Global Corporate Venturing

Magazine
February 2022

Services swing back into action

As the pandemic recedes, opportunities for innovative entrepreneurs and corporate venture investors abound

Case study on Workboard

Gender diversity for CVCs

Innovation contrasts: US and China

Contents

Kaloyan Andonov reveals that having historically taken over manufacturing and agriculture in importance, business services play a dominant role in most emerging and mature economies today. According to consulting firm Research and Market, the global professional services market was estimated at $5.02 trillion in 2020 and forecast to reach over $7 trillion in size by 2025 in the post-pandemic world, implying a compound annual growth rate (CAGR) of 7.03%.

Global Corporate Venturing's broad definition of "services" covers a wide range of subsectors – from accommodation and travel and real estate through education, human resources and consulting to logistics and others. It is imperative to consider developments in each in order to properly understand the trends in the sector data.

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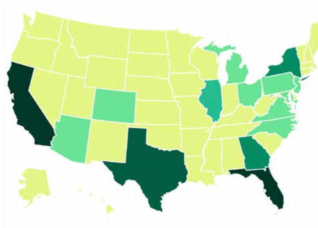

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Global Corporate Venturing

Editorial

Innovation capital's paradigm shift

By James Mawson
Editor-in-chief

Welcome to the Lunar New Year. The year of the water tiger in China and east Asia promises much and strength and bravery will undoubtedly be much in demand in all walks of life.

Financially, too, as investors seemed to try to sell their entire portfolio last year during the unprecedented boom period for flotations (IPOs), and mergers and acquisitions (M&A).

Global takeovers rocketed to nearly $5tn in 2021, according to PitchBook's annual global M&A report. Nearly 1,500 companies also had IPOs, including special purpose acquisition companies (Spacs), worldwide last year, raising almost $500bn. That was about double the number of deals and capital raised in 2020.

Dealmakers remain hot for the right assets. If Microsoft's $68bn cash deal for gaming group Activision is approved by regulators – no small if – it will be the former's biggest acquisition ever, with a price tag higher than its past three purchases combined.

But they will have to decide if stock market falls last month presage greater challenges ahead and whether to stick or twist and try and sell the remainder now or hold on.

Corporations are hurrying to spin off assets, such as Tencent's sales of stock in JD.com and Sea, Thyssenkrupp's listing of its hydrogen subsidiary or LG Energy Solution, which is now South Korea's second-most valuable firm. Shares in the electric car battery maker, spun out of conglomerate LG, jumped 68% on its trading debut last month.

The other challenge is reinvestment. Where and how to find assets remains difficult.

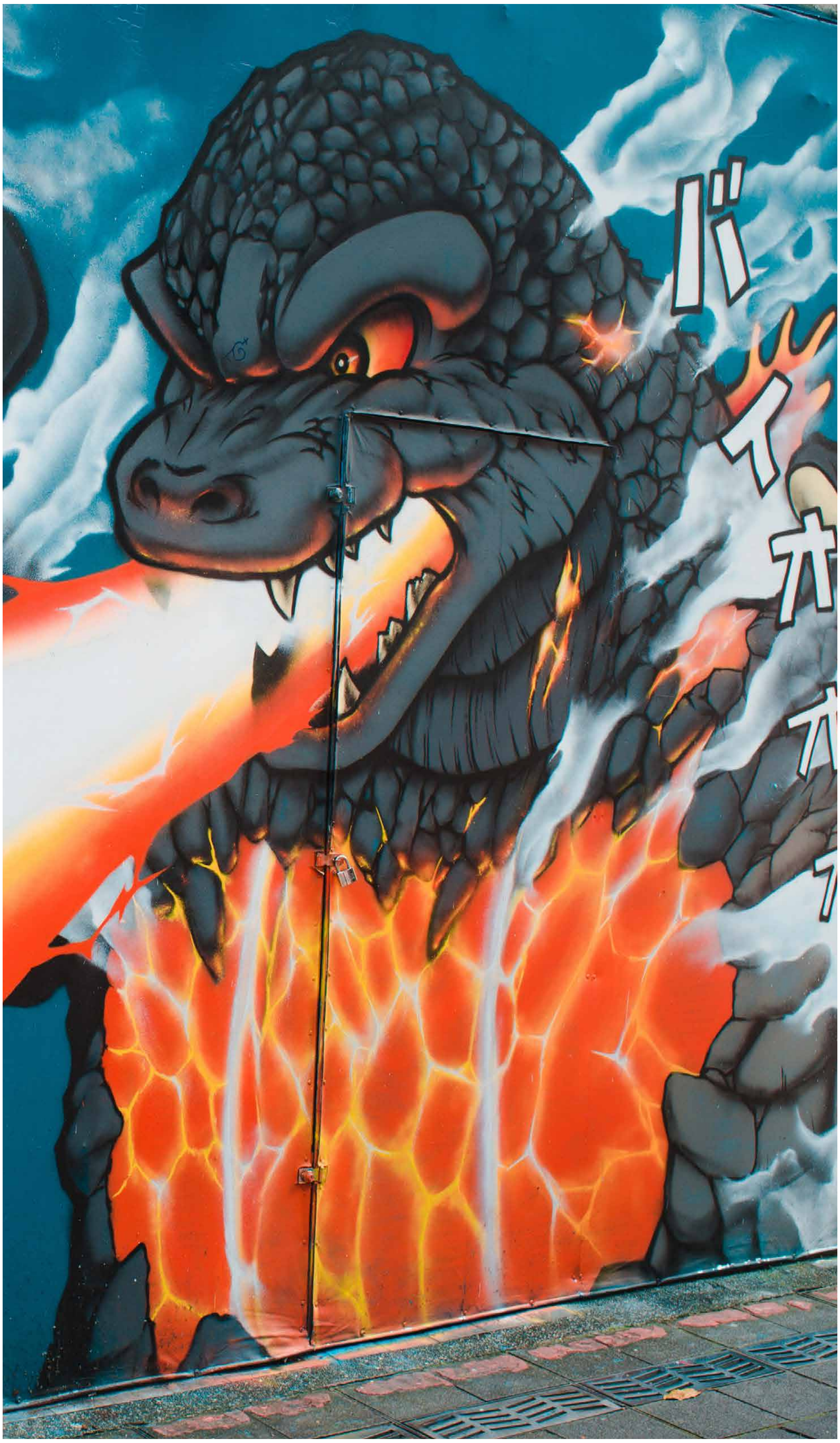
Hedge and mutual fund investors, such as BlackRock and Tiger Global, could see the public markets' downturn as a better buying opportunity than highly-valued private peers. Others, however, are continuing to invest. SoftBank struck nearly a dozen large deals in the final week of January.

And thesis-driven investors are building portfolios around technologies.

In Germany, state and corporate-backed High-Tech Gruenderfonds (HTGF) has targeted quantum and struck deals inside and out the country in the past year, including local spinouts HQS Quantum Simulations and Kiutra, as well as TU Delft's QphoX, Switzerland's Qnami, and University of Sheffield spinout Aegiq in the UK.

Others are going a little later to lead rounds for portfolio companies they can potentially partner with. Germany-based Bayer co-led Celino Biotech's $80m series A round and reinvested in Metagenomi's $175m B round, and also partnered with Mammoth Biosciences in a reported $1bn deal to aid Bayer's new cell and gene therapy platform.

As in the battle between giants Mothra and Godzilla, victory will come to those best able to form alliances and the right networks



The alternative is venture building for internal or external startups or finding other ways to buy or sell and partner with them. This is hard to do and scale, whether in healthcare or technology. (GCV is preparing its report into incubators and incentives and insights under Chatham House rule are welcome to jmawson@globalventuring.com)

The Diem Association, a Meta-backed consortium that aimed to bring a novel cryptocurrency to market, said last month it would sell off its technology to a small California bank for about $200m, the Wall Street Journal reported. Silvergate Capital, which planned to issue Diem's coin, will take ownership of intellectual property from Meta, the holding company for the Facebook, WhatsApp and Instagram media assets.

The big question for all is what happens to liquidity as the era of free money effectively starts coming to an end from next month as the US Federal Reserve is expected to start increasing interest rates.

The last time that the Fed raised rates and reduced its balance sheet simultaneously was four years ago in 2018.

This could put pressure on the near-1,000 private companies valued around at least $1bn (so-called unicorns) as well as those that have escaped on to the public markets in the bubble times.

Of the 133 publicly traded ex-unicorn startups that Jeffrey Funk analysed, 23 now have greater than $1bn in cumulative losses and another 36 have losses greater than $500m. A similar percentage or probably higher of unicorns are also loss-making and hence reliant on equity rounds to cover the cash burn.

The hope, of course, is that more of these highly-valued companies can replicate electric car maker Tesla's (and before that Amazon's) success in moving from losses to annual profit. Tesla's jump to $5.5bn profit last year was more than the combined losses it suffered in its first nine years as a public company.

Many large companies have been actively acquiring unicorns (among other VC-backed companies) and if they stop and the investment and IPO cycle hits the brakes then a negative price spiral and down rounds could quickly unwind the gains.

Ilya Strebulaev, professor at Stanford Graduate School of Business teaching Venture Capital and Private Equity, took a sample of 396 exited US unicorns and found 135 companies (34%) were acquired.

The majority of these acquirers were public companies, responsible for 105 (78%) of all unicorn acquisitions. Cisco and Alphabet each bought five unicorns, while Meta acquired Oculus VR, Instagram, WhatsApp and CTRL-labs.

Overall, however, regardless of shifts in fortune it is clear venture capital has, as Sebastian Mallaby's excellent new book, The Power Law, gone through a paradigm shift to become the "third great institution of modern capitalism," filling a role distinct from the stock market and the corporation, and "a pillar of national power".

China and the US as well as practically all other countries are trying to find and unlock more of it and effect the governance and support to capture its benefits while limiting its more pernicious outcomes. As in the battle between giants Mothra and Godzilla, victory will come to those best able to form alliances and the right networks.

News

FTX sets up $2bn fund and hires Wu

- > Shell pumps $1.4bn into ventures
- > Crypto.com expands fund to $500m and brings on Russell
- > Decibel makes noise with $275m fund target

By Kaloyan Andonov, Liwen-Edison Fu, Thierry Heles, Robert Lavine, James Mawson and Fernando Moncada Rivera

FTX Trading, a Bahamas-registered cryptocurrency marketplace operator, has set up a $2bn corporate venture capital fund and hired Amy Wu from venture capital firm Lightspeed Venture Partners to head the vehicle.

FTX Ventures includes the $100m gaming fund launched with blockchain technology provider Solana in November 2021. Wu said: "We will be folding the Solana gaming funding into FTX Ventures as well. Solana is a close ecosystem partner well beyond the gaming vertical. FTX Ventures will invest across blockchain ecosystems beyond Solana as well."

The $2bn represents the amount of new capital ready to be deployed to builders of the future of Web3, the term used for the blockchain-supported web, across social, gaming, fintech, software and healthcare, not the value of the existing portfolio, Wu added.

Shell pumps $1.4bn into ventures

UK-listed energy group Shell has set up a dedicated $1.4bn corporate venturing fund to invest in "innovative companies" working towards accelerating the energy transition.

Geert van de Wouw, managing director of Shell Ventures, said the fund would be deployed over the next six years to support startups and scale-ups.

Crypto.com expands fund to $500m and brings on Russell

China-headquartered cryptocurrency exchange Crypto.com has expanded its corporate venturing unit's fund to $500m, becoming the latest crypto exchange to beef up its investment subsidiary.

Crypto.com Capital invests in early-stage crypto technology developers, generally leading seed rounds with investments of up to $1m and up to $10m for series A rounds. The expansion more than doubles the size of its fund, which was initially launched in March 2021 with $200m.

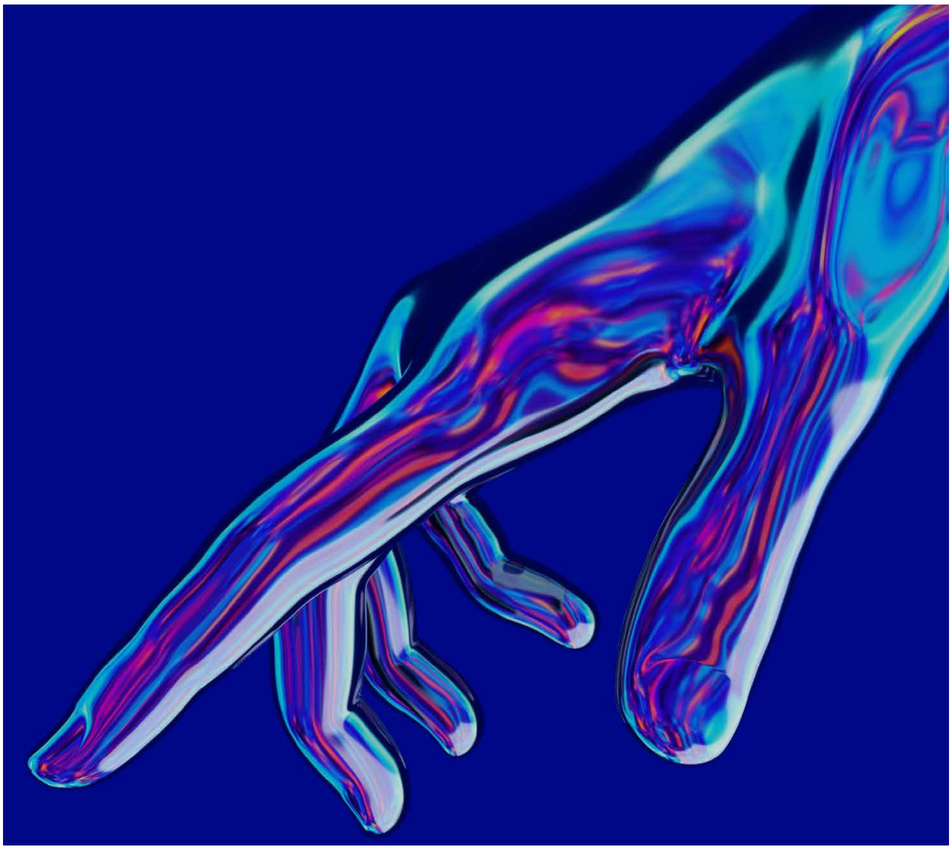
The unit's focus areas include blockchain gaming, metaverse, non-fungible tokens (NFTs) and decentralised finance (DeFi). It has also hired Jon Russell, most recently Southeast Asia editor for India-based business and tech publication The Ken and a former TechCrunch writer, as a partner.

Decibel makes noise with $275m fund target

Decibel Partners, an independent venture capital firm with Cisco as its cornerstone limited partner, has filed to raise $275m for its second fund.

Last year, Decibel closed its first fund from 36 foundations, endowments and others alongside Cisco according to its prior filing with the Securities and Exchange Commission.

Cisco had agreed to back Jon Sakoda, founder of Decibel and a former GCV Rising Stars award winner, according to Derek Idemoto, in his GCV Powerlist award profile.



Crypto.com Capital invests in early-stage crypto technology developers including NFTs

Deloitte Canada sets up $119m venture unit

US-based accountancy and consulting firm Deloitte's Canadian subsidiary launched a corporate venture capital (CVC) unit called Deloitte Ventures with C$150m ($119m) in capitalisation.

Deloitte Ventures will focus on early-stage Canada-based developers of financial, consumer, data and artificial intelligence, cybersecurity, healthcare and life sciences, governance risk, compliance, sustainability or clean technology.

