and art, each year through Prequel Venture Studio (PVS).

Allana hammers out \$10m for Iron Pillar

India-based venture capital firm Iron Pillar has raised \$10m for its second fund, from food product exporter Allana Group, Business Standard has reported.

Founded in 2016, Iron Pillar targets enterprise and consumer technology developers, typically investing across series B, C and D rounds. In addition to its home country, it has offices in Mauritius, the United Arab Emirates and the United States.

Adil Allana, who sits on the supervisory board of Allana Group, will join Iron Pillar as a board partner after the commitment. Iron Pillar has fully deployed its initial vehicle, which closed at \$90m in 2018, before adding \$45m in May 2020 for specific portfolio companies.

KK Fund keen on third vehicle

Singapore-based venture capital firm KK Fund, which has received backing from corporate limited partners in the past, is raising an undisclosed amount of capital for its third vehicle, DealStreetAsia has reported.

KK Fund co-founder and general partner Koichi Saito told DealStreetAsia the new iteration may be larger in size and is set to reach a first close later this year, but did not disclose further details. It intends to back some 30 companies through the fund in areas including healthcare, education and human resources.

Founded in 2014, KK Fund provides roughly \$500,000 per deal, targeting seed-stage internet and mobile-focused entrepreneurs based in Southeast Asia, Taiwan and Hong Kong.

Peanut launches StartHer fund

Peanut, the UK-based developer of a social networking app for women, has launched a \$300,000 micro fund focused on backing female startup founders, TechCrunch has reported.

Founded in 2017, Peanut operates a mobile-based social networking platform where women can meet like-minded users and discuss topics such as fertility and motherhood.

StartHer will invest between \$25,000 and \$50,000 in startups founded by women and other underrepresented groups in entrepreneurship, focusing on preseed stage companies aiming to make a "positive impact on society, healthcare or the environment."

The fund will make three to four investments in 2021 but will not take an equity stake in its portfolio companies. StartHer will also provide access to mentorship and its strategic network.

Infragistics initiates corporate venturing

US-based enterprise software supplier Infragistics has formed a \$50m corporate venture capital vehicle dubbed Infragistics Innovation Fund and Lab.

The fund will target intrapreneurs from within the organisation who are developing innovation technologies related to Infragistics' user interface and user experience (UX) design software products.

Tobias Komischke, head of data analytics, artificial intelligence and machine learning for Infragistics, who had previously held senior director of design and UX roles at the company, will lead the fund's activities.

BMW i Ventures revs up \$300m fund

BMW i Ventures, the US-based venture capital firm formed by Germany-headquartered automotive manufacturer BMW, has launched a \$300m fund that will focus on sustainability.

Launched by its parent in 2016, BMW i Ventures has accumulated a portfolio of some 50 companies including Chargepoint, the vehicle charging network set to list at a \$2.4bn valuation, and manufacturing services marketplace Xometry, which floated in a \$302m IPO in July.

The latest vehicle will operate alongside the unit's \$500m first fund and will target early and midstage companies concentrating on sustainability, transportation, manufacturing and supply chain technologies.

People

Sampathkumar P starts Sistema Asia Capital stint

- > Stewart marches on to M12
- > Osborn leaves Telus to rejoin RecapHealth
- Salesforce promotes its impact investment team

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

Sistema Asia Capital, a corporate venture capital vehicle for diversified Russia-based conglomerate Sistema, has appointed Sampathkumar P as senior partner ahead of the launch of its Sistema Asia Fund (SAF) II.

Founded in 2015, Sistema Asia Capital invests in enterprise technology developers and online consumer offerings across India and Southeast Asia, and was understood to be seeking \$150m to \$175m for Fund II as of October 2020, an increase from the \$120m it had been planning to raise a few months earlier. In addition to leading the investments of Fund II, Sampathkumar will be involved in the management of Fund I portfolio companies like Rebel Foods, Uniphore, Infra.Market, Licious and HealthifyMe.

Stewart marches on to M12

Michael Stewart has departed from Applied Ventures, part of semiconductor technology producer



Applied Materials, and joined M12, another US-based corporate venturing group formed by software provider Microsoft, as a partner.

Applied Ventures had hired Stewart in 2015 as a principal before promoting him to an investment director position three and a half years later.

His duties included identifying and investing in deep technology developers focusing on areas such as advanced materials, biomedical equipment, the industrial internet of things, energy generation and mechanical process automation technologies.

Osborn leaves Telus to rejoin RecapHealth

Rich Osborn, head of Canada-listed telecoms firm Telus' corporate venturing unit, has left to rejoin



venture capital firm RecapHealth Ventures as managing partner.

Before joining Telus Ventures in 2016, Osborn was the founder and managing partner of RecapHealth Ventures, a Canada-based investor in North American healthcare companies. Prior to founding it, he was a partner at private equity firm Second City Capital Partners, acquiring majority ownership positions in mid-market companies.

Osborn, a GCV Powerlist 2021 award winner, said: "After nearly six years at Telus Ventures I have decided to move on to new opportunities. My last day in office is Friday, August 6th. However, I will continue to support the team here through the end of year, including continuing to serve on portfolio board seats."

Salesforce promotes its impact investment team

US-listed customer relationship management software provider Salesforce has promoted two of its impact investment-focused corporate venturers.

Claudine Emeott has been made partner of Salesforce Ventures Impact Funds, which has made more than 30 investments, in companies including Guild Education, Flutterwave, Unite Us, Paper, Crehana, Andela, Urbint, Measurabl, BlocPower, Ellevest, FutureFuel and Sama.

Since early 2019, Emeott had been director and then senior director at the funds – a \$100m second fund was launched last year following the first \$50m vehicle in 2017 – after the departure of Meredith Finn in 2018.

In turn, Adrianna Alterman has been made director at the impact funds after two years as senior manager. Enki Toto had been promoted to senior manager at the Salesforce Ventures Impact Funds earlier this year after nearly two years as a manager.

Hoodbhoy leaves AT&T for Parc

Faraz Hoodbhoy, head of the startups platform at USheadquartered telecommunications firm AT&T, has joined Parc, Xerox's famed innovation centre in California, as vice-president of commercialisation and operations.

Hoodbhoy, a GCV Rising Stars 2018 award winner, had been in charge of AT&T's Innovation ecosystem outreach programme as well as its Palo Alto, California foundry, and was responsible for evaluating and delivering 120plus commercial deals per year worth about \$1.6bn (8% of AT&T's capital expenditure budget).

As well as direct equity investments through Hoodbhoy, in companies such as nonprofitfocused accelerator Fast Forward, digital media platform developer Cheddar and operating system developer SnapRoute, AT&T had limited partner commitments to external funds such as the \$200m Coral fund.

Tucker tucks into DocuSign

Donald Tucker, formerly head of venture Investments and corporate development for Cisco Collaboration and App Dynamics, an ecosystem building initiative for networking technology provider Cisco Systems, has joined e-signature platform developer DocuSign, according to LinkedIn.

At DocuSign, he will work in corporate development and venture investments.

While at Cisco, Tucker was involved as an investor in companies including Blind, Theta Lake, Parsable, Luma Health, Tagnos and Kustomer. He also served as board observer at ActionIQ, Theatro, Gong.io and Dynamic Signal.

Previously, Tucker had served as senior manager of finance at Responsys between 2013 and 2014, after a short stint as an equity analyst, specialising in communications equipment and technologies, at investment firm Jeffries.

Award-winner Malik joins Dell

Radhika Malik, a GCV Rising Stars award winner this



year, has moved to US-based computing technology prodcuer Dell's corporate venturing unit, Dell Technologies Capital, as principal.

Malik had previously been a senior associate at South Korea-headquartered consumer electronics manufacturer Samsung's \$500m evergreen Catalyst Fund.

At Samsung Catalyst Fund, Malik's deals had included artificial intelligence (AI) hardware maker SambaNova, optical interconnects provider Avicena, cloud cybersecurity software developer Bitglass, cloud software technology provider Rescale and Babble Labs, an AI software developer acquired by Cisco.

Herbst leaves Nvidia to set up GFT Ventures

Jeff Herbst, head of Nvidia GPU Ventures, the corporate venturing unit of US-based chipmaker Nvidia,



has left to join venture capitalist Jay Eum in setting up a new firm, GFT Ventures.

GFT, which stands for global frontier technology – such as artificial intelligence, data science, blockchain and robotics – has completed a first close of undisclosed size for a debut fund with a final target of \$100m.

Limited partners for the fund include chipmaker SK Hynix, internet group Naver, asset manager Mirae Asset Global Investments and US-based angel investors, in particular reflecting Eum's connections as a former head of corporate venture capital unit Samsung Ventures and co-founder of VC firm TransLink Capital.

Jahn rejoins Gabriel at Hitachi

Tobias Jahn, former managing director of Germany-based carmaker BMW's corporate venturing unit, BMW i Ventures, in Europe, has joined the locallybased Hitachi Ventures team as a partner.

Japan-listed electronics conglomerate Hitachi had originally set up its \$150m CVC unit in mid-2019. Jahn had spent six years at BMW i Ventures from 2015, initially as a principal, having originally joining the company in the early 2000's.

Jahn had then left BMW in 2008 and worked with Stefan Gabriel, GCV Powerlist 2021 award winner and CEO of Hitachi Ventures, the Munich-based investment arm of Hitachi, as a senior manager at another corporate venturing unit, 3M New Ventures, for six and a half years.

Choudhry leaves Cigna Ventures for startup

Sahil Choudhry, managing director of US-based health insurance provider Cigna's corporate venturing and



strategy unit, has departed to launch a mental health-focused startup.

Cigna Ventures hired Choudhry in November 2019 and his deals since have included a \$32m series B round for Octave, the developer of a neurodegenerative disease management platform, and mental health app developer Ginger's \$100m series E round. Choudhry said: I am excited to share that I will be taking the plunge into entrepreneurship. I will be partnering with (Cigna Ventures colleague) Kwasi Kyei to build a mental health startup."

Craig Cimini will be the remaining MD for Cigna Ventures having run the unit since 2014.

Kufner nets Nemetschek role

Tanja Kufner has been appointed head of ventures and startups at Germany-based property design software provider Nemetschek Group.



Nemetshcek functions as a holding company with Kufner as a central point for innovation. She had spent the past two years as a venture partner at venture capital firm Antler, and advising the European Commission to help impact, automotive and mobility startups grow

Until the end of 2019, Kufner had been partner and head of Dynamics.vc, part of carmaker Porsche's MHP division. Her earlier corporate venturing roles had included telecommunications firm Telefonica's Wayra unit in Germany.

Huang and Zeb to hang at GV

GV, a corporate venturing vehicle for US-headquartered internet technology conglomerate Alphabet, has appointed Crystal Huang and Sangeen Zeb partners.

Huang will invest in enterprise software-as-a-service, infrastructure and financial technology developers on behalf of GV, focusing on product-driven go-to-market strategies. GV hired Huang after nearly three years as a principal at New Enterprise Associates, following five years in similar roles at fellow venture capital firm GGV Capital. Her investments included companies such as BigCommerce, BitSight, Tile and NS1.

Zeb will likewise concentrate on enterprise and financial technology deals for GV and comes from growth capital firm Founders Circle Capital where he spent two and a half years as a partner, backing companies including Algolia, Confluent, Databricks and Robinhood, following more than five years at investment firm Centerview Capital.

Siahaan slides into TMI role

Telkomsel Mitra Inovasi (TMI), the corporate venturing arm of Telkomsel, the mobile network subsidiary of Indonesiaheadquartered telecommunications operator Telkom Indonesia, has named Marlin Siahaan as chief executive.

Siahaan replaces Andi Kristianto, who had been CEO of TMI since mid-2019 having been with Telkomsel for almost two decades in several senior positions.

Before joining TMI, Siahaan had been Indonesia-based country manager for Waze, an interactive navigation app owned by internet technology provider Google, for three and a half years from 2018, after spending a similar amount of time before that as general manager of digital advertising at Telkomsel.

Her new job entails Siahaan identifying strategic collaboration opportunities between TMI-backed entrepreneurs and Telkomsel in areas including the internet of things and cybersecurity, she told DealStreetAsia, adding that some of its growth-stage portfolio companies are exploring initial public offerings or reverse mergers.

Bechhold Russ joins Truist Ventures

Christina Bechhold Russ, former director of South Koreaheadquartered electronics prodcuer



Samsung's Next corporate venturing unit, has joined USbased financial services firm Truist.

As senior vice-president and head of strategic initiatives at Truist's venture capital arm, Truist Ventures, Bechhold Russ will be based in London, UK, where she had been working for Samsung since the start of 2018.

Under Vanessa Indriolo Vreeland, head of Truist Ventures since the start of 2020, the Ohiobased corporate venturing unit has backed companies including Greenwood, Veem and Greenlight.

Ngam-maykin leaves SCB for Sea

Jaytiya Ngammaykin, a GCV Rising Stars award winner in 2020, has joined Singapore-based internet and

e-commerce group Sea as head of corporate development.

Ngam-maykin had previously spent about five years in corporate venturing at Thailand-based financial services firm Siam Commercial Bank (SCB).

SCB hired Ngam-maykin as an accelerator programme manager

in 2016 before she moved two years later to lead strategic investments in China for SCB Digital Ventures. She was appointed to a principal position at the firm's SCB10X unit in March 2020

Leupold to leave DB1

Eric Leupold has been promoted to run cash markets at Germanybased stock exchange operator Deutsche Börse leaving a vacancy to be filled at its corporate venturing unit this month.

Leupold had been managing director of DB1 Ventures since January 2020 as well as head of group venture portfolio management for its parent company.

Paul Hilgers, managing director of Deutsche Börse's Cash Market subsidiary since September 2020, said he will leave the company at his own request at the end of August for family reasons, adding: "For the time being I am still here [at DB1]. From [September] there will be someone else."

Sumitomo Chemical America promotes Nakashima

Yosuke Nakashima has been promoted to senior manager at the corporate venturing and



innovation office for Japan-based chemical producer Sumitomo Chemical's US division, Sumitomo Chemical America.

Based in Massachusetts for Sumitomo Chemical America, a subsidiary of conglomerate Sumitomo, since 2016 as a manager, Nakashima works with startups and academia to create next generation products and businesses through minority investment, research funding, codevelopment and licensing.

Lozman becomes MD at M Ventures

Owen Lozman has been promoted to managing director at M Ventures, the corporate



venturing arm of Germanyheadquartered pharmaceutical firm Merck Group.

The internal promotion followed the departure of Jasper Bos in May this year to take up a general partner position at Netherlandsbased venture capital firm Forbion.

Lozman had previously been running M Ventures' Performance Materials Fund as a vice-president since early 2018. He had originally joined Merck subsidiary Merck Chemicals in 2013 as a research and development manager.

Matthews takes managing director role at DTCP

Lance Matthews has been promoted to managing director of growth equity at Deutsche Telekom Capital



Partners (DTCP), the venture capital firm sponsored by Germanyheadquartered telecommunications firm Deutsche Telekom.

Based in San Francisco, California, Matthews had been a principal at the firm since the start of 2020, having originally joined the investment team as an associate in November 2016. Matthews' most recent deals have included Arctic Wolf, the cybersecurity services provider that raised \$150m at a \$4.3bn valuation in July, as well as Streetlight Data, Innovid, SuperAnnotate, Heap, Anomali, Fastly and Dynamic Signal.

Cencosud hires del Valle for new CVC unit

Jose Antonio Pascual del Valle has joined Chile-based retailer Cencosud as head of its corporate venture capital subsidiary, Cencosud Ventures.

Del Valle will lead Cencosud Ventures after almost five years at Spain-headquartered telecommunications firm Telefónica's Wayra corporate venturing unit. He had previously been Wayra's head of scouting and investments in Latin America at Wayra and a director or observer in Wayra Chile's portfolio.

Portfolio companies where del Valle had held board roles include SimpliRoute, Poliglota, IpsumApp, Recorrido, U-Planner, WebdoxCLM, Rocketpin, Autofact, Zapping, ComunidadFeliz, Cloner, OmnixCorp, GoQuantum and WivoAnalytics.

Mann takes on Takeda Ventures role

Sacha Mann has been appointed a senior partner at Takeda Ventures, the corporate venture capital arm of Japan-headquartered pharmaceutical firm Takeda, according to her LinkedIn profile.

Her profile describes Mann as being in "stealth" at the unit from June 2020 to February 2021. She describes herself as a "venture capitalist with [an] interest in all modalities across oncology, neuroscience, rare disease and [gastrointestinal]."

Mann had previously been a venture partner at healthcarefocused VC firm Zoic Capital from 2018 to 2020. Inventages Venture Capital, a VC firm formed with the support of packaged food producer Nestlé, hired her as a principal in 2009 and she was promoted to venture partner in 2016 before leaving the following year.

Burr to pilot JetBlue Technology Ventures

US-listed airline operator JetBlue has named Amy Burr president of its corporate venturing subsidiary,



JetBlue Technology Ventures (JTV).

Burr is replacing Bonny Simi, who served at the company for 18 years, launching JTV for its parent in 2016. She took up a position as head of air operations and people at JTV-backed vertical take-off and landing aircraft developer Joby Aviation in December 2020 but will continue to advise the JTV team.

Reporting to JetBlue's general counsel and corporate secretary Brandon Nelson, Burr will oversee the unit's strategic venture capital investments and corporate innovation initiatives.

JTV hired Burr as managing director of operations and partnerships in 2018 and she was involved in establishing networks and deployment opportunities for many of its portfolio companies.

Analyses

- > Valuations in the HR tech space are picking up
- Softbank enabled Cybereason to secure crossover financing
- > AG2R La Mondiale committed capital to lending platform Younited Credit
- > China-based ride-hailing service company debuted in an upsized \$4.44bn IPO
- > This year continues record number of corporate-backed rounds sized \$100m and above
- > Up to a quarter of all corporate investors appear to be newcomers
- > Hanwha subsidiary will take an 8.8% stake in satellite connectivity provider OneWeb
- SoftBank's Vision Fund returned to back the e-commerce business in a \$1bn round
- > Amazon Climate Pledge Fund committed capital to battery recycling services provider

By Alessia Argentieri, Jordan Williams, Kaloyan Andonov, Liwen-Edison Fu, Thierry Heles and Robert Lavine

HR tech gains momentum

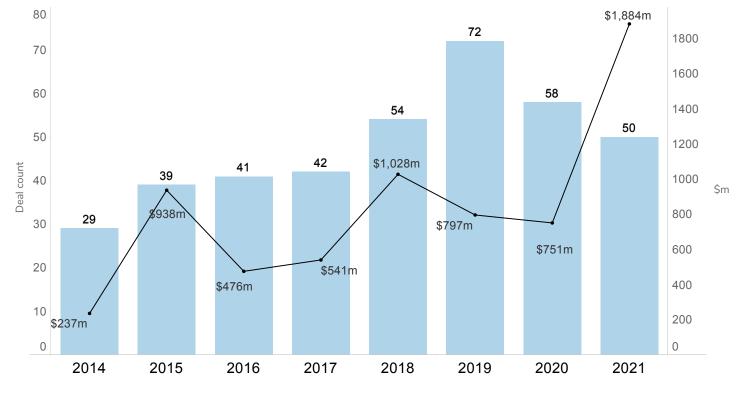
Australia-based human resources software provider Employment Hero raised A\$140m (\$103m) in a series E round, which included enterprise software provider Salesforce's investment arm, Salesforce Ventures, and recruitment portal operator Seek. The round, which reportedly valued the company at \$586m, was led by growth equity firm Insight Partners, also with contributions from venture capital firms OneVentures and AirTree Ventures. Founded in 2014, Employment Hero provides cloud-based software which helps small and mediumsized enterprises with employee training, payroll, retention, remote work management, human resources implementation and legal compliance, reducing administration time by up to 80%. The company currently services more than 6,000 businesses and has increased its headcount by

65% and its revenue by 113% over the past year.

US-based recruitment software developer SmartRecruiters, which counts Salesforce among its backers, completed a \$110m series E round led by Silver Lake Waterman. Growth equity firm Insight Partners and venture capital firm Mayfield Fund also participated in the round, which reportedly valued the company at \$1.5bn. The funding will be used to support continued development of the company's software, focusing on artificial intelligence, automation and conversational interfaces.

Launched in 2010, SmartRecruiters provides software used by enterprises to attract, select and hire new talent. Its talent acquisition platform can be used for applicant tracking and screening, candidate relationship management and text-based recruiting. The platform has been used by 4,000 businesses globally, including payment services firm Visa and video game developer Ubisoft.

The HR tech space has received much attention by corporate venture investors. The number of corporate-backed deals in this area was mostly stable before it took off in 2018 and reached an all-time high of 72 in 2019. Even though it did suffer in 2020, dropping to 58 deals, likely due to the impact of the pandemic, over the first seven months of this year we have already tracked 50 deals in such businesses and, most notably, with a total estimated capital in them at \$1.88bn, more than in any other year, which indicates that there is an upward pressure in valuations.



Corporate-backed deals in HR tech 2014-21*

Source: GCV Analytics

Data as of 15 July



Cybereason raises \$275m

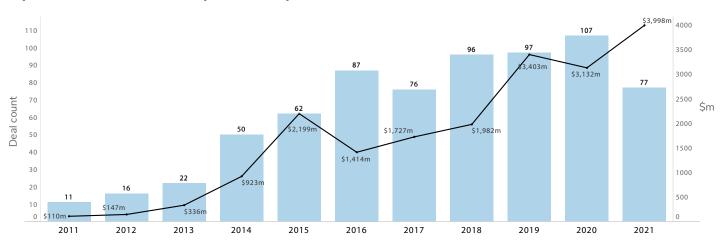
US-based endpoint security software provider Cybereason secured \$275m in crossover financing from investors, which included telecoms and internet group Softbank. The round was led by private equity firm Liberty Strategic Capital and also backed by asset manager Neuberger Berman. The valuation of the financing reportedly stood at between \$3bn and \$3.3bn, according to different sources. Softbank is a returning investor. Cybereason had previously secured \$200m in a 2019 series E round backed by unspecified SoftBank affiliates at a \$900m valuation. SoftBank had also made a \$100m investment two years earlier in a deal that

made it the company's single largest shareholder.

Founded in 2012, Cybereason has built and operates a cloudbased extended detection and response (XDR) platform which uses big data, behavioural analytics and machine learning to identify and thwart attacks, delivering context-rich analysis of malicious operations and improving protection, detection and response. The company plans to use the funding for expanding its product offering, developing new features for its platform and enhancing its cybersecurity tools.

Cybereason is part of the broader cybersecurity tech space, which has seen much attention from

corporate investors over the past decade. The number of corporatebacked deals in this space reached an all-time-high by the end of last year (107), likely propelled by trends like remote working and the emergence of more cyberthreats during the pandemic. It appears that 2021 may be another record year for corporate-backed startups in this space, as over the first six months of this year we have already tracked 77 rounds and record total estimated capital in them of nearly \$4bn. The latter suggests that, as in most other areas, valuations in cybersecurity are surging.



Corporate-backed deals in cybersecurity 2011-21*

Source: GCV Analytics

Data as of 30 June

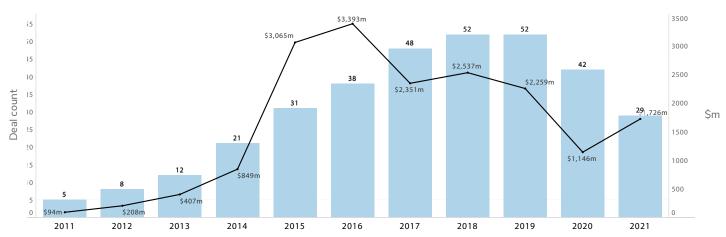


Younited Credit deposits \$170m

France-based online lending platform developer Younited Credit raised \$170m in a round, which featured insurance firm AG2R La Mondiale. Goldman Sachs Asset Management, the asset management arm of investment bank Goldman Sachs, which participated through its growth equity unit, private equity firms Bridgepoint and Eurazeo as well as French government-owned investment bank BPIfrance's Large Venture Fund also participated in the round. This new funding took the overall capital raised by the company to \$400m.

Launched in 2011 as Prêt d'Union, Younited Credit operates a lending business, which offers amortising personal loans of up to €50,000 (\$59,000), employing an artificial intelligence and machine learningpowered software platform in addition to extended payment services, budget coaching and term deposits. The company claims to have lent over \$3bn to date and also provides bankingas-a-service software for banks, insurance companies, telecoms operators, online merchants and tech companies.

Younited is part of the broader alternative lending space within fintech, which has received much attention from corporate investors over the years. The number of corporate-backed deals in that space reached a top of 52, registered in both 2018 and 2019, whereas the total estimated dollars in such rounds hit an alltime high of \$3.39bn in 2016 but have gone down since. Over the first six months of 2021, we have already tracked 29 deals in this space with an estimated \$1.73bn of total capital deployed in them. The latter suggests that valuations and deal making in this area have been recovering significantly after the pandemic shock of last year.



Corporate-backed deals in alternative lending businesses 2011-21*

Source: GCV Analytics

Data as of 30 June

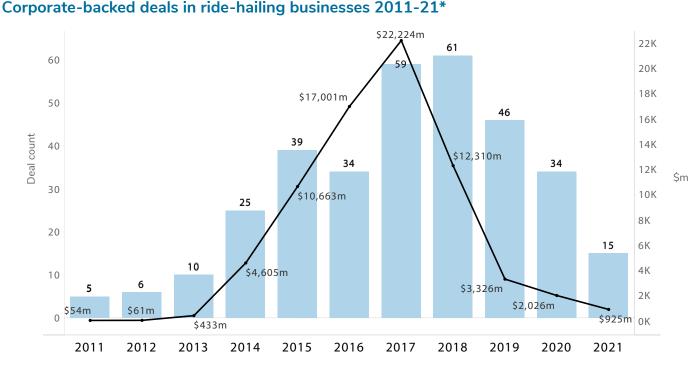
Didi hails \$4.4bn in US IPO

China-headquartered ride hailing service provider Didi Global went public in a \$4.44bn IPO on the New York Stock Exchange. The company counts multiple corporates among its backers, including internet conglomerate SoftBank, internet company Tencent, e-commerce company Alibaba, insurance firms China Life and Ping An electronics producer Apple, online travel agency Booking Holdings, car rental service eHi and social media company Sina Weibo. Didi increased the number of shares in the offering from 288 million to approximately 317 million American depositary shares (ADSs), with four ADSs equalling one class A share. The company priced its shares at the top of the IPO's \$13 to \$14 range. Investment bank Morgan Stanley's Investment Management,

Morgan Stanley Asia and Morgan Stanley Investment Management Company had expressed interest in purchasing \$750m of shares and Temasek – \$500m. Didi plans to use the IPO proceeds for further investment in its technology and international expansion.

Formed after the merger of peers Didi Dache and Kuaidi Dache in 2015 and formerly known as Didi Chuxing, Didi operates an ondemand ride service spanning its home country of China but has presence in Russia, Africa, Latin America, Central Asia and the Asia Pacific regions as well. It also offers food and package delivery in addition to automotive and financial services. Didi's annual revenues decreased slightly to \$21.6bn in 2020 versus the previous year due to the impact of the pandemic, while its net loss rose 9% to \$1.62bn.

Didi is part of the broader ridehailing space, which has seen much interest by corporate investors over the past decade. The number of corporate-backed deals in this space peaked in 2017 (59) and 2018 (61) but have been going down since. Similarly, total estimated capital in such deals reached an all-time high at \$22.2bn in 2017 and has been going down since as well. The latter has roughly coincided with the end of the ride-hailing business war around the globe, which culminated with established names in the field either getting acquired (Careem) or going public (Uber, Lyft) from 2019 onward.



Source: GCV Analytics

Data as of 30 June

Large corporate-backed rounds

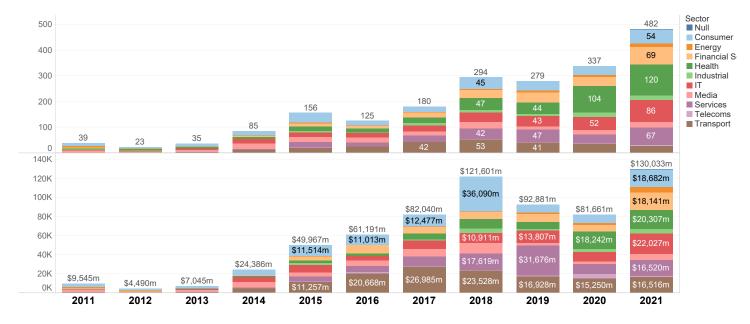
We often point to the fact that a corporate investor is likely to be found among the syndicates of larger VC rounds. There is no lack of reasons for this. On the one hand, for a variety of reasons, many corporate investors are often reluctant to publicly disclose their backing of a startup until it has reached later stages of development, which naturally tend to involve larger-in-size rounds. On the other, some corporate venturers play the game for financial returns mainly, therefore later-stage and larger rounds some of which with special classes of shares guaranteeing minimum

returns should an envisioned exit strategy nosedive – are also an alluring option to them.

This year is already a record year in terms of the number of nine-figure rounds, with 482 such rounds by the beginning of August, worth an estimated total of \$130bn. This leaves 2020, which was also a record years, considerably behind with its 337 rounds, worth an estimated total of \$81.66bn.

Corporate-backed nine-figure rounds are, thus, interesting to monitor on a global scale. Historically, the majority of deals

sized \$100m and above have been concentrated mostly in the US and China. However, it is more interesting to ask what type of companies actually raise such gargantuan rounds. Unlike their concentrated geographical distribution. there does not seem to be a bias for companies from any particular sector among those top rounds raisers. Except for some occasional peaks for companies from the transport, consumer or health sector in recent years, a promising business from almost any sector can be (almost) equally as likely to raise a large round.



Corporate-backed deals sized above \$100m by sector 2011-21

Source: GCV Analytics

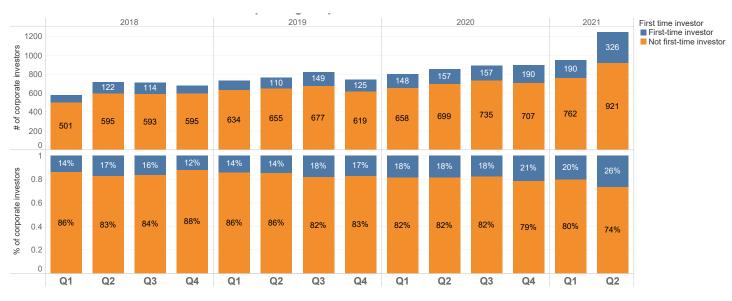
Data as of 12 August

First-time corporate investors

Most of the corporate investors taking minority stakes in the second quarter of 2021 were investors that have done at least one deal before (74%). It is, thus, noteworthy that one out of every four (26%) corporates was disclosing their first minority stake deal in the past quarter. And the proportion of these "first-timers" appears to have stayed around 20% through most quarters since the beginning of 2018. In previous years, like in 2017, the proportion of first-time corporate investors was consistently lower than 20%.

There is, however, one caveat which must be borne in mind. It is hard to estimate how many are actual newcomers to the corporate venturing game, as some of them may have done other occasional minority stake deals in emerging enterprises but not announced them publicly.