The unit will invest approximately $1.5m to $8m per company, taking minority stakes in startups sized at up to 10%.

Chrysalix adds Artantix as LP

Chrysalix Venture Capital, a Canada-based venture capital firm, has made the final close of its Chrysalix RoboValley Fund at nearly $100m with a final corporate limited partner (LP) joining.

Artantix, an affiliate of Consensus Business Group, joined existing corporate LPs in the fund from a prior close, including Caterpillar Venture Capital, J-Power, South32, Hitachi Construction Machinery, Petronas, Severstal, Delft University of Technology, Mitsubishi, FLSmidth, Mistletoe Venture Partners International, Golden Properties, Hyundai Motor Company, and an undisclosed mining company.

The fund invests in early-stage companies across the globe that are developing technologies in intelligent systems, resource productivity and environmental solutions for resource intensive industries, such as energy, mining, mobility, construction, chemicals and materials, and manufacturing.

OSF Ventures launches $100m third fund

OSF Ventures, the corporate venture capital subsidiary of US-based healthcare provider OSF HealthCare, has launched a $100m third fund, increasing its total assets under management to $250m.

Founded in 2016, OSF Ventures provides capital for early-stage developers of therapeutics and technology such as medical devices, healthcare software and diagnostics products. Its portfolio currently boasts 17 companies and it has made 27 direct investments to date as well as three commitments to other venture capital funds, achieving nine exits.

The unit's previous fund was launched in 2019 with $75m, the same size as its inaugural fund in 2016. Investments into other funds include VC firm LRVHealth's fourth fund in 2019, three years after OSF was one of 13 healthcare providers to invest in Ascension Ventures' $255m fourth fund.

Cottonwood collects capital for third fund

US-based venture capital firm Cottonwood Technology Fund has closed its third fund at $75m with backing from limited partners (LPs) including KPN Ventures and Caterpillar Ventures, on behalf of telecommunications firm KPN and construction equipment manufacturer Caterpillar.

Cottonwood said the new fund has 40 new LPs and it is targeting pre-seed and seed-stage deep technology developers in the southwest US and the northwest of Europe.

Banco do Brasil two CVC funds total $36m

MSW wins Banco do Brasil mandate

Brazil-based financial services firm Banco do Brasil (BB), has set up two corporate venture capital (CVC) funds with a combined R$200m ($36m) to back local startups.

Banco do Brasil is controlled by the Brazilian government but listed at the B3 in São Paulo, and MSW Capital is one of the fund managers.

MSW has had two exits that have returned all the capital invested in its first fund, BR Startups, including financial assistant developer Olivia, which was acquired by neobank Nubank through an October 2021 deal giving MSW shares two months before Nubank went public.

Cathay Life commits $30m to NEA fund

Taiwan-based conglomerate Cathay Financial Holdings' insurance subsidiary, Cathay Life Insurance, has committed $30m to US-headquartered venture capital firm New Enterprise Associates' (NEA's) 18th fund, DealStreetAsia reported yesterday, citing filings on the Taiwan Stock Exchange.

The investment is set to give Cathay Financial a stake of 1.03% in New Enterprise Associates 18, according to DealStreetAsia. NEA has so far secured just under $1.7bn for the vehicle, which has a $2.9bn ceiling.

ByteDance bids goodbye to investment team

ByteDance, the China-headquartered owner of short-form video app TikTok, has closed its corporate venturing unit.

News of the move comes on the same day as sources familiar with the matter told Reuters the Chinese government has drafted proposals requiring large internet companies to explicitly seek regulatory approval for any investments.

While traditionally not on the level of peers such as internet groups Tencent and Baidu or e-commerce firm Alibaba, ByteDance had ramped up the pace of its investments and has participated in 49 funding deals since the start of 2021 according to PitchBook data.

J&J forms New Company (NewCo) Creation unit

Johnson & Johnson Innovation (JJI), the corporate venturing unit of US-listed healthcare provider Johnson & Johnson, has revealed more details on its New Company (NewCo) Creation team set up last year.

Sanjay Mistry has been made vice-president for venture investments and NewCo Creation, with Nancy Ondovik and Andres Tellez as senior directors and Brian Imszennik a director for NewCo.

Credem joins CDP's accelerator

Italy-based banking group Credem has confirmed it has backed Fin+Tech, the three-year accelerator formed by venture capital firm CDP Venture Capital.

The initiative is expected to accelerate 16 startups per year and held it its first call for entrepreneurs in July 2021. CDP had already provided about $4m for the accelerator, which is managed by Digital Magics, Startupbootcamp and Fintech District.

BRI and Google target crypto acceleration

BRI Ventures, the corporate venture capital (CVC) arm of Indonesian state lender Bank BRI, has launched a blockchain-focused accelerator with domestic cryptocurrency exchange Tokocrypto amid a wave of corporate interest in the sector.

Separately, Google, the internet technology provider overseen by of US-listed conglomerate Alphabet, is reportedly creating a unit under its Labs division focusing on blockchain and other decentralised technology.

South Korean chaebols start local CVCs

South Korea-based electronics conglomerate LG is among local corporations considering starting a local corporate venture capital unit based on a regulatory change passed in the country at the end of last year.

The regulatory changes enacted from 30 December are understood to only affect groups with a holding company structure, such as LG, for Korea-based CVC units. LG already runs US-based LG Tech Ventures under CEO Dong-Su Kim, who said it was considering starting a Korea-based CVC after the rule changes.

South Korean GS Holdings plans a CVC firm

The changes allow these corporations to invest directly in external startups rather than use CVC units run at arm's length as affiliates.

Edenred and Eurazeo begin ESG funds

France-based financial services provider Edenred has joined Raise Ventures, the venture capital arm of non-profit organisation Raise Partners, to back its Seed for Good fund.

The deal forms part of an open innovation approach for Edenred that includes committing to VC firm Partech Ventures and its Africa-focused fund, as well as direct investments through Edenred Capital Partners and international intrapreneurship scheme Edenred F@ctory.

This fund has been claimed to be Europe's first VC vehicle to integrate environmental, social and governance (ESG) criteria, and comes as others are targeting the space.

GS confirms ventures unit in South Korea

South Korean conglomerate GS Holdings has confirmed plans to set up a corporate venture capital (CVC) firm to invest in startups following a regulatory rule change at the end of last year.

GS Ventures will invest in local startups that focus on the new growth industries, such as biology, climate change, resource recycling, retail and renewable energy, GS Holdings said. GS Holdings and its subsidiaries will commit money to funds for GS Ventures to manage

Heo Jun-nyeong, vice-president at GS Holdings for mergers and acquisitions, is CEO of GS Ventures.

Min Park sets up venture capital firm

Min Park, formerly managing partner for South Korea-based telecommunications operator SK Telecom's Silicon Valley corporate venture capital vehicle, SK Telecom Ventures, has set up a VC firm called KRS Ventures.

Park is the founding managing partner of KRS Ventures, which will invest in early and mid-stage startups focused on technologies such as artificial intelligence, data science, mobility, infrastructure, innovative consumer offerings, robotics and automation.

SK Telecom hired Park in 2008 as head of business development. He was promoted to president of regional subsidiary SK Telecom Americas in 2012 and ran the $100m SK Telecom Ventures fund, before leaving in November 2021. His previous roles included stints at Motorola, Samsung and Arthur D Little.

People

Marcelo Claure leaves SoftBank

- Badoual steps back in to run TotalEnergies Ventures
- Patel promoted at Yamaha
- Burger to hand over CTV next month

By Kaloyan Andonov, Liwen-Edison Fu, Thierry Heles, Robert Lavine, James Mawson and Fernando Moncada Rivera


Marcelo Claure

Marcelo Claure, chief operating officer at SoftBank Group and the driving force behind its Latin America corporate venturing funds, is leaving after a reported clash over compensation with founder Masayoshi Son.

Michel Combes will take over Claure's responsibility for SoftBank Group International (SBGI) and oversee its operating and investment portfolio, the company said in a statement.

Badoual steps back in to run TotalEnergies Ventures


Girish Nadkarni

Girish Nadkarni, head of corporate venturing unit TotalEnergies Ventures (TEV), has moved back to the US from France in preparation for leaving the oil major TotalEnergies in March.

Nadkarni, a GCV Powerlist award winner, said he had "handed over charge for TEV to Francois Badoual who, incidentally, was also my predecessor".

Badoual has been running TEV's US office since Nadkarni joined in 2017 from leading ABB's CVC unit. Badoual had set up Total's CVC unit in mid-2012 and has moved back to Paris, France, as part of the handover.

Patel promoted at Yamaha

Anish Patel has been promoted to chief operating officer and managing director at Japan-headquartered motorised vehicle manufacturer Yamaha's Silicon Valley-based corporate venturing unit.

One of the most experienced venture investors in transport and mobility, with a dozen years of experience, Patel joined Yamaha Motor Ventures and Laboratory Silicon Valley in 2019 as a partner. He has taken board seats at Yamaha portfolio companies Siren Marine, Rios, Canvass AI, InOrbit, Exyn Technologies and Veniam.

Before joining Yamaha, Patel had run venture capital firm Blue Victor Capital and been an investment director at SAIC's $100m corporate venturing unit after nearly a decade at fellow carmaker General Motors.

Burger to hand over CTV next month


Barbara Burger

After 34 years at US-listed oil major Chevron, Barbara Burger, vice-president of innovation and president of its corporate venturing unit, Chevron Technology Ventures (CTV), will hand over her role next month.

Jim Gable, who is vice-president of downstream technology and services at Chevron, will replace Burger from the start of February. Burger had joined Chevron in 1987 as a research chemist and took over leadership of CTV in 2013.

Aukland arcs to GreenCap CEO position


Ørjan Aukland

Ørjan Aukland will be promoted to CEO of Norway-based carbon capture technology developer GreenCap Solutions next week.

GreenCap hired Auckland as chief financial officer in August 2021 after two-and-a-half years as head of corporate M&A and corporate venturing at industrial conglomerate Lyse.

Aukland had previously run early-stage corporate venture capital investment fund Lyse Investeringer, taking board seats at Nordvest Fiber, Heimdall Power, Sensar Marine, Blueday Technology and pre-seed incubator Validé Invest II.

The corporate venturing role came after Auckland had been group finance lead for Lyse's telecommunications business, covering broadband companies including content provider Altibox.

Steffens agrees to join Thomson Reuters


Tamara Steffens

Tamara Steffens, a GCV Powerlist 2021 award winner and managing director at software producer Microsoft's corporate venturing unit, M12, is joining media company Thomson Reuters next week, The Information has reported.

Steffens is expected to help launch Thomson Reuters' new corporate venture capital fund. It said in October 2021 it would launch a $100m vehicle dubbed Thomson Reuters Ventures to focus on technology capable of supporting "future professionals".

Based in San Francisco, Steffens had led investing and market development for M12 in North America and India and was the executive sponsor of its Female Founders Competition. She has an operational and entrepreneurial background stemming from more than two decades of experience in Silicon Valley at both startups and large technology companies.

Zurriaga Carda joins Sanofi Ventures


Alba Zurriaga Carda

Alba Zurriaga Carda has joined France-based life sciences company Sanofi as a director of investments in digital health amid a series of personnel changes in the field.

She had spent the past three years at venture capital firm 500 Global supporting early-stage founders all around the world connect with corporations after a similar three years helping consultants Deloitte in Japan understand startup ecosystems.

She added: "Excited to share that I have joined Sanofi Ventures, Sanofi's strategic venture fund, to focus on investing in the future of digital health."

Thestrup joins Angelini Pharma's CVC unit

Thomas Michael Thestrup, formerly director for corporate business development and strategy for

Denmark-listed pharmaceutical group Lundbeck, has joined Italy-based peer Angelini Pharma's corporate venturing department as investment director.

Prior to joining Lundbeck in 2019, Thestrup had been associate director of global business development for another drug producer, UCB, since 2017. He had previously been an associate at venture capital firm Sunstone Life Science Ventures for about two years until late 2017.

Torres joins Altaris as MD


Rafael Torres

Rafael Torres, former head of healthcare investing for industrial and power technology producer General Electric's GE Ventures unit, has joined US-based investment firm Altaris Capital Partners as a managing director.

Torres was previously operating partner at Altaris having joined in May 2021 after the sale of New York-listed oncology technology provider Varian Medical Systems, where he had been head of corporate development and strategy, to Siemens Healthineers for $16.4bn.

Before joining Varian in 2015, Torres spent 14 years at General Electric, where he led the healthcare investing teams at GE Ventures and sister unit GE Equity. Since its inception in 2003, Altaris has invested in more than 45 healthcare companies and manages $6bn in assets.

Alibaba adds to strategic investment team

Tao Liu has moved to the strategic investment group at China-based e-commerce group Alibaba after Chinese investment rebounded last year.

Liu will back cloud software technology developers having spent the past seven months at sister company Alibaba Cloud making undisclosed technology investments in semiconductors and silicon, sensing, artificial intelligence (AI) and virtual reality.

Barnes joins Van Horne at JP Morgan

Tanya Barnes has joined JP Morgan Asset Management's (JPMAM) sustainability-focused growth private equity investment business, as co-managing partner.

Barnes was previously a managing director and head of impact investing at Blackstone.

She now co-heads the JPMAM team alongside Osei Van Horne, a managing partner and head of sustainable growth equity investing. Van Horne, a GCV Powerlist Award winner, joined JPMAM last summer from Wells Fargo.

BAI bets on three promotions

Bertelsmann Asia Investments (BAI), a corporate venture capital (CVC) vehicle for media group Bertelsmann, has made three promotions, DealStreetAsia reported, as the unit gradually pivots to a multi-limited partner (LP) structure.

William (Penglan) Zhao has been appointed partner, having joined BAI in 2015 as a senior investment manager focusing on financial, enterprise and industrial technologies before adding a vice-president (VP) role two years later.

Will Wang, another new partner at BAI, was hired in 2012 and also served as a VP before his promotion. He specialised in internet, consumer, retail, cross-border commerce and digital technology developers.

Christine Sun, who was legal and corporate communications director for BAI in charge of maintaining key relationships with the government and industry peers, has taken up a chief operating officer (COO) role. She will continue overseeing legal affairs while managing human resources for the unit.

Trbovic leaves Pfizer for SV Health


Nikola Trbovic

Nikola Trbovic, a GCV Rising Stars Awards winner while principal at Pfizer Ventures, US-based pharmaceutical group Pfizer's corporate venture capital unit, has joined venture capital firm SV Health Investors.

As a partner at SV, led by managing partner Kate Bingham, who devised the UK's covid-19 vaccine strategy, Trbovic will be a biotech investor focused on funding companies working on transformative new therapeutics.

Trbovic's investments at Pfizer Ventures, which he joined in 2014, had included Triplet Therapeutics, TRex Bio, Lodo Therapeutics, Complexa, Arrakis, Artios, Cydan, Jnana, Nimbus and Palleon.

Rochkind reportedly joins SoftBank

Brett Rochkind is joining the Silicon Valley office of SoftBank Investment Advisers, the subsidiary of Japan-listed internet and telecommunications group SoftBank that manages its Vision Funds.

The move follows the departure of Jeff Housenbold in July 2021 and Marcelo Claure earlier this month as well as the arrival of Nagraj Kashyap, former head of software producer Microsoft's M12 corporate venturing unit.