What are the implications of all this? Corporate venturing – understood in its broadest sense as minority stake investing in emerging companies – appears to have become a key innovation tool to be employed by ever more corporations around the globe, rather than by just a few global corporate leaders. While some of these newcomers may be merely occasional investors in startups or, conversely, more frequent than the data suggest, it is very unlikely that the pattern we observe so consistently be just accidental, in a time when valuations have reached peaks unseen since the dot-com bubble and despite the shock of the covid-19 pandemic.



First-time vs repeating corporate investors 2018-21

Source: GCV Analytics

Data as of 23 August



OneWeb orbits \$300m from Hanwha

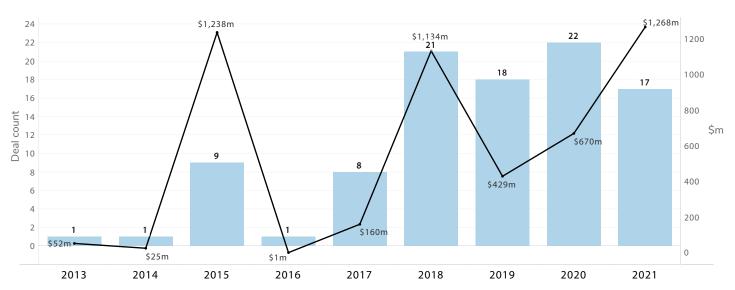
Hanwha Systems, an intelligent technology subsidiary of conglomerate Hanwha, agreed to invest \$300m in exchange for an 8.8% stake in satellite internet services provider OneWeb. The deal is set to close in early 2022, with pending regulatory approvals, after which OneWeb will name a board director to represent Hanwha. The investment will increase OneWeb's overall equity funding to \$2.7bn, raised since it officially emerged from bankruptcy in November last year.

OneWeb's fate has seen an almost 180-degree reversal over the past year and a half. It had to apply for insolvency in March 2020 after it was unable to raise additional funding due to the impact of the covid-19 crisis. The UK government and conglomerate Bharti Enterprises invested \$1bn in OneWeb in July

2020, before Bharti increased its stake to 38.6% through a \$500m call option agreed in June 2021. Telecoms and internet conglomerate SoftBank also committed \$350m for a 30% stake in OneWeb in January 2021, when satellite service Hughes Network Systems also injected \$50m. Satell ite operator Eutelsat Communications agreed in April 2021 to provide \$550m in return for a 24% stake. After Bharti's call option is completed later this year, Eutelsat, SoftBank and the UK Government will each own a 19.3% share of OneWeb.

Founded in 2012, OneWeb is building a network of some 650 low Earth orbit (LEO) satellites to provide high-speed internet connection, scheduled to complete global coverage in 2022. It currently boasts 254 satellites in orbit and intends to launch more from Baikonur, Kazakhstan. Before its bankruptcy filing, OneWeb had raised \$3.4bn of funding from backers including Bharti, Eutelsat, Hughes Network Systems, the SoftBank Vision Fund, conglomerates Grupo Salinas and Virgin Group, beverage producer Coca-Cola, aerospace group Airbus and mobile chipmaker Qualcomm.

OneWeb is part of the broader space and satellite tech area, which has enjoyed much interest from corporate investors over the past few years. Even in 2020, we recorded 22 rounds, worth an estimated \$670m, raised by businesses from this space. The momentum appears to have been sustained in 2021, when we have already tracked 17 deals, worth an estimated total of \$1.27bn, by the beginning of August.



Corporate-backed deals in space and satellite tech businesses 2013-21*

Source: GCV Analytics

Data as of 12 August



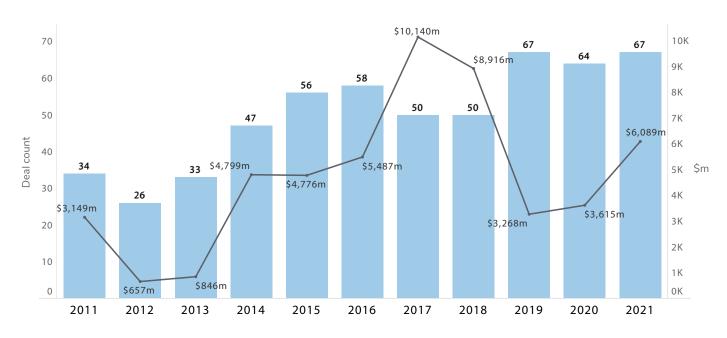
GoPuff puffs up \$1bn

US-based on-demand consumer delivery service GoPuff collected \$1bn in a funding round backed by telecoms conglomerate SoftBank's Vision Fund 1. Blackstone's Horizon platform, Guggenheim Investments, Hedosophia, MSD Partners, Adage Capital, Fidelity Management and Research Company, Atreides Management and Eldridge filled out the round, which reportedly valued GoPuff at \$15bn, up from a \$8.9bn valuation reported in March this year. This latest cash injection will enable GoPuff to accelerate its expansion across North America,

and European markets such as the UK. The company will also recruit additional staff and enhance its technology.

Founded in 2013, GoPuff operates an e-commerce platform for consumers to purchase items such as cleaning products, overthe-counter drugs, pet food or alcohol. It claims to deliver goods "within minutes", using a network of micro-fulfilment centres in every market it serves.

GoPuff is part of the broader e-commerce space, which has seen much growth and interest from corporate venture investors. The number of corporate-backed deals in this space has remained relatively stable over the past few years at well above 60 rounds. It is noteworthy, however, that during the first seven months of this year, we have already tracked more deals (67) than in all of 2020 and the estimated total capital in them amounts to \$6.01bn, significantly up from the \$3.62bn estimated total for 2020, which also suggests upward pressure on valuations.



Corporate-backed deals in e-commerce 2011-21

Source: GCV Analytics

Data as of 31 July

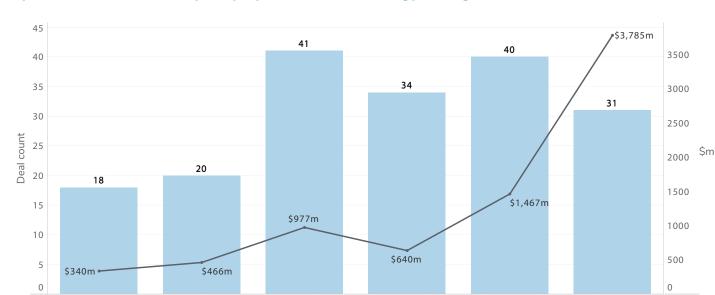
Redwood to grow with \$700m

US-headquartered battery supply chain developer Redwood Materials raised more than \$700m from a group of investors, which featured e-commerce and cloud computing group Amazon's Climate Pledge Fund. Funds and accounts advised by investment management firm T Rowe Price led the round, which reportedly valued the company at \$3.7bn post-money. The investment syndicate also included investment and financial services group Fidelity, Goldman Sachs Asset Management, Baillie Gifford, Canada Pension Plan Investment Board, Capricorn's Technology Impact Fund, Breakthrough Energy Ventures, Valor Equity Partners,

Emerson Collective and Franklin Templeton.

Founded in 2017, Redwood is developing a closed loop supply chain for electric vehicle batteries that will involve it partnering large companies to recycle used batteries and feed the useful materials back into the supply chain, thus reducing the industry's environmental impact. The company has struck recycling partnerships with many businesses including Amazon. It also plans to triple the size of its Carson City, Nevada facility, while constructing a new plant elsewhere in the state.

Redwood Materials may be considered part of the broader batteries and energy storage space, which has received much attention from corporate investors over the past few years. It is noteworthy that, previously, we have seen no more than 40-41 deals in such businesses per year, whereas over the first seven months of 2021 we already tracked 31 rounds raised by such enterprises, with a total estimated capital in them at \$3.78bn, far above than dollar figures registered in previous years. This clearly suggests that there is much upward momentum both in the number of deals as well as in valuations.



2019

Corporate-backed deals in pure play batteries and energy storage tech 2016-21*

2018

2017

Source: GCV Analytics

2016

Data as of 29 July

2021

2020

Feature

The great Spac mania

- Many companies have opted to stay private longer than VCs would like
- > Spacs have emerged as attractive way to score exits
- Investors recognise the use and abuse of this tool

By Kaloyan Andonov Analyst

The US stock market is the most liquid public market and the world. It has demonstrated not only enviable returns over the past decade but extraordinary resilience after the pandemic's shock over financial markets in February-March 2020. The latter only attests to the markets ability to immediately discount the effects of injected additional liquidity by the Federal Reserve and the expected economic recovery. After all, there tends to be a bull market most of the time in US stock exchanges, or at least that has been the case of the past few decades.

However, there is one thing that remains truly puzzling about this

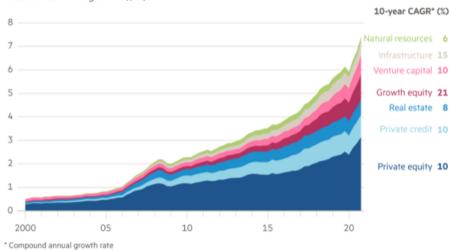
public market which has such a strong tendency to go up - the number of listed companies in it went down for quite some time over the past two decades. According to data, cited by MarketWatch, the number of companies on the New York Stock Exchange and Nasdag reached an all-time high at around 8,000 during the second half of the 1990s, amid the dotcom boom, but has steadily declined since. According to data of Credit Suisse, cited by MarketWatch, the number appears to have bottomed at around 3,600 in 2016 and stood at around 6,000 by October last year. Economically, it makes sense

for companies to raise equity capital on public market whenever there is a bull market, as higher implied valuations allow them to raise more cash per share than they otherwise could. Even though the trend appears to have somewhat reversed, it is still a pertinent question to raise: what has happened?

The answer may have to do partly with low interest rates, which major developed economies have enjoyed since the end of the global financial crisis. Low borrowing costs may have incentivised companies to raise more debt rather than equity financing. Share buybacks, which became somewhat controversial for certain public entities in the beginning of the covid-19 crisis, have probably also had their fair share of contribution for stirring the bull market. In a paper by S&P Global, entitled "Examining Share Repurchasing and the S&P Buyback Indices in the U.S. Market", authors Zheng and Luk found that, from 1997 onward, share repurchases have effectively overtaken the role of dividends as the dominant form of corporate payout in the US public markets. The logic behind

Private capital industry has exploded in size

Assets under management (\$tn)



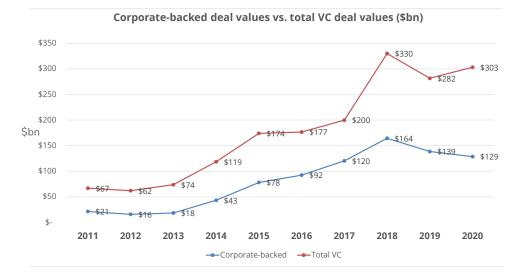
Excludes secondary and fund of fund strategies Sources: HLNE Cobalt data as of Dec 30 2020; Morgan Stanley Research

repurchases is rather simple and lies on basic arithmetic – over time the total number of shares outstanding of a listed company is shrunk, assuming the market is generally moving up, it is easy to see how this artificially created scarcity of shares contributes to higher returns.

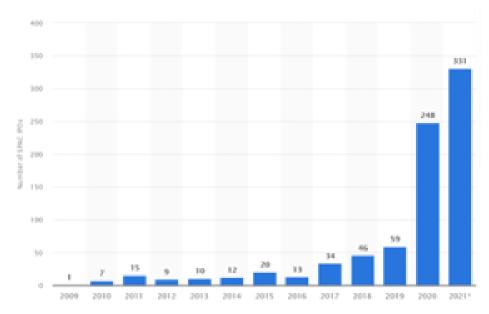
However, one thing that is interesting to us at Global Corporate Venturing is: has private capital played a role in this? And there is seemingly no shortage of evidence to support such a hypothesis. As we reported in the last World of Corporate Venturing report 2021, using PitchBook's data, nearly \$1.8 trillion were deployed in all VC-backed deals tracked between 2011 and 2020. According to the Financial Times, total private capital industry has reached over \$7 trillion in size, encompassing venture capital, private equity, private credit, growth equity as well as private investments in natural resources, infrastructure and real estate.

Robin Wigglesworth, the author of the FT piece entitled "Private capital industry soars beyond \$7tn", attributes this impressive growth to "demand for higherreturning but pricey and opaque strategies". He also highlights the enormous amounts of dry powder that have been amassed, standing at nearly \$2.5 trillion that are yet to be deployed. He warns, however, this excess of liquidity has spurred competition for deals, which has led some analysts to believe that returns may suffer going forward.

High valuations in venture capital and the much-publicised rise of unicorns over the past five



Number of special purpose acquisition company (Spac) IPOs in the US from 2009 to June 8, 2021



Source: Statista.com 2021

years have likely fomented the preference of promising companies to stay private over opting to list on a stock exchange. If we look back at some of the landmark or notable IPOs of 2020, we find a number of companies that have stayed private for well over a decade - Airbnb (founded in 2008), Asana (founded in 2008), Unity Technologies (founded in 2004), Palantir (founded in 2003), ZoomInfo (founded in 2000), GoHealth (founded in 2001), Datto (founded in 2007), Duck Creek (founded in 2000), Schrödinger (founded in 1990). Venture capital investors have a long investment horizon of around 10 years, though, anecdotal evidence suggests seven years or shorter on average. However, we may reasonably suppose that companies with great potential staying private for so long may have been something a bit frustrating even for longterm investors like them, when it comes to scoring exits and building goodwill with their limited partners.

One explanation of why private companies were waiting for

their valuations to soar before going public may have to do with regulatory burden. Regulatory requirements for companies that consider an IPO or a direct listing can be very stringent and expensive for companies that are relatively small in valuation and have smaller institutional support. There is also the implicit issue of trade secrets in tech companies which may not be as easy to guard if the entity is listed as a public company. However, in recent times, private companies and private capital seem to have found a novel way of working around such issues.

Spac mania or how do Spacs really work?

The number of special purpose acquisition companies (Spacs) has attracted much media attention over the past year and a half. According to data by Statista, the number of such blank cheque investment vehicles in US public markets was beginning to lift off in 2017 and 2018 versus previous years but it truly skyrocketed in 2020, which registered 248 of them – a nearly four-fold increase over the 59 in 2019. By the beginning of June, there have already been considerably more (311) Spacs already listed.

To put things in perspective, these numbers represent a significant chunk of all IPOs in the US both in 2020 (61% or 248 out of a total of 407) as well as the first half of 2021 (56% or 311 out of the 558 IPOs by late June). So, why this seemingly sudden popularity bordering on frenzy?

By now most readers interested in finance are likely familiar with the basic mechanics of Spacs. They are in essence blank cheque companies, typically sponsored by a well-known investor, that get listed in a public market through an IPO in which they raise capital. The capital is used to buy one or more company or, often, just merge with an existing private company. When a merger takes place, the Spac takes the private company public without having to go through a cumbersome IPO or a direct listing. It is clear to see how advantageous that might be to venture investors holding stakes in portfolio companies that may otherwise have some trouble filing for an IPO.

As there is less scrutiny than with a company going public the old-fashioned way, there have been some controversies with companies that have gone public through reverse mergers with a Spac, such as China-based coffeehouse chain Luckin Coffee and US-based zero-emission vehicle developer Nikola. The former was caught to have falsified large chunks of its reported revenues and in early 2021 it filed for bankruptcy, whereas the latter was accused of fraud and its founder ended up resigning and being indicted. Such cases support the argument of critics of Spacs, as neither company would have likely withstood scrutiny had it gone public through a regular IPO or a direct listing.

However, some may argue that there is yet a bigger problem, from an ethical standpoint, with how Spacs are being structured and mergers get executed, to begin with. To understand it, one has to get to the nitty-gritty of the entire process. Once a Spac has raised cash usually at \$10 per share, it invests it in "risk-free" government bonds and must use it to purchase a private company within two years to take it public. If the Spac does not complete a purchase or merger within this period, it must liquidate the bond holdings and return the entirety of the amount with the accrued interest to investors.

The promoters of the Spac vehicle tend to put up very little of their own money (according to the Financial Times, in some cases, as little as \$25,000), as they charge a special kind of fee for the entire operation dubbed "the promote". The "promote" consists of taking 20% of shares of the listed company once the reverse merger with the private target company is complete (or once the company is "despack-ed", as professionals in the sector dub it). Even if they end up acquiring a business of questionable quality, they can simply sell all their shares in the stock market immediately. Either way, the 20% of equity in the listed entity they obtain is pure profit, whatever the price shares may be trading at.

In addition, the promoters also usually hold warrants that are financial instruments similar to call options, which give an investor the right but not the obligation to buy shares at a specified strike price, normally above the \$10 at which the Spac is originally listed. This creates another incentive for them to promote, as it were, and generate as much hype as possible about the Spac and the target company of the proposed merger. One detail to keep in mind, of course, is that these warrants dilute the holdings of other investors.

Despite that, these blank cheque companies count large institutional investors and hedge funds among their backers. So, what gives? Such investors simply hold a special right to redeem their equity shares for cash any time before the merger takes place as well as warrants. The former they obtain usually by backing the Spac before it even gets listed. When a merger with an existing private company, however, is officially announced or before, the institutional investors have every incentive in the world to redeem their shares, as the promoter will obtain 20% of the company once the merger is complete. If they opt to do so, they receive the principal of their investments plus some interest on top of it.

This is a sort of a risk-free investment but how is it a lucrative one? After all, government bond yields are not particularly high these days. Big institutional backers still get to hold warrants for every share they have owned before redeeming, which they could exercise should the stock price take off and enjoy the upside. Additionally, let us not forget that, as institutional investors, they can borrow and use a significant degree of financial leverage for their initial investment in the Spac, which could multiply the meagre bond returns to something much more attractive.

There actually is even more dilution, as contemporaneously with the merger, the sponsor and (or) third parties tend to purchase shares to carry out private investment in public equity transactions (PIPEs) in order to replenish some of the cash the Spac paid out to redeem its shares in the de-Spac-king process. Such shares are often sold at a discount versus the IPO price (i.e. at less than \$10) to institutional investors. Such investors are given access to conduct extensive due diligence on the target company. which other simply cannot at the point. Thus, some argue that the presence of such transactions and of reputable investors in them has certain positive externalities for other investors in the form of informational or reputational spillover. The argument is somewhat dubious, however, as such transactions may be also incorporated in a traditional IPO or direct listing process and the reason such transactions are necessary is, often, the fact that the target company loses considerable chunks of cash in the complicated de-Spac-king process through redemptions.

A 63-page-long academic paper entitled "A sober look at Spacs" by Klausner, Ohlrogge and Raun examined 47 Spacs from 2019-20 and found that median divestment rates by such institutional backers (before a merger is completed) stood at between 97% and 100%. Very few Spac shareholders would keep their shares until after the merger's completion – no surprise in this finding, given the incentive structure in such vehicles.

More interestingly, however, the paper analyses how costs are borne and by whom. The answer lies in the dilution and the redeeming of the shares. The study found that



even though Spacs collect \$10 per share in their IPOs, by the time a median Spac merges with its target company, it holds only \$6.67 in cash per share. The authors of the paper are unequivocal about it: "The high return to redeeming investors does not come from any magic in the Spac structure; it comes at the expense of non-redeeming investors." It is reasonable to suppose that these non-redeeming investors will be, in their majority, less sophisticated retail investors that may have joined the party much later. They end up being diluted by both the promoter, who gets 20% of all shares outstanding for free, and by the institutional investors with warrants that get exercised if the stock price of the Spac heats up. The promoters also hold such warrants. The paper also discovered that "for a large majority of Spacs, post-merger share prices fall, and second, that these price drops are highly correlated with the extent of dilution, or cash shortfall, in a Spac."

This can be seen in a group of 137 Spacs that closed mergers by mid-February, which have lost 25% of their combined value, or about \$75bn, according to a Dow Jones Market Data analysis of figures from Spac Research published by the Wall Street Journal this month.

The academic authors of A sober look at Spacs also meticulously dismantle the argument that Spacs are actually less costly than IPOs in the paper and express serious doubts as to whether the way such transactions are currently being executed is sustainable: "Commentators who have touted Spacs as a cheap way of going public are thus correct, but they have misunderstood what makes Spacs cheap for companies seeking to go public. It is not that the Spac structure or process makes them cheap. To the contrary, the Spac structure and process make them extremely expensive. But so far, Spac shareholders have borne much of the cost. Why that is, is a mystery, but it is difficult to believe that it is a sustainable arrangement. At some point, Spac shareholders will become more sceptical of the mergers that sponsors pitch."

The authors offer two policy recommendations to rectify the situation. On the one hand, Spac sponsors should make side payments in the form of shares or warrants to public shareholders in return for commitments not to redeem their shares with a strict requirement of full disclosure on such payments. On the other, the authors of the study suggest that Spacs "be required to disclose the amount of cash per share that it will deliver in a merger under a range of redemption scenarios".

However, one may make the argument that the caveat emptor principle apply to public equity markets and that it is, at the end of the day, the less sophisticated investors' fault for not having done sufficient due diligence on the Spac vehicles whose shares they purchase. One may further argue that many of those investors are trading for the very short term and hence the massive price drops of Spacs are not so relevant. Whatever the merits or demerits of such arguments, there is no doubt that Spac structures have already caught the eye of regulators.

The Reuters recently reported that the US Securities and Exchange Commission (SEC) was mulling over specific guidance on revenue projections that are normally given by companies going public through Spacs. It is such revenue projections that have arguably helped the Spac promoters to generate hype and rising prices in the stock market. The SEC has also issued guidance requiring Spacs to include warrants they have issued as a liability on their balance sheets.

How do venture investors see it?

While academics and outside commentators look on Spacs with a high degree of scepticism, it is important to consider also the viewpoint of investment professionals as well. At the last GCV Digital Forum in July 2021, we hosted a session on Spacs under Chatham House rule in order to encourage free and open discussion about the topic. The latter rule prevents us from citing any of the participants or their affiliation but allows us to summarise the major points of the discussion.

In the first place, participants in the discussion agreed that a Spac is nothing more than an investment tool and as such, it can be used well or abused. They mentioned some of the obvious advantages of a reverse merger with a Spac, from the perspective of portfolio companies – it allows startups to go public without the usual burdensome processes and the lead time to go public is much shorter. Startups are also permitted to show their projections, unlike in a classic IPO. The latter fits better their nature, as they are more about the future than about the past.

Spacs may be also seen as venture investing vehicle that may be potentially more efficient and that could democratise venture capital. Instead of raising a new round of financing every six months or so, founders may just use the Spac money and focus on developing their product or service. If retail and other investors treat a listed startup after de-Spac-king with the same risk-reward profile as a traditional venture investment, this could make venture deals available to a wider public and not just to institutional investors, high net worth individuals or other accredited investors.

Participants recognised that the Spacs phenomenon is a way to address an unsatisfied and unmet appetite for new listings, despite not being the only way to address it. Going public on a large exchange like Nasdag, for example, has been made exceedingly difficult for private companies for a variety of reasons. As a result, only the very best portfolio companies, the gold medallists, could go public through the help of tier-one investment banks. The other good companies who may be considered silver or bronze medallists usually cannot because the process is too expensive, too unpredictable and, often, they would have no way to attract the attention of JP Morgan, Goldman Sachs or Morgan Stanley. Spacs have made it easier and more predictable for such companies to go public and to

gain access to public equity capital and in a time when liquidity is very abundant.

With more of those companies going public, there is more risk involved. And that has been reflected in the stock price performance of Spacs that has not been, on average, spectacular, although there have been some exceptions of Spacs, run by professionals, who have provided great returns since the de-Spacking. Regulators from the SEC have become increasingly wary about the possibility of investors being defrauded and all participants in the anonymous discussion agreed that this is a development in a positive direction, as there may be too many unqualified people raising Spacs, including celebrities, making it feel like a sort of a gold rush. After all, the ability to present forecasts implies that a company is also to be held responsible, if some of its disclosures are completely outlandish.

There are, however, other points where further checks and balances may be put in place. One of them is the fact that hedge funds, other institutional investors as well as the Spac promoters face virtually no downside. That is something which would inevitably raise suspicion among regulators.



Other checks and balances may arise naturally from within the investment industry that will be paying close attention to details around a Spac, such as whether it is raising its PIPEs today and it is being raised from credible investors. Another point of focus would be the Spac sponsor and its reputation, knowledge and expertise. This may be a natural mechanism to weed out some of the "crazy" companies that may otherwise get to go public. Finally, once the de-Spac-king has been completed, an important point for markets would be what happens to the share price. If Spac prices keep falling after the mergers, the sector may have an increasingly hard time justifying itself when raising PIPE money so that may disincentivise over time certain questionable practices.

Part of the risks are for the portfolio companies themselves, not only for the investors. Some of those companies are very young and they are not set up properly to be public companies yet. Spacs allow such young companies to circumvent this. Part of the job of venture investors is to help them along. Another problem for young companies that go public through a Spac is that they may have their employees potentially always watching the stock price, which may not make sense for a relatively early-stage company. It could be a big counterproductive distraction, if the business is simply not ready for it. So, going public would not be appropriate for all portfolio companies and an M&A exit may actually be a better way to cash in on an exit much faster.

How do corporate venture investors experience this Spac phenomenon with respect to their corporate parents? Some are set up as strategic investors with a mandate to invest in technologies that could improve current operations or in something that is potentially disruptive. Thus, it is reasonable to suppose that, while they may be excited about an occasional exit, some C-suites have and will likely continue to have, by default, very low expectations about exits. Others will be a little wary and uncertain about the Spac process, having seen the negative press about it.

Other corporates have been even approached by leading investment banks, asking them to sponsor Spacs, with the hope that the corporation would bring its credibility and expertise to the table and give it a point of differentiation. Such corporates have had to decline offers of this kind, as it is not within their mandate to rent the corporate parent's name.

There is no dearth of anecdotal evidence that Spac exits may have been somewhat of a mixed blessing. The problem is that key decision-makers may think scoring such exits is now normal or standard. The other worry it naturally creates among some investors is that this frenzy may generate unrealistic expectations among some investors, who may eventually lose patience, money and thus flee a specific sector.

Only the future can tell whether Spacs will become a better used, rather than abused tool that adds value to all classes of investors, institutional and retail alike. Until such time, corporate venture investors will have to carefully navigate the waters to make Spac exits something sustainable in the long run. More regulations may be on the horizon, and we are yet to see when less sophisticated investors bearing much of the cost will realised the real risks involved in their holdings. Ultimately, we are yet to see how Spacs that have been used by venture capital investors, among others, as an attractive way to score an exit will continue to evolve within the blur of private and public markets.

Feature

GCV Digital Forum 2021

By Kaloyan Andonov and Alessia Argentieri

Introduction

James Mawson, founder and editor-in-chief at GCV, welcomed delegates to the Fourth GCV Digital Forum, stressing that in the world of corporate innovation "It is the most flexible and adaptive that succeed" in leading innovation capital. Mawson also thanked the community for the continued support during the challenging times of the covid-19 pandemic. He announced that GCV is planning to host its first post-pandemic live-event, as vaccinations advance, at the end of September in Monterrey, California. He also said that GCV's primary objective is to

"follow and try to understand what the community is trying to achieve".

GCV Digital Forum 2021: M&A, exits and rising trends across the market

Alex McCracken, managing director at Silicon Valley Bank's UK branch, provided an overview of mergers and acquisitions (M&A) activity, exit routes and emerging trends across the market at the GCV Digital Forum 2021.

As McCracken underlined, activity has been buoyant in the last year, often driven by an increasing presence of corporate investors. A rising trend that has picked up steam not only across the US, but also in Europe.

"Deal activity has been strong in the European market, and we have seen a notable increase in corporate investing, with CVCs now participating in 50-60% of rounds above \$30m," said McCracken. "Corporate investors have been providing vital resources as well as know-how, expertise and strategic support to local entrepreneurs."

The European market has also seen a positive year on the exit side, with a flurry of deals and an increase in valuations across many sectors. "We have seen several great exits across Europe, including some outstanding IPOs, which are essential to driving up outside returns," said McCracken. "Furthermore, US Spacs are calling on European companies, and this has become a valuable path for many businesses based in Europe. In addition, there has been considerable Spac formation in Europe itself recently, and this also represents an interesting exit route that many European companies could successfully pursue."

McCracken also noted how M&A activity has increased across the market, with a significant expansion and differentiation of the players involved, including emerging companies eager to pursue build-up and consolidation projects.

"In addition to strong corporate and private equity M&A, in the last year we have also seen more and more startups buying other startups," McCracken said. "Many companies have been able to raise hundreds of millions in funding and use part of their proceeds to finance their acquisition strategy. Despite multiples often being not as high as in IPOs and Spacs, these players are achieving an important goal: they are recycling capital back into the ecosystem in a way we had not seen before."

McCracken also underlined another major trend that has accelerated across the market in the last year, impacting the strategy of many VCs and CVCs: sector specialisation. McCracken said: "In niche industries, often very highly Amazon's innovation strategy.

"Our invention machine relies very heavily on customer sessions, where we figure out what the customer can get out of a product or service. This is what drives all the innovation and the invention that goes into it," said Misener.

Another unique and essential part of the Amazon formula, according to Misener, is also the willingness to fail.

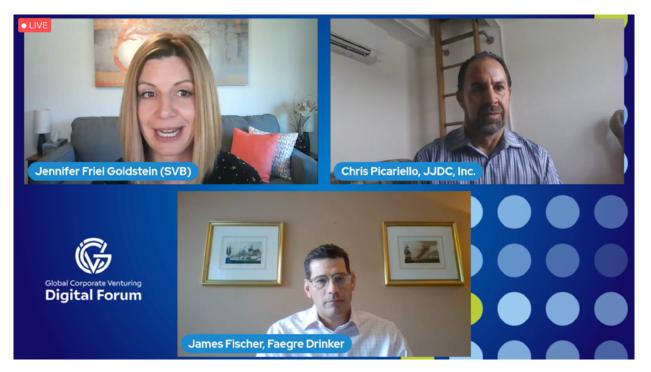


regulated, such as deep tech, fintech and health tech, corporates that truly understand the dynamics of the sector have the ability to find promising investment opportunities and add value to their portfolio companies."

GCV Digital Forum 2021: Amazon's innovation strategy

Paul Misener, senior vice-president for global innovation policy and communications at Amazon, speaking at the GCV Digital Forum 2021 described how being obsessed over customers instead of competitors is the key to "We fail all the time and we are actually proud of our failures, because our willingness to fail in the name of doing something truly new and innovative has allowed us to achieve incredible goals. It has given us the freedom to try new things without worrying about the direct consequences for customers, making sure that things fail within Amazon before they reach our customers."

Furthermore, Amazon's strategy has an additional component that represents a strong factor for the firm's innovation approach, Misener



explained: "Diversity allows us to break down that confirmation bias that we all have, as human beings," he said. "Our diverse teams are better positioned to identify flaws and optimise product development and innovation."

GCV Digital Forum 2021: How innovation and syndication have strengthened the healthcare sector

Jennifer Friel-Goldstein, managing partner for life science and healthcare practice at SVB Capital, and Christopher Picariello, president of Johnson & Johnson Innovation – JJDC, discussed how innovation is fuelling the growth of the healthcare sector at the GCV Digital Forum 2021.

"At Johnson & Johnson Innovation our ultimate mission is to identify the best ideas wherever they might be in the world and provide a diverse set of investment tools to accelerate their development," said Picariello.