Pescatello rejoins Lightbank VC


Bill Pescatello

Bill Pescatello, founder of Evolv Ventures, the $100m venture capital fund backed by Kraft Heinz to invest in the food industry, has rejoined VC firm Lightbank.

Prior to joining Evolv, Pescatello, a former GCV Rising Stars award winner, had spent seven years at Lightbank where he partnered serial entrepreneurs Eric Lefkofsky and Brad Keywell.

At Evolv, he led investments in Parsable, Flowhub, Outrider and Fabric. The other general partner at Evolv is Steve Sanger, a former business development executive behind GrubHub's success.

Ibbotson promoted to partner at Swisscom


Peter Ibbotson

Peter Ibbotson has been promoted to partner at Swisscom Ventures, the corporate venturing unit of Switzerland-based phone operator Swisscom.

Since joining in 2017, he has been responsible for investor relations and fund administration of Swisscom's two external funds, Digital Transformation Fund I and II, in addition to his investment activity.

Weiss becomes partner at Bold Ventures

Rachel Weiss, vice-president for strategy and growth at France-headquartered cosmetics brand L'Oreal's US operations, has been appointed partner at its corporate venturing unit, Bold Ventures.

Weiss has spent almost 15 years at L'Oreal and said she would be an early-stage investor at Bold, which has been run by Laurent Schmitt, head of corporate finance, since 2018.

Bold invests in new business models in marketing, digital, retail, communication, supply chain and packaging. Its portfolio companies include Sillages Paris, and others, including Carbios, Global Bioenergies, Functionalab Group, Slick, Replica Software and Gjosa.

Karp leaps to Cervin Ventures as partner


Daniel Karp

Daniel Karp, a GCV Emerging Leaders 2021 award winner as director of US-listed network equipment provider Cisco's corporate venturing unit, has joined venture capital firm Cervin Ventures as a partner.

Karp said he will target infrastructure deals around cloud/cloud-native, development operations and tools, security, networking, operations and observability in his new role.

Cervin has had a successful run as a VC under managing partner Preetish Nijhawan, with two of its portfolio companies, LaunchDarkly and Snaplogic, now valued north of $1bn following two large rounds last year, he said in a review of 2021.

Kai Martin joins Baker Hughes

Kai Martin has this month joined US-based oil services provider Baker Hughes' New Energy Frontiers Team as a corporate development lead.

Previously, Martin had handled corporate development for AneCom AeroTest, a Germany-based service provider for the aero engine and gas turbine industry.

He said: "In this investment and incubator arm, my role is focused on identifying growth opportunities through emerging new technologies and startups that advance the energy transition and decarbonisation of industry."

EDF's Raynal to co-work at Eurazeo

Loïc Raynal, investment manager at EDF Pulse Ventures, a corporate venture capital (CVC) subsidiary of France-based energy group EDF, has joined local private equity firm Eurazeo in a short-term placement.

Raynal said: "I am actually both within the VC team in Eurazeo for a few months and staying in EDF's CVC."

Such moves are often a precursor to a corporate setting up a similar investment operation as well as bringing about closer partnership between portfolio companies and the parent corporation, though Raynal declined to comment.

Lloyd changes channel from Sky to Netflix


Emma Lloyd

Emma Lloyd, a former GCV Powerlist award winner, has left UK-based pay-television operator Sky following its acquisition by US peer

Comcast to join video streaming service Netflix.

She said: "After 14 incredible years at Sky I am excited to be taking on a new and exciting challenge, this time at Netflix as VP [vice-president] business development, EMEA [Europe, Middle East and Africa]."

For the past near-three years, Lloyds has been chief business development officer at Sky after six and a half years running its corporate venturing unit, Sky Ventures.

Keshvargar joins Walmart for incubation

Safi Keshvargar has joined Walmart, the US-listed retailer, to become ecosystem head for Store No. 8 – Walmart's incubation unit.

He had previously lead the expansion into New York City of Brand Capital, the strategic investment arm of the Times Group – India's largest media conglomerate – whose portfolio consists of more than 900 investments, including AirBnB, Uber, Coursera, Headspace, Square Panda and Oddup.

Kesvargar remains an investor at angel network GoingVC Partners, which backs early-stage health tech, consumer marketplaces and consumer product brands.

Xu turns partner at On Deck


Shawn Xu

Shawn Xu, former senior associate at venture capital firm Floodgate, has joined US-based talent network On Deck as a founding partner at ODX, its new $150m venture capital fund and accelerator.

On Deck Fund (ODF) is a pre-accelerator focused on startup ideation to help entrepreneurs decide what to build. It has produced 800-plus companies in the past 24 months collectively valued at more than $7bn.

ODX invests $125,000 in companies in return for a 7% stake. It has so far evaluated more than 7,000 companies and signed term sheets with at least 110 companies from its inaugural ODX1 batch.

Flucht heads Global Brain's US office

Brian Flucht has joined venture capital-as-a-service provider Global Brain as partner and head of its US office.

Flucht had previously spent six years as a managing partner at local family office Third Horizon Venture Partners and earlier four years as a director of global corporate development at US-based sportswear retailer Nike.

Japan-based Global Brain primarily helps local corporations invest in startups and Flucht joins its local partner, Shouhei Ichimiya, whose deals have included Securitize, Rally Rd, and Balance Re.

Analyses

> **2021 registered record figures in the realm of corporate venturing**
> **Cancer diagnostics developer Freenome adds $290m from returning investor Roche**

By Robert Lavine, reporter and Kaloyan Andonov, analyst

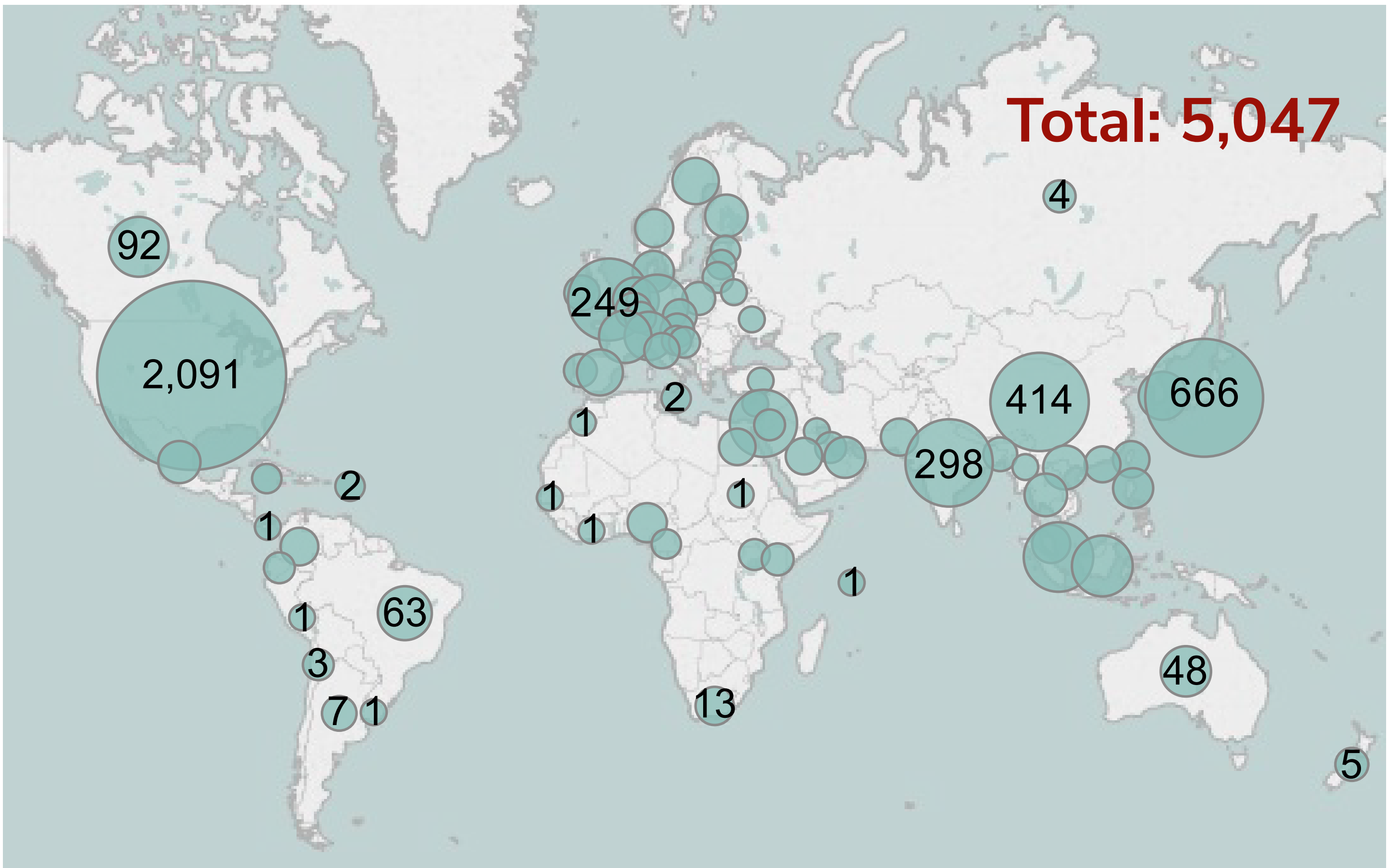
Venturing activity spiked in 2021

In 2021, GCV Analytics tracked 5,047 deals worth an estimated $298.1bn of total capital raised. Both the deal count and the total dollars registered considerable year-on-year increases (40% and 27%) versus the 3,607 transactions worth an estimated $131.22bn reported in 2020.

These are indubitably strong and impressive numbers for any industry, business or portfolio.

Four out of every 10 tracked corporate-backed transactions in 2021 took place in the US (a total of 2,091). Other notable innovation geographies on the global scene were Japan (666), China (414), India (298) and the UK (249). Read more insights on corporate venturing capital data in the upcoming World of Corporate Venturing 2022 report.

Global view of deals in 2021



Source: GCV Analytics

Freenome cracks $290m

US-based cancer detection technology developer Freenome raised $290m from pharmaceutical firm Roche, almost a month after it had announced a $300m series D round.

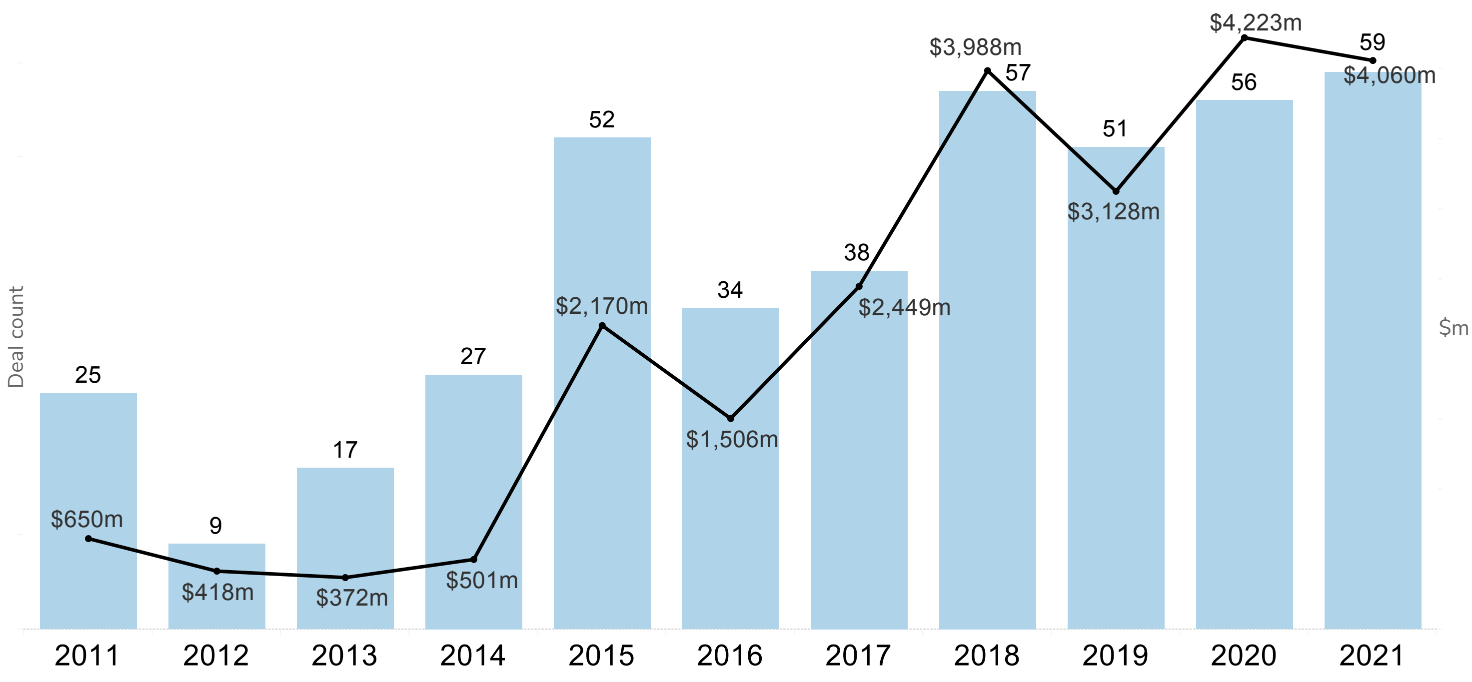
The series D round was co-led by Perceptive Advisors and RA Capital Management and featured internet conglomerate Alphabet's GV unit as well as corporates Kaiser Permanente, Novartis and Intermountain Healthcare, the last via Intermountain Ventures. Roche also participated in the series D round.

Launched in 2014, Freenome has developed a machine learning-equipped multiomics technology that enables cancer detection from routine blood draws through the decoding of cell-free biomarker patterns. Thus, cancers can be detected earlier when there is a greater chance of successfully treating the disease.

Freenome's initial product is a blood test for colorectal cancer screening, which is in the final stages of enrolment for a prospective registrational study. The company is also expanding its technology into other forms of cancer beginning with pancreatic cancer.

Freenome is part of the broader genetics and gene therapeutics space, which has caught the attention of corporate venture investors over the past decade. The number of corporate-backed deals in the space increased multi-fold over the past decade and have remained relatively stable in recent years. This is likely because the space is relatively nascent and yet to gain more momentum on the VC arena.

Corporate-backed deals in genetics tech and gene therapeutics 2011-21



Source: GCV Analytics

Data as of 31 December 2021

Global Corporate Venturing

Financial Sector Report
Q1 2022

DeFi-ning moment

Game-changing fintech developments bring new players to venture investing

Decentralised finance primed to take over

Decentralised finance primed to take over

> Crypto incumbents fuel record venture investing
> Decentralised autonomous organisations fuel new forms of backing entrepreneurs
> Insiders coinvest to create cross-holdings

BY **JAMES MAWSON**
Editor-in-chief

Jamie Dimon, CEO of JPMorgan Chase, said the US-listed bank would spend up to $12bn on technology this year. He gave the reason for this in an earnings call in January, saying: "There is global competition. There is non-bank competition, direct lending competition. There is fintech competition, there is PayPal competition. There is a lot of competition and we intend to win and sometimes you need to spend a few bucks."

The problem for the banks and other traditional financial services providers is the information technology systems they use are reliant on legacy platforms, or are effectively held hostage by niche providers, such as credit cards on mainframe computers that prevent machine learning from accessing the data to recommend efficiencies in other products or syndicated leveraged loans sent by fax machine.

The first wave of cryptocurrency relied on centralised finance (CeFi) wallets and exchanges, such as Coinbase and Gemini, for storing, buying, selling and trading different cryptocurrencies.

Decentralised finance (DeFi) relies on smart contracts operating on a blockchain, often Ethereum, and is a catch-all term for the technologies rebuilding a digital economy for users to trade assets, get loans and store deposits.

DEFI'S POTENTIAL FOR IMPACT

For banks, insurers or asset managers grappling with a legacy of platforms and customer-supplier contracts, why does DeFi, or its related terminologies – crypto, blockchain or web3 – matter?

Jacqueline LeSage, head of Munich Re Ventures, the corporate venturing unit of Germany-based reinsurer Munich Re, and co-chair of the Global Finance Council of CVCS, said: "Crypto, DeFi and web3 have the potential to change every vector in venture, from securities, liquidity, governance and founder interests."

Ken Griffin, founder of a large hedge fund and trading platform for traditional securities, this month sold a $1.15bn stake in Chicago-based Citadel Securities to VC firm Sequoia Capital and crypto investor Paradigm, and could now embrace digital currencies.

Matt Huang, founder of Paradigm, told Bloomberg it looked forward to "partnering with the Citadel Securities team, as they extend their technology >

$12bn

Amount JPMorgan Chase said it would spend on technology in 2022

Source: JPMorgan Chase

and expertise to even more markets and asset classes, including crypto".

These VCs are investing so much because they expect much greater returns even beyond disruption to their own industry. The promise is a rebuilding of the financial economy and making it more efficient and relevant to the virtual or online worlds, as well as physical one.

UP YOUR GAME

Related are creating digital (micro-) economies for the metaverse through games. By merging games, finance and blockchain (GameFi) business models, and incentive structures in the virtual worlds of games and the metaverse, can be translated to the real world or become a larger part of the economy.

As the *Economist* noted: "The fact that the applications built on top of blockchains all work with each other and that the information they store is visible to all, harks back to the idealism of the internet's early architects, before most users embraced the walled gardens offered by the tech giants."

"Crypto, DeFi and web3 have the potential to change every vector, from securities, liquidity, governance and founder interests, in venture"

Jacqueline LeSage
Head, Munich Re Ventures

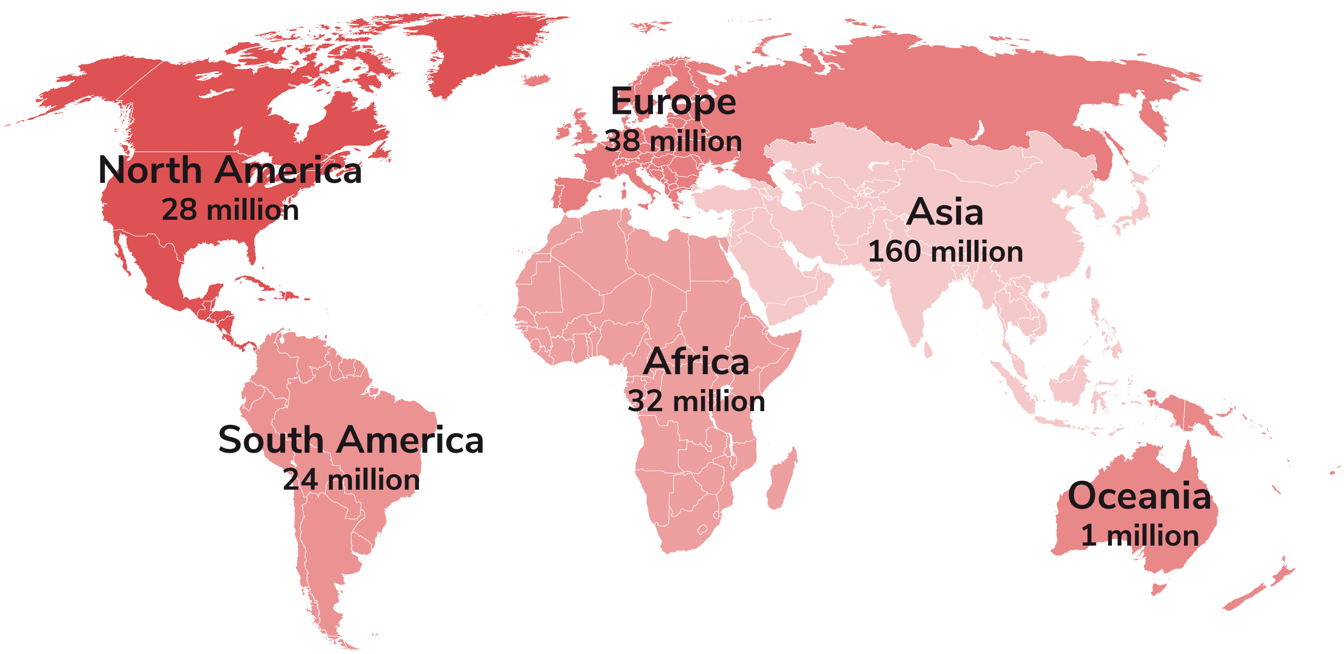
POWER HUNGRY

Blockchains are databases distributed over many computers and kept secure by cryptography. It is both energy and computing power-hungry and cutting-edge in how new advances in, for example, quantum computing might affect security or opportunities.

An undisclosed cryptocurrency investor recently backed Terra Quantum, a Switzerland-based quantum-as-a-service platform, in its $60m series A round led by VC firm Lakestar.

Cybersecurity remains a concern in crypto. Cryptocurrency-based crime hit a new high in 2021, with illicit addresses receiving $14bn during the year, up from $7.8bn in 2020, according to Chainalysis. >

FIG 1: GLOBAL CRYPTO USERS BY REGION



Source: Triple A

> With more than 300 million crypto users and more than 18,000 businesses accepting cryptocurrency payments worldwide, DeFi adoption has become a global phenomenon.

The bitcoin network has been the most powerful computing fabric in the world (three years ago it was about a million times more powerful than the most powerful supercomputer).

The value of assets stored in this nascent financial system has climbed from less than $1bn at the start of 2020 to almost $250bn by the end of last year, according to DeFi Llama.

This increase came despite China saying that all cryptocurrency-related business activities within the country were illegal and barred financial institutions from helping crypto investors deposit fiat currency on crypto exchanges. The move was seen by many as an attempt to eliminate competition with Beijing's new digital currency, the digital yuan, which is set to launch before the Beijing Winter Olympics in February. (*see box, Tencent*)

$250bn

The value of assets stored in the bitcoin network, up from $1bn at the start of 2021

Huobi, Binance and OKEx, three of the world's largest crypto exchanges, which were founded in China, had closed their subsidiaries in China by the end of the year, although local individuals are still able to get around the rules.

Around two-thirds of DeFi assets are hosted by the Ethereum blockchain, which was created around the middle of the last decade as a more general-purpose version of Bitcoin. Bitcoin's database stores information about transactions in the associated cryptocurrency, providing proof of who owns what at any time. Ethereum stores more information, such as lines of computer code.

The *Economist* wrote: "Both Bitcoin and Ethereum use a >

TENCENT: EXPANDING THE GLOBAL PORTFOLIO

Tencent has dodged most of China's regulatory crackdown and built an impressive global fintech portfolio.

There is an elite band of venture investors who have returned more than $100bn in profits from their deals. When asked who they rate and why, they often cite Forest Lin who, along with Jeffrey Li, took China-based gaming and internet group Tencent's corporate venturing portfolio to be valued at nearly $300bn, excluding realisations, such as the $16bn of shares in JD.com in December 2021.

Lin became president of Tencent's then-nascent financial technology group just before the covid-19 pandemic started. Li remained as sole general or managing manager of Tencent Plus Partners and became corporate vice-president in summer 2019.

Tencent's latest deal in this area came just before the new year, when it joined a $600m funding round for UK digital bank Monzo.

Tencent's fintech deals include a who's who of startups, including Rakuten, Nubank, Uala, N26, Lunar, Qonto, Tyme, Ozow, Viva wallet, Airwallex, Fenbeitong and Lydia.

Revenues from Tencent's FinTech and Business Services unit increased by 40% on a year-on-year basis to RMB41.9bn ($6.6bn) for the second quarter of 2021.

Tencent recorded net other gains of RMB20.8bn for the second quarter of 2021, compared with RMB8.6bn on a year-on-year basis, mainly due to increased valuations of investee companies in fintech and other sectors, such as transportation and local services, and before recent uplifts, such as Brazilian digital bank Nubank's flotation on the New York Stock Exchange in December. Shares rose 15%, valuing the company at $45bn and making Tencent's 8.1% stake worth about $3bn.

Tencent has built its portfolio internationally and continues to invest almost all its free cashflow in corporate venturing.

During the six months ended 30 June 2021, Tencent invested RMB42bn in listed and unlisted entities. The fair value of these investments in associates which are listed entities was RMB1,145bn in June 2021 (RMB981bn on 31 December 2020), excluding potentially another $100bn in unlisted holdings for a total portfolio of 800 companies.

Robin Zhu, an analyst at Sanford C Bernstein asset managers, estimated Tencent's listed and unlisted investments were worth $259bn in total as of 2 March 2021).

Even before these latest results and investments, Morgan Stanley valued Tencent's own fintech business at $157bn, which means that even if its position is eventually affected by China's use of a digital currency for electronic payments and regulatory crackdown its global eminence is secure.

mechanism called ‘proof-of-work’, where computers race to solve mathematical problems to verify transactions, in return for a reward. This slows down the networks and limits capacity. Bitcoin can process only seven transactions per second; Ethereum can handle only 15. At busy times, transactions are either very slow or very costly and sometimes both.”

R3 Corda, another blockchain or type of distributed ledger promoted by Bank of America, HSBC, Intel and Microsoft, is a novel consensus mechanism in which transactions are cryptographically linked and processed in real time rather than blocked together, which can improve performance and become a potential standard for insurers.

Similarly, Ethereum could shift to a more easily scalable mechanism, either through changes at its database or operating level, or through customised versions, such as Quorum, which was pioneered by JPMorgan to be suitable for banks.

A more scalable Ethereum blockchain could emerge if it turned to ‘proof-of-stake’ to verify transactions, or was split through a process called ‘sharding’, or transactions were bundled together.

1.6m

Number of decentralised autonomous organisations December 2020, a 130-fold increase from 13,00 in January of the same year

VULNERABLE TO ATTACK

However, pooling transactions creates centralised entities and a single shard of a blockchain could be more vulnerable to hackers, so Ethereum remains stuck in development, which is negatively impacting its market share as alternatives emerge.

JPMorgan Chase estimated that the share of DeFi applications using Ethereum fell to 70% by the end of 2021, with other networks, such as Avalanche, Binance Smart Chain, Terra and Solana, now using proof-of-stake to run blockchains, enabling them to operate quicker and cheaper.

Decentralised applications (DApps), such as tokens or exchanges, can increasingly operate across blockchains and can scale up by creating ecosystems of support through corporate venturing.

The changes are obvious in other ways, too. In the past year, decentralised autonomous organisations (DAOs), surpassed 1.6 million members in December 2021, up 130-fold from just 13,000 last January, according to data provider DeepDAO. Investment DAOs are collectives of individuals capable of investing their personal capital or directing portions of the DAO’s treasury into early-stage, crypto startups and who buy-in in the form of the DAO’s governance token in exchange for access >

DECENTRALISED AUTONOMOUS ORGANISATIONS

BY **LIVINE.SANCHEZ,** ZYCRYPTO.COM

A decentralised autonomous organisation (DAO) is a blockchain-based organisational structure or group, organised around a shared mission, goal, or cause that coordinates through a shared set of rules enforced by the blockchain.

It is a system that enables individuals to coordinate and self-govern themselves, led by a set of self-executing rules deployed on a public blockchain, with no central decision-making authority.

A DAO is typically referred to as an internet-native business collectively owned and governed by its members. It is also commonly described as a digital collective or cooperative. Generally, DAOs are curated with a central treasury and no individual has the authority to access or control it without the approval of a larger group of persons. Every decision in the digital cooperative is made through proposals and voting to ensure equity and allow members to have a voice.

So far, DAOs are being used for many purposes, such as investment, charity, fundraising, borrowing, or buying NFTs. DAOs are structured without the need for intermediaries or third parties. These organisations can accept donations from almost anyone, anywhere at any time and members can decide and vote on fund allocation.

DAOs could be the next wave of huge growth for the blockchain industry. It would also facilitate more widespread adoption, leading to potential competition with traditional businesses and organisations.

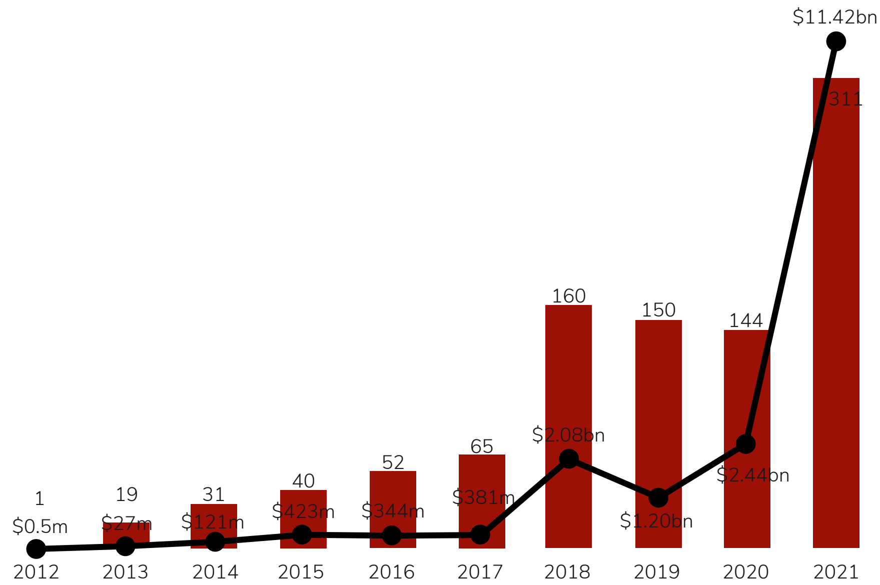
to private spaces – invite-only Discord chats, Telegram groups or in-person events – where deals can be sourced.

Members of Global Coin Research (GCR), for example, have cumulatively invested in more than 30 deals, deploying more than $25m into projects such as blockchain interoperability protocol Aurora and Web 3 management platform Coinvise, according to news provider CoinDesk.

Raising funds from investment DAOs "helped us in bootstrapping our own community by on-boarding new members through co-hosting events with GCR," Jenil Thakker, founder of Coinvise, told CoinDesk. "More broadly, investment DAOs offer access to a much wider network of people that can help projects get early feedback."

Likewise, RevenueCoin works by users buying up the native $RVC token for themselves, with the funds distributed to the high-tech companies often chosen by community voting. Those who had initially bought the token are meant to be able to sell them on traditional exchanges or through buybacks by the startups.