"We want to achieve a successful translation of the best science into effective solutions for patients and consumers, to help them live healthier lives," he added. "We focus primarily on three segments within the healthcare industry: pharmaceuticals, medical devices and consumer health, trying to bring our long-term support to entrepreneurs at all stages of their journey, from discovery to commercialisation, from the early creation of new companies to series A, B and beyond."

The importance of fuelling innovation and technological advancements has become particularly significant during the pandemic, when the entire healthcare industry has been affected by the race for a covid-19 vaccine.

"The pandemic has been a very challenging time for the entire healthcare industry, but has also been a time of great innovation," said Friel-Goldstein. "It has allowed SVB to flex what is its core, putting the entrepreneur at the centre of every investment decision and strategy. As an organisation, this was one of our proudest moments, working hard to respond to a crisis and get to see science winning and achieving unimaginable results.

Furthermore, an important factor that has emerged during the pandemic, especially across the healthcare industry, has been the ability to build syndicates and partnerships with the aim of achieving common goals.

"We consider syndication as a critical part of the ecosystem," said Picariello. "It is important to find great partners to syndicate great innovation, because we do believe that it takes a village to finance a great opportunity."

"Life sciences is a collaborative industry by nature," added Friel-Goldstein. "Investors often syndicate deals, and at SVB we work closely with our partners and we are very supportive of syndication and collaborations with traditional, corporate and alternative investors to support further innovation. With this goal in mind, we have been able to deploy different tools, depending on the capital needs and requirements of each given company that we find interesting, to fuel its growth and boost its expansion."





Constant Craving: Qualcomm Ventures and The Continuation To Conquer CVC

Quinn Li, Global Head of Venturing, Qualcomm Ventures

Victor Boyajian, Global Chair of Venture Technology and Emerging Growth Companies at law firm Dentons, interviewed Quinn Li, Global Head of Venturing, Qualcomm Ventures, the corporate venturing arm of mobile chip and semiconductors company Qualcomm. Li mentioned that Qualcomm Ventures had celebrated its 20th anniversary in November of 2020 and now has presence in the US, China, India, Europe and Latin America, sharing with the audience some reflections on what has remained the same over years: "There is a lot of innovation happening all across the globe – that has remained the same. That is why we have expanded internationally." Li also pointed out that in some emerging regions like Latin America, Qualcomm had seen many opportunities and growth over the past few years, in particular agriculture, which he described as a "very big sector, particularly in Brazil."

Boyajian asked Li about Qualcomm's insights on one of the rather hot spaces of innovation – automotive technology. "We look at it like a computer or smartphone on wheels. We need sensors, radars, cameras, CPUs etc. to enable it to act like a human being. We look at it as a use case of AI [artificial intelligence]. We leveraged many of the technologies Qualcomm has developed for the smartphone industry," replied Li, mentioning as an example self-driving car company Cruise, in which Qualcomm was an early investor and which would be later acquired by automobile manufacturer GM.

Li explained that Qualcomm Ventures seeks in a portfolio company to be a "good fit for Qualcomm", primarily because the unit aims to be a value-adding investor: "We focus on areas we know best. And once we invest in we try to add value to the companies."

Li also touched on collaboration within the investment community: "We work very well with other VC firms globally – both financial venture firms and strategic corporate investors like us, such as Microsoft. We share best practices on how to go about investing. We collaborate. Overall, it is a very collaborative environment in the corporate venturing world."

Li's advice to new corporate venture investors revolves around taking a long-term view as an investor: "It is a long horizon business. You need to have a long horizon view. You may or may not be able to get returns in a couple years. Develop a clear thesis on where you are going to invest and how you will work with those companies."

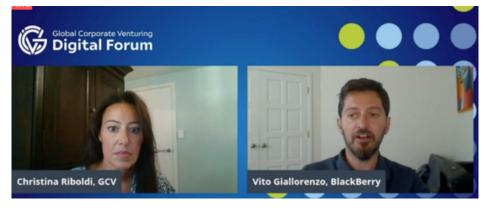
If you are not earning carry as a corporate VC, you should be. Here is why and how

Kevin Ye, partner at Mach49, and Paul Holland, managing director of corporate Investing practice at Mach49, tackled the topic of carried interest and compensation in the world of corporate venture capital. Ye acknowledged that it can be "a very sensitive conversation for many". Holland described a hypothetical example of a traditional venture firm that has raised \$1bn fund, with four general partners (GPs) and staffed four other junior team members. The fund applies the standard 2/20 fee structure, that is – a 2% management fee charged over assets under management every year and a 20% performance fee on successful exits and over profits once realised.

The 2% management fee implies that the hypothetical \$1bn fund would have \$20m to cover all expenditures, of which - according to Holland – roughly \$16m would go to cover compensation expenses. Of those \$16m, about \$2m would be spent on basic salaries and the remaining \$14m would come in the form of bonuses, mostly for the GPs. Ye and Holland said that sometimes people forget about the share of bonuses but also pointed out that there is usually a cap on how much of the management fee may be spent on compensation and bonuses.

In terms of the carried interest (or "carry") off the 20% performance fee, Holland pointed out that historically it has been the GPs that have kept a larger share of realised





profits and junior team members a much smaller amount. He warned against being in a situation where you are undercompensating junior members that have made tangible contributions for successful exits: "Try to make sure you are not in a situation where someone who is a top performer gets the same amount of "carry" as someone who did not perform as well." He pointed out this is the reason why compensation structures as "shadow carry" are sometimes put in place.

In the context of the positive evolution of corporate venture capital and its further professionalisation, Holland noted the need for proper compensation in order to retain talent: "The reason compensation needs to be where it needs to be is that there is an arms race for talent. You are competing with PE firms, large corporations and others who are going to have other ways to compensate more generously such people...To have the best people, we have to compensate them properly or they will just go somewhere else."

However, Ye also addressed challenges on adopting traditional VC compensation incentives in the context of corporate venture capital. Such hurdles include but are not limited to: corporate HR and compensation policy, the potential costs of having carried interest compensation for the corporate parent as well as the potential to create severe inequality in compensation compared to other executives in the organisation.

GCV Leadership Society – New Member Spotlight: Blackberry

Christina Riboldi, programme director of GCV, interviewed Vito Giallorenzo, senior vice president of Corporate Development and chief operating officer IoT, BlackBerry. Giallorenzo explained to the audience that BlackBerry is "very well and alive", now as a profitable software-only company after a transformation involving a shutdown of its device business.

He also told the audience about a joint project with Amazon's cloud division AWS which tackles issues in automotive software and aims to foster an ecosystem of apps in automotive IT. "It is very important to attract solutions and build an ecosystem. You need that for the platform to work and be adopted. Amazon has done it in the past with the Alexa Fund," said Giallorenzo.

He also shed light on BlackBerry's strategic fund, which is based in California, was launched in April this year and has already closed a deal in a seed round. The fund engages in direct investments only and is stage-agnostic: "We have just completed a seed round recently, looking at a couple of series B rounds...Any application that uses data from a vehicle is a potential candidate for our portfolio." Giallorenzo also clarified: "Ours is a strategic fund but that is not to say that we want to lose money on it. We definitely want to make money."

Catalyzing Change: How Backstage Capital Is Creating Conduits For Diverse Founders

Allison Cooper, partner at law firm Fenwick & West, interviewed Christie Pitts, general partner at diversity-focused investment firm Backstage Capital. Pitts described

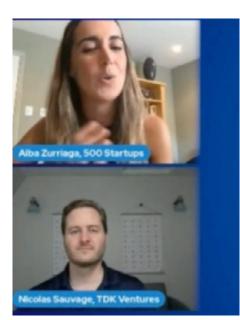


Backstage as a vehicle investing in "underestimated rather than underrepresented founders", including women, people of colour, and LGBT founders. The firm has been actively investing since 2015.

Pitts commented on the increased interest in investing in diverse founders despite the pandemic: "For most of us, the pandemic was unexpected. We put in a lot of effort into helping our companies in understanding PPP [the US programme to support small businesses during the pandemic]. During 2020, we continued to actively invest and saw that many of our companies were successfully raising money because there was great attention being paid to investments in diverse founders, after the unfortunate death of George Floyd."

Pitts shared some advice and tips to corporate VC fund managers on how to invest in diversity. She suggested corporate first look at their networks and understand what diversity there already is in existing portfolios and then look for more diversity if it is not diverse enough. She also pointed various studies have shown that investing in companies with diverse founders and teams is more financially rewarding: "It is both a financial derisking activity and addressing social issues."

As a former member of the CVC world, Pitts stated: "There is nothing more strategic than understanding who your future customers are and what they are like." She also mentioned: "In general, corporate venture teams are more diverse than private VC firms and that is a good thing. Most corporate VC teams already work in organisations where D&I initiatives are taking place."



GCV Digital Forum 2021: Best practices for raising a second fund

Speaking at the GCV Digital Forum 2021, Nicolas Sauvage, managing director of TDK Ventures, the corporate venturing arm of electronics producer TDK, has provided advice on how to raise a second fund.

The firm closed its sophomore fund on \$150m in April 2021, collecting three times the capital raised by its debut vehicle, which was launched nearly two years ago.

"It is important to think about why you want to raise a second fund, and the reason should not be simply because you are running out of money from your previous vehicle," said Sauvage. "You need to leverage what you have learned from fund one and show how you plan to accelerate growth in your next vehicle, by augmenting and optimising what you have accomplished before. Furthermore, strategy is also about deciding what you plan to avoid: make sure that you are explicit about what you are not going to do with your vehicle."

Timing is also very important when preparing the launch of a new fund, as Sauvage explained. "You should estimate when you plan to complete building your first fund portfolio and make your final investment," he said. "You also need to carefully plan how to spend your reserves, the capital that you keep for cash flow and build-up investments of your existing portfolio companies. This is particularly important because some corporate investors might not understand why you plan to start raising a new fund if you have not fully deployed your previous vehicle."

According to Sauvage, it is also useful to establish clear criteria that will determine your sector focus. "We identified three criteria," he explained. "Aligning our investments with the longterm strategy of our mothership; investing in sectors where there is space for growth, that are not already overcrowded and where it is possible to achieve long-term financial returns; and choosing areas which the team is very passionate about. Passion really matters, because with passion your team will deliver higher quality due diligence, better engagement with entrepreneurs and investors and higher added-value."

Sauvage also underlined the importance of determining the size of the fund, which should be carefully chosen and only based on the firm's investment strategy. "Make sure that it is your strategy that is driving your fund size and not anything else," he said. "You should decide the size only once you have defined the strategy that the fund will follow and you have a clear view about it."

Keeping Up With The Corporates: 500 Startups and TDK Ventures Share Insights On How Today's Multinationals Are Catalysing Innovation

Alba Zurriaga Carda, head of global Innovation strategy at US-based venture capital firm and accelerator 500 Startups, and Nicolas Sauvage, managing director at TDK Ventures, the corporate venturing capital subsidiary of Japan-based electronics producer TDK, shared a number of lessons learned from interviews aiming to capture insights on how today's multinationals are catalysing Innovation.

Lesson 1: Your team matters most. Sauvage explained the need to have "the right mix of skills and people in a team." However, he also warned: "Technical skills and capital are not enough. You need to have investment experience. You need to also make sure you set the right incentives to keep your team empowered."

Lesson 2: Develop a robust investment thesis. Zurriaga pointed that if that robust thesis features a significant strategic element, involving business units early is a must. Lesson 3: Utilise pattern matching wisely. Sauvage acknowledged that pattern recognition in aiming to identify great startup teams and investments may encourage a shortcut approach and biases.

Lesson 4: Adding value is critical to entering a round. This is particularly true in a time when capital is relatively abundant and corporate VCs have to "pitch" to startups to differentiate themselves and be let in an investment syndicate.

Lesson 5: Capturing strategic value and returns is vital. Sauvage cited one of the executives interview who said that not caring about the business units' support "would be a big mistake".

Lesson 6: Dedicate resources for corporate connectivity. As practical examples, Zurriaga pointed how some corporate venturing units bring business development teams to the table right after a deal is done to make sure there is value captured by the corporate parent or others having a special team dedicated to connecting portfolio companies with the mothership

Lesson 7: Always be a good board adviser. Sauvage reminded that a board seats involves a fiduciary duty to the startup first. In addition, he stressed that the ability to develop relationship with the CEO and other key members on the board is instrumental in the investment process.

Lesson 8: Aim to quantify strategic returns, even if it is hard. Zurriaga encouraged reporting a different kind of ROI – return on innovation – including some measurement on how learning and knowledge were transferred it to the corporate mothership. In addition, it would have to include some quantitative measure of what gains the corporate parent may have obtained (market entry, new market category and so on) as well as the cost and time savings that investments have brought about.

Feature

Semiconductor and Al panel

By Liwen-Edison Fu Supplements and features editor

A Taiwanese industry association and Global Corporate Venturing jointly organised a second semiconductor, artificial intelligence (AI) and quantum computing-themed panel held under Chatham House Rule on July 27, after a similar discussion in late April.

The latest panel featured multiple Taiwanese corporate venturers, who were joined by their global counterparts based in Japan, China, the United States and Israel. An executive from a governmentbacked vehicle hosted the panel.

The corporate investor who kicked off the meeting pointed out that

there were currently three trends in the AI investing scene in their home country: core AI technology, AI applied in different verticals and chips. The entrepreneurs in the AI ecosystem are focusing on parallel computing platforms, for example, in order to compete with their US peers.

Another corporate venturing executive then explained that their fund had backed various AI accelerator chip companies that cover areas such as inference processors. In the AI space, the practice is not to only separate inference and training but also to distinguish datacentre and edge computing, the last one is particularly difficult to tackle given it is a highly fragmented market, they said.

Their fund invested in an edge Al technology developer that was successful but it would be hard to repeat the feat or further grow the business, they acknowledged. On the data centre side, the major trend in the past few years is to have access to memory given the larger parameters.

Become software developers

Another tendency is for Al accelerator chip companies to become software developers. Software is increasingly more important and challenging than chip development itself. They added that typically the companies are tasked with developing peripheral component interconnect express-based cards or the full appliance. Though admitting it is not probable to compete with larger corporations but they believe they will see more coming from startup companies and there is still room for disruption in this space.

Another corporate venturer added that edge devices went beyond their traditional definition, and the products such as cameras and cars can also be classified under the category. Before the fund commits to an Al company, it tries to identify augmented and virtual reality as well as other edge device applications.

A speaker representing a local corporate VC fund agreed with the first two panellists and said they were excited about the development of the space while recognising that it is becoming more challenging to explore.

"First of all, the incumbents of the edge have all been treating



Al as a core feature or with high priority," they said. "But meanwhile, there is the notion that domainspecific architecture has become feasible...There is now more room for specific applications and specialised architectures that is enabled by Al or domainspecific computing that made the diversity from the chipset architecture possible."

A fourth panellist representing a corporate venture capital (CVC) unit added that as their corporate parent focuses on industrial robotics devices, AI performance and security are both important aspects to address. They also noted that their investments usually have mergers and acquisitions in mind.

Another executive of the CVC subsidiary of an industrial conglomerate said Al is not necessarily a good focus for all funds. They agreed that Al is a fragmented industry and it is not easy to define which device is universal for solving a specific problem. Their fund focuses on companies are working on technologies and products that can improve and solve a computing problem, including in-memory computing products.

A fifth participant said their corporate venturing unit focused on the sovereign component in AI and electronic design automation (EDA) tools, adding that EDA software is a more domain-specific technology, so there is still a long way to go to have a more user-friendly version.

Hyperscale computing

Hyperscale computing is a crucial focus area, said a sixth speaker participating on behalf of a global corporate venturing fund. They said the most important part was to win these hyperscaler customers, and in order to achieve that, they looked at effective tera operations per second (tops).

"When we talk about hyperscaler, I have a new metric, which is tops per square metres, not millimetres, square metres, which is how much can you pack into a building," they added. "And even if you have all those magnitudes, that does not get you to win; therefore, what we thought was a good insight and we made a bet on this – we need to think about which customers of these hyperscalers they care the most about, which ones they get the biggest margins? And if you can win these very valuable customers for the hyperscalers, then you have a chance to win the hyperscaler."

They added that their new fund's strategy was about what not to invest in for three years, and stressed that in order for quantum computing to have good financial returns, they would have to wait until at least 2025. "There is so much technical risk and getting

the right vertical integration for a solution," they noted. "I cannot see how investing today is going to get good financial returns."

A seventh CVC executive chipped in by saying their focus was on image sensor chips. They explained: "We found some initial foray in the retail space in terms of managing shelf space and communicating with the brands. That has been proven to be an area that is useful. But from the engineers' point of view, they want to look at different areas,

but when it comes to the actual implementation, it is guite time-consuming."

The second participant then concluded that guantum computing hardware and software has different layers. "You have the hardware gubit level, you have the control layer, you have the application layers and the algorithm layer - it depends on what you are going after. The market is still part of our humble assessment."



Interview

Jeff Herbst, managing partner, GFT Ventures

By Liwen-Edison Fu Supplements and features editor

Last month, Jeff Herbst departed from US-headquartered semiconductor technology provider Nvidia, where he had led its business development activities and corporate venture capital (CVC) unit Nvidia GPU Ventures for two decades starting in 2001.

"I spent the last 20 years running business development for Nvidia," Herbst said. "I also founded and ran its venture investment activities as well as its global artificial intelligence (AI) startup accelerator."

Herbst has teamed up with seasoned venture capitalist Jay Eum to set up a US-based frontier



Jeff Herbst left Nvidia after two decades

technology-focused venture capital firm dubbed GFT Ventures.

Eum had co-founded another VC firm Translink Capital in 2007, where he oversaw four successful

funds and over \$600m in assets under management. Before that, he had been founding managing director for Samsung Ventures America, a CVC unit of the South Korea-headquartered consumer electronics manufacturer, for nearly four years.

Herbst added: "Jay and I have been friends for two decades, and have collaborated and co-invested in the past. This is indeed our passion, and we are looking forward to building the GFT franchise together for many years to come."

The new firm is concentrating on the US and Israeli ecosystems, identifying and investing in developers of disruptive technologies including AI, data, robotics, cybersecurity, blockchain, digital healthcare and mobility.

The rise of modern AI techniques could represent the biggest technology inflection ever, according to Herbst, who said: "I just read a report from an investment analyst calling it 'the mother of all cycles'.



Jay Eum backs frontier technology

"We formed GFT Ventures to capitalise on AI and other major trends in what we call 'frontier technology'. This includes data science, robotics and automation, blockchain and fintech as well as digital health.

"Our sweet spot is earlystage companies solving the hardest problems for the largest markets. And we 'lean in' heavily when we find the best and proven management teams in the business."

The firm has just begun investing, and some deals have not yet



GFT Ventures aims to capitalise on AI including data science, blockchain and fintech

closed or been announced. "What I can tell you is that our first lead investment is in a company leveraging AI and data science to revolutionise the way marketing dollars are deployed and tracked by CMOs (chief marketing officers) and CROs (chief risk officers) across large enterprises. This is a white space in a huge market, with a top calibre management team.

"We have also already invested in a couple of other companies leveraging the blockchain and NFT (non-fungible token) technologies. In all cases, the management teams are known, proven and top-notch. Although we are technically a 'new' fund, Jay and I both gain a lot of leverage from the fact that we have proven track records, defensible expertise and operational experience, and are well-known to entrepreneurs and other VCs. So we definitely benefit from what we like to think of as proprietary deal flow."

Both Herbst and Eum come from corporate backgrounds and are collaborative by nature, Herbst pointed out, adding that he is passionate about working closely with GCV in various initiatives including chairing the GCV AI Council to work more closely with other ecosystem players.

"We would like to think of ourselves not only as VCs but also 'ecosystem builders'. We are already collaborating on deals with top VCs from other firms as well as dozens of corporate venture investors around the world," Herbst said.

"In fact, our relationships, and desire to collaborate with, corporates is one of our major differentiators from other early-stage funds." In addition to his VC role, Eum is the chairman of the Asia America Multitechnology Association and a board director of the Association of Asian American Investment Managers.

"We are both very passionate about giving back to the community, including mentoring young founders as well as those currently under-represented in our industry," Herbst added.

As for the year ahead, Herbst said GFT Ventures has "big plans". He explained: "Although we have just formed the fund and are really just getting started, we are already about halfway to our target fund size of \$100m. "We will finish raising our inaugural fund, and we are delighted to engage with any potential new LPs (limited partners), financial or corporate, that would like to join us on our mission.

"At the same time, we are already very active in evaluating and closing on startup investments. In another year, I am sure we will have at least a half dozen more companies we can talk to you about."

Herbst considers the opportunities present today are tremendous. "We are at the beginning of the most disruptive technology cycle most of us will see in our lifetimes. Essentially we have entered an era where 'software can write software', which ultimately enables exponential technology development.

"The challenge, which in fact is also the opportunity, is to separate the 'signal from the noise' and zone in on the highest growth areas and the startups with the most potential. The tendency in a bull market is for everything to look attractive, but we know from experience that is not the case. We will leverage our pattern recognition skills, gained over our long track records investing in frontier technology, to make sure we stay extremely focused and disciplined. This will be fun!"

Sector report

Telecoms recovering from the pandemic

- Optimism about 5G-related opportunities still prevails
- > Deals flat in 2020 but growing in 2021
- Record number of exits in 2020 and 2021

By Kaloyan Andonov Reporter and analyst

Telecommunications connect our ever more digitised world. Current developments in the sector will likely continue to facilitate the further digitisation of everything around us. This is why the sector is among the most highly competitive ones. Telecom companies are compelled to continually make significant outlays of capital and innovate, so they can stay afloat and relevant.

With high levels of competition and high capital requirements, the telecoms sector has been, unsurprisingly, also among the most technologically disrupted ones. Basic and core services of telecom carriers, such as voice calls and texting (SMS), have been long replaced by instant messaging and social media platforms that operate via Internet connection. GCV Analytics' definition of the telecoms sector encompasses telecoms service providers, wireless technologies as well as other telecoms-related emerging businesses.

This disruption has exerted substantial impact on telecoms' revenue streams and it is likely to deepen with the current rollout of 5G connectivity. The 5G-enabled technologies, some of which are yet to emerge, may open up new opportunities for telecoms to improve their revenue streams. This is why industry incumbents are likely to continue to look for synergies and partnerships with other service providers, including young and innovative businesses.

With disruptions challenges come also opportunities. These industry conditions helps to explain why venturing units of telecom carriers have started seeking third parties as limited partners (LPs) to back their fund and deals. There is no dearth of examples of this trend – from SoftBank with its two large Vision Funds through Swisscom, Telstra and Deutsche Telekom. Over the past few years, the sector has notably developed structures and strategies to incorporate third-party LPs. Such practices have successfully withstood the covid-19 pandemic and have been adopted by corporate venturers from other sectors as well. While demand for capital by emerging enterprises is virtually unceasing, the supply of venture capital funding necessitates a broader range of investors see potential for exceptional financial returns.

However, in recent years optimism has somewhat prevailed in established companies in the sector due to the potential of 5G technologies, because these opportunities are the catalyst that may assuage the erosion of profits for telecoms. The key to the potential of 5G lies in higher speeds. The previous major network upgrade, 4G, was rolled out in 2009 and mobile devices reached a peak speed of almost 10 Mbps. This is far behind what 5G is set to deliver – speeds between 10 and 20 Gbps. This would drive network latency from 30ms to about 1ms, making it apt for a wide range of services and devices that require ultra-low latency. Some venture (no pun intended) to say that a massive virtual reality world

Paul Asel, co-founder and managing partner, NGP Capital

Paul Asel is a co-founder and managing partner of NGP Capital, the venture capital firm spun off from Finland-based communications technology manufacturer Nokia, with \$1.2bn under management and offices in Silicon Valley, China and Europe.

NGP Capital, an early investor in 12 companies that eventually became unicorns, was founded in 2005. The firm focuses on growth-stage companies to create financial and strategic value.

The fund's initial ticket size typically ranges between \$8m and \$12m with the possibility

will be opened thanks to this. It is, however, somewhat early to judge whether such futuristic predictions will indeed materialise.

Consulting firm Deloitte surveyed 437 US-based executives responsible for connectivity and networking technologies at organisations during the last quarter (Q4) of 2020. According to the survey, the pandemic has accelerated the transition to advanced wireless technologies. The surveyed networking executives stated that the pandemic had made their organisations to accelerate investment in wireless networking, focusing particularly on 5G and wifi 6. The latter two are largely seen as "a way to bolster their ability to address current and future disruptions, as well as an opportunity to create new solutions" because 5G and wifi 6 promise significant operational

of follow-on investments. Its limited partners include Nokia and its Bell Labs



subsidiary, which have created many connected technologies around 5G and the internet of things.

Asel has been investing in startups for more than 25 years, having achieved over 20 successful exits including five IPOs and four mergers and acquisitions (M&A) exceeding \$1bn. Before joining NGP Capital, he led technology investments in Southeast Asia at the International Finance Corporation.

improvements over previous generations of technologies.

The survey also revealed some findings on the behaviour of organisations that are early adopters of such technologies. Such adopters tend to engage with multiple telecom and technology vendors, prefer to purchase bestin-class components and look for help with integration. According to the survey, seven in 10 adopters have said to be open to exploring new relationships.

According to another report by Deloitte titled "2021 Telecommunications industry outlook", the pandemic has accelerated structural changes in the industry that were beginning to take place before 2020 and covid-19. In 2021, according to the authors of the report, incumbents in telecoms, media and entertainment have three opportunities to recover from the pandemic and to reposition themselves for the future: first, to renew their focus on customers' needs; second, to converge and remix entertainment experiences through new service offerings; and third, to monetise advanced wireless networks through new products, services and business models.

The customer centricity focus has to be reshaped in terms of the economic situation of consumers. According to the report, "churn rate among over-the-top services in the United States rose from 35% in Q1 2019 to 41% in Q1 2020." While the liquidity injections and support from governments programmes may have just prevented a massive economic collapse after the pandemic, some patterns of consumption have emerged which suggest that original contents is what drives adoption and cancellations. This implies that a more tailored pricing approach may be warranted in order to retain customers. Providers of content in the US are increasingly offering ad-supported video streaming services (AVOD) as an alternative to paid subscriptions, so that may have just been the answer. Telecoms stay in the middle of all this, having to provide connectivity, so there is much room for partnerships.

As for opportunities to monetise on technological advances, there is, according to the report, no shortage of them, as businesses from other sectors already understand fully the implications of it, as suggested by the aforementioned survey. The report thus suggests there should be particular focus on business customers: "This will likely involve exploring and developing new operating and business models that require greater collaboration with third-party partners to deliver end-to-end enterprise applications that meet the disparate needs of specific industries. Because 5G will likely trigger innovative business models that gain large-scale adoption, telecom providers should strive to help enterprise customers gain first-mover advantages in defining and developing the innovative business models that can disrupt their industries."

There are many technologies that will naturally draw the attention of telecoms – from image and speech recognition to machine learning to deal with big data to providing hi-speed in-flight internet access. The pattern of corporate venturing investments GCV Analytics has tracked corroborates this.

Chris Bartlett, senior vicepresident of corporate development, Verizon

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

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

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

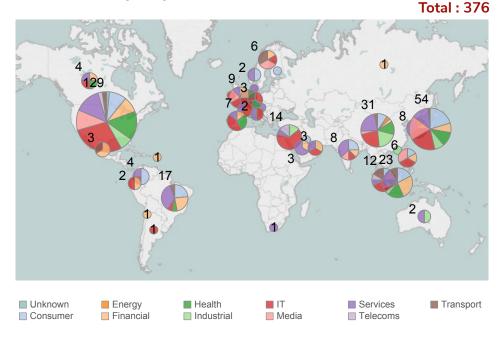


Bartlett oversees joint ventures, strategic investment activity, acquisitions and divestitures. The unit has invested in more than 70 companies to date across industries and technologies since it was launched in 2000.

He said: "As new ways of working, collaboration and connecting continue to emerge at a rapid pace, the team at Verizon Ventures looks forward to the continued support of entrepreneurs building the 5G future across the globe."

The sector in charts

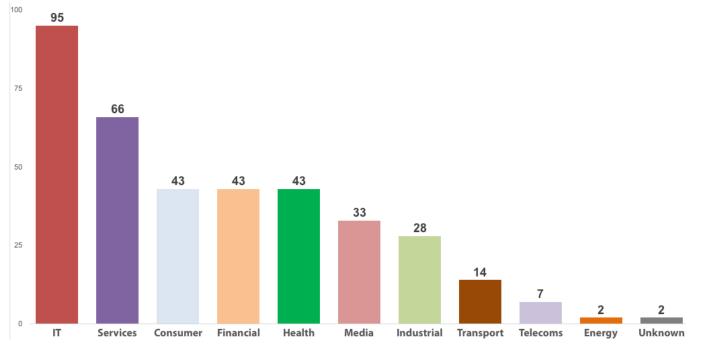
Global view of past year's deals



For the period between August 2020 and July 2021, we reported 376 venturing rounds involving corporate investors from the telecoms sector. Many of them (129) took place in the US, while 54 were hosted in Japan and 31 in China.

Investments of telecoms venturers by sector over the past year

The majority of those commitments (95) went to emerging enterprises from the IT sector (mostly cybersecurity, artificial intelligence, big data and enterprise software) as well as into companies developing other technologies in synergies with telecoms: 66 deals in the services sector (mostly, edtech, logistics and HR tech), 43 in the financial sector (mostly payment technology and alternative lending) and 43 in the consumer sector (mostly e-commerce platforms as well as food and beverages, including food delivery).

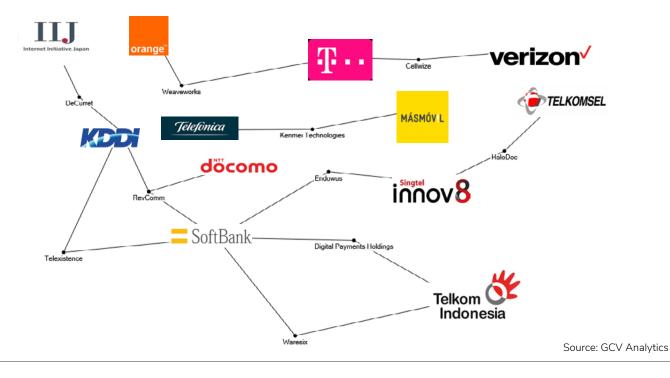


Source: GCV Analytics



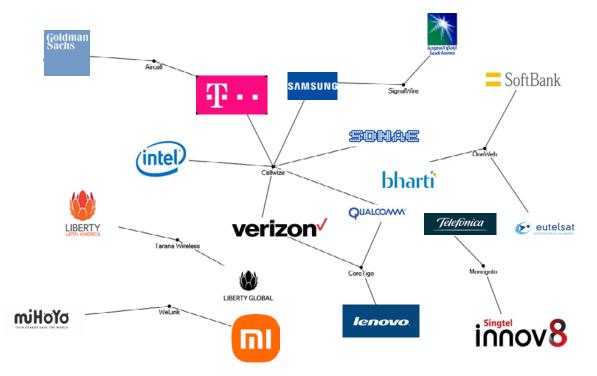
Co-investments of telecoms sector venturers 2020-21

The network diagram, illustrating co-investments of telecoms corporates, shows the broad variety of investment interests of the sector's incumbents. The commitments range from fintech and cryptocurrency exchanges (DeCurret, Digital Payments, Endowus) through digital health and telemedicine (HaloDoc), robotics (Telexistence) and warehousing (Waresix) to network technology and cloud connectivity (Revcomm, Cellwize, Kenmei Technologies) and IT (Weaveworks).