FIG 2: CORPORATE-BACKED DEALS IN CRYPTO AND BLOCKCHAIN TECH 2012-2021



Source: Pitchbook

VENTURE ACTIVITY EXPLODES

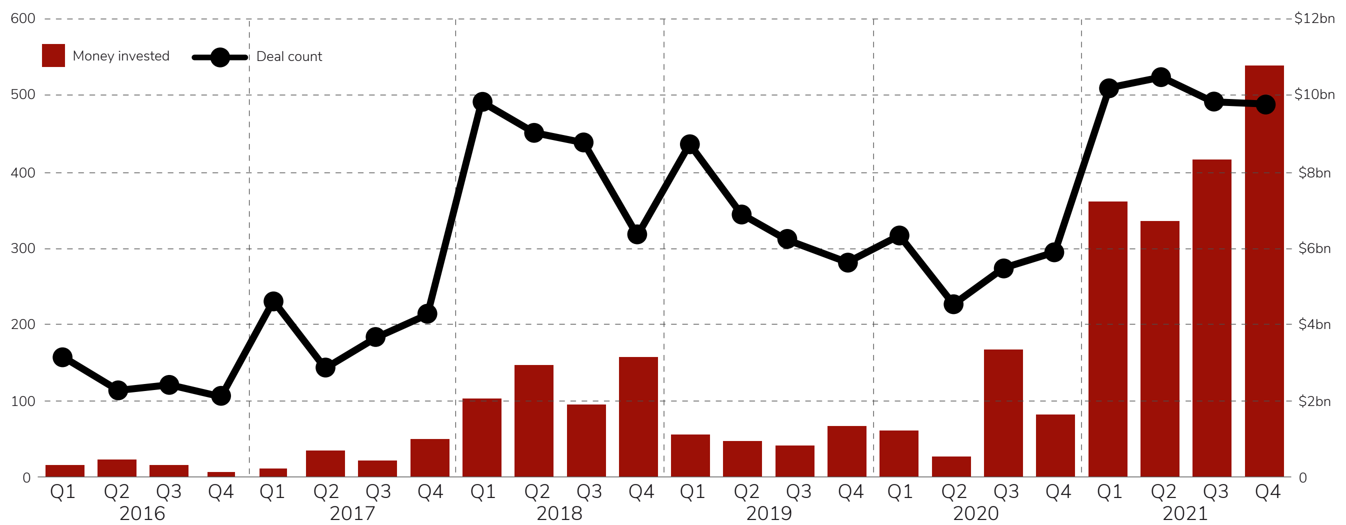
But the investment DAOs are still small-scale compared with traditional corporate and VC investors. VCs invested at least $30bn in crypto projects last year, according to Bloomberg.

Corporate venturers were involved in around a third of these deals by value, according to Pitchbook, dominated by crypto incumbents Coinbase and Digital Currency Group.

Companies specialising in trading, exchange services and lending of digital currencies led the financing rush, taking a large share of the capital (41%), while startups building NFTs (non-fungible tokens), DAOs and web3 came in second, receiving 17% of funding, just above DeFi and other digital infrastructure.

Binance is the largest cryptocurrency exchange in both spot and derivative volumes, >

FIG 3: CRYPTO, BLOCKCHAIN AND VC DEALS INVESMENT



Source: Galaxy Digital Research on Pitchbook data followed by OKex, FTX, Huobi, KuCoin, Bybit, Cointiger and Coinbase.

Binance, which was founded in 2017 and initially headquartered in China before moving to the Cayman Islands, had more than $20bn in revenues last year, according to Bloomberg estimates. Its success has fuelled a corporate venturing explosion, backing more than 100 projects in three years through its Binance Labs unit.

These deals include 1Inch, which helps route trades across blockchains to the best exchange; distributed network BitTorrent; and the $110m series C financing of web3 infrastructure provider Figment.

Ken Li, investment director at Binance Labs, said: "Binance Labs invests deeply in Web3 infrastructure teams."

Perhaps even more active in corporate venturing since 2018 has been peer Coinbase.

Coinbase Ventures (CV) has invested in more than 150 companies as of August 2021, according to data provider CB Insights, which included its infrastructure deals TaxBit, an automated tool for paying crypto taxes, Zora Labs, a marketplace for digital tokens, Arweave, a digital storage service, and OpenSea, an NFT marketplace, as well as DeFi companies, including Vega Protocol, Saddle, Uniswap, and peers Pintu, Bitso and CoinDCX.

> *"With FTX Ventures, we are looking to support entrepreneurs building generational businesses. We are particularly excited about web3 gaming and its ability to bring mainstream audiences into the ecosystem"*
>
> **Amy Wu**
> Head, FTX Trading

Emilie Choi, president and COO at Coinbase, told CB Insights that investing in competitors was a policy endorsed by co-founder Brian Armstrong.

With an initial capital of $100m announced last year, OKEx's corporate venturing unit, Blockdream Ventures, also targets basic infrastructure for blockchains and DeFi, as well as web3 and NFTs, among other areas. Its deals by Breeze Liu and Helen Liu from its China team include: Arbitrum, a layer 2 scaling solution for Ethereum developed by Offchain Labs; Gods Unchained, a free-to-play tactical card game that gives players ownership of their in-game items; and Wax, a blockchain for gaming and NFTs. It also claims more daily transactions than any other blockchain in the metaverse.

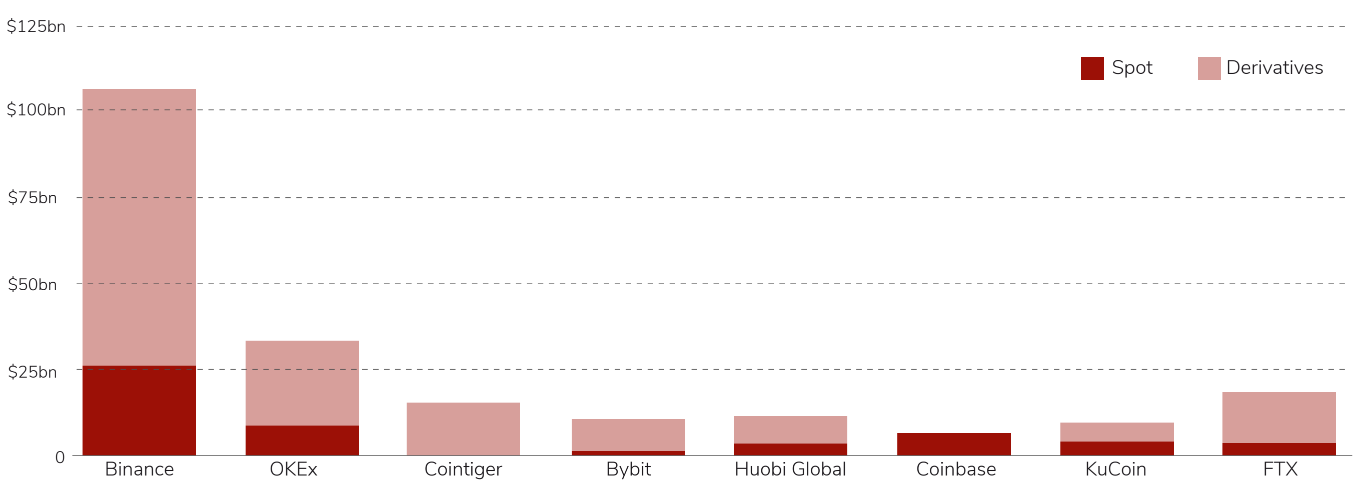
Even more recently, FTX Trading, a Bahamas-based crypto and blockchain services provider, set up a $2bn corporate venture capital fund and hired Amy Wu from venture capital firm Lightspeed as its head.

FTX Ventures includes the $100m gaming fund launched with Solana in November. Wu said: "We will be folding the Solana gaming funding into FTX Ventures as well. Solana is a close ecosystem partner well beyond the gaming vertical. FTX Ventures will invest across blockchain ecosystems beyond Solana as well."

The $2bn is the amount of new capital ready to be deployed to builders of the future of web3, across social, gaming, fintech, software and healthcare, not value of the existing portfolio.

Wu said: "With FTX Ventures, we are looking to support entrepreneurs building generational businesses. We are particularly excited about >

FIG 4: LARGEST GLOBAL CRYPTOCURRENCY EXCHANGES



Source: Bloomberg/Coingecko.com

web3 gaming and its ability to bring mainstream audiences into the ecosystem."

There are no external limited partners, as the fund is backed by FTX's CEO, Sam Bankman-Fried, and FTX, according to a company statement. The fund will invest in multi-stage companies and projects, providing flexible funding and strategic support from FTX and its network of global partners.

"Our investors at FTX have made a deep impact in supporting our growth and development. We strive to do the same at FTX Ventures," said Bankman-Fried.

Likewise, VC firm Andreessen Horowitz (A16Z) plans to raise two crypto funds worth a total of $4.5bn to support its expansion into the digital asset space, as reported by the *Financial Times*. A16Z has made 40 crypto-related deals between 2016 and 2021, including Ethereum-competitor Solana, NFT marketplace OpenSea and blockchain-based gaming startup Sky Mavis, the studio known for creating NFT-focused metaverse game Axie Infinity. A16Z is also up against more active corporate venturing incumbents.

Founded in 2015, Digital Currency Group (DCG) is one of the most active investors in the blockchain and crypto sectors, "with a mission to accelerate the development of a better financial system through the proliferation of digital assets and blockchain technology," according to Rumi Morales, who joined as director of investments to lead and expand the US-based crypto exchange's venture, growth and fund portfolios.

She said: "Today, DCG sits at the epicentre of the industry, backing more than 200 blockchain-related companies in over 35 countries. DCG also invests directly in digital currencies and other digital assets."

"Digital Currency Group sits at the epicentre of the industry, backing more than 200 blockchain-related companies in over 35 countries. DCG also invests directly in digital currencies and other digital assets"

Rumi Morales
Director of investments, Digital Currency Group

In addition to its investment portfolio, DCG is the parent company of Genesis, a global digital asset prime brokerage, Grayscale Investments, a digital currency asset manager, CoinDesk, a financial media, data and information company, Foundry, a bitcoin miner and staking company, Luno an international cryptocurrency platform, and TradeBlock, an institutional trading platform.

In April 2018, CoinTiger established its Ecosystem Fund to take blockchain equity and token investments, as well as CoinTiger Labs to incubate blockchain projects. The fund has invested in projects including Perlin, Mytoken, Lianyixia, Carry, Carblock and Cocos BCX.

More recently, KuCoin Labs, the investment and research firm spun out of the crypto exchange KuCoin, launched a $100m fund to invest in metaverse startup projects in gaming, NFTs and decentralised infrastructure projects. Its deals include data privacy hub Secret Network's $400m in ecosystem funding that will set up a $225m ecosystem fund and a $175m accelerator pool.

The ecosystem fund is led by SCRT Labs and, beyond KuCoin Labs, includes DeFiance Capital, Alameda Research, CoinFund, HashKey, Hashed, Arrington Capital, Dragonfly Capital Partners, Fenbushi Capital, Skyvision Capital, Blocktower Capital, Terraform Labs, Hartmann Ventures, NGC Ventures, Figment, Arkstream Capital, Shima Capital, Magnus Capital, Bison Fund, Momentum6, Arca, Iconium, Huobi Ventures and Skynet Trading.

Animoca Brands, another blockchain gaming and trading company with an active CVC unit, having backed more than 150 NFT and metaverse-related companies, >

TABLE 1: TOP CORPORATE INVESTORS IN CRYPTO & BLOCKCHAIN TECH DEALS

Investors	Investments in the past five years
Coinbase Ventures	163
Digital Currency Group	120
Consensys Mesh	69
Blockchain Ventures (CVC)	33
Hashkey Capital	29
Medici Ventures	19
KuCoin Labs	14
Solana Foundation	14
Xpring	14
Innogy Innovation Hub	12
SCB 10X	12

Source: Pitchbook

including OpenSea, Dapper Labs, Yield Guild Games, Star Atlas, Axie Infinity and Thetan Arena, raised $358.9m in January in its fourth round since May and at a reported $5bn pre-money valuation.

Liberty City Ventures led the round, with other investors including 10T Holdings, C Ventures, Delta Fund, Gobi Partners Greater Bay Area, Gemini Frontier Fund, Kingsway, L2 Capital, Mirae Asset, Pacific Century Group, ParaFi Capital, Provident, Senator Investment Group, Sequoia China, Smile Group, Stable Asset Management, Soros Fund Management, Wildcat Capital Management and Winklevoss Capital.

Huobi Capital supports the eponymous exchange's corporate venturing deals through Huobi Ventures, such as Blockstack, Theta and Lootex, a GameFi platform to purchase NFTs and in-game assets across multiple blockchains, which raised $9m from a number of venture capital firms and strategic partners, such as Spartan Capital, Infinity Ventures Crypto, LD Capital and Akatsuki.

The Lootex round also saw the participation of SweeperDAO, YGG SEA, Polygon Studio, HTC, OKEx Blockdream Ventures, Avocado Guild, Cherubic Ventures, Palm Drive Capital, Evernew Capital, Morningstar Ventures, NGC Ventures, Petrock Capital, Panony, Yolo Investments, Kosmos Ventures, Daedalus and, from PKO Investments syndicate, angel investors Kevin Lin, Twitch's co-founder, Holly Liu, Kabam's co-founder, Patrick Lee, co-founder of Rotten Tomatoes, and Kun Gao, co-founder of Crunchyroll.

Likewise, founded in 2019 and incubated by quantitative trading firm Alameda Research, FTX had 69 investors in its last round of $421m in October 2021, including SoftBank, payment technology provider Circle and crypto exchanges Coinbase and Binance, as well as a who's who of financial investors, including Ontario Teachers' Pension Plan Board's Teachers' Innovation Platform, BlackRock, Temasek, Sequoia Capital, IVP, Iconiq Growth, Tiger Global Management, Sea Capital, Ribbit Capital and Lightspeed Venture Partners.

GREATER OPPORTUNITIES

The depth of syndicates for the rounds and cross-holdings between new organisations using part of their rounds to back other projects points to an unusual fertility and interconnection. This creates risks but points to a fundamental philosophical underpinning in the web3 movement to gain and retain consent.

Miko Matsumara, co-founder of Gumi Cryptos Capital (GCC), a VC firm where games company Gumi is a cornerstone limited partner, described blockchain as a "quantum evolution of open source software", a field he spent decades involved in through startups such as Gradle and >

TABLE 2: TOP CORPORATE-BACKED DEALS IN CRYPTO AND BLOCKCHAIN TECH

Company	Round	Size	Investors
FTX	B	$1bn	40 North Ventures, 6ixth Event, Abstract Ventures, Alan Howard, Altimeter Capital Management, Bond, Schoeneck & King, Coinbase Ventures, DHVC, Gisele Bündchen, Insight Partners, Israel Englander, Lightspeed Venture Partners, Mark VC, Mayfield (PEy), Multicoin Capital, Paradigm, Ribbit Capital, Sequoia Capital, SoftBank Investment Advisers, Temasek Holdings, Third Point, Third Point Ventures, Thoma Bravo, Tom Brady, Tribe Capital, Willoughby Capital.
Forte	B	$725m	Andreessen Horowitz, Animoca Brands, big bets, Griffin Gaming Partners, Kora Management, Overwolf, Playstudios, Polygon Studios, Sea Capital, Solana Ventures, Tendermint, Tiger Global Management, Warner Music Group, zVentures.
Robinhood Markets	G	$668m	9Yards Capital, Aeon Family of Funds, Aliya Capital Partners, Andreessen Horowitz, Capella Partners, D1 Capital Partners, DST Global, Founders Circle Capital, Iron Edge VC, IVP, John-Paul Gallo, Michael Kogan, Millennia Capital, Redalpine Venture Partners, Ribbit Capital, Rogue Insight Capital, Sequoia Capital, Sung Capital Partners, Sutton Capital, The Factory (France), Toy Ventures, Unusual Ventures, West Coast Equity Partners.
Wealthsimple	D	$600m	Alkeon Capital Management, Allianz X, Aubrey Graham, Base10 Partners, Dragoneer Investment Group, DST Global, Dwight Powell, Eldridge, Greylock Partners, ICONIQ Capital, Inovia Capital, Kelly Olynyk, Meritech Capital Partners, Michael J. Fox, Patrick Marleau, Plus Capital, Redpoint Ventures, Ryan Reynolds, Sagard, Steadfast Capital Ventures, TCV, Two Sigma Ventures.
BlockFi	E	$500m	7feur, Acrew Capital, Bain Capital Ventures, Coinbase Ventures, Hedosophia, Hutt Capital, The Venture Collective, Third Point, Tiger Global Management, Trousdale Ventures.

Source: *Pitchbook*

Hazelcast and at Java developer Sun Microsystems in the mid-1990s.

He said: "Bitcoin is an insane leap from open source runtime, where developers donate time to write software and give it away. People do this because they have free will and so can choose, but machines do not have free will and so cannot give away their time or computing power. So Bitcoin and blockchains are a way to compensate for runtime. To turn ones into zeros and zeros into ones costs energy, which is money, so mining Bitcoin as proof of work neutralises this, as it is effectively creating money so there is an incentive to download and run software.

"The internet is usually seen as a tragedy of the commons [a problem in economics that occurs when individuals neglect the well-being of society in the pursuit of personal gain], but web3 is a new phase of open culture through NFTs that is creating a better internet; a comedy of commons as it were.

"The internet is usually seen as a tragedy of the commons... but web3 is a new phase of open culture through NFTs that is creating a better internet, a comedy of commons as it were"

Miko Matsumara
Co-founder, Gumi Cryptos Capital

"Now there is competition for consent. Do other developers consent to use your software? Do end users consent to use the applications? If it is useful, there is greater consent so suddenly there are vectors to improve software. Can you compete to create canonical platforms, the Platonic ideal of a database.

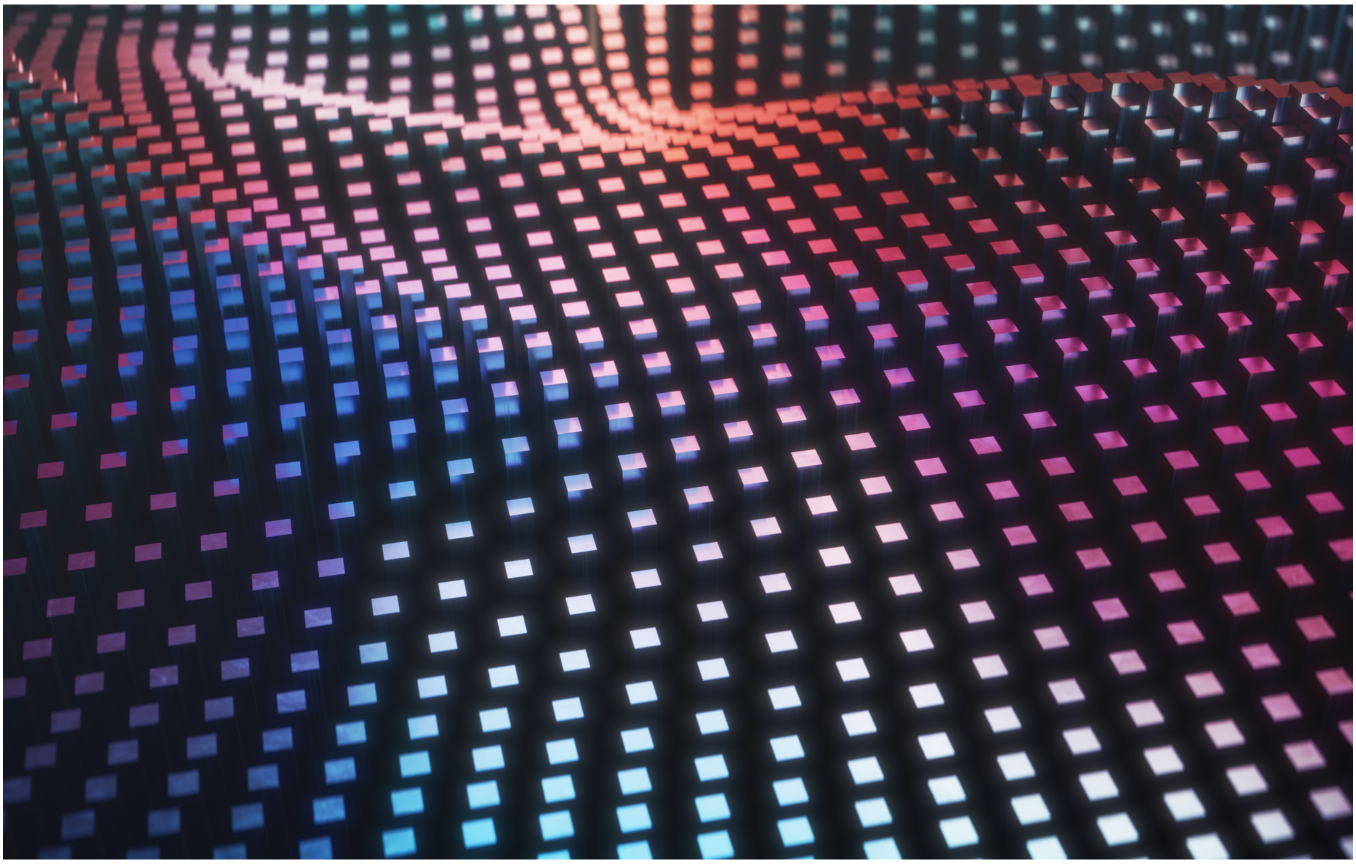
"NFTs are a medium to reposit canonical cultural evolution and new capabilities to rebuild the internet and remove tech giants' externalities."

Within a year, the total market value for NFTs reached $46bn, representing a nearly 100 times multiple from the $52.3m total market cap in December 2020, according to CoinGecko data used in OpCrypto's annual report.

"Web 1.0 was read-only," VC Bill Tai said to CNBC. "Web 2.0 is read-write. Web 3.0 is the instantiation of a wrapper around everything that is coming in and out of the screen so that it can move around. It is an internet of assets.

"You can put land titles on there, real estate, art, drawings, anything. It is the most efficient way over time to assign ownership of any asset," he said, explaining that everything can have an address that allows people to find it through a marketplace.

But some believe the impact of "a better internet" through web3 and crypto could be even greater >



through decentralised autonomous organisations or even "cloud nations," as laid out by Balaji Srinivasan.

Mario Gabriele in his blog, the *Generalist*, said: "Just as mechanical advancements gave rise to national systems, the technological revolution enables new structures. While the internet was the dominant force in the current shift, cryptocurrency represents the missing piece. Though much discussed, we remain in the early innings of understanding how profoundly the blockchain 'vernacularises' economics and empowers digital, censorship-free homesteading.

"The result will be a new type of civilisational structure: decentralised countries. 'DeCos' will operate above national borders in the digital realm.

"These unions will be internet native and agnostic to the physical world. They may start by leveraging platforms run by centralised companies, but eventually migrate to a fully decentralised stack to protect their existence. In time, DeCos will attract borderless 'populations' that rival and surpass that of many nations. Though much of it will be dominated in vernacular monies, including currencies denominated by the DeCo, these entities will boast large GDPs."

RETAINING TRUST

In this world of decentralisation, therefore, trust and identity is important.

Austin Arensberg, senior director at corporate venturing unit Okta Ventures, told peer Alex Lazarow: "Startups will be investing in interoperable customer identities underpinned by both open banking and crypto use cases. The excitement around the potential for social auth championed by Facebook 10 years ago will be manifested once again, but this time by fintech players. Customers want their financial identity to be transferred seamlessly and securely across the web. One click checkout tools and crypto wallets will be important battlefields to watch."

Gen Tsuchikawa, chief investment manager at Sony Innovation Fund, said: "Financial and insurance technologies will increasingly blend blockchain and web3 together. [For example,] a number of DeFi new entrants are likely going to take the opportunity to dislodge neobanks and challenger insurers with more differentiated products leveraging on blockchain. This opens an even broader opportunity than just the decentralisation of monetary flow, as a deeper reconfiguring of credit scoring, identity verification and fraud prevention could be powered by web3."

UK-based Checkout.com, which recently raised $1bn at a $40bn valuation and hired Meron Colbeci, Meta's previous digital wallet lead, as its chief product officer, has also expanded into the crypto space and processes payments for exchanges such as Coinbase and FTX.

Lazarow, a venture capitalist with Cathay Innovation, added: "My own prediction is about the continued global opportunity for fintech. For context, in 2021 we saw the rise of fintech unicorns around the world. Most of that action has been in emerging markets. At the beginning of 2021, Africa had one unicorn. Today it has seven. The six additions were in fintech. Latin America (*see box, Latam takes off*), saw the historic IPO of Nubank. Europe was the source of some of the largest financings."

The financial technology underpinning the world is shifting at pace. ■

LATAM TAKES OFF

The Inter-American Development Bank believes that the value of the technology sector in the region grew from $7bn in 2010 to $221bn in 2020.

Most of the innovation so far has been in fintech, led by Nubank, a Brazilian startup which listed in New York in December 2021. With almost 50 million users, it has become the world's biggest digital bank, valued at more than $40bn.

Five banks control more than 80% of the market in Brazil, but unmet demand for credit for small- and medium-sized enterprises is more than $650bn.

In 2020, Brazil's central bank introduced a series of rules to foster transparency and competition in finance. Customers can now compare services and transfer more easily between providers.

It also launched Pix, an instant payment system and paid covid-19 stimulus money digitally. This meant that an estimated 40 million unbanked people signed up for traditional and digital accounts in Brazil, Colombia and Argentina.

The Central Bank of Brazil authorised the issuance of tokens, on blockchain within the national financial system.

To capitalise and compete with Nubank and others, the main incumbent banks, Banco do Brasil, ABC and Itaú, have set up corporate venture capital funds.

Itaú used its CVC unit, Kinea, to back Liqi, a local blockchain-based asset tokenisation startup, in its R$27.5m series A round.

Sector report

Services recover from the pandemic

- Deal count and estimated dollars increase
- Exits count and dollar value also up
- Dollar value in funding stable

By Kaloyan Andonov
Reporter and analyst

Having historically taken over manufacturing and agriculture in importance, business services play a dominant role in most emerging and mature economies today. According to consulting firm Research and Market, the global professional services market was estimated at $5.02 trillion in 2020 and forecast to reach over $7 trillion in size by 2025 in the post-pandemic world, implying a compound annual growth rate (CAGR) of 7.03%.

Global Corporate Venturing's broad definition of "services" covers a wide range of subsectors – from accommodation and travel and real estate through education, human resources and consulting to logistics and others. It is imperative to consider   in each in order to properly understand the trends in the sector data.

The GCV Analytics' definition of the services sector encompasses accommodation and travel, human resources, education, business and legal consultancy services, communication and market research services, logistics and supply chain services, real estate, classifieds and review platforms and other subsectors

With the covid-19 pandemic travel and tourism suffered an unprecedented decline in 2020. According to the UNWTO World Tourism Barometer, international tourist arrivals plummeted by 72% between January and October 2020. The report estimated that this had translated into a massive loss of $935bn in export revenues from international tourism, 10 times over the loss registered in 2009 after the global financial crisis. The drastic decline took international tourism to a level of 30 years ago, according to the report.

In 2021, the UNWTO Barometer estimated that global tourism "experienced a 4% upturn, compared to 2020" but international tourist arrivals (overnight visitors) were still 72% below the pre-pandemic year of 2019. The latest estimates regard this moderate rebound as a slow and uneven recovery across the globe from the worst hit for international tourism on record.

The UN remains cautious in forecasts with respect to the impact of the Omicron variant and surging covid-19 cases: "According to the latest UNWTO Panel of Experts, most tourism professionals (61%) see better prospects for 2022. While 58% expect a rebound in 2022, mostly during the third quarter, 42% point to a potential rebound only in 2023. A majority of experts (64%) now expect international arrivals to return to 2019 levels only in 2024 or later, up from 45% in the September survey."

This panorama may be a mixed blessing for emerging businesses in the travel tech space in the near term. On the one hand, the ongoing recovery may be an opportunity to innovate. On the other, even in frothy markets as in most recent times, that may still mean relatively depressed valuations for such businesses, which may limit the amount of capital they could raise.

Another branch of services, sensitive to the business cycle, is the real estate space. Some subsectors in it such as retail and office space were severely affected by the pandemic but with the reopening and despite the emergence of the "future of work" and increase remote working, they have started to recover. This is partly due to the recovery but also thanks to the heightened levels of liquidity in markets stemming from accommodating monetary policy.

According to the DLA Piper's Annual State of the Market survey on commercial real estate of 2021, optimism in commercial real estate began to come back, as the uncertainties of the pandemic started to fade with the global vaccination rollout in early 2021. The survey found that 74 of the responding industry experts awaited a bullish market, up from just 21% the previous year.

A joint report by PwC and the Urban Land Institute, "2022 Emerging Trends in Real Estate Report" also confirms the rather swift recovery of the real estate sector but point to future challenges related to climate change: "The sector is the largest contributor to greenhouse gasses and global warming. Buildings account for upwards of 40% of global energy use and carbon emissions. Sector leaders and investors are ideally positioned to play a leading role in muting climate change's worst effects. But many are not convinced.

Suzanna Chiu, head, Amadeus Ventures

Suzanna Chiu heads up Amadeus Ventures, the corporate venturing unit of Spain-based travel software and technology services provider Amadeus IT Group.

Based in Madrid, where the parent firm is headquartered, Chiu started as senior manager of strategic planning in 2012, until she was appointed to head of ventures in 2014.

Regarding her focus going forward, Chiu said: "Sustainability is a key topic that we want to focus on a bit more this year on how we can support the industry to achieve various net-zero growth goals. Another one will be safe travel and continue to explore how the health element interacts with travel being relevant to the industry on an ongoing basis and not just during the current pandemic."

In addition to corporate venturing, Chiu is also helping Amadeus identify new opportunities.

"At the moment, on top of my responsibilities with Amadeus Ventures, I am also leading the discussion on diversification internally – to explore growth opportunity for ourselves for the mid to longer term."

Executives and investors often talk up environmental, social and governance (ESG) values, but many executives remain sceptical that ESG pays off in enhanced returns." This challenge will surely inspire more innovation to come in the sector to tackle it.

The rise of e-commerce, driven by mobile technologies, sprang opportunities for logistics service providers, who have been forced to shift business models. The pandemic and nearly universal lockdowns also disrupted global supply chains, which made this space ever more noticeable and attractive. Going forward, the freight and logistics world market is expected to grow at a CAGR of 3.5% between 2022 and 2030, according to consultancy Market Research Future.

Recent developments in the sector have been undoubtedly shaped by supply chain disruptions, labour shortages, e-commerce and cross-border commerce. However, aside from these trends, logistics operator Mexicom Logistics also identified two other trends for 2022 centred on sustainability and advanced technology. The focus on sustainability is expected to increase as governments, consumers and other stakeholder take a stronger stance on sustainability and productivity enhancement in a push to cut greenhouse emissions. Supply chain technologies, on the other hand, are expected to incorporate more machine learning, blockchain and the internet of things (IoT) for efficiency gains. This will likely create ample opportunities for innovators and entrepreneurs and continue to attract the interest of strategic corporate venture investors.