Corporate co-investments in telecoms enterprises 2020-21

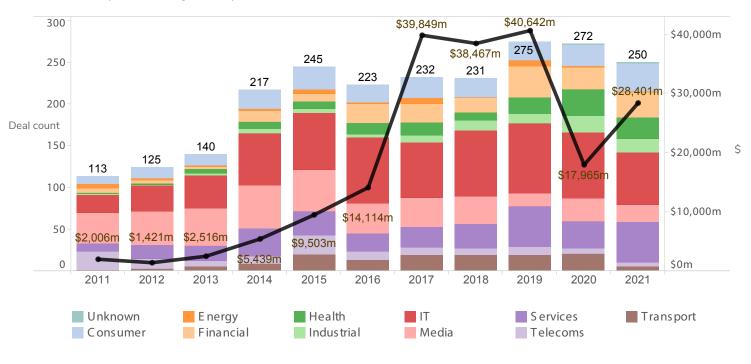
The emerging telecoms businesses in the portfolios of corporate venturers came from wireless connectivity technologies (Tarana Wireless, Welink, CoreTigo), cloud phone and connectivity (SignalWire, Monogoto, Aircall) through mobile networks automation (Cellwize) to satellites and satellite data providers (OneWeb).



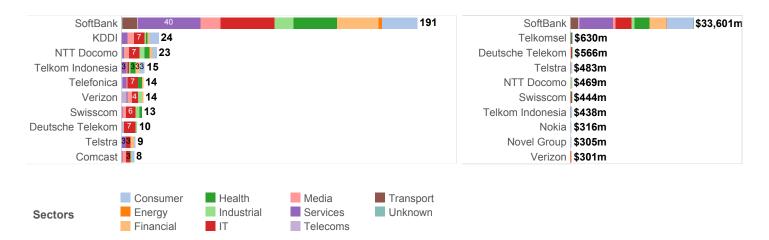
Source: GCV Analytics

Deals by telecoms corporates 2020-21

On a calendar year-on-year basis, total capital raised in corporate-backed rounds dropped from \$40.64bn in 2019 down to \$17.97bn in 2020, representing a 56% decrease. The deal count stayed comparatively unchanged, with 272 deals last year compared to the 275 tracked in 2019. However, it seems 2021 may be a record year, as by end of July we had already tracked 250 rounds, worth an estimated total of \$28.4bn. As outlined further in this article, the 10 largest investments by corporate venturers from the telecoms sector were not necessarily concentrated in the same industry, as they happened to be diverse investments made by SoftBank, by far the largest corporate investor from this sector.



Top telecoms investors over the past year



Source: GCV Analytics

The leading corporate investors from the telecoms sector in terms of largest number of deals were telecoms and internet company SoftBank, as well as telecoms carriers KDDI and NTT Docomo. The list of telecoms corporates committing capital in the largest rounds was headed also by SoftBank along with Telkomsel, the mobile network subsidiary of Indonesia-headquartered telecommunications operator Telkom Indonesia, and telecoms firm Deutsche Telekom.

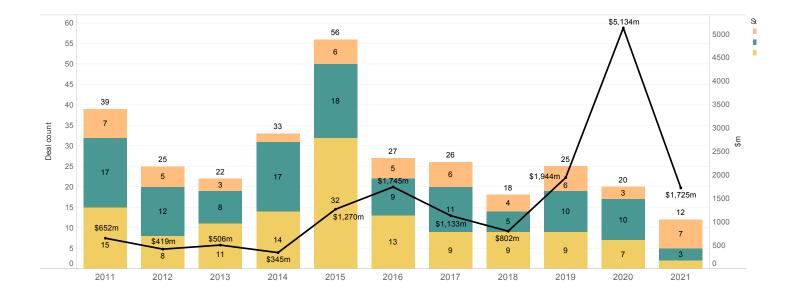
Top investors in telecoms enterprises over the past year

The most active corporate venture investors in the emerging telecoms businesses were semiconductor producer Qualcomm, along with Deutsche Telekom and telecoms carrier Verizon.



Corporate-backed deals in emerging telecoms enterprises 2011-21

Overall, corporate investments in emerging telecoms-focused enterprises went down from 25 rounds in 2019 to 20 by the end of 2020, suggesting a 20% decrease. The estimated total dollars in those rounds, however, rose several times over from \$1.94bn in 2019 to \$5.13bn last year.



ubsectors

I Telecommunication service providers

I Wireless technologies

Other (Telecommunications)

Source: GCV Analytics

Deals

Portfolio Company	Location	Sector	Round	Round size	Investors List	
Yanolja	Singapore	Services	Undisclosed	\$1.7bn	SoftBank	
Manbang Group	China	Services	Undisclosed	\$1.7bn	Fidelity GGV Capital Hillhouse Capital Management Lightspeed China Partners Permira Sequoia Capital SoftBank Tencent YF Capital	
Zuoyebang	China	Services	E and beyond	\$1.6bn	Alibaba FountainVest Partners Sequoia Capital SoftBank Tiger Global Management	
Swiggy	India	Consumer	Undisclosed	\$1.25bn	Accel Partners Amansa Holdings Carmignac Falcon Edge Capital Goldman Sachs Naspe Qatar Investment Authority SoftBank Think Capital Wellington Management	
GoPuff	USA	Consumer	Undisclosed	\$1.15bn	Baillie Gifford D1 Capital Partners Eldridge Industries Fidelity Luxor Capital ReInvent VC SoftBank	
FTX Trading	Antigua and Barbuda	Financial Services	В	\$900m	40 North Ventures Altimeter Bond VC Circle Coinbase Hudson River Capital Insight Partners Lightspeed Venture Partners Multicoin Capital New Enterprise Associates Paradigm Paul Tudor Jones family private investors Ribbit Capital Senator Investment Group Sequoia Capital Sino Global Capital SoftBank Third Point Ventures Thoma Bravo Van Eck Associates Corporation Willoughby Capital	
Revolut	UK	Financial Services	E and beyond	\$800m	SoftBank Tiger Global Management	
Perch	USA	Consumer	A	\$775m	SoftBank Spark Capital Victory Park Capital (VPC)	
Reef	USA	Transport	Undisclosed	\$700m	Mubadala Oaktree Capital Management SoftBank Target Global Ventures UBS	
SambaNova Systems	USA	IT	D	\$676m	Alphabet BlackRock GIC Intel SoftBank Temasek Walden International WRVI Capital	

Source: GCV Analytics

Corporates from the telecoms sector invested in large multimillion-dollar rounds, raised by enterprises from the services, consumer, financial and transport sectors. Five out of the top 10 deals were above the \$1bn mark and all top deals featured SoftBank as an investor.

SoftBank's Vision Fund II supplied \$1.7bn in funding for South Korea-based travel and accommodation services provider Yanolja. Founded in 2005, Yanolja initially began as a shortterm accommodation services provider before adding hospitality, food, leisure and transportation booking services to its offering, which is accessible through a mobile app. Yanolja will use the capital to invest in its technology and expand its technology-based services into new markets. It intends to build a global travel platform that leverages artificial intelligence technology and big



data to provide more automated and personalised services.

SoftBank's Vision Fund has co-led a \$1.7bn funding round for Manbang Group, the China-based trucking services provider also known as Full Truck Alliance. The round was co-led with investment and financial services group Fidelity, Permira's Growth Opportunities Fund and Sequoia Capital China. It included internet group Tencent, Hillhouse Capital, GGV Capital, Lightspeed China Partners and YF Capital and valued the company at almost \$12bn. Manbang operates an app-based service that uses artificial intelligence to match drivers with space in their trucks to customers who require cargo to be transported, taking a cut of the fee and plotting out optimal routes for drivers.

China-based online tutoring platform developer Zuoyebang closed a \$1.6bn series E-plus round featuring e-commerce group Alibaba and SoftBank's Vision Fund 1. Hedge fund manager Tiger Global Management, venture capital firm Sequoia Capital China and private equity fund FountainVest Partners also participated in the round, which came after reports that the company was raising money at a \$10bn valuation. Zuoyebang runs an online education platform

with 50 million daily active users and 170 million monthly active users, offering services such as live tutorials and homework assistance, the latter through an app with some 300 million answers to education questions. The funding will support the expansion of its categories and the growth of a business-focused offering.

SoftBank's Vision Fund 2 and internet group Prosus co-led a \$1.25bn series J round for India-based food delivery service provider Swiggy at a \$5.5bn valuation. The round also featured sovereign wealth fund Qatar Investment Authority as well as Accel, Wellington Management, Falcon Edge Capital, Amansa Capital, Goldman Sachs, Think Capital and Carmignac. The round reportedly included an \$800m tranche led by Prosus' corporate venturing arm, Prosus Ventures, in April 2021. SoftBank provided a reported \$450m for that close, which included Falcon Edge, Goldman Sachs, Amansa Capital, Think Capital, Carmignac and Accel. Founded in 2014, Swiggy provides food and grocery delivery services, and its online platform facilitates access to more than 150,000 restaurants and stores located in over 500 Indian cities.

GoPuff, the US-based operator of a personal services app, received \$1.15bn from investors including SoftBank's Vision Fund 1 at an \$8.9bn valuation. Investment and financial services group Fidelity Management and Research also took part in the round, as did hedge fund managers Luxor Capital and D1 Capital Partners, investment manager Baillie Gifford and investment firms Eldridge and Reinvent Capital. Founded in 2013, GoPuff runs an online platform that allows users to order products such as food and drink, cleaning, baby and pet products, overthe-counter medications and, in some places, alcohol, for delivery. The company operates out of a network of fulfilment centres and charges a flat \$1.95 fee per delivery. It will use the funding to expand geographically, extend its product range, grow its team and bolster its technology.

Antigua and Barbudaregistered cryptocurrency exchange operator FTX Trading completed a \$900m series B round, featuring SoftBank, digital currency exchange Coinbase and blockchain payment technology provider Circle. The funding was raised at an \$18bn valuation from a consortium of more than 60 investors including quantitative trading



Cryptocurrency exchange operator FTX Trading is registered in Antigua and Barbuda

firm Hudson River, Paradigm, Seguoia Capital, Thoma Bravo, Ribbit Capital, Insight Partners, Bond, New Enterprise Associates, Third Point and Lightspeed Venture Partners. Incubated by quantitative trading firm Alameda Research, FTX Trading runs FTX. Com, a cryptocurrency exchange with more than 1 million users that handles some \$10bn of trading volume a day. The series B proceeds will be channelled into company growth and international expansion in addition to introducing new features and accumulating users.

UK-headquartered financial services app developer Revolut secured \$800m in a series E round that included SoftBank's Vision Fund II. The corporate was joined by hedge fund manager Tiger Global Management and the funding was raised at a \$33bn valuation. Revolut initially focused on crossborder financial transfers but has expanded its mobile appbased services to encompass a range of products including bill settlement and splitting, salary advances, consumer cashback, wealth management and a dedicated business offering. The cash has been earmarked for product development in addition to expanding the company's US operations and entering the Indian market.

US-headquartered e-commerce holding company Perch completed a \$775m series A round led by SoftBank's Vision Fund 2. The round also featured venture capital firm Spark Capital and alternative investment manager Victory Park Capital. It is the largest series A yet to be closed by a US-based company, according to Perch.



Revolut products including bill settlement

Founded in November 2019, Perch is acquiring direct-toconsumer e-commerce brands, particularly third-party merchants on online marketplace Amazon, in a bid to build a diversified online retail offering. Several emerging companies are ploughing similar ground but Perch is among the first to raise corporate funding. It has bought more than 70 brands so far and targets category leaders with the potential to scale their businesses.

Reef Technology, a US-based provider of infrastructure for ondemand services, raised \$700m from investors including SoftBank's Vision Fund. Abu Dhabi's sovereign wealth fund Mubadala Investment Company led the round through its Mubadala Capital fund while financial services firm UBS's Asset Management unit, venture capital firm Target Global and funds managed by Oaktree Capital Management also took part. Formerly known as ParkJockey, Reef's core business was a system that allowed users to book parking spaces through a mobile app, but

it has since pivoted to concentrate on converting underused physical space into hubs for on-demand services. The company's app still allows parking lot owners to optimise their space, but also offers space for local logistics hubs for e-commerce delivery, localised mini-healthcare facilities, and cloud kitchens that can support on-demand food deliveries. The round was disclosed alongside the formation of Neighborhood Property Group, an investment vehicle funded by Reef and alternative investment manager Oaktree that will spend \$300m on acquiring real estate assets that will support Reef's business.

SoftBank's Vision Fund 2 led a \$676m series D round for US-headquartered artificial intelligence software developer SambaNova Systems. The round included Intel Capital and GV, corporate venturing subsidiaries for semiconductor and data technology provider Intel and internet and technology group Alphabet respectively, and it reportedly valued the company at \$5.1bn. Singaporean state-owned entities Temasek and GIC filled out the round together with Walden International, WRVI and funds and accounts managed by BlackRock. SambaNova is developing systems to run advanced AI applications that are intended to be more powerful that existing central or graphics processing units, for use across data centres, the cloud and edge computing. The company's co-founders include Kunle Olukotun, who leads Stanford University's Hydra Chip Multiprocessor (CMP) research project, and Chris Ré, an associate professor in Stanford's Department of Computer Science.

Top investments in telecoms sector enterprises over the past year

Portfolio Company	Location	Sector	Round	Round size	Investors List	
Jio Platforms	India	Telecoms	Stake purchase	\$4.5bn	Alphabet	
OneWeb	USA	Telecoms	Stake purchase	\$550m	Eutelsat	
Aircall	USA	Telecoms	D	\$120m	Adams Street Partners Deutsche Telekom Draper Esprit eFounders Gaia Capital Partners Goldman Sachs NextWorld Capital	
Plume	USA	Telecoms	D	\$60m	Belkin Charter Communications Liberty Global Qualcomm Service Electric Cablevision Sha Communications	
Pivotal Commware	USA	Telecoms	С	\$50m	Devonshire Investors Dig Investments GlobalStart Lux Capital private investors Thermo Companies Tracker Capital Management	
Cellwize	Singapore	Telecoms	В	\$32m	Deutsche Telekom GreenApple Tech Intel Qualcomm Samsung Sonae undisclosed investors Verizon Vintage Investment Partners Viola Ventures	
Tarana Wireless	USA	Telecoms	Undisclosed	\$30m	Liberty Global Liberty Latin America Prime Movers Lab undisclosed investors	
Kymeta	USA	Telecoms	Undisclosed	\$30m	Hanwha	
SignalWire	USA	Telecoms	В	\$30m	private investors Samsung Saudi Aramco Storm Ventures	
WeLink	USA	Telecoms	А	\$23m	China Mobile Games and Entertainment Group Dunhong Capital Management MiHoYo Shunwei Capital Xiaomi	

Source: GCV Analytics

There were other interesting deals in emerging telecomsfocused businesses that received financial backing from corporate investors from the telecoms and other sectors.

Internet technology provider Google, part of Alphabet, invested \$4.5bn in Jio Platforms, the digital services spinoff of diversified India-based conglomerate Reliance Industries. Google will take a 7.7% stake in Jio and plans to collaborate with it on the development of technology including an affordable entry-level smartphone. Qualcomm Ventures, the corporate venture capital subsidiary of Qualcomm, provided \$97.1m for the spinoff three days earlier. Intel Capital, semiconductor producer Intel's strategic investment arm, had committed \$253m to the company earlier, while social media group Facebook injected \$5.7bn in funding in April 2021. At the time, Alphabet had announced plans recently to invest \$10bn in India in the next five to seven years. Jio operates a mobile

network and broadband service, as well as about a dozen proprietary apps offering functionality such as music, film and television streaming, cloud storage and chat. It aims to expand into online retail, digital payments, education and healthcare, building an ecosystem modelled on that of China-based Alibaba.

Satellite operator **Eutelsat** Communications invested \$550m in UKheadquartered satellite internet technology developer One Web, in return for a stake sized at about 24%. OneWeb is building a 648-satellite constellation intended to provide broadband coverage to remote areas from low orbit. The initial system is expected to be operational by the end of this year and it said Eutelsat's capital will take it most of the way towards its funding goal. The company had raised a total of \$3.4bn from investors including SoftBank's Vision Fund, conglomerate Bharti Enterprises and satellite services provider Hughes Network Systems

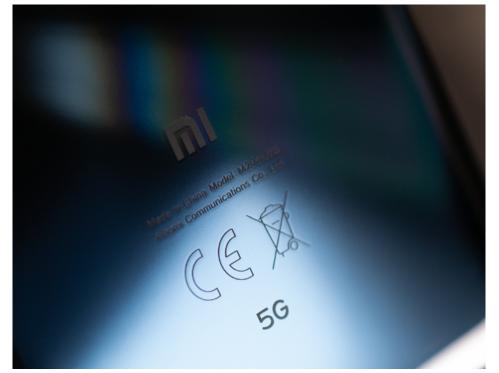
before filing for bankruptcy in March 2020. Bharti subsequently joined the UK government to buy OneWeb's assets for \$1bn in July the same year. SoftBank and satellite network operator Hughes Network Systems had invested a combined \$400m in it in January 2021. Later in June 2021, OneWeb secured an additional \$500m from diversified conglomerate Bharti Enterprises, which exercised a call option from a shareholder's agreement to increase its stake to 38.6%.

3 France-based customer support software provider Aircall raised \$120m in a series D round backed by Deutsche Telekom Capital Partners (DTCP), the investment firm sponsored by Deutsche Telekom. The round was led by investment bank Goldman Sachs' Asset Management division and included eFounders, DraperEsprit, NextWorld Capital, Adams Street Partners and Gaia Capital Partners. The cash was secured at a \$1bn valuation. Founded in 2014, Aircall provides a

Investment, Lux Capital and Bill Gates, the co-founder of software producer Microsoft. Pivotal was spun out of intellectual propertyfocused investment firm Intellectual Ventures in 2017. The company develops communications platforms based on holographic beam forming technology, which enable mobile network providers to deploy 5G networks.

US-based network automation technology provider Cellwize Wireless Technologies secured \$32m in a series B round co-led by Intel Capital and Qualcomm Ventures, subsidiaries of semiconductor technology producers Intel and Qualcomm. Samsung Next, Sonae Investment Management (IM), Verizon Ventures and Deutsche Telekom Capital Partners (DTCP) also participated, on behalf of Qualcomm, conglomerate Sonae and telecoms groups Verizon and Deutsche Telekom. The round was filled out by Viola Ventures, Vintage Investment Partners, GreenApple Tech and undisclosed additional investors. Cellwize offers machine learning-driven software that is used to optimise mobile communications transmitters including 5G networks. The capital will be used to bolster its technology and expand its business into adjacent and international markets.

Tarana Wireless, a US-headquartered provider of wireless networking technology, raised \$30m from investors including broadcaster Liberty Latin America and mass media group Liberty Global. Venture capital fund Prime Movers Lab led the round, which also featured undisclosed private and existing investors. The corporates took part through



Pivotal Commware is a US-based developer of 5G infrastructure

cloud-based phone system for call centres, support lines and sales teams which integrates with an enterprise's existing applications, including customer relationship management platforms Zendesk and Salesforce, to help customer service staff provide better service during phone calls. The company will use the funding to expand globally, opening new European offices in London and Berlin, in addition to investments in North America and the Asia Pacific region and the recruitment of new hires.

US-based wifi technology developer Plume completed a \$60m series D round co-led by telecoms firm Charter Communications, consumer electronics manufacturer Belkin, Qualcomm and cable television provider Service Electric Cablevision. The equity round, secured with \$25m in debt financing from Silicon Valley Bank and WestRiver Group, included also telecoms firm Shaw Communications and mass media group Liberty Global. Qualcomm and Liberty Global invested

through their Qualcomm Ventures and Liberty Global Ventures units. Founded in 2015, Plume has created mesh technology - a type of network designed to provide sustained wifi coverage throughout a house - which uses artificial intelligence to adapt signal strength in real time. The system identifies and blocks malicious activity, offering parental controls including the ability to remove internet access from specific devices. Visitors can be given temporary access to the wifi network and it can integrate with smart connected devices in the home.

5 Pivotal Commware, a US-based developer of 5G infrastructure technology, has picked up \$50m for its series C round featuring the owner of mobile satellite operator Globalstar and financial services group Fidelity. Thermo Companies, the majority-stake owner of Globalstar, participated in the round alongside Fidelity-affiliated investment firm Devonshire Investors. Tracker Capital Management led the round, which was filled out by DIG



investment vehicles Liberty Latin America Ventures and Liberty Global Ventures. Founded in 2009, Tarana is the creator of a residential broadband internet system known as G1, which offers users gigabit speeds over long ranges through unlicensed parts of the spectrum. It is designed to provide fast and reliable internet to suburban customers. The funding was likely a follow-on from the \$24m Tarana secured from satellite and internet services provider EchoStar, Khosla Ventures and 1010 Holdings in February 2021, as part of a round with a \$60m target for its close.

US-based satellite communication technology provider Kymeta raised \$30m from Hanwha Systems, a smart technology subsidiary of diversified conglomerate Hanwha. Spun off by intellectual propertyfocused investment firm Intellectual Ventures in 2012, Kymeta provides flat-panel satellite antennas and terminals used for satellite communication, as well as a range of related software and services. The company launched with \$12m in a 2012 round featuring mass media company Liberty Global, Lux Capital and Bill Gates, with Intellectual Ventures remaining a shareholder. All three joined Osage University Partners and The Kresage Foundation in a \$50m series C round the following year. The funding will be used to extend the company's market reach, speed up the development of its product offering and ramp up its manufacturing processes. Hanwha Systems will receive a seat on its board of directors in connection with the investment.



Satellite communication technology provider Kymeta raised \$30m from Hanwha Systems

SignalWire, a USbased developer of software-defined telecommunications technology, received \$30m in a series B round featuring Samsung Next, a subsidiary of consumer electronics manufacturer Samsung. Prosperity7 Ventures led the round, which included Storm Ventures and private investors Jerry Yang and Dean Drako, and which came in the wake of an \$11.5m series A round in 2019 led by Storm Ventures and backed by Samsung Next, Seguoia Scouts, AME Cloud Ventures, Yang, Drako, Ron Neuenberger and Erik Yang. Founded in 2017, SignalWire has created a technology platform that can be reprogrammed by enterprise clients to facilitate secure communications through media including telephone calls, internet voice calls and text messages.

Consumer electronics manufacturer Xiaomi led a RMB150m (\$22.9m) series A round for China-based cloud video software developer Welink. Video game developer Mihoyo and CMGE also participated in the round, as did Shunwei Capital and Dunhong Capital Management. Welink raised about \$1.4m from cloud services provider Kingsoft Cloud and Sea of Stars Capital in October 2019, the latter joining Mihoyo and Binfu Capital in an eight-digit yuan preseries A round in February 2020. All the existing backers returned two months later for a series A round also in the eight-figure range that included Orient Hontai Capital, a vehicle for cybersecurity software provider Orient Security. WeLink offers a broadband service that uses fixed-wireless technology, which it claims means it can provide far higher broadband speeds while charging less than competitors.

Exits

Consumer

Energy

Global view of past year's exits

Total: 82

Telecoms

Transport



Industrial

IT IT

Corporate venturers from the telecoms sector completed 82 exits between August 2020 and July 2020 – 39 acquisitions, 20 initial public offerings (IPOs), 19 other transactions (including reverse mergers with Spacs), three mergers and one stake sale.

Exits by telecoms corporates 2011-21

Financial

Health

On calendar year-on-year we registered an increase in the number of exits by telecoms corporates last year, which reached 52, up 11% from 47 in 2019. The total estimated capital in those exits stood at \$35.65bn, up significantly from the \$10.3bn in 2019.

Media

Services



Source: GCV Analytics



Exits by telecoms corporate investors August 2020 – July 2021

Portfolio Company	Location	Sector	Exit size (\$m)	Exit type	Acquirer	Exiting investors
Slack	USA	Media	\$27.7bn	Acquisition	Salesforce	Bessemer Venture Partners Deutsche Telekom K9 Ventures Meritech Capital Partners NTT Docomo NXTP Corp Partners Portland Seed Fund Salesforce Sapphire Ventures Silicon Valley Bank Telstra Trinity Ventures World Innovation Lab
Auth0	USA	IT	\$6.5bn	Acquisition	Okta	BlackRock Greenoaks Capital LaunchTime Rose Park Advisors Sequoia Capital SoftBank Wellington Management
Coupang	South Korea	Consumer	\$4.55bn	IPO		Alibaba Apple Bank of Communications BlackRock Booking Holdings CDC Capital International Chia Life China Investment Corporation China Merchants Bank Citic Coatue DST Global eHi Car Rental GSR Ventures Matrix Partners Mubadala New Horizon Capital Ping An Bank Silver Lake Sina SoftBank Temasek Tencent Tiger Global Management Toyota Uber
Didi Chuxing	China	Transport	\$4.44bn	IPO		China Vanke Country Garden Holdings Gaochun Capital Gaw Capital Hillhouse Capital Management Huaxing Capital Partners New Horizon Capital Sequoia Capital SoftBank Source Code Capital Strait Capital Sunac China Holdings Tencent
Ke.com	China	Services	\$2.12bn	IPO		Amazon Baillie Gifford Canada Pension Plan Denso Hyundai Index Ventures Morgan Stanley PACCAR Primecap Management Company Reinvent Capital Reinvent Technology Partners Y Royal Dutch Shell Sequoia Capital SoftBank T Rowe Price Toyota Uber Volvo XN Ventures
Aurora Innovation	USA	Transport	\$1.85bn	Other		Altos Ventures SoftBank
Hyperconnect	South Korea	Media	\$1.73bn	Acquisition	Match Group	Activant Capital American Express Aurora Acquisition Corp Novator Partners Ping An Insurance SoftBank
Better Mortgage	USA	Financial Services	\$1.72bn	Other		Advanced Technology Investment Company (ATIC) All-Stars Investment Alphabet Baidu China Structural Reform Fund Corporation DCM Fidelity Genesis Capital GSR Ventures Hillhouse Capital Management International Finance Corporation (IFC) Lightspeed China Partners Lightspeed Venture Partners Ontario Teachers' Pension Plan Board Permira Sequoia Capital SoftBank Tencent Tiger Global Management Ward Ferry YF Capital Zhongding Capital
Manbang Group	China	Services	\$1.57bn	IPO		Essex Investment Management Company Kingdon Capital Pequot Ventures Pogue Capital Management SoftBank undisclosed investors Van Wagoner Capital
MessageMedia	Australia	IT	\$1.3bn	Acquisition	Sinch	

Source: GCV Analytics

Enterprise software producer Salesforce agreed to acquire Slack, the US-based, publicly listed communication platform developer that counted corporates SoftBank, Alphabet and Comcast as backers, for \$27.7bn. The deal consisted of \$26.8bn in cash with the rest in Salesforce shares. Slack floated in a direct listing in June 2019 with a \$26.00 guidance price valuing it at about \$13.1bn, and its shares closed at \$43.84 around the time of the acquisition. SoftBank's Vision Fund owned a 7.3% stake prior to the listing, registering 2.2 million of

its 36.6 million shares for trading. It first invested in the company at a \$5.1bn valuation and its subsequent stake of about 7% would be valued at just over \$1.9bn in the deal. Slack is the creator of an enterprise messaging platform with about 12 million daily active users.

South Korea-based e-commerce company Coupang went public in a \$4.55bn IPO on the New York Stock Exchange which was the second-largest by a foreign company since China-based peer Alibaba's in 2014. The transactions delivered a paper \$20bn-plus in profits for SoftBank's Vision Fund. Similar to US-listed social media network Facebook, Bom Suk Kim founded Coupang after dropping out of Harvard in 2010. A decade on and Coupang's revenue last year was \$12bn, nearly double (up 91%) from 2019's, and a narrowing loss of \$475m for 2020. Coupang offers a diversified e-commerce service that is best known for its rapid delivery capabilities. Because it operates an end-to-end fulfilment service, the company can often deliver orders made in the morning later the same day for no extra charge.

China-headquartered ride hailing service provider Didi Global went public in a \$4.44bn IPO on the New York Stock Exchange. The company counted multiple corporates among its backers, including SoftBank, internet company Tencent, e-commerce company Alibaba, insurance firms China Life and Ping An electronics producer Apple, online travel agency Booking Holdings, car rental service eHi and social media company Sina Weibo. Didi increased the number of shares in the offering from 288 million to approximately 317 million American Depositary Shares (ADSs), with four ADSs equalling one class A share. The company priced its shares at the top of the IPO's \$13 to \$14 range. The IPO proceeds were used for further investment in its technology and international expansion. Formed after the merger of peers Didi Dache and Kuaidi Dache in 2015 and formerly known as Didi Chuxing, Didi operates an

on-demand ride service spanning its home country of China but has presence in Russia, Africa, Latin America, Central Asia and the Asia Pacific regions as well. It also offers food and package delivery in addition to automotive and financial services.

KE Holdings, the Chinabased online estate agent also known as Beike, went public in a \$2.12bn IPO in which internet group Tencent invested \$160m. The company counted among its venture backers SoftBank and real estate developer China Vanke. The offering consisted of 106 million American depositary shares (ADSs), each equating to three ordinary shares, issued on the New York Stock Exchange at \$20.00 each. The price was above the \$17 to \$19 range the company had set easlier, valuing it at about \$22.6bn. Tencent bought 8 million ADSs while hedge fund manager Hillhouse Capital paid \$100m for 5 million ADSs and



Didi Global backed by car rental service eHi

venture capital firm Sequoia Capital bought 3.5 million for \$70m. KE Holdings was formed in 2001 as real estate brokerage Lianjia before adding Beike as an online and offline platform that manages real estate transactions. The combined platform provides access to 260 real estate brokerage brands and had 39 million monthly active users as of June 2020.

Aurora, a US-based self-driving technology developer backed by multiple corporate investors, agreed a reverse merger with special purpose acquisition company Reinvent Technology Partners Y. The combined company would have a \$13bn pro forma implied market capitalisation and will take on Reinvent's listing on the Nasdaq Capital Market, which was secured through an \$850m initial public offering in March 2021. The SPAC was sponsored by investment firm Reinvent Capital. The transaction also included a \$1bn private investment in public equity (PIPE) financing featuring truck manufacturer Paccar, ride hailing service provider Uber and commercial vehicle producer Volvo Group. The PIPE also included Reinvent Capital, Baillie Gifford, XN, Primecap Management Company, Canada Pension Plan Investment Board, Index Ventures and Sequoia Capital as well as funds and accounts managed by Morgan Stanley's Counterpoint Global unit and funds and accounts advised by T Rowe Price. Formed in 2017, Aurora is working on an autonomous driving system initially aimed at the trucking market. It expects to launch its first product by 2023 and expand the application of its technology to the last-mile delivery and ride hailing sectors.

Online dating platform Match Group agreed to acquire South Korea-based online communication technology provider Hyperconnect for roughly \$1.73bn. The transaction, which involves both cash and stock, gave SoftBank an exit. The latter had committed capital to the company in its \$8.6m series A round almost six years ago. Launched in 2014, Hyperconnect runs a one-onone video and audio chatting app dubbed Azar, which has been downloaded more than 540 million times, as well as Hakuna Live, a group livestreaming app featuring augmented reality avatars. The latter has been downloaded more than 23 million times. The company claims to have reached profitability, after generating more than \$200m in revenue during 2020.

Better, the US-based digital mortgage services provider backed by corporates SoftBank, payment operator American Express, insurance company Ping An as well as financial services Citi and Ally Financial, agreed a reverse merger at a \$7.7bn post-deal valuation. The company agreed to join forces with SPAC Aurora Acquisition Corp, taking its position on the Nasdaq Capital Market, where it acquired in a \$220m IPO. The deal was supported by \$1.5bn in PIPE financing from SoftBank's SB Management subsidiary, Activant Capital and fellow investment firm Novator Capital, Aurora Acquisition Corp's sponsor. Founded in 2016, Better offers a range of services including commission-less mortgages which are informed by the company's Tinman data technology platform. It also provides realty services and title and homeowners insurance.



Full Truck Alliance raised nearly \$1.57bn in an IPO

Full Truck Alliance, a China-based trucking services platform developer, raised nearly \$1.57bn in an IPO, which gave an exit to internet conglomerates SoftBank, Alphabet, Baidu and Tencent. The IPO was comprised of 82.5 million American Depositary Shares, each representing 20 ordinary shares, issued on the New York Stock Exchange. The shares were priced at the top of its \$17 to \$19 range. The price subsequently rose above \$20 per share, giving the company a market capitalisation of over \$21bn. Full Truck Alliance was formed in 2017 when freight booking services Huochebang and Yunmanman merged to form Full Truck Alliance, also known as Manbang Group. The company runs a digital freight platform that provides shippers with access to a network of some 2.8 million trucks, employing artificial intelligence to increase efficiency. It made a \$532m net loss in 2020 from just over \$395m in revenue. The IPO proceeds will be used for expanding its services and strengthening infrastructure development and technology.

Customer engagement software developer Sinch agreed to acquire Australia-based mobile messaging platform developer MessageMedia in a \$1.3bn transaction facilitating an exit for SoftBank. The deal consisted of \$1.1bn in cash, with the remainder to be supplied in the form of 1.1 million new Sinch shares. It followed reports publicly listed Sinch had raised \$1.1bn from investors including SoftBank and Singaporean stateowned investment firm Temasek. MessageMedia has built an online messaging platform that helps small and medium-sized businesses communicate and interact with their customers over mobile. It processes more than 5 billion mobile messages each year and is used by more than 60,000 customers.

Portfolio company	Location	Sector	Exit size	Exit type	Acquirer	Exiting investors
Satellogic	Argentina	Telecoms	\$388m	Other		Cantor Fitzgerald CF Acquisition Corp V Inter-American Development Bank SoftBank Tencent
Fastback Networks	USA	Telecoms	\$14m	Acquisition	ComSovereign	Foundation Capital Granite Ventures Harmony Partners Juniper Networks Matrix Partners
Openet	Ireland	Telecoms		Acquisition	Amdocs	Balderton Capital Cipio Partners Cross Atlantic Capital Partners Enterprise Ireland Kreos Capital Nippon Steel Trading NS Solutions
Fon	Spain	Telecoms		Acquisition	Agile Content	Alphabet Atomico Coral Capital Deutsche Telekom Index Partners Qualcomm
loTium	USA	Telecoms		Acquisition	View	General Electric Honeywell Juniper Networks March Capital Partners OpenSource Ventures private investors
Flash Networks	USA	Telecoms		Acquisition	Volaris Group	Argonaut Private Equity Evergreen Investment Partners HarbourVest Verizon

Top exits from emerging telecoms enterprises August 2020 – July 2021

Source: GCV Analytics

Global Corporate Venturing reported six exits from emerging telecoms-related enterprises that involved a corporate investor.

Satellogic, a Uruguayheadquartered satellite imagery analytics provider backed by internet group Tencent, agreed a reverse takeover with special purpose acquisition company CF Acquisition Corp V. The merged entity will take the Nasdaq Capital Market listing held by CF Acquisition Corp V since it went public in a \$288m IPO in January 2021, and will have a pro forma enterprise valuation of \$850m. SoftBank's Latin America-focused SBLA Advisers Corp subsidiary co-led a \$100m private investment in public equity financing deal with institutional investors including Cantor Fitzgerald, which sponsors CF Acquisition Corp V, supporting the transaction. Founded in 2010, Satellogic has developed a low-Earth-orbit satellite constellation that sends high-resolution geospatial images intended to help public and enterprise users analyse geographic data.

Connectivity systems provider ComSovereign agreed to acquire USbased mobile infrastructure technology developer Fastback Networks in a \$14m deal enabling networking technology producer Juniper Networks to exit. The transaction will consist of cash as well as debentures such as securities that can be exchanged for ComSovereign shares. Founded in 2010, Fastback builds radio transmission systems that enable telecommunications networks to offer wireless connectivity for highspeed applications such as 5G while retaining signal strength in areas with poor reception.

Ireland-based telecommunications software and services provider Openet was acquired by US-based media and communications consultancy Amdocs for an undisclosed amount, enabling steel producer Nippon Steel to exit. Founded in 1999, Openet provides charging, network policy and data management software for the telecoms industry. Its technology will be folded into Amdocs' service network to extend its capabilities in areas such as 5G, edge computing and the internet of things.

Agile Content paid an undisclosed amount to acquire Spain-based wifi hotspot provider Fon, allowing Qualcomm, internet technology provider Google and Deutsche Telekom to exit. Fon had raised a reported total of approximately \$72m from investors including Qualcomm subsidiary Qualcomm Ventures, Deutsche Telekom, Google, Index Partners, Coral Capital and Atomico as of its last round, when it secured \$14m in 2014.

Dynamic glass producer View purchased USbased smart building software developer IoTium for an undisclosed amount, allowing networking technology provider Juniper Networks and consumer and industrial technology manufacturer Honeywell to exit. IoTium raised closed a \$4.8m series A round in 2017 co-led by industrial technology producer General Electric's now defunct GE Ventures unit and VC firm March Capital Partners with backing from Juniper Networks, OpenSource Ventures and Pankaj Patel. It took its total funding to \$22m in a \$13.6m series B in 2018 led by March Capital Partners and backed by GE Ventures, Juniper subsidiary Juniper Ventures, Honeywell unit Honeywell Ventures, JC2 Ventures and Hanna Ventures.

Funds

For the period between August 2020 and July 2021, corporate venturers and funds investing in the telecoms sector secured over \$31.4bn in capital via nine funding initiatives, which included seven VC funds, one accelerator and one CVC unit. The dollar estimate, however, is somewhat deceiving as it is due to the effect of a \$30bn second Vision Fund described below which targets telecoms, among other things.



Telecoms sector funding initiatives 2011-21

Source: GCV Analytics

On a calendar year-to-year basis, the number of funding initiatives in the telecoms sector went down slightly from 10 in 2019 to seven last year but that figure was significantly down from the peaks of 24-27 such initiative reported in 2014-16. The total estimated capital for last year stood at \$881m, likely because of the effect of the covid-19 pandemic shock.

Fund Name	Туре	Funds Raised	Location	Focus	Backers
SoftBank Vision Fund II	VC Fund	\$30bn	Japan	Telecommunications	Apple Dai-Ichi Life Daiwa Securities Hon Hai Microsoft Mitsubishi UFJ Financial Mizuho Financial Mubadala National Investment Corporation of National Bank of Kazakhstan Saudi Arabia's Public Investment Fund SoftBank Standard Chartered Sumitomo Mitsui
Unnamed MDI Fund	VC Fund	\$500m	Indonesia	Telecommunications	Telkom Indonesia
Orange Ventures	CVC Unit	\$426m	France	IT, Telecommunications, Health, Financial	Orange
V-Capital	VC Fund	\$235m	USA	Health, Telecommunications, IT, Services, Industrial, Energy	Huaxi Holding
Legend Star IV	VC Fund	\$118m	China	Telecommunications, IT, Health	Legend Holdings
UV T-Growth	VC Fund	\$117m	Italy	Telecommunications	Telecom Italia United Ventures
Huawei Spark	Accelerator		Singapore	IT, Telecommunications	Huawei Technologies
LightShed Ventures	VC Fund		USA	IT, Media, Telecommunications	LightShed Partners
Digital Health 2 (DH2)	VC Fund		France	Health, Telecommunications	LBO France Orange

Telecoms sector funding initiatives over the past year

SoftBank increased the size of its Vision Fund 2 from \$10bn to \$30bn. The company's original Vision Fund closed at \$98.6bn in 2017 with contributions from corporate limited partners and sovereign wealth funds, but it had far been unable to secure backing for its successor, instead committing the capital itself. The first Vision Fund booked a \$16.8bn net loss for 2019 due to bankruptcies for portfolio companies OneWeb and Brandless, the failure of workspace provider WeWork to successfully float and lacklustre share performance for others such as ride hailing service Uber. However, the coronavirus pandemic has caused tech stocks in several industries to skyrocket while also driving the pre-IPO funding market, leading to a considerable turnaround in the corporate's fortunes. SoftBank's latest full-year results were published and revealed the values of its holdings in several portfolio companies have increased sharply, giving the Vision Funds a \$37bn paper profit.

Telkom Indonesia provided \$500m for a technology investment fund to be run by its corporate venturing subsidiary, MDI Ventures. MDI Ventures was originally founded in 2014 and officially launched two years later with \$100m in capital to be deployed over a four-year period. The unit invests in digital advertising and payment technology, cloud computing and big data, mobile apps and e-commerce, the internet of things and technologies that can influence the future of communications, offering access to Telkom companies along with capital. The new fund will provide \$5m to \$30m for late-stage companies located in Indonesia. They will get the chance to collaborate not only with Telkom but with other stateowned enterprises (SOEs), which will get the chance to leverage their technologies to build a digital ecosystem.

Brance-based mobile network operator Orange has spun off its corporate venturing arm, Orange Ventures, and hired Mathieu de La Rochefoucauld as managing partner of the now independent firm. Read more about his recruitment in the People section. Orange committed an additional €350m (\$426m) to Orange Ventures, which since September 2019 has been run by president and managing partner Jérôme Berger. Orange Ventures currently invests in connectivity, cybersecurity, digital enterprise, financial services and e-health technology, as well as in new territories the group is exploring. such as Africa. Its portfolio companies include Monzo, Actility, Raisin and WeaveWorks.

V-Capital, the corporate venture capital arm of China-based cigarette packaging materials producer Huaxi Holding, reached a RMB1.5bn (\$235m) first close for a fund. Formed in 2015, V-Capital has been conducting venture capital and mergers and transactions deals, investing alongside local governments and fund of funds. Local governmentbacked funds and corporations have committed capital as limited partners, as have new and returning other investors. The vehicle will target developers of telecommunications, healthcare, cultural services, semiconductors, IT, smart manufacturing and new energy technologies across China. V-Capital now has about \$3bn under management, and its shareholders include state-owned enterprise group Guolian Group's Industrial Investment vehicle, Anhui JiongKong Industrial Development Fund, Wuxi HuiKai Investment Management and Federal Reserve Innovation.

Legend Star, a corporate venturing vehicle for China-headquartered conglomerate Legend Holdings, closed its fourth renminbidenominated fund at RMB800m (\$118m). Legend Holdings provided 25% of the capital for the fund, and Legend Star said 90% of the limited partners in its third fund returned for the latest vehicle. The unit's previous fund closed at RMB800m in February 2018 and DealStreetAsia identified online lender CreditEase, Chinese Academy of Sciences Holdings, VMS Investment and Hony Horizon Fund as LPs. Formed in 2008, Legend Star invests in earlystage developers of innovative technology in addition to those in sectors such as healthcare and the technology, media and telecommunications (TMT) space. The unit's fourth fund will specifically seek out deals for 5G and artificial intelligence-related technologies, innovative medical technology such as biomedicines and cutting-edge technology in the semiconductor and aerospace area.

Italy-based venture capital firm United Ventures has received €100m (\$117m) of capital commitments for UV T-Growth, a growth-stage investment fund anchored by telecommunications firm Telecom Italia (TIM). The fund's target has been increased to €180m, from the €150m reported at the launch of the fund in August 2020. United Ventures expects to reach the target for its close by 2022. UV T-Growth will invest in late-stage companies located in Europe and will focus on innovative technologies such as 5G, artificial intelligence, cybersecurity, the internet of things and cloud services. United Ventures will use the vehicle to invest an average of €10m to €15m per round. TIM's corporate venturing subsidiary, TIM Ventures, has committed about \$70m to the vehicle through its role as anchor investor.

China-headquartered telecommunications equipment provider Huawei launched a Singapore-based deep tech accelerator called Huawei Spark to target the Asia Pacific region. Huawei Spark is a partnership with government agencies Enterprise Singapore and Startup SG and its target areas include 5G, machine learning, the internet of things and edge computing technology. The corporate's Huawei Cloud subsidiary will provide participants in the accelerator with up to \$100,000 in development funding and up to \$125,000 in cloud credits. An inaugural cohort of 15 startups will be shortlisted. Two winners will then be entered into global startup contest Slingshot 2020.

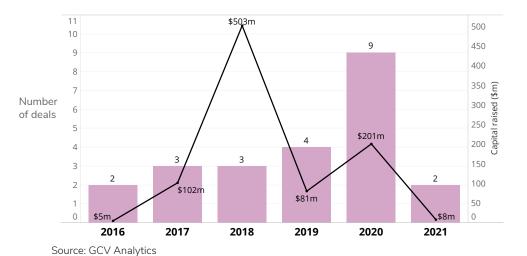
LightShed Partners, a USbased boutique research firm founded by media analyst Rich Greenfield in 2019, has set up a corporate venturing fund. LightShed Ventures is in the process of raising \$75m to invest in seed and series A rounds across technology, media and telecom sectors. Alongside Greenfield in the fund are Walter Piecvk. Brandon Ross and Jamie Seltzer. who previously worked at venture capital firm Waverly Capital. Greenfield told Barron's: "I write about disruption. This will make our research even stronger. We have been looking across both public and private companies for a long time."

Mobile network operator Orange committed an undisclosed amount of capital to France-headquartered private equity firm LBO France's Digital Health 2 (DH2) fund through its Orange Digital Investment vehicle. DH2 has a €200m (\$238m) target for its close and is tasked with investing in small-to-medium sized businesses in the digital health sector. Its target areas are France and the rest of Western Europe. Orange's contribution was made as a strategic investment connected to Enovacom, the businessto-business digital health unit overseen by its Orange Business Services subsidiary. The firms will also explore opportunities for synergy. DG2's portfolio so far includes intelligent insole developer FeetMe. Africa-focused medicine distribution technology producer Meditect, medical imaging system developer QuantifiCare and pathology software provider Tribvn Healthcare.



Universities

Deals in university spinouts



By the end of 2020, we had registered nine rounds raised by university spinouts developing telecoms-related technologies and three during 2021 so far. The level of estimated total capital deployed in 2020 stood at \$201m, up from \$81m in 2019.

Federated Wireless, a US-based provider of phone spectrum-sharing technology based on Virginia Tech research, has extended its series C round to \$64.7m following a \$13.7m investment by commercialisation firm Allied Minds and Pennant Investors. Both took part in the initial \$51m tranche in September 2019, participating alongside Singaporean sovereign wealth fund GIC and telecoms infrastructure providers SBA Communications and American Tower. Founded in 2012, Federated Wireless offers shared spectrum technologies which enable mobile network operators to more efficiently allocate specific US radio frequencies intended for small enterprise communication

networks. The funding will support a recently launched wireless network-as-a-service offering, targeting enterprises through an integration with cloud computing platforms Amazon Web Services and Microsoft Azure.

Lumenisity, a UK-based fibre optic and cabling supplier aligned to University of Southampton, closed a £7.5m (\$9.7m) round led by BGF and featuring Parkwalk Advisors, the fund manager owned by commercialisation firm IP Group. The cash will go to building a new manufacturing and testing plant. Lumensity produces fibre optic cables using a hollow core technology which helps light propagate more effectively.

AccelerComm, a UK-based wireless communications technology spinout of University of Southampton, secured £5.8m (\$7.4m) in a series A round involving commercialisation firm IP Group. The round was led by IQ Capital and was also backed by Bloc Ventures. AccelerComm has devised a wireless communications technology to reduce the impact of latency by addressing errors arising from interference and poor signal strength. The spinout was founded by Rob Maunder, a professor of electronics and computer science at University of Southampton. AccelerComm will use the funding to expand its team in support of technology development and growth both in the US and internationally.

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



People

We reported many people moves in the corporate venturing space of the telecoms sector in the past 12 months and many of them involved rotation at SoftBank and its Vision Fund.

Katsunori Sago, chief strategy officer for SoftBank, will resign at the end of March 2021. Sago had joined SoftBank in 2018 after three years as chief investment officer of Japan Post Bank, a subsidiary of postal service Japan Post. He had previously been an investment banker at Goldman Sachs in Japan. Sago "played a crucial part in expanding [SoftBank Group's] potential as an investment company,' Son said in a statement used by Reuters which did not provide a reason for the departure." The Financial Times stated that Sago's exit marks the second time a high-profile executive has quit after being recruited as potential heir to SoftBank CEO Masayoshi Son, following the 2016 departure of former Google executive Nikesh Arora. The move came after Son, who is 63, recently said that he planned to stay as the leader of the group beyond the age of 70.

Corporate venturers Rajeev Misra and Marcelo Claure left SoftBank's board of directors. Misra,



Rajeev Misra and Marcelo Claure

head of the company's Vision Fund, and Claure, the chief operating officer of SoftBank who also oversees its \$5bn Latin America fund, will be joined by SoftBank chief strategy officer Katsunori Sago and Yasir O. Al-Rumayyan, a representative of Saudi Arabia's

Public Investment Fund (PIF). SoftBank's core business has traditionally been in telecoms, but it has increasingly put more resources into its corporate venturing activities in recent years, putting some \$33bn into the \$98.6bn Vision Fund alongside \$45bn from PIF. The moves were intended to increase the proportion of external directors on the board and follows the appointment of independent directors Lip-Bu Tan and Yuko Kawamoto in June 2020. They reduce the number of board members from 13 to nine. The company had removed Sago, Claure and Misra to improve oversight at the group.

Ruwan Weerasekera departed from his chief operating officer (COO) role at SoftBank Investment Advisers (SBIA), which oversees SoftBank's Vision Funds. Softbank confirmed the departure of Weerasekera, who was also a managing partner for Vision Fund I and II. He joined SBIA in late 2017 after more than two decades at investment banking group UBS in several senior roles. Neil Hadley, SBIA chief executive Rajeev Misra's chief of staff, assumed the COO position along with his existing responsibilities. Penny Anne Bodle, a partner and global head of investor relations, also left SBIA.

SBIA operating partner Avi Golan moved to facial recognition technology producer AnyVision as its new CEO, following the departure of chief risk officer Maria Khan in September 2020. Khan since joined Eight Roads, a venture capital arm of investment and financial services group Fidelity, as head of risk and compliance.

Private equity firm Gores Group meanwhile brought SBIA partners Ted Fike and Justin Wilson on board as senior managing directors. They will focus on special purpose acquisitions companies. Fike's investments included pet-sitting service Wag, before SoftBank divested its stake in the company in December 2019 at a loss, while Wilson led investments in Brandless, the e-commerce platform that ceased operations in February 2020.

Another Vision Fund member, Carolina Brochado, quit SBIA soon after she was made a partner in March 2020. Her move came in the wake of multiple executive exits including founding partner David Thévenon and managing directors Praveen Akkiraju and Michael Ronen.

Daisy Cai, formerly partner at SoftBank's Vision Fund, has joined venture capital firm B Capital Group



to open its China office. B Capital is part-funded and owned by management consultants Boston consulting Group (BCG). In April 2020, Cai accepted a partner position at the Vision Fund. Cai had previously been a founding partner at Gaocheng Capital, a growthstage private equity firm backed by hedge fund manager Hillhouse Capital, and also had been a managing partner for China-based internet group Baidu, working on both early-stage fund Baidu Ventures and late-stage vehicle Baidu Capital, having joined the company in 2016.



Priya Saiprasad, a former founding principal at M12, the corporate venturing arm of US-based software



Priya Saiprasad

producer Microsoft, rejoined her former boss, Nagraj Kashyap, at SoftBank Investment Advisers. Kashyap, a GCV Powerlist 2020 award winner, joined SoftBank earlier as a managing partner for its two Vision Funds. Saiprasad had left M12 in mid-2019 for a venture investor role at venture capital firm Mayfield Fund. Saiprasad was a founding member of M12 in September 2016 and oversaw investments in businessto-business software providers, including Workboard, Go1 and Skedulo.

Colin Fan left his managing partner role at SBIA. Fan had joined SBIA in 2017 after almost two decades at financial services firm Deutsche Bank in various executive roles. He managed financial technology deals on behalf of SoftBank's Vision Funds, overseeing deals for portfolio companies including Fair, Flexport, Greensill, Cheduoduo (Guazi) and Zume. Fan will take up an adviser position at SBIA while his previous duties will be assumed by Munish Varma, a UK-based SBIA managing partner who will relocate to the United States.

Jeffrey Housenbold, managing partner at SoftBank's Vision Fund, stepped down



Jeffrey Housenbold

in July 2021. Housenbold, a former GCV Rising Star award winner, joined SoftBank almost four years ago after it raised nearly \$100bn for its first Vision Fund. His deals for the fund include DoorDash, OpenDoor, Compass, Rappi, Memphis Meats, Ordermark, Alto Pharmacy, Plenty, Whoop, Globality, Clutter, Get Your Guide, Katerra, Brandless, Wag, Heed and InMobi, according to his LinkedIn profile. Housenbold earned an MBA from Harvard Business School, where he was a dean's fellow, and his undergraduate degrees in economics and business administration from Carnegie Mellon University, where he was an Andrew Carnegie presidential scholar who graduated with high honours. Housenbold ran online photo-printing service Shutterfly for more than a decade.

Telkomsel Mitra Inovasi (TMI), the corporate venturing arm of Telkomsel, named Marlin Siahaan chief executive. Siahaan replaces Andi Kristianto, who had been CEO of TMI since mid-2019 having been with Telkomsel for almost two decades in several senior positions. Before joining TMI, Siahaan had been Indonesiabased country manager for Waze, an interactive navigation app owned by Google, for three and a half years from 2018, after spending a similar amount of time before that as general manager of digital advertising at Telkomsel. Her new job entails Siahaan identifying strategic collaboration opportunities between TMI-backed entrepreneurs and Telkomsel in areas including the internet of things and cybersecurity. Siahaan intends to help TMI raise a second vehicle that will maintain its early stage-focus but raise its \$1m-to-\$2m ticket size to up to \$4m per deal. Its first fund has backed 15 companies since it was formed in 2019 with \$40m of capital.

France-based mobile network operator Orange spun off its

corporate venturing arm, Orange Ventures, and hired Mathieu de La Rochefoucauld as managing



Mathieu de La Rochefoucauld

partner of the now independent firm. Orange committed an additional €350m (\$426m) to Orange Ventures, which since September 2019 has been run by president and managing partner Jérôme Berger. The recruitment of de La Rochefoucauld as managing partner creates potential for Orange Ventures to develop a private equity model. De La Rochefoucauld started at French bank Société Générale's venture capital unit in 2000 before the asset management group's merger to form Amundi. He had been an associate director within its private equity funds group. The move followed similar efforts by other telecommunications-focused corporate venturing units, including those operated by Swisscom, Telstra, Deutsche Telekom and, most notably, SoftBank, to attract third-party capital.

SoftBank Ventures Asia, the South Korea-based corporate venturing subsidiary of SoftBank, hired Tony Young-Suc Lyu as a venture partner. Lyu co-founded cryptocurrency exchange Korbit in 2013 as its chief executive. The company received backing from SoftBank Ventures Asia's predecessor, SoftBank Ventures Korea, in a \$3m series A round in 2014, and was eventually acquired by video game publisher Nexon in 2017. SoftBank Ventures Asia runs 17 funds with \$1bn of assets under management and has more than 250 portfolio companies. It concentrates on early to growth-stage artificial

intelligence, internet-of-things and robotics deals in regions including China, Israel, Japan, South Korea, Southeast Asia, the United States and the European Union. SoftBank Ventures Asia said in a statement on LinkedIn: "We are fortunate to welcome Tony, one of the most accomplished entrepreneurs in the industry, and a perfect complement to the team."

Kenyu (Ken) Sobajima, senior director of investments at KDDI and its Open Innovation



Kenyu (Ken) Sobajima

Fund, left to set up Tomorrow Access. Sobajima, a GCV Emerging Leaders 2021 award winner, had worked at KDDI for 25 years and for its corporate venturing unit since 2014. Following his relocation from Japan to the US in 2015, his deals had included Swift Navigation, Mojo Vision, Secret Double Octopus, Mad Street Den, Allganize, Jibo, August Home, Monohm, Ossia, Pogoseat, Issuu, Edmodo and VentureBeat. KDDI Open Innovation Fund is a corporate venture capital (CVC) vehicle for Japan-headquartered telecommunications firm KDDI that is jointly run by venture capital firm Global Brain (GB). KDDI Open Innovation Fund was launched in 2012 with two initial capital of \$50m each, and it expanded again in April 2018 with a third fund of roughly \$200m.

Takayuki Inagawa, CEO of NTT Docomo Ventures, the corporate venture capital (CVC) arm of Japan-



Takayuki Inagawa

based telecommunication firm

NTT Group's mobile network subsidiary, NTT Docomo, was promoted to general manager and head of innovation management department. He said: "I am excited to join Docomo headquarters team. I will leave VC industry finally but still continue working on open innovation activities." Since 2018, Inagawa, a GCV Powerlist 2020 award winner, has overseen the development of innovative mobile communication services and products, partnering and collaborating with emerging companies that develop information and communications technology, big data, cloud and authentication security across all stages.

LLYC, a Spain-based

communications and public affairs consulting firm, hired Francisco Sánchez Rivas with the intention of ramping up its corporate venturing and merger and acquisitions strategy. Rivas will sit on the firm's board of directors while also remaining on the board of multiple other technology and media companies. He has spent 25 years in investment banking, including a spell as CEO of wealth management firm Edmond de Rothchild's Spain and Portugalfocused investment bank. Rivas later established boutique middle-market banking firm Zechman Capital, and was also once corporate finance director at accountancy firm Deloitte. LLYC is looking to grow its strategic acquisitions having most recently bought Colombia-based innovation consultancy Adaptative.

Jose Antonio Pascual del Valle joined Chile-based retailer Cencosud as head of its corporate venture capital subsidiary, Cencosud Ventures. Del Valle will lead Cencosud Ventures after almost five years at Spainheadquartered telecoms firm Telefónica's Wayra corporate venturing unit. He had previously



Jose Antonio Pascual del Valle

been Wayra's head of scouting and investments in Latin America at Wayra and a director or observer in Wayra Chile's portfolio. Portfolio companies where del Valle had held board roles include SimpliRoute, Poliglota, IpsumApp, Recorrido, U-Planner, WebdoxCLM, Rocketpin, Autofact, Zapping, ComunidadFeliz, Cloner, OmnixCorp, GoQuantum and WivoAnalytics.

Verizon Ventures, the corporate venturing arm of Verizon, appointed Tom Arnost as a

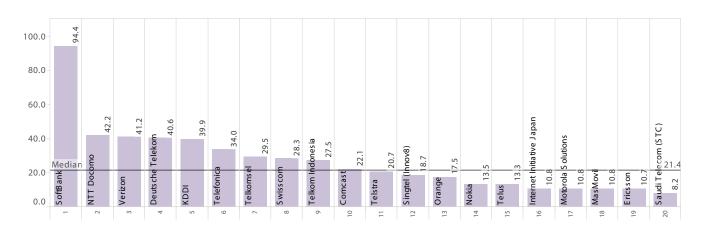


Tom Arnost

principal. Arnost began working in the role and is responsible for executing and managing strategic investments on behalf of the corporate. He had previously been part of Verizon's corporate development team, where he was involved in merger and acquisition deals and strategic planning projects. Before joining Verizon, Arnost was an investment banking associate at investment bank Houlihan Lokey between 2016 and 2019. Arnost had also been a senior accountant at accounting firm Raffa, PC, which has since been merged with accounting and advisory services firm Marcum, assisting companies with a variety of accounting, consulting and business advisory services.

Lance Matthews was promoted to managing director of growth equity at Deutsche Telekom Capital Partners (DTCP), the venture capital firm sponsored by Germany-headquartered telecoms firm Deutsche Telekom. Based in San Francisco, California, Matthews had been a principal at the firm since the start of 2020, having originally joined the investment team as an associate in November 2016. Matthews' most recent deals have included Arctic Wolf, Streetlight Data, Innovid, SuperAnnotate, Heap, Anomali, Fastly and Dynamic Signal.





Source: GCV Analytics



Comment

Families versus institutions in corporate venture capital

- > Family governance improves CVCs
- Institutions focus on managerial agency
- Overall, 80% of large companies have CVC units

By James Mawson

What are the limits to the CVC industry? The conclusion seems to depend on the types of shareholders controlling the executives allocating resources to the innovation tool.

When families get involved in corporate venture capital (CVC) investments, success follows. When passive institutional investors get involved, however, firms can cut their CVC investment.

Family-owned corporations with CVC units add more value to their portfolio companies. These portfolio companies are 4.3 percentage points more likely to have successful exits, better market performance after initial public offerings, and more valuable patents after those IPOs.

Family-owned corporate ventures are also more likely to "generate shareholder value for their parent companies" than those not owned by families and produce more patents, according to academic research by Mario Daniele Amore of Bocconi University, Samuele Murtinu at Utrecht University and Bocconi's Valerio Pelucco.

They used an Eikon dataset of 8,942 US-based venture capital deals from 2000 through 2017 made by 306 parent companies. About a third (2,516) of the deals, worth in aggregate \$12.4bn, had a family-owned parent company involved. The researchers defined family-owned parent organisations as those with at least a 5% or higher equity stake owned by family, including firm founders or their descendants.

"Collectively, our findings are consistent with the view that family control entails a mix of risk mitigation and long-term preferences beneficial for venturing activities," the authors said. During the 2008 financial crisis, families invested twice as much as nonfamilies and made more deals during that time period. "These findings suggest that families' desire to maintain control and their long-term horizon improve the responsiveness of their firms to hard times," according to the paper.

This seems to make sense given academics Gary Dushnitsky and Michael Lenox had previously found corporations with CVC units enjoyed a significant increase in their own innovation output and higher firm value while other research led by Thomas Chemmanur at Boston College showed CVC-backed startups are more innovative than independent venture capital-backed startups and access the equity market at an earlier stage in their life cycles and obtain higher IPO market valuation. [See related article, The great Spac mania, by Kaloyan Andonov].

However, Xuan Tian at Tsinghua University, one of Chemmanur's co-authors, has more recently asked: "Why do not all [publiclylisted] firms establish CVC programs and make CVC investment?"