Education services is another subsector of services that was affected in a relatively positive way by the pandemic and is expected to grow. The growth of education services has been underpinned by two major forces in the past decades – demographics and a growing need for reskilling and further professional development. The global education technology market was estimated at $254.80bn in 2021, according to the report "Edtech market – Global outlook and forecast 2022-2027", and forecast to grow at a CAGR of 15.52% to $605bn between 2022 and 2027.

The report puts emphasis on the role of the digital revolution which has democratised educational services and their reach: "The global education technology market is constantly experiencing a digital revolution with the emergence of artificial intelligence and digitalisation. Technology has played a major role in education categories serving primary, secondary, and corporate training. The global edtech market holds an absolute growth of more than 130% during the forecasted period. The education shift from traditional to interactive and digitised formats has positively impacted the online education market with a new creative approach to delivering education and skills." And further: "Advanced technologies like artificial intelligence (AI) and augmented reality (AR) are expected to drive the digital education market fostering education through means of game-based learning (gamification), hybrid models, mobile-based learning attracting many investors to inject funds during the forecasted period."

The global market for consulting services is among the most mature

Takeshi Kodama, executive manager, 31Ventures

Takeshi Kodama is a founding member, executive manager and head of investment at 31Ventures, Japan-based real estate developer Mitsui Fudosan's corporate venture capital (CVC) arm with over $400m under management. He has been in this role since April 2015, concurrently serving as head of mergers and acquisitions and business strategy.

On what attracted him to CVC, Kodama said: "I would say I am one of the first penguins in the real estate industry because most developers and landlords usually focus on opening co-working and innovation spaces rather than operating CVCs."

Kodama added: "As for the quantitative aspect, 31Ventures has three initial public offerings on the Tokyo Stock Exchange, three positive mergers and acquisitions from shy of 50 portfolio companies so far.

"Regarding strategic return, my team has arranged over 650 business meetings between business units at Mitsui Fudosan and startups, 20% of which result in proof of concept projects or official implementations. These business meetings bring stimulus and educational opportunities for Mitsui Fudosan's business units."

subsectors of business services, though somewhat cyclical and linked to prevailing general market conditions. As far as innovation in it, advanced technologies like cloud computing, robotics, blockchain and big data have been and will likely continue to be key to improving business performance and streamlining operational processes.

The global market for management consulting services was estimated at $891.8bn in 2021, after a year of slow growth because of the pandemic, according to "Management Consulting Services Global Market Report 2022" – a report by Research and Markets. It is expected to grow at a CAGR of 7.9% to over $1.3 trillion by the end of 2026. The report attributes this expected growth to a number of factors in the pandemic and post-pandemic world: "The growth is mainly due to the companies rearranging their operations and recovering from the covid-19 impact, which had earlier led to restrictive containment measures involving social distancing, remote working, and the closure of commercial activities that resulted in operational challenges."

As we had noted in previous years, there has also been a drive for value-oriented revenue models in consulting markets that are taking over the traditional per-hour and per-month revenue model. Such value-oriented billing is easy to apply and the trend is expected to deepen over time. It will likely also drive more investments in consulting services tech startups as well.

Another subsector, very open to technological disruptions that may streamline work, is legal services. The recent "2021 Legal Market Report: How innovative technology is reshaping the business and practice of law" report examines how certain trends are shaping the sector. Among them are the transition to working from home, increased use of technology to improve efficiency and reduce costs, greater emphasis on work-life balance as well as employee well-being. Several factors are identified by the report, including the impact of expenses as well as an increase in technology spending. We are likely to continue seeing more innovation in legal tech, aimed at finding solutions that enable more efficient processes in legal firms' everyday matters.

With this 'exodus' in place and inflationary pressures not only in products and services but also in wages, recruiting talent may be challenging in the short or medium term

The human resources (HR) space is another business services subsector with many opportunities. The most palpable impact of covid-19 has been the emergence of remote working or what some loosely refer to as "the future of work".

Another notable development is what some have dubbed as the "great resignation" or "big quit" that came along in the beginning of 2021, denoting the tendency of significant number of employees to voluntarily quit their jobs. We are yet to see the consequences of this and seek more thorough explanations for the phenomenon.

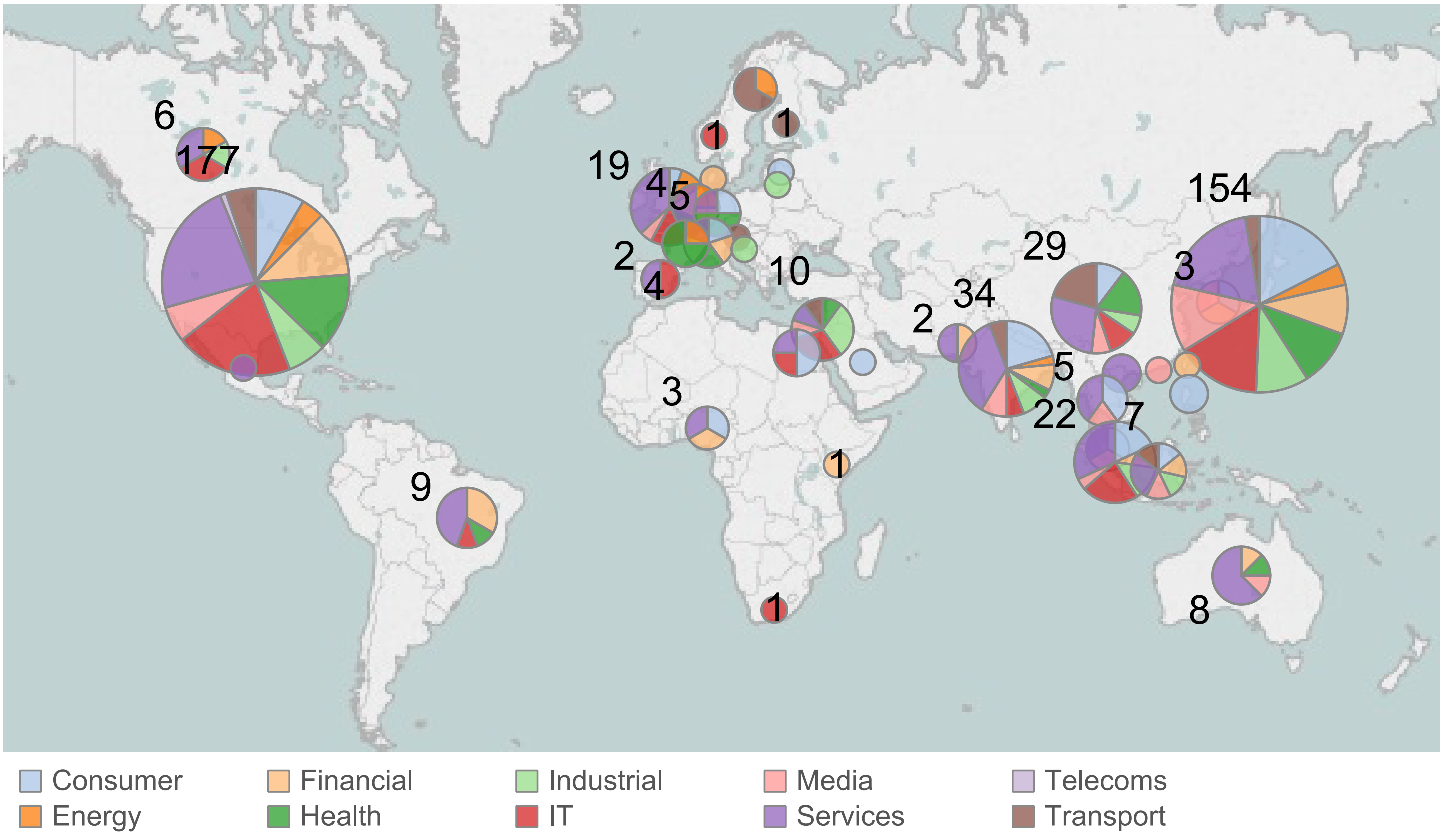
With this "exodus" in place and inflationary pressures not only in products and services but also in wages, recruiting talent may be challenging in the short or medium term, so internal recruitment may come to the fore. According to the Randstad RiseSmart's Q3 2021 Career Mobility Outlook report, 63% of employees would like their current employer to consider them for new opportunities within the company but 54% distrust that their company gives enough consideration to their future interests.

HR tech is what may help to tackle these challenges. According to a report by consultancy Fortune Business Insights, the global HR technology market is projected to grow from an estimated $24bn in 2021 to $35.68bn by 2028 at an implied CAGR of 5.8% during the period. The expected rise is attributable to returning to pre-pandemic levels, on the one hand, and market demand for such technologies, on the other. This is, of course, all good news for entrepreneurs in this space and for corporate venture investors seeking to back them.

For the period between January and December 2021, we reported 535 venturing rounds involving corporate investors from the services sector. Many of them took place in the US (177) and Japan (154), while 34 were hosted in India, 29 in China and 19 in the UK.

Global view of past year's deals

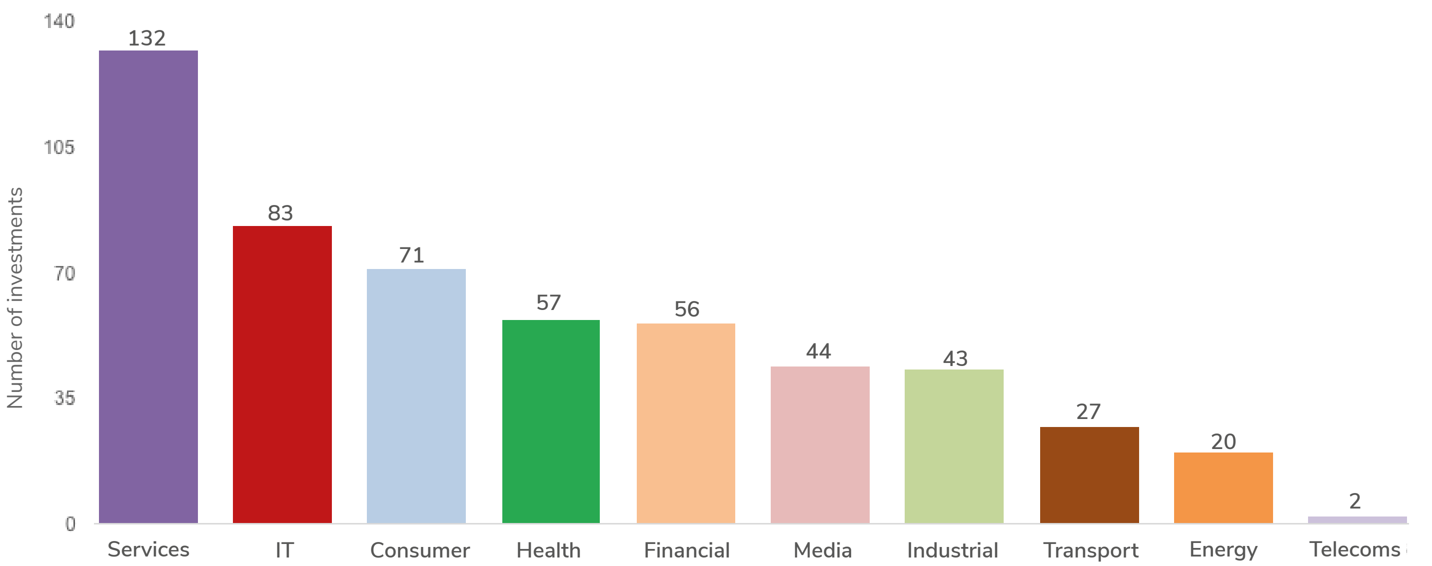
Total number of deals: 535



Source: GCV Analytics

Many of those commitments (132) went to emerging enterprises from the same sector (mostly logistics, edtech, HR tech and real estate tech) as well as into companies developing other technologies in synergies with services: 83 deals in the IT (mostly enterprise software, big data and cybersecurity), 71 in consumer (mostly food and beverages and e-commerce), 57 in health (primarily pharmaceuticals, medical devices and healthcare IT) and 56 in fintech (mostly payment tech and insurtech).

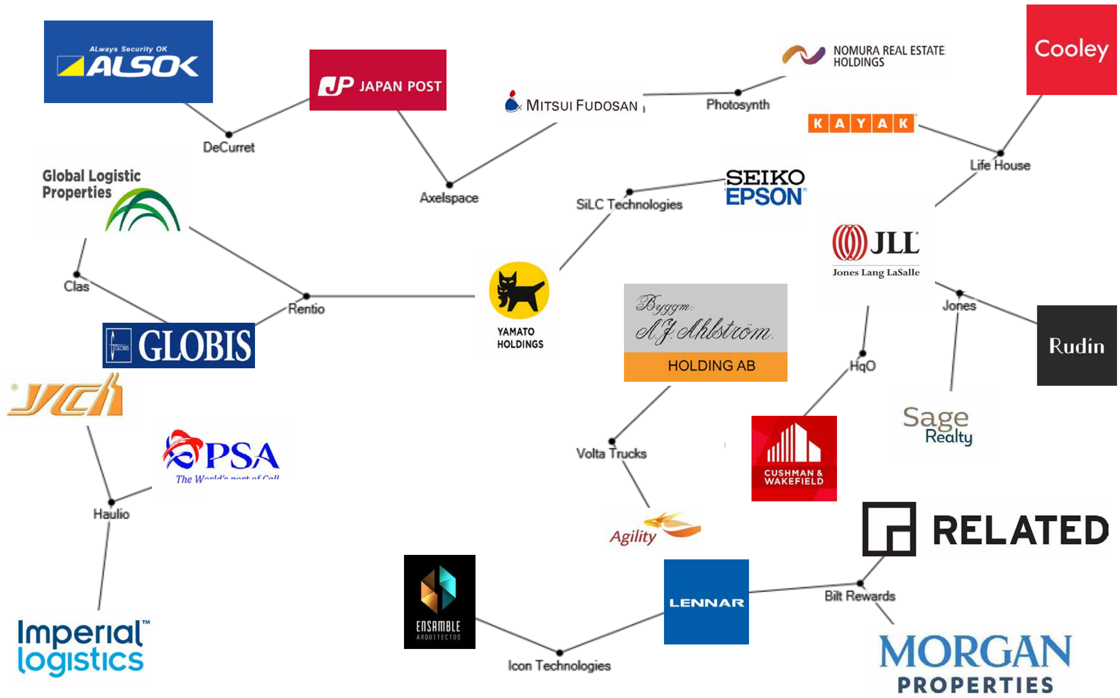
Investments of services sector over the past year



Source: GCV Analytics

The network diagram, illustrating co-investments of services corporates, shows the broad spectrum of investment interests of the sector's incumbents. The commitments ranged from logistics software and services (Haulio, Axelspace, Inceptio) through real estate and construction tech (HqO, Icon, Jones, Photosynth, Rentio and Share Village) to travel tech (LifeHouse), electric vehicles (Volta Trucks) and even cryptocurrency exchanges (DeCurrent).