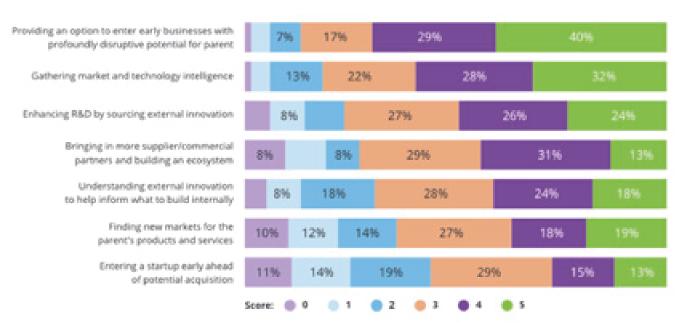
He and Kailei Ye at University of North Carolina at Chapel Hill point the finger at institutional shareholders, such as pension and mutual funds. "An increase in passive institutional ownership leads to a reduction in the firms' CVC investment propensity and CVC portfolio size.

"Specifically, a one standarddeviation increase in a firm's passive institutional ownership leads to a 5.7% decline in the probability of making CVC investment and a 9.5% decrease in the firm's CVC portfolio size... [as] firms actively write off existing startups in their portfolios."

This can be considered a good thing if these CVC units were underperforming. Xuan and Kailei Ye at University of North Carolina at Chapel Hill warned of "a dark side" of CVC if corporations "overinvest in early-stage startups and create managerial agency problems, which could destroy shareholder value".

The paper added: "We find that passive institutional investors induce firms to cut CVC investment in startups that are unrelated to the firms' core business and are

What is the most valuable support you provide to your corporate parent? (Assign score on scale 0-5, where 0 ="not relevant" and 5 = "critically important")



Source: World of Corporate Venturing 2021

of low quality (evidenced by their low innovation output and eventual successful rates).

"The negative effect of passive institutional ownership on CVC investment is more pronounced if the firms have poor past track record on CVC investment. By doing so, passive institutional investors enhance firm value in both the short run and the long run."

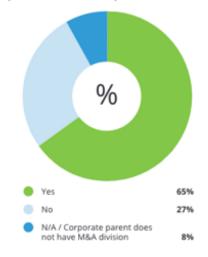
So how to square the two papers? Partly it is about finding and engaging the right managers and different approaches, whether more personally involved family owners or more passive institutions tackling managers to act in shareholders rather than own interests, can be helpful.

Ultimately, however, efficient allocation of resources to innovation is hard to do well.

As Lee Sessions, executive-inresidence at Global Corporate Venturing (GCV) and former managing director at Intel Capital, the CVC unit of US-listed chip and data company Intel, for almost 20 years said: "For years we have heard the corporate venturing debate about success metrics. No more 'either / or', CVC programmes are expected to earn financial returns and corporations are asking their CVC teams to demonstrate strategic impact.

"They have to attract the best startups and help capture insights

Do you help your corporation's M&A team identify and buy yours or other venture-backed portfolio companies?



and value to impact corporate strategy and growth.

"CVs and their portfolios contribute emerging market, technology, business model insights and innovative product ideas. For the best startups, investment capital is accessible. Startup founders ask: 'Which corporate investors deliver the best value beyond money? What are the best practices to unleash startup innovation and tap into corporate expertise?'

"Achieving the goals of startup founders and corporate parents requires collaboration among CV teams, business units, innovation, R&D and other functions in order to deliver the best value to portfolio companies and to accelerate the strategic impact of CVC programs. "Research by the GCV Institute shows that successful corporate venturing programmes build mutually beneficial partnerships with these teams to achieve business unit and corporate objectives. CVs and their portfolios contribute emerging market, technology, business model insights and innovative product ideas, while leaders in business units (BU), innovation, R&D and other functions provide market, technical domain and operational expertise and customer access for scalability."

Nearly two-thirds (65%) of those 100-plus CVC managers surveyed by GCV last year said their corporate venturing units collaborate closely with the corporate M&A division in identifying and buying companies, while almost a quarter (24%) said CVC was a "critically important" way to enhance R&D.

And the broader argument to do something has been clearly won. Four-fifths of the Fortune 100 largest listed corporations in 2020 had corporate venturing programmes, according to GCV Analytics.

This growth from less than a third in 2010 and about 10 at the turn of the millennium and the height of the dot-com boom.

Comment

Corporate venture capital – here to stay or just another wave ebbing away?

- Corporations cannot afford to abandon their venturing activities
- The strategic value that CVC units can generate is invaluable

By Patrick Flesner

Partner, LeadX Capital Partners, author of FastScaling LinkedIn

Given the covid-19 crisis and its severe business implications in many industries, corporations have started scrutinising their corporate venture capital (CVC) activities again. Is CVC here to stay this time or has this been just another CVC wave that is about to ebb away?

I argue there are several good reasons why corporations must continue engaging in venture capital activities and that CVC is here to stay.

The Why

Generating financial returns

CVC units can provide their corporate sponsors with

"attractive" financial returns. And the CVC units need to generate such financial returns if they do not want to lose corporate support and their right to play. But even more important than "attractive" financial returns is the strategic value that CVC units can generate.

Detecting long-term industry trends

Professional corporate venture capital investment teams engage deeply with all players in the startup and innovation ecosystem, including founders, business angels, institutional and other corporate investors as well as intermediaries and industry experts. By constantly being in touch with people working on innovation topics in the relevant industry, investment teams detect long-term industry trends early on. This is especially true for CVC units that also focus on investing in early-stage companies.

The knowledge gathered by investment teams must be communicated to the relevant business units within their corporations – for example innovation, digitisation, strategy or M&A departments – so that their corporate sponsors can respond to these industry trends correspondingly, for instance by adjusting their R&D activities, product offerings or the go-tomarket strategies.

Exploring new markets, industries and geographies

CVC activities offer the possibility to invest in innovative companies active in new markets, industries or geographies and thereby enable corporations to explore relevant new business opportunities. On the basis of the respective learnings, the corporations can then decide whether or not to further pursue activities in this regard.

Becoming aware of potential disruptions and disruptors

Investment teams notice if founders are working on new (digital) business models or are using new (digital) technologies that may completely change how business is done in industries. Therefore, CVC units cannot only detect long-term industry trends but also potential industry disruptions and disruptors.

If investment teams have the mandate to invest under a broad investment focus, they can detect potential disruptors also if such disruptors are active in adjacent industries.

Becoming the disruptor or investing in the disruptor

If corporations learn about potential disruptions early on and if they are not held back by corporate inertia, they may also use this knowledge and become the disruptors themselves. Unfortunately, many of the big corporations may not be fast and agile enough to absorb new radical ideas and translate them into compelling value propositions and business models in a timely manner. Rather, they may be rigid in their thinking and actions and not open to changing industry trends and dynamics. In this case, a CVC unit may "at least" be able to invest in and capture a portion of the value generated by the disruptor.

Overcoming corporate inertia

However, if investment teams organise regular opportunities for corporate employees to meet founders, engage with portfolio companies and learn from the culture and mindset of startups, they may even be able to help their corporate sponsors overcome corporate inertia. Corporations can then combine the scope and capabilities of a big corporation with the spirit and heart of a small one, as Jeff Bezos put it in his 2016 letter to the Amazon shareholders.

Facilitating digital business transformation

Many big corporations have the not-invented-here-syndrome and a tendency to reject suitable external solutions to their internal problems. CVC units can help here if they continuously expose the corporation to top-notch external solutions provided by startups. Corporate employees may eventually agree to run pilots with the respective startups and realise that they may even better and faster cope with the digital business transformation challenges if they closely work with these young innovative companies.

Improving the corporate brand

By constantly engaging with young innovative companies, being present on respective fairs and creating value for startups and sponsoring corporations alike, CVC units can help improve the corporate brand. If a corporate brand can be established as a brand that stands for digital innovation, agile working methodologies, fast decision-making and cuttingedge technologies the respective corporation may better attract desperately needed digital talents.

Generating commercial benefits

Corporations that invest in startups can have a competitive advantage if they can leverage the corporate assets. Sometimes this can "just" be reduced to facilitating a cooperation between a portfolio company and the corporation. Such cooperation should preferably benefit both the startup and the corporation. But for the corporation, this may exemplary mean: a new customer, new business or a new channel and distribution partner. And from an even broader perspective, the corporation may also use such cooperation to support its ecosystem and enable its partners to move faster within this ecosystem.

Preparing M&A

Being invested in young innovative high growth companies can

certainly also be a route to M&A. But, in my view, this strategic approach to M&A is sub-optimal and should be handled with care. If corporations invest with an M&A mindset, incentives may not be aligned anymore. For instance, while the corporation wants to acquire the company for the lowest price possible, founders and co-investors want to exit and sell the company for the highest price possible.

Conclusion

Given the strategic value CVC units can generate and especially the digital disruption threats and opportunities they can identify, corporations cannot afford to abandon their venturing activities. In a business world where innovation needs to be top of mind and where industry dynamics can change from one day to the other, they will otherwise fail rather sooner than later. While corporate venture capital is here to stay and corporations should stay on the path and continue investing in young innovative companies, the current crisis may certainly serve as a good opportunity to reflect on the CVC performance and organisational set-up. In this regard, you may want to read the previous articles published in this series of articles. They deal with the How of CVC and explain how to make corporate venture capital work.

<u>Guiding Principle 1: create</u> <u>a traditional venture capital</u> fund structure

<u>Guiding Principle 2: define a clear</u> investment focus

<u>Guiding Principle 3: embrace fast</u> <u>decision-making</u>

<u>Guiding Principle 4: ensure</u> <u>long-term commitment</u> <u>Guiding Principle 5: invest on</u> market terms

<u>Guiding Principle 6: do not request</u> strategic rights

Patrick Flesner's high-growth handbook FastScaling is available <u>here</u>



Comment

The world should be India's playground

> First published in Financial Express

By Vatsal Gaur Partner, Pier Counsel

Adam Salkin Partner, Herzog, Fox & Neeman

Over the past 12 months it has been hard to keep up with the dizzying pace of growth in India's tech sector. And Corporate India led by the likes of Lodha Group. Bennett Coleman. Reliance and others - is getting in on the act through venture arms (socalled CVC or corporate venture capital). While the flow of capital from traditional 'non-tech' industries into the tech world is welcome, we cannot ignore how focused Indian CVCs appear to be on the domestic market, which has a disproportionate focus on B2C e-commerce products servicing local marketplace. The huge growth in India's

tech scene is part of a broader global story. This begs the question: Is Corporate India potentially missing out on global opportunities by focusing on domestic market?

Nowhere is this point better demonstrated than Israel's tech ecosystem – the Silicon Wadi. Like in India, Israel's tech scene saw exponential growth last year, with a record-breaking Rs 885bn (\$12bn at current rates) raised in first half of 2021. But despite the common growth story, there is a significant difference in the focus between Israeli and Indian tech companies. In contrast to India's e-commercefocused tech sector, Israel's ecosystem places emphasis on IoT, cybersecurity and deep tech (AI, blockchain, robotics and so on). According to the IVC, there were over 150 firms in Israel developing deep tech products. Israel has become a key tech corridor, and attracts global investors looking to invest in its startups. But not many Indian companies are investing in Israeli tech firms (except a few, like Paras Defence & Space Technologies' investment in the Israeli drone tech company, High Lander, and tech centres set up by TCS and Mahindra in Israel). These are a drop in the ocean compared to the scope.

Historically, key foreign investors in Israeli tech companies are from the US and China. But the US administration's toughening stance on China and changes in the Committee on Foreign Investment in the US pose a challenge for Israeli firms' ability to accept investments from the Chinese. Without Chinese investors, the need for Israeli tech firms to diversify their shareholder base has resulted in a willingness to accept capital from other jurisdictions. Of late, there has been a rise in investment in Israeli startups from Japan and South Korea; following the Abraham Accords entered into last year, the UAE has started to follow suit.



The lack of traction in this area is all the more unusual when you consider that India and Israel boast warm ties, similar legal systems and, prior to covid-19, the opening up of direct flight routes.

While Israel is mentioned here as a case study, the same argument can be applied to Corporate India's involvement in other well-known tech corridors, from Stockholm to Berlin. Perhaps there is a sense that the domestic tech scene represents the "low-hanging fruit", but Indian corporates can and should broaden their horizons internationally.

In the current environment the most attractive startups have extraordinary bargaining power when raising funds, but when you consider that startups are now looking for the "value-add" that an investor can bring beyond the cold hard cash, Indian corporates hold a competitive advantage. This is because tech companies globally have greater awareness of the attractiveness of India as a marketplace.

But international tech companies are equally aware of the challenges to market entry and the onboarding of an Indian investor provides a trusted partner in the world's fifth-largest economy.

In the global arms race for deep tech, Corporate India simply cannot afford to be left behind in vital tech corridors such as Israel. Arguably, India is as well placed as others to take advantage of this proposition. All that is required is execution.

First published in Financial Express

Innovative region

Japanese innovation ecosystem on the rise

- > Exponential CVC growth
- Early stage-focused strategy
- Robust academia and government-fuelled pipeline

By Liwen-Edison Fu Supplements and features editor

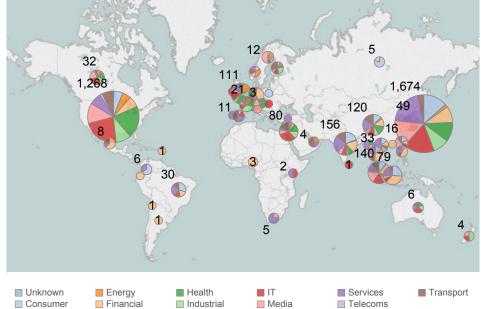
Japan is the world's third-largest economy, with a gross domestic of nearly \$5 trillion, the country has been home to some of the most successful electronics and automotive businesses, such as Canon, Casio, Nikon, Sony, Panasonic, Nintendo, Hitachi and Fujitsu for electronics, and Yamaha, Toyota, Nissan, Mitsubishi, Honda, Suzuki and Mazda for automotive, to name a few.

Many of these have conducted strategic investments, and some have their own specialised corporate venture capital (CVC) vehicles. Japan Venture Capital Association (JVCA) has some 90 CVC members, most of whose publicly disclosed deals have been tracked by Global Corporate Venturing Analytics.

Ken Asada, Japan head for Salesforce Ventures, the corporate venturing subsidiary of



US-headquartered enterprise software provider Salesforce, said JVCA only had a handful of CVC members five years ago but has grown considerably. "It is estimated that over 300 companies in Japan are currently involved in some form of corporate venturing activity," Asada said.



Global view of deals backed by Japan-based corporates 2011-21

Consumer

Industrial

Telecoms

Regarding the Japanese innovation ecosystem, Gen Tsuchikawa, chief executive and chief investment



officer for Sony Innovation Fund and Innovation Growth Ventures. vehicles for electronics manufacturer Sony for which he also serves as corporate vice-president, told GCV: "We can attribute the recent significant growth of Japan's venture capital market, to the size gap of the VC market compared to the whole economy and infrastructure of large companies.

"As more people are vaccinated, I expect more global talent to jump in and take advantage of the arbitrage opportunity here."

Naoki Kamimaeda, UK-based partner and Europe office representative for Global Brain, a Japan-headquartered VC firm that oversees multiple corporate venturing vehicles, said: "In my view, compared to the US or Europe, Japan has three major unique points.

"First of all, there are not that many foreign investors active in Japan, especially in early stages. Most investment rounds are led by Japanese investors and the syndicate also consists of Japanese investors and corporations.

"Secondly, angels or family offices are less active. There are some very famous angel investors; however, it is not yet common for wealthy people to invest in startups in Japan.

"Lastly, we have fewer series A and B-focused pure VC funds than in the US, the UK or Europe. Only

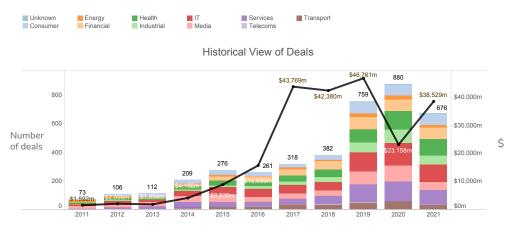
a handful of VCs have big funds sufficient to lead series A and B rounds. Therefore, syndication is more common and more CVCs are involved in early-stage deals.

"There are more chances for corporations to be involved in early-stage deals if they wish. I believe this unique environment also leads more corporations to form their CVC funds.

"We are seeing this trend continue in Japan – covid-19 even has accelerated this trend because of a lack of international travel and investors being a bit conservative and focusing more on local markets."

Japan ranked 16th most innovative economy in 2020 in the Global Innovation Index compiled by Cornell University's SC Johnson College of Business, Insead and the World Intellectual Property Organisation. It came after Israel, China and Ireland, and was ahead of Canada, Luxembourg, Austria and Norway.

Notably, the country came in the third position in terms of innovation quality, following the United States and Switzerland and before Germany, the Netherlands and the United Kingdom. It also has some



Deals backed by Japan-based corporate venture investors 2011-21

Global Corporate Venturing



Corporate exits from Japan-based startups 2011-2021

of the top science and technology clusters with Tokyo-Yokohama being named first in the top 100 list, while Osaka-Kobe-Kyoto came sixth. Other Japanese cities – Nagoya (12th), Hamamatsu (85th) and Kanazawa (91th) – featured the roster.

Kazuhiko Chuman, head of KDDI Open Innovation Fund and KDDI Mugen Labo, which were formed by telecommunications firm KDDI, pointed out that in Japan, the most common exit method for startups is via initial public offerings on the Tokyo Stock Exchange's Mothers Index. "Compared with western countries, the number of startups acquired by large enterprises is still small," he said. Salesforce Ventures' Asada added: "The Mothers Market, which allows companies with sales of ¥2bn to ¥3bn (about \$18m to \$27m) to list on the stock exchange, functions similarly to the series B market in Silicon Valley in terms of fundraising. That said, as more and more investors in Japan are able to increase their ticket size to more than ¥1bn (roughly \$9m), more and more companies will be aiming to go public at a larger scale."

Ikkei Matsuda, CEO of accelerator operator SARR – which stands for Science, Art and Research



for Reconstruction – and the Japan advisory partner of US-based venture capital firm Benhamou Global Ventures (BGV), and Shiyo Takeoka, vice-president of professional and innovation services firm Ignition Point and an investment professional at its IGP X unit, pointed out several characteristics of the Japanese ecosystem:

"A: Players – In any ecosystem, VCs and CVCs play an important role. There are several characteristics of Japan compared with Silicon Valley and other ecosystems.

"(1) Excellent seed VCs: Japan has a large number of VCs that specialise in small seed and earlystage companies, mainly in the internet field. Investors who have studied at many top-tier VC firms in Japan tend to go independent as seed VCs first. They sometimes make a commitment even before founding the company. This role is probably filled by business angels in the Bay Area.

"(2) Lack of large VCs and IPO market for startups: While seed VCs are great, the number of investors managing funds sized

Portfolio company	Location	Sector	Round	Exit size (\$m)	Co-Participant List
Mercari	Japan	Consumer	IPO	1,190	GMO Internet Group Itochu Mitsui United
Plexxikon	Japan	Health	Acquisition	935	Advanced Technology Ventures Alta Partners Astellas Pharma CW Ventures Daiwa Securities GIMV Kumho Asiana Group Pappas Ventures Walden International
Miniso	Japan	Consumer	IPO	608	Easy Land Hillhouse Capital Management Tencent
Sansan	Japan	Services	IPO	360	CyberAgent GMO Internet Group Japan Post Nikkei Nippon Life Recruit Holdings Salesforce
i-Plug	Japan	Services	IPO	334	Future Venture Capital Globis Nippon Life Resona Group
Pokelabo	Japan	Media	Acquisition	175	Doll Capital Management Incubate Fund Sega
WealthNavi	Japan	Financial Services	IPO	173	Chiba Dojo DBJ capital Global Brain Corporation Gree Infinity Venture Partners Mirai Global Mizuho Capital NEC Opt Resona Group SBI Group SMBC Venture Capital Sony Sumitomo Mitsui University of Tokyo
WingArc1st	Japan	IT	IPO	172	Data Applications Itochu Pksha Technology Sansan Suzuyo Shoji SystemExe Teikoku Databank Toshiba
lemo	Japan	Media	Acquisition	50	B Dash Ventures DeNA
V-cube	Japan	Media	IPO	43	Intel

Top corporate exits from Japan-based businesses 2011-21



larger than \$300m is limited. The IPO market in Japan, called Tokyo Stock Exchange Mothers, is a market for startups. In this market, even companies with less than \$100m can go public. This has made it difficult to create unicorns, which are companies that are not yet public and have a high valuation.

"(3) Corporate VC as a service: In Japan, many CVC funds are formed as a limited partnership with a professional VC firm as the GP, and the VC firm provides fund management services to large companies to pursue strategic returns as well as financial returns. This is probably due to the mobility of human resources. In Japan, it is difficult for large companies to hire venture capitalists.

"(4) Government support is focused on R&D-based startups: Japan is a country with a high level of science and engineering. For a long time, the leaders of science and engineering in Japan have been universities (that is, at the laboratory level) and large corporations.

"On the other hand, recent trends

have recognised the importance of science-based technology startups. For this reason, the Japanese government has given a lot of funding to the commercialisation of applied research.

"Perhaps in the past decade, the thinking of the Ministry of Education, Culture, Sports, Science and Technology has undergone a major transformation, and it is now strongly focused not only on scientific research but also on the commercialisation of its results. Similarly, the Ministry of Economy, Trade and Industry (METI) has strengthened its policies for startups, moving away from industrial policies that focus on large corporations. Most of these policy investments in startups were made in R&D-based startups and VCs that invest in them.

"B: Market and Exit Strategy – Japanese startups' market development and exit strategies are often focused on the Japanese market. Japan is fortunate to have the second-largest market in the west after the US. And because of the language barrier, the market development and exit strategy is sometimes isolated from the global market.

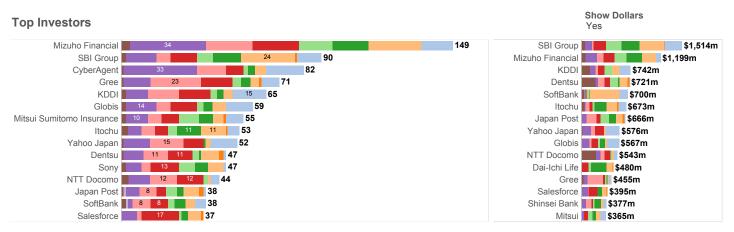
"The language barrier can be a hindrance for Japanese startups to expand overseas, and at the same time, it can be a barrier for foreign startups to expand into Japan. For this reason, Japanese entrepreneurs sometimes take businesses that are trending in the US and adapt them to the Japanese context.

"Main exits are IPOs, and the number of M&A and buyouts are increasing, but much less than in the US. As you know, there is an 18-month rule if you want to be a global startup, or you need to create a global culture when you are a small team, such as 10 to 15 members. From this aspect, the majority of Japanese startups are out of this scope, that is why only a small number of startups are active outside of Japan. This is why I (Matsuda) became a member of BGV to create a global startup from Japan."

Anis Uzzaman, founder and CEO of Pegasus Tech Ventures, a USheadquartered venture capital firm that serves multiple Japanese corporate limited partners, noted:

Top corporate investors in Japan-based businesses 2011-21





By Number of Deals



"In terms of the CVC ecosystem, Japan is far ahead compared to many of its Asian rivals.



"Japan has a very mature corporate culture and they are open to adopting the US–Silicon Valleystyle innovation concepts into their corporate innovation scheme. So, many Japanese corporations have been able to adopt US–Silicon Valley-style corporate innovation programmes from the last few decades.

"The number of large, mid and small-sized Japanese corporations who have adopted Silicon Valleystyle corporate innovation are many. Some of the Chinese and Korean mega corporations outstand with the amount of their spending as part of the CVC programmes, but still, the participation from Japanese corporations into innovative programmes are seen in many more corporations compared to China.

"In terms of the tech ecosystem, Japan has always been a technology hub for multiple decades. Japanese universities have produced hundreds of thousands of PhDs each year. Japan definitely experienced a slowdown in recent years, but there has been a push for the last 10 years to accelerate innovation overall. Starting from the government, the private sectors have also done a fabulous job in nurturing the startup and innovation ecosystem and we have been able to see new technologies coming out of top startups in Japan."

Sony's Tsuchikawa agreed and

said: "When we started Sony Innovation Fund in 2016, we did not expect to invest much in Japan. But as we progressed, we were pleasantly surprised with the quality of the startups here and now have 30% or more invested in Japan. It is a rapidly expanding and very open community."

While Sony Innovation Fund has teams across Europe, India, Israel and the US in addition to its home country, some of its most recent deals have been Japanbased companies: emergency medical support system developer Smart119, know-your-customer technology provider TrustDock and food delivery service Chompy.

Global Brain's Kamimaeda cited the findings in a report entitled 2021 first quarter startup fundraising trend published by corporate database and curated news app provider Uzabase's startup information platform Initial in April this year, saying that the amount of startup investment in the first few months of 2021 was almost the same as in 2020.

"The number of startups getting investments decreased between 2020 and 2021," Kamimaeda clarified. "This indicates later-stage companies are securing bigger funding. In contrast, the number of startup investments is decreasing.

"We can see this kind of trend in other countries like the US and Europe, probably due to covid-19 restricting international travel and investors being more conservative.

"However, we at Global Brain have kept our investment approach the same as pre-covid-19, as we rather think now is the chance to find and invest in greater companies.

"We strongly believe the potential

of the Japanese startup ecosystem stays huge and the underlined trend of people shifting more towards startups and corporates shifting more towards startup investments has not changed and will continue. We can expect more corporations to establish CVC funds and start collaborating with startups."

Shinichiro Hori, CEO of Z Venture Capital (ZVC), a corporate venturing arm of internet group Z Holdings that was formed through the merger between YJ Capital and Line Ventures' parent groups: internet company Yahoo Japan and messaging app operator Line, noted three trends differentiated Japan from other global markets.

"The first is the increase in the supply of capital," Hori said. "We have observed a rapidly growing number of CVCs in the Japanese market, with 63 newly established vehicles between 2018 and 2020. In addition, there is an increase in overseas investors and funds targeting investments in late-stage startups within Japan.

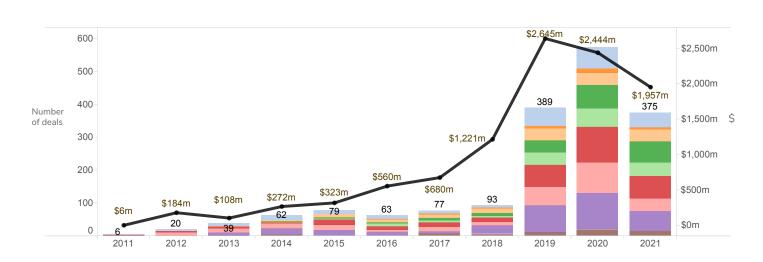
"Second, the amount of financing for startups are also increasing. Each year, we see the previous year's record being broken on the amount of funding for serial entrepreneurs as well as late-stage startups.

"Third, because of the abundance of capital for startups compared to prior periods, startups themselves have more opportunities to acquire smaller companies to accelerate their growth. We, therefore, believe that the Japanese VC market is significantly expanding."

KDDI's Chuman explained that the covid-19 public health emergency shaped KDDI Open Innovation Fund's recent investment strategy

Corporate-backed deals in Japan-based businesses 2011-2021





in technologies that merges cyber and physical spaces. "One of the outstanding cases of co-creation with our portfolio was Virtual Shibuya, the metaverse project launched in May 2020.

"This was the first case of virtual city certified by the local government and got recognised by several awards in terms of new entertainment [possibilities] under the covid-19 crisis."

KDDI Open Innovation Fund not only targets companies operating in the domestic market – such as virtual reality game developer Thirdverse, robotics technology developer Telexistence and Ginkan, the owner of gastronomy social network SynchroLife – but also cross-border deals, backing global startups including Germanybased private online browser and search tool creator Xayn and South Korea-headquartered short video production company Whynot Media.

Asada was quick to point out that with the increase in the number of VC funds and CVCs, the competitive environment on the investor side has become more intense. "We at Salesforce Ventures believe that the more players there are, and the more CVCs are entering the VC market, the more positive it is for innovation, but the question for investors is what value they can bring to a startup other than money. We try to provide more value than money through postinvestment collaboration and more specific advice on softwareas-a-service (SaaS) business management."

Regarding SARR's investment strategy in the Japanese ecosystem, Matsuda said: "I am running an accelerator in Kyoto, supporting tech entrepreneurs and seed-stage startups. Investment is only at the seed level. Many of my portfolios are out of university research or spin-offs from corporations. Our criteria are to invest in the best and the most disruptive technology or research in a specific field – and with those technologies or research, we can change the world. "So science innovation is quite important for us. And the development of AI, cybersecurity, crowd native, the business environment are changing, even in biotech, now it is not simply biology – rather digital x bio. These changes affect our investment approach.

"As mentioned above, there are many Japanese startups in Al, cybersecurity, DevOps and digitisation, but the US, Israel and France are more advanced from a business point of view. Our ecosystem to incubate new, disruptive technology is behind. On the other hand, we have a good pool of science and technology in academia. But we have only many seed-focused VCs and CVCs who invest at the seed stage of tech startups. No big money here."

Still, Pegasus's Uzzaman reiterated Japan has made immense progress with the innovation ecosystem in recent years. "The Japanese government has taken multiple initiatives to foster innovation not only in megacities but also in regional territories. The major

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

Portfolio company	Location	Sector	Round	Round size (\$m)	Co-Participant List
PayPay	Japan	Financial Services	Undisclosed	419	SoftBank
Mobility Technologies (MoT) (JapanTaxi)	Japan	Transport	Undisclosed	211	Dentsu NTT Docomo Tokyo Century Corporation
Miniso	Japan	Consumer	Undisclosed	146	Hillhouse Capital Management Tencent
SmartHR	Japan	Services	D	142	Arena Holdings Greyhound Capital Light Street Capital Sequoia Capital Signifiant undisclosed investors Whale Rock Capital
Tier IV	Japan	Transport	A	105	Aisan Industry Jafco KDDI Sompo Japan Nipponkoa Yamaha
Playco	Japan	Media	A	100	Caffeinated Capital Digital Garage Dreamers VC KSK Angel Fund Makers Fund Mistletoe private investors Sequoia Capital Sozo Ventures undisclosed investors
Preferred Networks	Japan	IT	Undisclosed	94.8	Toyota
From Scratch	Japan	Media	D	93.9	Daiwa Securities DNX Ventures Global Brain Corporation Goldman Sachs Japan Post KKR Link and Motivation Rakuten Sumitomo Mitsui
Cygames	Japan	Media	Stake purchase	92.1	CyberAgent Incubate Fund
iSpace	Japan	Industrial	A	90.2	Dentsu Development Bank of Japan (DBJ) Innovation Network Corporation of Japan (INCJ) Japan Airlines KDDI Konica Minolta Real Tech Fund Shimizu Sparx Group Tokyo Broadcasting System (TBS) Toppan Printing

institutional education has also adopted an innovative curriculum and created incubators and accelerators to foster innovation. The private sectors especially the corporations have done a fabulous job adopting new CVC programmes and have started to work with the startups more than ever before.

"Pegasus started investing in Japan in 2012 and worked with the Japanese startups and large corporations to promote cross innovation. Over the last few years, Pegasus was able to build CVC partnerships with more than 20 large public and private corporations in Japan. This shows a surge in corporate innovation in Japan.

"Pegasus has also been able to invest in more than 40 startups in Japan in the last few years and was able to hook those startups up with global entities and help with their globalisation, we definitely see many more startups today with high success potential compared to when we started our journey in 2012."

Pegasus co-runs corporate venturing funds with Japanese corporates including automotive components manufacturer Aisin, amino acid product provider Ajinomoto, broadcaster Asahi Broadcasting Group, video game publisher Bandai Namco, electrical equipment maker Brother Industries, television shopping service Japanet, entertainment group Sega Sammy, construction firm Shimizu, diversified conglomerate Sojitz, newspaper publisher Nikkei, spark plug producer NGK, automation equipment manufacturer Omron and pharmaceutical and IT services group Teijin.

ZVC's Hori added: "There has been a whirlwind of changes in the venture investment scene in Japan. As the supply of capital increases, the total amount of funding has reached \$4.1bn in 2020, resulted in 5.6 times more than that of 2011. "Furthermore, fields which now qualify for startup funding have also widened. In the past, technology, media and telecommunications-centred areas such as e-commerce and media drove its fundraising, but now it has expanded to fintech, businessto-business, space businesses and biotechnology. There are even funds that specialise and invest in those verticals that have emerged.

"The effect on us is that we now need to define our investment areas even further. In addition, we need to communicate our focus areas to the outside world and actively approach startups more than ever before."

Chuman said while KDDI Open Innovation Fund shares deal flow with other CVC units, it also coinvests with large enterprises that do not have a dedicated vehicle or venture investment subsidiary.

In addition, KDDI's accelerator scheme, Mugen Labo, aims for business co-creation by combining the ideas and technologies of startups with a wide range of assets from enterprise partners.

"Furthermore, we have partnered with Tokyo University to offer entrepreneurship education for master's degree since October 2021."

Asada said Salesforce Ventures also supports its portfolio companies in strategic ways. "Salesforce is used by a lot of Japanese companies, and through Salesforce's sales department, we exchange information with a lot of Japanese CVCs. Salesforce Ventures is recognised as a major investor in SaaS startups and has co-investment opportunities with many VCs."

In addition to running SARR, Matsuda is also a judge and adviser to multiple governmentaffiliated organisations: Nedo (New Energy and Industrial Technology Development Organisation), Amed (Japan Agency for Medical Research and Development), space agency JAXA's startup contest S-Booster, Scope (Strategic Information and Communications R&D Promotion Programme) and JST (Japan Science and Technology Agency).

"I regularly communicate with them, and support the startups who receive the funding from these organisations," Matsuda added. "I used to be a member of the board of JVCA, and still have good contacts with many VCs, accelerators and incubators."

Pegasus works closely with large corporations and helps their innovation programme with a special scheme known as VCaaS (venture capital as a service) or CVC 4.0, said Uzzaman. "Under this scheme, Pegasus has been able to hook these corporations



up with top innovative startups globally so that the corporations are able to collaborate with them.

"Through this scheme, many Japanese corporations were able to import new startups, technologies, business ideas, to Japan and become distributors of those startup technologies in Japan and Asia.

"In many cases, they bought the startup technologies and create a win-win situation. It has not only helped the Japanese large corporations but also helped the startups to get matured advice and training from these large corporations.

"Pegasus also develop a special programme called Pegasus University in the last years and used it heavily for startup and innovation education of the large corporate partners and Japanese startups."

ZVC has also formed partnerships with various institutions to create more Japanese startups, according to Hori, who said: "For university partnerships, we are working with Hitotsubashi University and Keio University to provide startuprelated lectures. "In terms of VC, we have created a fund called EV Growth with East Ventures to contribute to the growth-stage funding for promising startups in Southeast Asia.

"Also, we are participating in the Shibuya District Startup Development Program by providing technical know-how to startups.

"Last but not least, we co-host a startup school called Code Republic with East Ventures and are committed to developing and nurturing young entrepreneurs."

As Global Brain manages eight CVC funds alongside its mothership pure VC fund, the firm works with its CVC corporate partners daily, said Kamiameda. In addition to co-managing KDDI Open Innovation Fund, the firm also helps run property developer Mitsui Fudosan's 31Ventures funds, inkjet printer and electronics producer Seiko Epson subsidiary Epson X Investment, brewery group Kirin Holdings' vehicle Kirin Health Innovation Fund, Norinchukin Bank unit Norinchukin Innovation Fund, logistics group Yamato Holdings' Kuroneko Innovation Fund and Sony Financial Ventures, which is

part of Sony Financial Holdings, consumer electronics provider Sony's financial services subsidiary.

"We strongly believe collaborating with corporations is a key to stimulate the Japanese startup ecosystem, help startups grow and bring the ecosystem to the next level," Kamimaeda continued.

"For that purpose, Global Brain has established α Trackers, Japan's next-generation CVC labs, in late 2018. α Trackers has been attracting and inviting more corporations and has become one of the major CVC consortiums in Japan now.

"We also collaborate with other CVC peers, VCs, incubators, accelerators, universities and the government deeply. As

collaborating with other players in the ecosystem is a key to grow and strengthen the ecosystem, we actively work with them, mentor their portfolio startups and coinvest together.

"As one of the largest VCs in Japan, we, Global Brain, are committed to the Japanese startup ecosystem. To bring the ecosystem to the next level and to make it more competitive to the world top startup ecosystems in other countries, we reckon we need to stimulate and improve the Japanese ecosystem further and incubate more global companies from Japan as well.

"To realise this vision, we also believe Global Brain needs to become more global to help our

startups to go global. Therefore, we have been actively expanding our footprints in new markets and aiming to become a global toptier VC. Establishing our European headquarters in the UK in 2019 was one of the steps for us to achieve this goal."

GCV joined JVCA in 2018 to conduct a Japan-focused CVC survey released at METI, comparing local and international perspectives, before teaming up again, along with Japan Research Institute (JRI) and Sony, to co-host the GCV Asia Congress in Tokyo the year after. GCV, JRI, JVCA, Sony and electronics group TDK, among others, are set to hold a new edition of the conference in April 2022.



Growing seeds of innovation through strategic corporate venturing

By James Mawson, editor-in-chief, Global Corporate Venturing Stefan Gabriel, CEO, Hitachi Ventures Kenichi Funaki, deputy general manager for the corporate venturing office,

Hitachi

Alongside other market changes wrought by the rapid advance of digitalisation, recent years have also seen a growth of interest in corporate venturing, in which large companies offer support and collaboration to external startups as a means of fostering open innovation. James Mawson, who presides over Global Corporate Venturing, a data provider in the corporate venture capital industry and publisher of digital magazines, makes the point that investment by large corporations in startups has grown rapidly over the past decade, with investments totaling around \$129bn in more than 3,000 such companies during

2020 alone. Another recent trend has been that many of these corporations are going beyond simple investment, instead seeking strategic opportunities through collaboration.

Hitachi Ventures was established in 2019 to serve as the strategic CVC arm of Hitachi, with offices in Munich and Boston. It has been investing in startup companies, primarily in Europe, Israel and North America, operating through the Hitachi Ventures Fund for CVC investment and paying close attention to the affinity between its investments and Hitachi's own strategies. By collaborating with leading startups in a wide variety of industries and combining their innovative technologies and business models with Hitachi's own technology and customer base, the objective is to foster innovations that can help resolve the challenges facing both customers and wider society. Hitachi Ventures conducted reviews of more than 1,200 startups during the financial year 2020 and has already invested in seven of them. Hitachi is also seeking to contribute to the operations of its customers and to help provide people with a better way of life by delivering a mix of social, environmental, and economic value, leveraging its distinctive mix of experience and expertise in the OT, IT, and products needed to deliver this value to develop advanced services and grow in tandem with its startup partners. The Corporate Venturing Office at Hitachi is accelerating its contribution to the global innovation ecosystem, having already entered into more than 15 collaborative projects with startup companies. Why are corporate ventures important today? What is necessary for corporate ventures to be successful? Hitachi Review invited James Mawson along with Stefan Gabriel, CEO of Hitachi Ventures, and Kenichi Funaki, chief of the Corporate Venturing Office, Hitachi, to discuss these questions and offer their own particular viewpoints.

Significance of Corporate Venturing in Corporate Strategy

Funaki: My first encounter with a startup company can be traced back to about 15 years ago. When I was engaged in research on supply chain management systems in the 2000s, I visited a startup from University of Michigan. The company was developing a supply chain network design platform. The purpose of my visit was just benchmarking and I was fully satisfied with their technologies for simulation or optimisation, and then said goodbye. However, it was a huge mistake. Even at that time, the company had already adopted a subscription model. Their customers subscribed to the platform and could benefit from optimal supply chain strategies generated from data gathered on the platform that was provided by the subscribers themselves. Had I had the foresight back then, I would have realised that the core of the company was not its technologies, but its business model. Unfortunately, I missed the chance. Since then, I have believed that the seeds of innovation can come from someone else. Now, the company has become a global leader in this space.

In 2019, Hitachi established Hitachi Ventures in Munich, the Corporate Venturing Office in Tokyo, and the Corporate Venturing Fund in December of the same year. We have already entered into 1,800 deals and investigated about 900 companies worldwide. The Corporate Venturing Office has had numerous discussions with Hitachi business units or group companies about such businesses, with a total of more than 500 such discussions covering 400 companies. We have also launched more than 15 collaboration projects with startups globally, ranging from the co-development of technologies to joint go-to-market initiatives with new service concepts. Hitachi Ventures, meanwhile, has made successful strategic investments in seven companies to date.

Gabriel: There are thousands of startups that have excellent skillsets and technologies, and the opportunities for collaborating with startups in relevant niches in highly technical, scalable markets are immense. It is so important for corporates to learn from selected startups while at the same time helping them to execute their business plans and scale their businesses, also offering assistance with growth in new regions by partnering. I think strategic corporate venturing is one of the big trends in the corporate venture capital (CVC) world and for sure will foster Hitachi's strategies and add valuable business.

Strategic corporate venturing activities are particularly important from the point of view of corporate strategy. Corporate strategy is very complex, and it must be adapted to fast-changing disruptive markets. Corporates need some input to understand and adapt, and even to adjust their business development and skillset. They need to be "open for innovation." Before making major mergers and acquisitions (M&A), or investing hundreds of millions of dollars in research and development (R&D), it is more effective to first challenge business growth strategies, including the input of startups looking into the new territory of disruptive markets. You can then invest and provide resources accordingly.

Hitachi Ventures is the strategic corporate venturing arm of Hitachi Located in Munich and Boston, we scout out for exciting, innovative, and leading startup companies, mainly in Europe, Israel and North America, looking for companies that have strategic relevance to Hitachi and address society's key technological, social, and environmental challenges in the target areas of Hitachi Group. Through investment in those startups, we aim to facilitate the establishment of value-adding collaboration and strategic partnerships between our portfolio companies and Hitachi businesses. To do so, we need to use all of our networks. In that regard, the Global Corporate Venture (GCV), which is presided over by James and has data and networking capabilities covering more than 3,000 of the world's top 5,000 corporate ventures, has greatly helped in conducting corporate venturing activities.

Mawson: As the chief of GCV, a media publication and data provider for the CVC industry, it is a great pleasure to be here to discuss strategic CVC. There has been a sustained and rapid increase in both the number of corporations investing in and working with startups and the amounts invested over the past decade. Corporations were involved in deals worth \$129bn last year in more than 3,000 startups according to GCV Analytics data. To win strategic business opportunities and to put Hitachi at the forefront of global open innovation, corporate venturing will be the key.

Gabriel: While scouting out opportunities in up-and-coming ecosystems, Hitachi Ventures looked into more than 1,200 startups just in the last financial year, evaluated 100, and then invested in seven of them. In parallel, we always promote collaboration between startups and relevant Hitachi business units and even customers. The better we understand clusters, markets, and the growth drivers of technologies, the better we can provide strategic guidance, advise on business opportunities, and collaborate or partner with startups. We sometimes even work on real customer projects (what is most exciting for startups!) or experiment in new frontiers. Besides, corporate venturing as a tool fosters entrepreneurship in corporate organizations, bringing changes to corporate culture and open innovation strategy as we challenge and discuss strategies and then add value from outside-in

Mawson: From the data, we can see a couple of interesting trends. First, the more established and experienced corporate venturing units, perhaps with an experienced leader, are responsible for about 80% of the corporate venturing deals and activity. In addition, the top 20% of firms, "the Powerlist leaders" we call them, have been involved in corporate venturing activities for more than 10 years and they are responsible for the majority of activity, in particular, the majority of successful activity.

Of course, what makes corporates "successful" is their strategy. Some seek greater economic return and others seek strategic returns, which means to discover the value of existing business units and identify new business opportunities and growth drivers. In any case, corporates need to find more viable startups for successful corporate venturing that will also lead to financial returns. So it is clear that delivering on strategic goals also delivers financial goals whereas it is not always the case that if you focus on the financial goals, they will then lead to strategic benefits. When we look at the data, the more successful corporate venturing units are increasingly thinking about how their strategic component fits and works, while also trying to be independent from the management point of view in order to enable more effective allocation of capital.

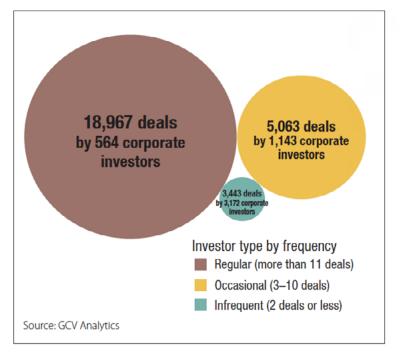
From our perspective, the leadership of Hitachi within the global corporate venturing leadership society plays a great role in speeding up the cycle of scale-up and adoption of important fundamental technologies addressing societal issues, such as climate change or new energy forms, and it very much feels like Hitachi contributes to that wider ecosystem development.

In 2020, even though covid-19 adversely affected societies and economic activity, we saw a record number of corporations begin their corporate venturing activities. So for them, role models that they can learn from, such as Hitachi Ventures, will be important.

Hitachi's Style of Corporate Venturing with More Collaboration

Mawson: How did Hitachi's corporate venturing activities begin and why is collaboration more important than investment and return for you?

Funaki: Actually, Hitachi has been actively collaborating with startup companies for some time. Even in the last couple of years, Hitachi announced multiple partnerships with startups in various areas, including a new work style offering and in the field of regional medicine. Collaboration with startups who have innovative ideas is very important to the agile delivery of new value. Therefore, we plan to further strengthen collaboration through corporate venturing activities. For example, we recently announced a partnership with a startup company that provides a genome analysis platform^{*1}. By investing rather than simply partnering, we can create future growth together. Hitachi has also welcomed several startups to



Deal Flow by Investor Type Categorised by Deal Frequency (2011–2020)

A small number of corporations are responsible for the greater part of regular deal flow.

the Lumada Alliance program^{*2} and we aim to provide maximum value to our customers through collaborative creation at the newly opened Lumada Innovation Hub Tokyo^{*3}.

Gabriel: I have observed for many years now, and have learned from my global activities in corporate venturing, that there is a need for strategic returns like these that cannot be measured but are really important and most valuable. On the other hand, financial success is necessary to gain significance in the startup environment and also to show how Hitachi is a "good investor". It is true that Hitachi is always actively collaborating with startups, with evaluation and decision-making on investment happening in parallel. Therefore, the number of collaboration projects is often much higher than the number of investments. Nevertheless, we need to learn

Source: GCV Analytics

from this if we are to understand megatrends and identify disruption from adjacent markets before investing funds and resources. That is why strategic venturing is a significant value-add to corporates.

Funaki: We always have to be open and fair to such external innovators. We must change our mindset and business practices and think about ways to support them. I have learned three things in particular from this experience.

The first is that we should not put undue emphasis on our startup being a world leader. When it comes to seeking a collaboration partner, we tend to carefully assess how this startup is superior to others and what particular advantages it possesses. In my experience, however, this is not something we should worry too much about. No company that is addressing a new challenge starts out as number-one. Rather, there are usually a large number of companies in the world trying to solve the same challenge. So, we should instead make the most of the time we have with them and get collaboration underway quickly. Our attitude needs to be one of supporting the startup in its activities and seeking to become a market leader in partnership.

The second insight relates to the maturity of startups. We are often asked "at what stage is your target?" However, I think this is less important for strategic corporate venturing activities. Consider the example of a startup seeking to make use of data in its possession to generate new value. There are many cases of such startups that have already reached a certain level of maturity, already holding such data in sufficient quantity and quality. But if what you want is to create new value in ways that the market has never before imagined, you can work with younger startups that may have more innovative ideas and ambition. The required degree of maturity in startup companies will vary depending on the goals and objectives of open innovation.

Finally, when collaborating with a startup, multiple-step scenarios are needed to grow together. Of course, collaboration with shortterm results is attractive, but by sharing medium-to-long-term scenarios that bring future growth for both parties, we can strengthen relationships and work together to solve problems.

Gabriel: When selecting an investment target, Hitachi Ventures first tries to understand the ecosystem as well as different business models and technologies. We evaluate the targeted startup companies, start a strategic discussion with the business units and Corporate Venturing Office, and develop a landscape of multiple technologies in the space according to Hitachi's strategy and interests. In one recent example, we invested in four startups in the precision medicine cluster which is in line with Hitachi's plans of "building and providing solutions globally through digital platforms". Regardless of the maturity of the targeted startups, we consider what kind of valueadd the company will bring to Hitachi in terms of technology and business model as we seek to take advantage of promising opportunities. As is often the case with CVC investments, we do minority equity stakes of less than 20%, but keep some reserve for follow-up investment depending on the success of collaboration and business execution. The purpose of today's strategic CVC is not to absorb startups, but to learn and grow together through strategic collaboration. Startup companies benefit not only from the financial support, but also from access to Hitachi's businesses and global network.

Mawson: Actually, only about 3% to 10% of startups sell to one of their corporate investors, and most startups typically have multiple CVCs as part of their shareholder base. Therefore, it is unlikely for a startup to sell to one of their corporate backers even if M&A has been the likeliest route for profitable exits for entrepreneurs. However, as you both said earlier, a method of providing medium-to-long-term support rather than acquisition is being established. The key to strategic corporate venturing is to ask what startups are looking for? Whether they want capital,

customers, product development, or an exit, big corporations can be good at meeting those demands of startups. It is, however, very difficult for experienced CVC teams to find a company that can actually collaborate well from among the huge number of startups. The role of the team is very important.

Gabriel: I think you are right. We always figure out what startups need, but at the same time, what we need for Hitachi's growth. We have had conversations with almost 2,000 startups so far, receiving huge interest and excellent feedback. I am glad that all startups say: "We like to work with Hitachi." Over my last two decades in corporate venturing, it is now more than ever that I see CVC becoming a strategic tool for corporates. Our mandate is to add value to corporates' business growth, also encouraging more startups to work and partner with big Hitachi. However, it is still not easy to motivate a business unit to work with a small startup that has just started its business. Avoiding inefficient investment requires a lot of experience and leadership as well as energy and passion, and with the trust we get from the corporate side, we are excited to continue our journey.

Funaki: I think we are fortunate, because Hitachi's corporate venturing activities are fully backed by our executives. As you say, getting our existing business units to embrace the brandnew ideas that startups bring to us is always a challenge. But if we can show them examples of successful collaborations, they should be interested.

Mawson: That sounds interesting. Mr. Funaki, what do you mean by the word "successful" — is it success in terms of increasing the competitiveness of your existing business division? Or is it success in establishing a new business?

Funaki: The ultimate goal of Hitachi's corporate venturing is to discover seeds of growth and to pioneer new business opportunities. But on the way there, you can learn a lot by looking at how startups think and act from multiple angles.

Gabriel: We want startups to understand that Hitachi welcomes exciting business opportunities and is open for innovation. In various sectors where Hitachi operates, including healthcare, the environment, and industry, we have made, and will continue to make investments to grow startup ideas, business models, and technologies to the next level, because this will lead to the sustainable growth of Hitachi. Unless we innovate technology and business models quickly and in a better way, we cannot achieve global success.

What Leads to Successful Corporate Venturing and Collaboration?

Funaki: Hitachi has set goals of simultaneously increasing three types of value - social, environmental, and economic - that improve the quality of people's lives and increase value for customers. In the case of environmental value, Hitachi announced "Hitachi Carbon Neutrality 2030" and became a Principal Partner of the 26th Conference of the Parties to the United Nations Framework Convention on Climate Change (COP26), demonstrating our commitment to carbon neutrality and our objective of achieving world-class environmental, social, and governance (ESG) performance





Corporate Venturing Symposium Held by Global Corporate Venturing

as an innovator challenging climate change. However, it is difficult for Hitachi to achieve these goals alone. Since its inception in 1910, Hitachi has always held to its corporate philosophy of "contributing to society through the development of superior, original technology and products." Our uniqueness resides in the fact that Hitachi is one of those few companies that combine operational technology (OT), IT, and products. Through collaboration with startups, we would like to contribute with high-value-added solutions that combine these OT, IT, and products. That is why we should be a part of the innovation ecosystem and work with a variety of startups, both in terms of technology and business models. Through the corporate venturing community, we would like to learn about various movements that are spreading around the world, including in the environmental and healthcare fields.

Gabriel: Through my corporate venturing activities over many years, I have met and had the chance to talk with many exciting startups, senior executives from big corporates, as well as people running CVC arms. Strategic alignment is very meaningful, but on the other hand, relationships are complex, somewhat "political," and always involving a big effort and cultural experience; especially in a large corporate organization where strategic decisions have a huge impact on how to cope with global social, health, and environmental challenges. In this respect, the global GCV platform with its unique database and analytics is a great tool to facilitate strategic discussion and cooperation.

Mawson: Thank you for those kind words. GCV tracks the activities of more than 3,000 companies around the world, tracking who is doing what and what strategies they have for innovation. Held in California, London, Tokyo, São Paulo, and other places, our events are attended by many corporates that want to collaborate through a global innovation platform.

Like Hitachi, many advanced investors such as good corporates, hedge funds, and sovereign wealth funds tend to focus on economic, social, and environmental perspectives and those kinds of investment are called "impact investing" or "triple bottom line investment." Today, corporate goodwill and externalities are not measured solely by financial reporting, profit, and loss. The next GCV symposium will be held in London on 3–4 November, and many companies are strategically conducting corporate venturing activities aimed at achieving the United Nation's Sustainable Development Goals (SDGs) because sustainability issues discussed at COP26 are likely to impact their business. How can we achieve Net Zero*4 beyond changes such as improving efficiency and improving the operation of products or services? How do we understand the impact of current businesses and supply chains on the climate? There will be a huge possibility of changes.

The GCV Institute offers training programs not only for corporate venturing unit personnel, but also for business units and executives. Understanding today's strategic changes will be a strength that will help improve the capabilities of the entire corporation, including the corporate venturing unit. According



to a survey by PitchBook Data Inc., investment through corporate venturing over the last decade has exceeded \$1.78trn. This is more than the total over all prior decades and shows that corporates are now able to invest more to improve their sector as a whole. That means they can innovate faster and innovate more. Over the last decade, venture investment in startups has increased five-fold. We expect total assets to grow another five-fold over the next decade. This will raise stock prices and create much larger companies. It is an exciting time.

Funaki: It is very indicative. I believe that Hitachi needs to take the

*2 Hitachi's open innovation ecosystem utilizing Lumada lead in such innovation to solve major social and environmental issues in the future. To that end, we must consider not only oneto-one collaboration, but also the gathering together of partners with a common vision to work together on addressing problems.

Gabriel: While the companies participating in the World Energy Council all come from different backgrounds, they share the same future challenges and a similar perspective. To identify the key factors for reaching the next level, where to invest, and with whom to collaborate. Hitachi Ventures is contributing to this

*3 "Hitachi Establishes Lumada Innovation Hub Tokyo to Accelerate the Lumada Movement through New Collaborative Creation with a View to the Post-COVID-19 World," https://www.hitachi.com/New/cnews/ month/2021/03/210322a.html Hitachi Review strategic dialogue. We have a strong network with other CVCs and investigate similar portfolios. We also exchange our findings and interests with other strategic CVCs and sometimes even coinvest. Of course, you need to pay attention to the information you disclose, but these strategic dialogues can be very helpful in selecting high-value-added investment destinations.

Funaki: Yes, I totally agree and would like to continue working on corporate venturing activities in order to lead global innovation at Hitachi. Thank you for your time today.

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*4 A target of completely negating the amount of greenhouse gases produced by human activity

James Mawson editor-in-chief, Global Corporate Venturing

Editor of Private Equity News, part of Dow Jones and The Wall Street Journal in London for nearly four years from 2006 until May 2010 when he launched Global Corporate Venturing as an independent title from Mawsonia, his own publishing company. Global Corporate Venturing is the media publication and data provider for the corporate venture capital industry. It has a unique database, GCV Analytics, and it runs multiple global events. This was followed by the launch of his second publication, Global University Venturing, in January 2012 to help students and faculty and academia more broadly launch or develop their entrepreneurial businesses and work with external peers. Mawsonia's third title, Global Government Venturing, was launched in May 2014 and rebranded as Global Impact Venturing in February 2019.

Stefan Gabriel, CEO, Hitachi Ventures

For over 20 years he had responsibilities in manufacturing engineering and global strategy at BMW Group Powertrain and led "Future Automotive Concepts." After working as president of 3M New Ventures, the corporate venture capital (CVC) arm of 3M, he took up his current position in 2019. Prior to that, he was Senior Executive Advisor for several Fortune 500 companies, engaged in the operation and improvement of CVC units that foster open innovation to enhance corporate value, enable sustainable growth, and support the development of business models and strategy. He has received multiple awards for investing in innovation. He has a master's degree in mechanical engineering and, since 2010, has been Visiting Professor of Enterprise and Innovation at the University of Huddersfield, UK.

Kenichi Funaki, deputy general manager for the corporate venturing office, Hitachi.

Having previously engaged in research into plant design, production systems, supply chain management (SCM) systems, and service design, he is currently engaged in the formulation and implementation of strategies for open innovation through collaborative creation. He has also previously worked on the development of production control systems for computer products and SCM systems for semiconductors; mechanical maintenance, repair, and operations (MRO) parts; and apparel. He took up his current appointment in 2019. He holds a doctorate in engineering and has served as a lecturer at the School of Information-Oriented Management, Sanno University: a Research Executive at the Supply Chain & Logistics Institute at Georgia Tech.

^{*1 &}quot;SOPHiA GENETICS and Hitachi Announce Collaboration to Advance Data Driven Precision Medicine," https://www.hitachi.com/New/cnews/ month/ 2021/03/210325d.html



Penn Medicine plots \$5m fund

- > It will focus on the drivers of health equity
- > Fund has already committed \$750,000
- Invest in up to 10 early-stage companies

By Jordan Williams Reporter

US-based academic medical centre Penn Medicine and Wharton Social Impact Initiative have launched a \$5m fund to invest in companies addressing health equity.

Penn Medicine is owned by University of Pennsylvania (UPenn), while Wharton Social Impact Initiative was launched by UPenn's Wharton School.

Over the next three years, the Fund for Health will invest in up to 10 early-stage companies that provide goods and services that strengthen social determinants of health – such as food security or housing – for economically disadvantaged people in Philadelphia.

The fund will be supported by an investment team of students from Wharton and Penn Medicine, who will identify potential investment targets and conduct due diligence.

The fund has already committed \$750,000 to three companies so far. Those startups were Kinvolved, a developer of communication software that reduces absenteeism in schools, Uptrust, the provider of a customer relationship management tool that helps keep people stay on top of court dates or probation appointments, and RecoveryLink, a recovery support platform for people with mental health disorders and substance abuse issues.

Brandon Grant, strategic support manager in the CEO's office at Penn Medicine, will co-lead the fund alongside Rajith Sebastian, director of special projects and impact investing at the Wharton Social Impact Initiative.

Sebastian, who also chairs the investment committee for the fund, said: "We are excited to create an investment vehicle that showcases how investing in mission-driven companies can meaningfully improve the health of our communities."



Solving the quantum problem

- > Quantum computing is not a magical machine
- > Qubits are incredibly error-prone
- > Putting more qubits into the machine is not enough

By Thierry Heles Editor, Global University Venturing

Quantum computing will change everything – or so the hype would have you believe. In fiction, they are often portrayed as machines with esoteric capabilities such as showing real-life videos of Jesus (streaming platform Hulu's limited series Devs) or communicating with dark matter (broadcaster BBC's adaptation of Philip Pullman's His Dark Materials novels).

These scenarios are obviously fantastical – if highly enjoyable – concepts and they are what science fiction often does best: take almost incomprehensibly complex technologies that remain out of reach for now and have them make sense in imaginary universes to great effect.

And while no sane person would expect to actually see a video of Jesus' last words on the cross, it all speaks to this idea that quantum computing could theoretically achieve anything we set our minds to.

But quantum computing is not a magical machine. Its core advantage is to solve complex calculations at scale that would take a traditional computer an essentially infinite amount of time.

An example of this is Shor's algorithm, discovered in 1994

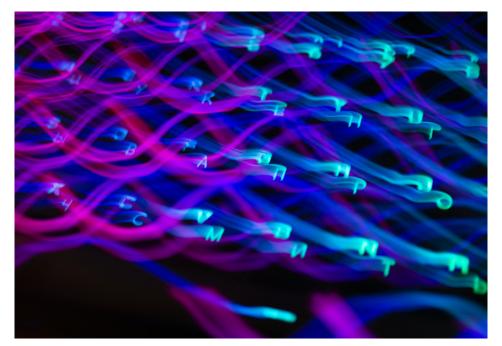
by Peter Shor, the Morss professor of applied mathematics at Massachusetts Institute of Technology, and <u>occasional poet</u> with a penchant for limericks and musings about quantum mechanics. In essence, the algorithm proves that a quantum computer is exponentially faster at factoring large numbers – a fact that means quantum computers could break modern-day encryption such as that employed by banks or online transactions.

Breaking cryptographic keys in the same way is not technically impossible with binary computing. It would just take much, much longer – potentially thousands of years even with supercomputers – as far as we currently know.

Emphasis on "currently" because therein lies the rub: much of quantum research is actually concerned with proving that a classical computer cannot solve the same problem in a comparable amount of time and that a quantum computer would not be overkill. If this sounds ludicrous – your assumption might be that, surely, a quantum computer would always be faster – it really is not.

Ewin Tang, now a PhD student with the University of Washington's theoretical computer science group, shocked many when he published a paper in 2018 – aged just 18 – that proved that the recommendation problem could be solved at roughly the same speed on a classical computer.

The recommendation problem is exactly what it sounds like: if you watch a movie on a streaming platform or make an online purchase, an algorithm will try and find other content or products that you may also want. This sounds



The feeblest noise, such as a stray magnetic field, wipes out the qubit's two-ways-at-once state

simple enough but can involve thousands of data points that take a long time to process. Quantum computing had largely been seen as an obvious way to exponentially speed up this process and, in fact, just two years earlier a pair of researchers had claimed as much in their paper.

With one stroke of genius, a teenager had made that real-world application for quantum computing obsolete.

This is all before we even get to building quantum hardware. Qubits - the quantum version of a bit – are incredibly error-prone and that has meant quantum supremacy has stubbornly remained out of reach. The feeblest noise, such as a stray magnetic field, wipes out the qubit's two-ways-at-once state the quality that makes qubits so powerful in the first place, because traditional bits can only be in one state at a time. It is also really difficult to maintain qubits in their quantum state and when they lose their state, the errors start creeping in.

So, simply putting more qubits into the machine is not enough and if a company talks about a 5,000-qubit processor, this does not automatically mean it is a phenomenally powerful machine. Compare this to a traditional computer where a 64bit architecture does equal higher efficiency compared to 32-bit.

Google, the internet technology subsidiary of conglomerate Alphabet, demonstrated that quantum error correction works, subject to certain conditions, on its Sycamore quantum processor, and showed that the method could be scaled. Those conditions? Google's approach can only handle one of two error types at a time, rather than simultaneously, and the method could not fix errors that it detected in real time. It was a breakthrough, but not the holy grail.

Then, Honeywell Quantum Solutions, a subsidiary of industrial conglomerate Honeywell, and Cambridge Quantum Computing – which are set to merge and form an independent business once regulatory hurdles are cleared – released their own study that showed their method could correct errors in real time. It was a bigger breakthrough, and brings us much closer to the holy grail.

None of this is to say that quantum computing is a pipe dream. It will become a reality and it will revolutionise many industries. For example, earlier this year, pharmaceutical firm Roche signed a deal with Cambridge Quantum Computing to speed up its drug discovery.

And countless spinouts are trying to make advances in the field too, such as Riverlane, based on University of Cambridge research, which is developing an operating system for quantum computers.

C12 Quantum Electronics, a France-based spinout of Ecole Normale Supérieure and CNRS, is working on a quantum computing processor that relies on highpurity quantum nanotubes to minimise errors and significantly improve performance.

Another one is PsiQuantum, a US-based spinout of University of Bristol, that is working on a commercial quantum computer that will offer a million qubits – the point at which the technology would become general-purpose and useful to businesses.

And in April this year, University of Chicago's Polsky Center launched the Duality accelerator, the first programme in the US that will focus exclusively on quantum technologies. It unveiled its inaugural cohort earlier, with six companies focused on challenges as varied as developing simulation software for modelling noise and current in quantum devices such as high-resolution quantum sensors (QuantCAD) or developing a quantum random number generator (Axion Technologies). For more on this, subscribe to our podcast, Talking Tech Transfer, which will feature an in-depth discussion of Duality with the Polsky Center's Jay Schrankler.

Similar programmes already exist elsewhere. In the UK, commercialisation firm IP Group and state funding agency UK Research and Innovation (UKRI) teamed up in August 2020 to form a \$15.7m accelerator aimed at nurturing early-stage quantum technologies. That accelerator is being funded through UKRI's Commercialising Quantum Technologies Challenge, a \$193m initiative set up through its Industrial Strategy Challenge Fund. That is the other reality of quantum computing: it will become increasingly geopolitically relevant. No state will want its adversaries to have bigger computing power, and no government will want its industries seen left behind because progress is made elsewhere. It is not a reality many spinouts will be concerned with while they are trying to figure out how to get the technology to work in the first place, but it is a challenge that will materialise sooner rather than later. And it seems likely that something as unprecedently powerful as quantum technologies will eventually become subject to export controls in most geographies.

But this, like every challenge thrown at the innovation ecosystem, will also be resolved. After all, tackling the big problems is what university researchers do best. And although quantum computing will not magically make all of our troubles go away, for all of the hurdles that remain its potential heralds a very promising future indeed.

There is no doubt in my mind that tech transfer offices and spinouts will be key in getting us there.



Monthly data

Corporate venturing bullishness went on in the summer

- > Higher deal numbers and dollars vs last year's
- > More exits versus same two months last year
- > Funding initiatives comparable in number with last year

By Kaloyan Andonov Analyst GCV Analytics

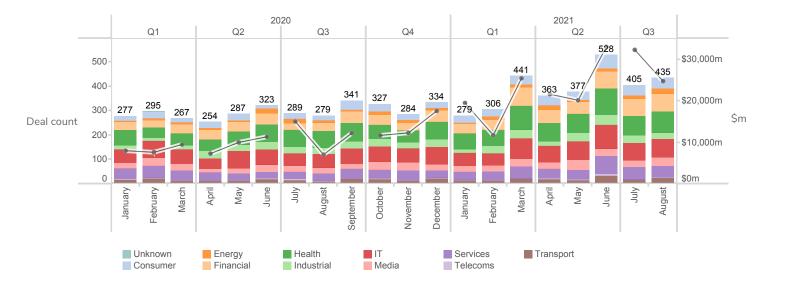
Hopes to leave behind the covid-19 pandemic thanks to vaccines rollout have permeated through the investment world. Despite the fact that the road has been somewhat bumpy with the appearance of new variants, investing has been in full swing. And this continues to be true for the corporate venturing arena.



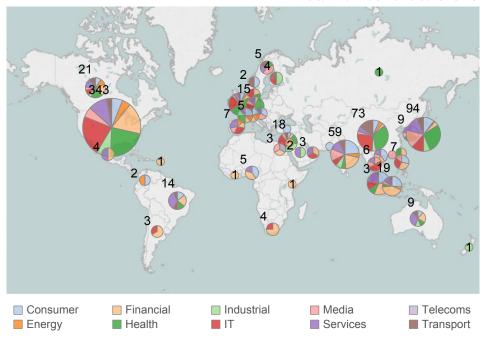
Deals by month

According to GCV Analytics, in the summer months of July and August, the total number of corporate-backed deals from around the world was 840 – 405 registered in July and 435 in August. This is nearly 48% higher than the total of 568 rounds from the same months last year, with 289 in July and 279 in August. Total estimated investment value stood at nearly \$57bn for the two months combined – nearly 156% over the \$22bn from July and August 2020. Neither July nor August was a record-breaking month for 2021 but the heightened investment interest and activity has been very much sustained during what tends to be a rather slow season in terms of deal making.

Corporate-backed deals by quarter, 2020-H1 2021



Global view of deals



Total number of deals: 840

The US came first in the number of corporate-backed deals, hosting 343 rounds during the two summer months, while Japan was second with 94 and China – third with 73.



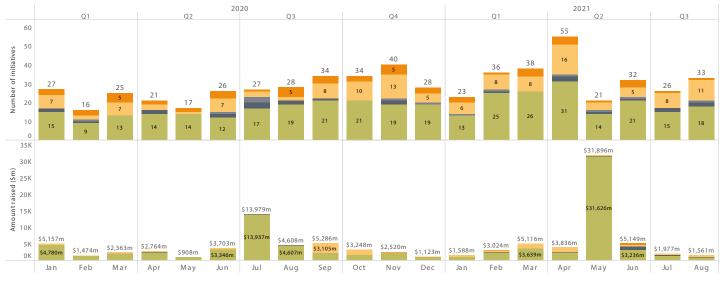
Top investors

The leading corporate investors by number of deals were telecoms and internet conglomerate SoftBank, investment and financial services firm Fidelity, digital currency exchange Coinbase and cloud enterprise software provider Salesforce. In terms of involvement in the largest deals, SoftBank was on the top of the list along with Fidelity and financial firm Goldman Sachs.



Funding initiatives

GCV Analytics reported 26 corporate-backed funding initiatives in July and 33 in August, including VC funds, new venturing units, incubators, accelerators and other. These figures are comparable with the ones from the same months last year, which had registered 27 and 28 such initiatives, respectively. The estimated capital stood at \$1.97bn in July and \$1.56bn in August, considerably lower than the \$13.98bn and \$4.6bn in the same months last year. However, it must be kept in mind that the world was beginning to shake off the shock of the pandemic and the lockdown at the time. Thus, a comparison must be drawn with a grain of salt.

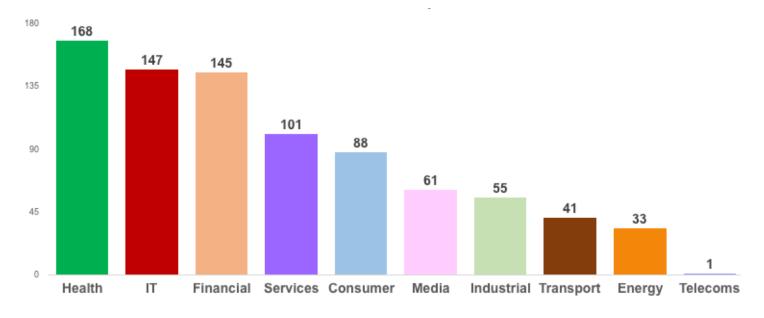




Deals

By sector

Emerging businesses from the health, IT, fintech and business services sectors led in raising the largest number of rounds in July and August 2021. The most active corporate venturers came from the financial, IT, media and telecoms sectors, as shown on the heatmap.



Heatmap

	Financial Services	F	Media	Telecoms	Services	Consumer	Industrial	Health	Transport	Energy
North America	155	75	38	43	26	35	35	48	20	20
Asia	107	52	66	35	59	42	41	24	12	10
Europe	32	8	16	8	6	7	10	15	6	6
Middle East	11	4	1	5	2	6	5	3	4	2
South America	4	6	2	8	2	2				1
Africa	7	1	1	4	1	2				
Australia / NZ	2	3		1	3	1	3		1	
Eastern Europe	1									

Top 10 deals

Portfolio company	Location	Sector	Round	Round size (\$m)	Co-Participant List
Rivian	USA	Transport	Undisclosed	\$2.5bn	Amazon Coatue D1 Capital Partners Dragoneer Investment Group Fidelity Ford Motor T Rowe Price Third Point Ventures
Yanolja	Singapore	Services	Undisclosed	\$1.7bn	SoftBank
SVolt Energy	China	Energy	В	\$1.58bn	Bank of China CCB International China Renaissance Country Garden Holdings IDG Capital JZ Capital National Fund for Technology Transfer and Commercialization Oceanpine Capital Sany Heavy Industry SDIC Shenzhen Capital Group undisclosed investors Xiaomi
Trendyol	Turkey	Consumer	Undisclosed	\$1.5bn	ADQ General Atlantic Princeville Global Qatar Investment Authority SoftBank
Swiggy	India	Consumer	Undisclosed	\$1.25bn	Accel Partners Amansa Holdings Carmignac Falcon Edge Capital Goldman Sachs Naspers Qatar Investment Authority SoftBank Think Capital Wellington Management
GoPuff	USA	Consumer	Undisclosed	\$1bn	Adage Capital Management Atreides Management Blackstone Eldridge Industries Fidelity Guggenheim Partners Hedosophia MSD Partners SoftBank
FTX Trading	Antigua and Barbuda	Financial Services	В	\$900m	40 North Ventures Altimeter Bond VC Circle Coinbase Hudson River Capital Insight Partners Lightspeed Venture Partners Multicoin Capital New Enterprise Associates Paradigm Paul Tudor Jones family private investors Ribbit Capital Senator Investment Group Sequoia Capital Sino Global Capital SoftBank Third Point Ventures Thoma Bravo Van Eck Associates Corporation Willoughby Capital
Revolut	UK	Financial Services	E and beyond	\$800m	SoftBank Tiger Global Management
Chime	USA	Financial Services	E and beyond	\$750m	Dragoneer Investment Group General Atlantic Sequoia Capital SoftBank Tiger Global Management
Redwood Materials	USA	Industrial	Undisclosed	\$700m	Amazon Baillie Gifford Breakthrough Energy Ventures Canada Pension Plan Capricorn Investment Group Emerson Collective Fidelity Franklin Templeton Goldman Sachs T Rowe Price Valor Equity Partners

Source: GCV Analytics

E-commerce group Amazon's Climate Pledge Fund and automotive manufacturer Ford Motor Company co-led a \$2.5bn funding round for US-based electric truck developer Rivian. The round was also co-led with investment firm D1 Capital Partners and funds and accounts advised by T Rowe Price, and included Third Point, Fidelity, Dragoneer Investment Group and Coatue Management. FoRivian is about to begin production on a range of electric trucks that will include an electric pick-up truck dubbed the R1T as well as the R1S, an all-terrain electric sports utility vehicle. Its vehicles are also set to be supplied to Amazon to serve as their last-mile delivery vans.

2 SoftBank's Vision Fund 2 supplied \$1.7bn in funding for South Koreabased travel and accommodation services provider Yanolja. Yanolja will use the capital to invest in its technology and expand its technology-based services into new markets. It intends to build a global travel platform that leverages artificial intelligence technology and big data to provide more automated and personalised services. Founded in 2005, Yanolja initially began as a short-term accommodation services provider before adding hospitality, food, leisure and transportation booking services to its offering, which is accessible through a mobile app.

SVolt Energy Technology, a China-based energy storage and battery technology developer spun off by carmaker Great Wall Motor, completed a RMB10.28bn (\$1.58bn) series B round backed by consumer electronics manufacturer Xiaomi. Heavy equipment manufacturing company Sany also took part in the round, which was led by Bank of China Group Investment, a subsidiary of financial services firm Bank of China. Unnamed sub-funds of the National Fund for Technology Transfer and Commercialization, Country Garden Venture Capital, Shenzhen Capital, CCB Investment, IDG Capital, Oceanpine Capital, China Renaissance, SDIC and JZ Capital contributed to the round, together with unnamed new and existing backers. SVolt is working on solid-state, cobalt-free car batteries and artificial intelligencepowered smart manufacturing technology. It was created by Great Wall Motor in 2012 and spun off in 2018.

A SoftBank's Vision Fund 2 co-led a \$1.5bn funding round for Turkeyheadquartered e-commerce marketplace Trendyol at a valuation of \$16.5bn. The round was co-led with growth equity firm General Atlantic, investment firm Princeville Capital and sovereign wealth funds ADQ and Qatar Investment Authority. Citi was financial adviser and placement agent on the deal. Trendyol operates a diversified online retail platform which incorporates on-demand grocery delivery and a peer-topeer e-commerce marketplace. It has also built its own courier and last-mile delivery infrastructure in addition to a mobile wallet.

5 SoftBank's Vision Fund 2 and internet group Prosus co-led a \$1.25bn series J round for India-based food delivery service provider Swiggy at a \$5.5bn valuation. The round also featured sovereign wealth fund Qatar Investment Authority as well as Accel, Wellington Management, Falcon Edge Capital, Amansa Capital, Goldman Sachs, Think Capital and Carmignac. TechCrunch reported the round includes an \$800m tranche led by Prosus' corporate venturing arm, Prosus Ventures, from April 2021. SoftBank provided a reported \$450m for that close, which included Falcon Edge, Goldman Sachs, Amansa Capital, Think Capital, Carmignac and Accel. Founded in 2014, Swiggy provides food and grocery delivery services, and its online platform facilitates access to more than 150,000 restaurants and stores located in over 500 Indian cities.

6 US-based on-demand consumer delivery service GoPuff picked up \$1bn in a funding round backed by telecoms conglomerate SoftBank's Vision Fund 1. Blackstone's Horizon platform, Guggenheim Investments, Hedosophia, MSD

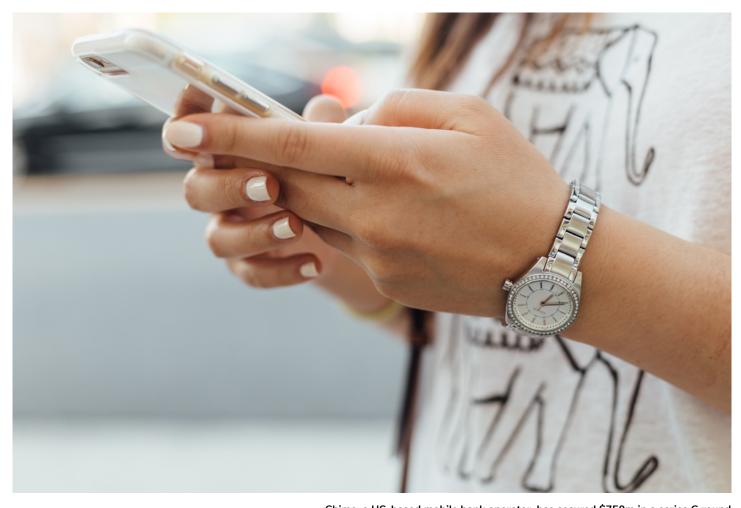


Consumer delivery service GoPuff picked up \$1bn in a funding

Partners, Adage Capital, Fidelity Management and Research Company, Atreides Management and Eldridge filled out the investor line-up. The round valued GoPuff at \$15bn, up from \$8.9bn in March. Founded in 2013, GoPuff operates an e-commerce platform for consumers to purchase items such as cleaning products, over-thecounter drugs, pet food or alcohol. It claims to deliver goods "within minutes", using a network of microfulfilment centres in every market it serves. The latest cash injection will allow GoPuff to accelerate its expansion across North America, and European markets such as the UK. The company will also recruit additional staff and enhance its technology.

Antigua and Barbudaregistered cryptocurrency exchange operator FTX Trading completed a \$900m series B round, featuring SoftBank, Coinbase and blockchain payment technology provider Circle. The funding was raised at an \$18bn valuation from a consortium of more than 60 investors. Incubated by quantitative trading firm Alameda Research, FTX Trading runs FTX.Com, a cryptocurrency exchange with more than 1 million users that handles some \$10bn of trading volume a day. The series B proceeds will be channelled into company growth and international expansion in addition to introducing new features and accumulating users.

B UK-headquartered financial services app developer Revolut secured \$800m in a series E round that included SoftBank's Vision Fund 2. The corporate was joined by hedge fund manager Tiger Global Management and the funding was raised at a \$33bn valuation.



Revolut initially focused on crossborder financial transfers but has expanded its mobile appbased services to encompass a range of products including bill settlement and splitting, salary advances, consumer cashback, wealth management and a dedicated business offering. The cash has been earmarked for product development in addition to expanding the company's US operations and entering the Indian market.

Chime, a US-based mobile bank operator, has secured \$750m in a series G round featuring SoftBank's Vision Fund 2, at a post-money valuation of \$25bn, according to press reports. The round was led by venture capital firm Sequoia Capital Global Equities and backed by private equity and hedge funds Chime, a US-based mobile bank operator, has secured \$750m in a series G round

General Atlantic, Tiger Global and Dragoneer Investment Group. Founded in 2013, Chime offers digital financial services through partnerships with regional banks, providing debit cards, spending accounts, savings accounts and special features such as SpotMe, a service which lets customers make debit card purchases that overdraw their account without paying fees. The company plans to use the funding to further expand its operations and broaden its business reach.

10 US-headquartered battery supply chain developer Redwood Materials raised over \$700m from investors including Amazon's Climate Pledge Fund. The round was led by funds and accounts advised by investment management firm T Rowe Price, and it valued the

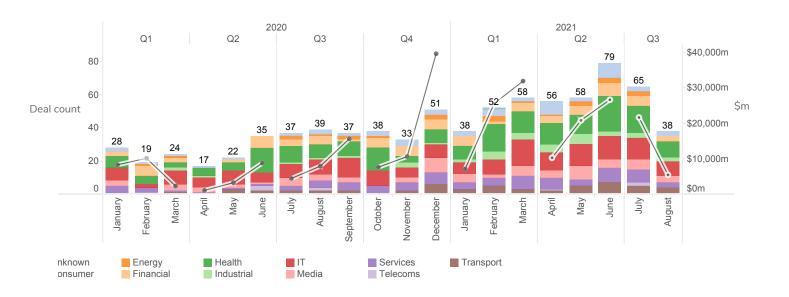
company at \$3.7bn post-money, a source familiar with the round told TechCrunch. Fidelity, Goldman Sachs Asset Management, Baillie Gifford, Canada Pension Plan Investment Board, Capricorn's Technology Impact Fund, Breakthrough Energy Ventures, Valor Equity Partners, Emerson Collective and Franklin Templeton filled out the round. Redwood is building a closed loop supply chain for electric vehicle batteries that will involve it partnering large companies to recycle used batteries and feed the useful materials back into the supply chain, reducing the industry's environmental impact. The company has re cycling partnerships in place with businesses including Amazon and revealed it plans to triple the size of its Carson City, Nevada facility while constructing a new plant elsewhere in the state.



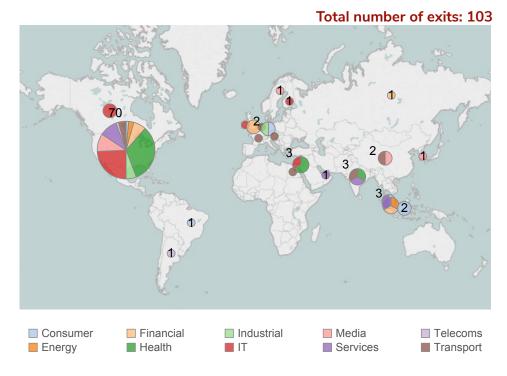
Exits

Historical view of exits

GCV Analytics tracked 103 exits involving corporate venturers as either acquirers or exiting investors in July and August. The transactions included 60 acquisitions, 24 initial public offerings (IPOs), 17 other transactions (reverse mergers with Spacs), and two mergers.



Global view of exits



The exit count was lower in both July and August (65 and 38) than in June 2021 (79), reflecting likely a typical seasonality associated with the summer months. However, this year's total figure for both months (103) was considerably higher than the one for the same months of 2020 – 76 (with 37 in July and 39 in August last year). The total estimated exited capital stood at \$21.75bn in July and \$5.5bn in August.



Top 10 exits

Portfolio company	Location	Sector	Exit type	Acquirer	Exit size (\$m)	Co-Participant List
Krafton (PUBG)	South Korea	Media	IPO		\$3.75bn	Bluehole PUBG Studio Striking Distance Studios Tencent
Robinhood Financial	USA	Financial Services	IPO		\$2.09bn	9Yards Capital Alphabet Andreessen Horowitz DST Global Greenoaks Capital Iconiq Capital Index Ventures Kleiner Perkins New Enterprise Associates QueensBridge Venture Partners Ribbit Capital Roc Nation Rothenberg Ventures Sequoia Capital Social Leverage Thrive Capital TSG Consumer Partners Unusual Ventures Vaizra Investments
Aurora Innovation	USA	Transport	Other		\$1.85bn	Amazon Baillie Gifford Canada Pension Plan Denso Hyundai Index Ventures Morgan Stanley PACCAR Primecap Management Company Reinvent Capital Reinvent Technology Partners Y Royal Dutch Shell Sequoia Capital SoftBank T Rowe Price Toyota Uber Volvo XN Ventures
Bukalapak	Indonesia	Consumer	IPO		\$1.5bn	500 Startups Alibaba Aucfan Bank Rakyat Indonesia Emtek GIC Gree Mandiri Bank Microsoft Mirae Asset-Naver Asia Growth Fund Naver Shinhan Financial Standard Chartered undisclosed investors
Vividion Therapeutics	USA	Health	Acquisition	Bayer	\$1.5bn	Acuta Capital Partners Alexandria Real Estate Equities Altitude Life Science Ventures Arch Venture Partners Avoro Capital Advisors BlackRock Boxer Capital BVF Partners Cardinal Partners Casdin Capital Celgene Driehaus Capital Management Logos Capital Mubadala Ventures Nextech Invest RA Capital Management SoftBank Surveyor Capital T Rowe Price Trinitas Capital Versant Ventures Woodline Partners
SentinelOne	USA	IT	IPO		\$1.4bn	Accel Partners Anchorage Capital Data Collective Granite Hill Capital Partners Insight Partners NextEquity Partners Qualcomm Redpoint Ventures Samsung Sequoia Capital SineWave Ventures Sound Ventures Third Point Ventures Tiger Global Management undisclosed investors Vista Equity Partners Westly Group
Innovium	USA	IT	Acquisition	Marvell	\$1.1bn	BlackRock Capricorn Investment Group DAG Ventures DFJ Growth Greylock Partners Paxion Capital Partners PremjiInvest Qualcomm Redline Capital Management S-Cubed Capital undisclosed investors Walden- Riverwood Ventures WRVI Capital
Bullish	USA	Financial Services	Other		\$850m	BlackRock Cryptology Asset Group EFM Asset Management Galaxy Digital Nomura
Sema4	USA	Health	Other		\$735m	BlackRock Casdin Capital CM Life Sciences Corvex Management Deerfield Management Fidelity Morgan Stanley Perceptive Advisors SoftBank T Rowe Price Viking Global Investors
Currency Cloud	UK	Financial Services	Acquisition	Visa	\$700m	Accomplice Alphabet Anthemis Group Atlas Venture BNP Paribas International Finance Corporation (IFC) Notion Capital Rakuten Sapphire Ventures SBI Group Siam Commercial Bank Visa Xange

Source: GCV Analytics

Krafton, a South Koreabased computer game publisher backed by gaming and internet group Tencent, raised KRW4.3tn (\$3.75bn) in its IPO. Krafton offered 8.65 million shares priced at the top of a revised KRW400.000 to KRW498.000 (\$350 to \$436) range, making it the second largest IPO held in the country so far. The amount was about 25% smaller than the one disclosed earlier, after a regulator demanded the company amend its filings. Formed by video game producer Bluehole as a holding group in 2018, Krafton oversees subsidiaries including Bluehole

Studio, PUBG Studio and Striking Distance Studios. It has sold some 70 million copies of its battle royale game, PlayerUnknown's Battlegrounds. Much of the IPO proceeds will go toward crossborder mergers and acquisitions, according to chief financial officer Bae Dong-keun.

US-based online trading platform developer Robinhood Markets floated in a \$2.09bn IPO representing exits for internet and technology group Alphabet and entertainment agency Roc Nation. The company priced 55 million shares at the foot of the IPO's \$38 to \$42 range. It issued nearly 52.4 million on the Nasdaq Global Select Market while the remaining shares were divested by co-founders Vladimir Tenev and Baiju Bhatt and chief financial officer Jason Warnick. Robinhood operates an online platform with 17.7 million monthly active users who can use its Robinhood Financial marketplace to trade stocks and shares, and its Robinhood Crypto to do the same with digital currencies. It made a \$7.4m net profit in 2020 from \$959m in revenue.

> Aurora, a US-based self-driving technology developer backed by



Volvo has invested in US-based self-driving technology developer Aurora

multiple corporate investors, has agreed a reverse merger with special purpose acquisition company Reinvent Technology Partners Y. The combined company will have a \$13bn pro forma implied market capitalisation and will take on Reinvent's listing on the Nasdaq Capital Market, which was secured through an \$850m IPO in March this year. It is sponsored by investment firm Reinvent Capital. The transaction includes a \$1bn private investment in public equity (PIPE) financing featuring truck manufacturer Paccar, ride hailing service provider Uber and commercial vehicle producer Volvo Group, among many other investors. Formed in 2017, Aurora is working on an autonomous driving system initially aimed at the trucking market. It expects to launch its first product by 2023 and expand the application of its technology to the last-mile delivery and ridehailing sectors.

Indonesia-based, corporate-backed e-commerce platform operator Bukalapak went public, with shares closing at Rp 1,060 (\$0.0738). The trading price represented a 25% increase from an IPO price of Rp 850 (\$0.059). Indonesia Stock Exchange (IDX) halted trading through its mechanism that prevents shares from rising more than 25% per day. The company had previously received backing from investors including e-commerce group Alibaba affiliate Ant Group, price comparison portal Aucfan, media groups Emtek and Gree (the latter through Strive), software supplier Microsoft and internet group Naver. Bukalapak's market capitalisation stands at \$7.6bn. It had aimed to raise \$1.5bn at a \$6bn valuation when it unveiled plans in July. Founded in 2010, Bukalapak provides an online marketplace that works with some 6.5 million merchants and

100 million shoppers. It also has a business-to-business supply chain platform and a financial services arm dubbed Buka Investasi Bersama.

Pharmaceutical firm Bayer agreed to pay \$1.5bn upfront to acquire Vividion Therapeutics, a US-based, corporate-backed precision medicine developer. Vividion stands to gain up to an additional \$500m in milestone payments. The transaction is expected to close in the third quarter of this year. Founded in 2017, Vividion is developing precision small-molecule therapies targeting cancer and immune system disorders. Its lead programmes include treatments for NRF2 mutant cancers and inflammatory diseases such as irritable bowel syndrome. Vividion will continue to market its offering independently in an effort to maintain the business' agility.



SentinelOne. a USheadquartered cybersecurity software provider that counts semiconductor technology manufacturer Qualcomm and consumer electronics producer Samsung as investors, closed its IPO at over \$1.4bn. The company issued 35 million shares in an upsized offering on the New York Stock Exchange, priced at \$35.00 each. The underwriters subsequently bought a further 5.25 million. Founded in 2013, SentinelOne has developed a software platform which utilises artificial intelligence to detect, prevent and respond to cyberattacks. It posted an \$118m net loss for the year ending January 2021, from \$93m in revenue.

Innovium, a US-based developer of data centre network infrastructure technology backed by Qualcomm, agreed to a \$1.1bn acquisition by infrastructure semiconductor company Marvell. The all-stock transaction, consisting of just over 19 million shares, remains subject to customary closing conditions and is expected to close by the end of the year. Innovium's networking technology for data centres powers cloud and edge applications. Its Teralynx software and scalable switches can handle data transfer speeds of up to 25.6 terabits per second (Tbps) and offers low latency, and could cope with more than 100Tbps. The acquisition will allow Marvell to enter the cloudoptimised switch market.

Bullish, a US-based digital asset services provider backed by blockchain software provider Block.one, agreed a reverse merger with special purpose acquisition company Far Peak Acquisition Corporation. The deal will give

Bullish the listing on New York Stock Exchange taken by Far Peak through a \$550m initial public offering in December 2020. EFM Asset Management anchored a \$300m private investment in public equity deal supporting the transaction that included funds and accounts managed by BlackRock in addition to Cryptology Asset Group and Galaxy Digital, at a \$9bn pro forma equity valuation. Formed by Block.one with a \$100m investment at the time of its launch, Bullish was tasked with developing advanced products for the digital asset management space. The startup plans to release its debut product, a cryptocurrency exchange designed to integrate the vertically integrated benefits of decentralised finance markets with the performance, compliance and privacy of central order book systems, by the end of 2021.

9 US-based health information provider Sema4 has completed a reverse merger with special purpose acquisition company CM Life Sciences backed by financing from investors including SoftBank. The combined business is now trading its common stock and warrants on the Nasdaq Global



Visa acquired one of its portfolio companies

Select Market under the ticker symbols SMFR and SMFRW respectively. CM Life Sciences floated on the Nasdag Capital Market in a \$385m initial public offering in September 2020. SoftBank's SB Management were among the investors that provided \$350m to support the deal through a \$350m private investment in public equity (PIPE) financing. Founded in 2017, Sema4 offers screening services to help diagnose, treat and prevent disease. It started out by producing models for reproductive health but later added precision oncology and covid-19 to its capabilities. The company will use the money gained through the reverse merger to fund its operations and accelerate business growth through strategic acquisitions.

Payment services firm Visa agreed to acquire one of its portfolio companies, UK-based cross-border payment software provider Currencycloud, at a valuation of £700m (\$963m). Founded in 2012, Currencycloud provides a cloud-based software platform which enables banks and financial services providers to offer currency exchange, real-time notifications on foreign exchange transactions, multi-currency wallets and virtual account management. The platform supports nearly 500 banking and technology clients and has processed more than \$100bn across 180 countries to date, the company said. It will continue to operate from its headquarters in London and will retain its current management team after the transaction closes.

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





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