Co-investments of services sector venturers 2021

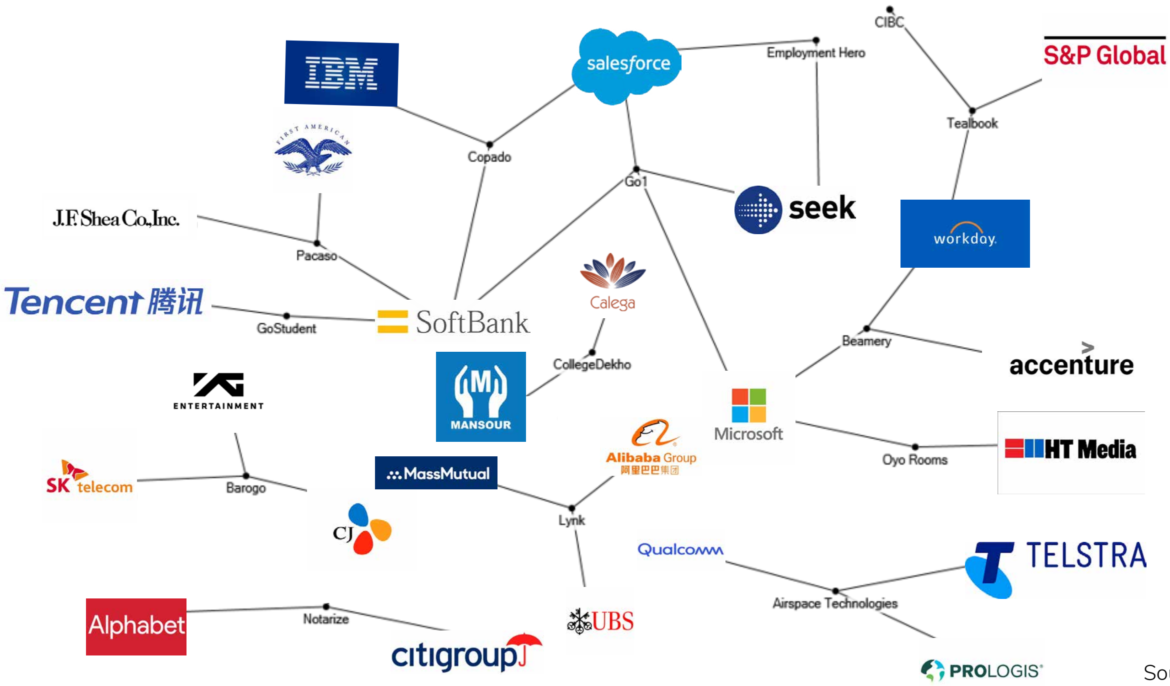


Source: GCV Analytics

**Includes only select companies with two or more services corporate co-investors*

The emerging services businesses in the portfolios of corporate venturers came from logistics and supply chain tech (Airspace, Tealbook, Barogo) through edtech (CollegeDekho, Go1, GoStudent) and HR tech (Beamery, Employment Hero) to proptech (Pacaso), travel tech (Oyo Rooms) as well as consulting and legaltech (Lynk, Notarize).

Corporate co-investments in services enterprises 2021

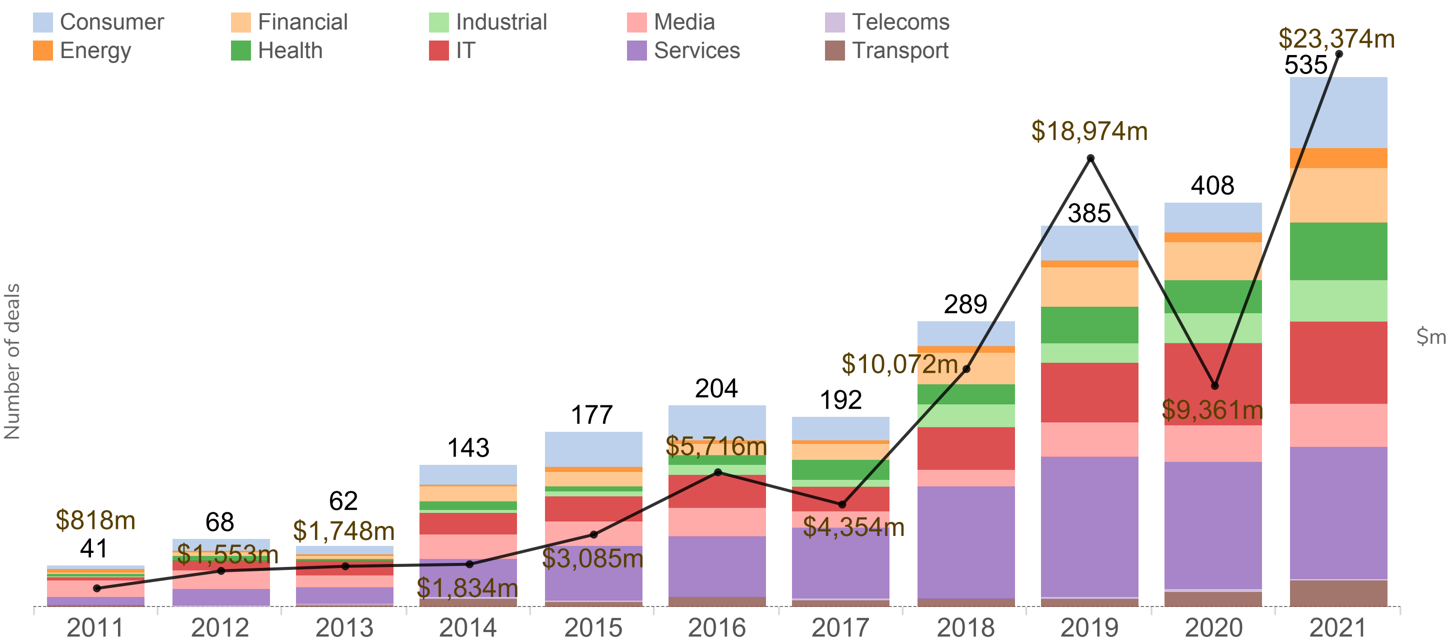


Source: GCV Analytics

On a calendar year-on-year basis, total capital raised in corporate-backed rounds more than doubled from $9.36bn in 2020 to $23.37bn in 2021. The deal count increased by 31% to 535, up from the 408 rounds reported during the year of the pandemic.

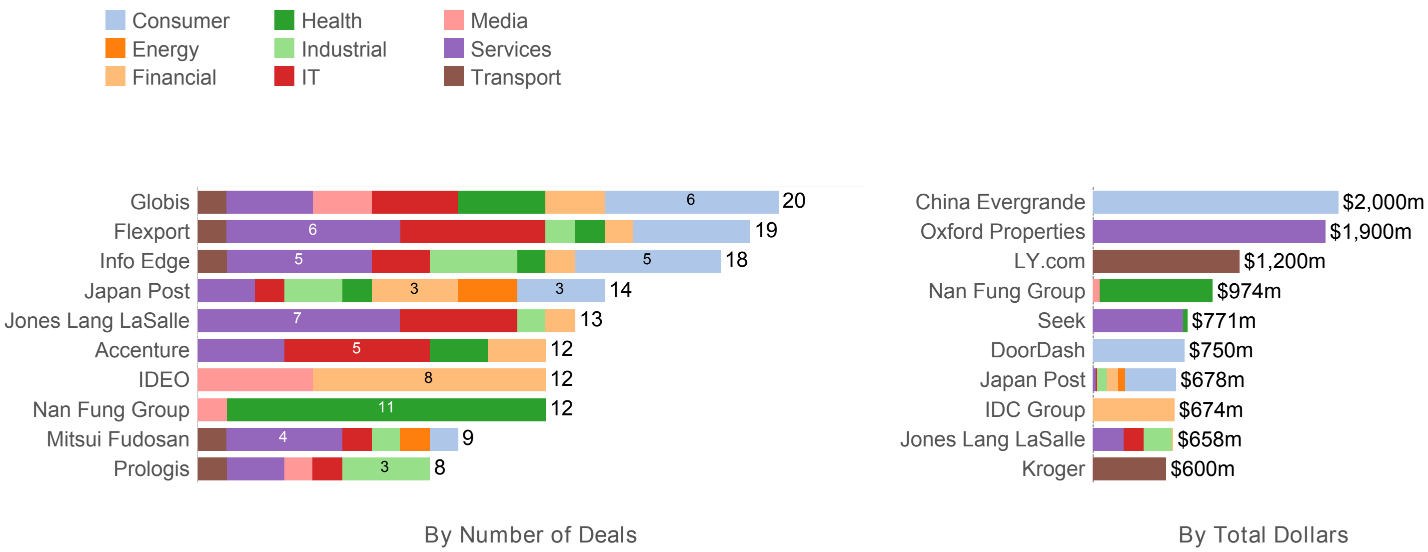
As outlined further in this article, the 10 largest investments by corporate venturers from the services sector were concentrated mostly in the same sector as well as in transport.

Deals by services corporates 2011-21



Source: GCV Analytics

Top services investors over the past year

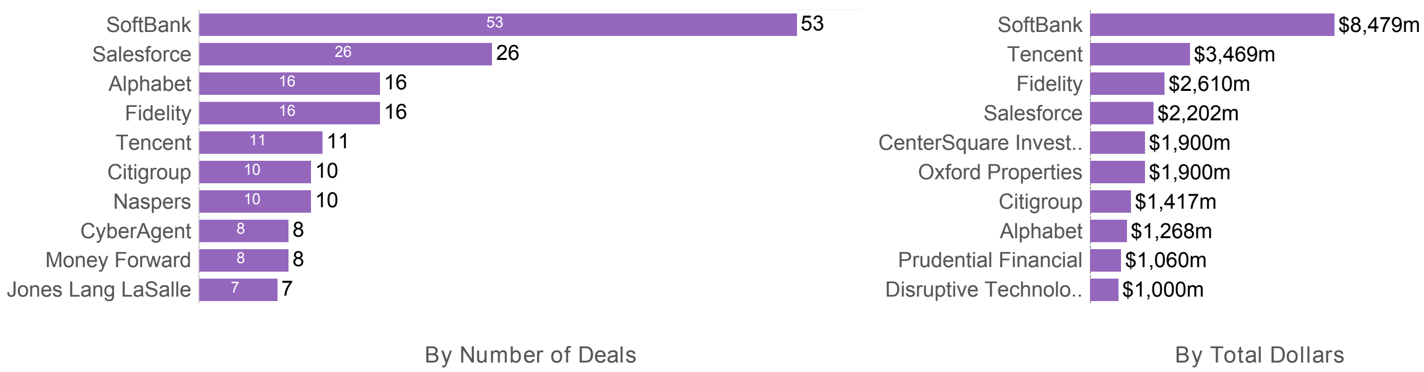


Source: GCV Analytics

The leading corporate investors from the services sector in terms of largest number were education services provider Globis, Freight forwarder Flexport and India-based internet services company InfoEdge. The list of services corporates committing capital in the largest rounds was headed also by real estate companies China Evergrande (before the infamous default on its bonds last year), Oxford Properties and online services company LY.com.

The most active corporate venture investors in the emerging services businesses were telecoms firm SoftBank, cloud computing services provider Salesforce and internet conglomerate Alphabet.

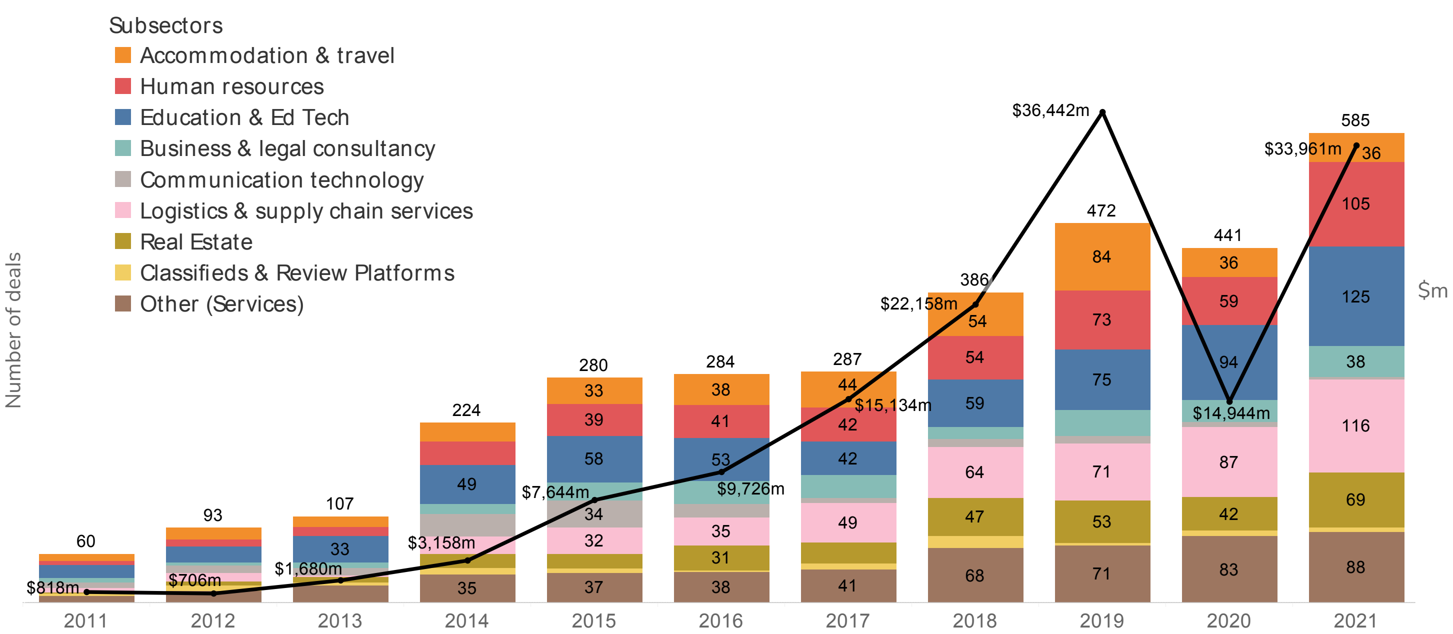
Top investors in services enterprises January-December 2021



Source: GCV Analytics

Overall, corporate investments in emerging services-focused enterprises went up significantly from 441 rounds in 2020 to 585 by the end of 2021, suggesting a 33% jump. The estimated total dollars in those rounds soared even more drastically, by 127%, from \$14.94bn in 2020 to \$33.96bn in 2021, returning to 2019 levels.

Corporate-backed deals in emerging services enterprises 2011-21



Source: GCV Analytics

Deals

Top 10 deals by services sector corporate investors January-December 2021

Portfolio Company	Location	Sector	Round	Round size	Investors List
Xingsheng Youxuan	China	Consumer	Undisclosed	$2bn	China Evergrande | FountainVest Partners | KKR | Primavera Capital | Sequoia Capital | Temasek | Tencent
Lineage Logistics	USA	Services	Undisclosed	$1.9bn	BentallGreenOak | CenterSquare Investment Management | Cohen & Steers | D1 Capital Partners | Morgan Stanley | OP Trust | Oxford Properties
T3 Mobile Travel Services	China	Transport	A	$1.2bn	Citic | LY.com | Redview Capital | Virtue Capital | Yingtong Technology
Flink	Germany	Consumer	B	$750m	DoorDash | Mubadala Ventures | undisclosed investors
Nuro	USA	Transport	D	$600m	Alphabet | Baillie Gifford | Fidelity | Gaorong Capital | Kroger | SoftBank | T Rowe Price | Tiger Global Management | Toyota
Ninja Logistics (Ninja Van)	Singapore	Services	E and beyond	$578m	Alibaba | boston consulting group | GeoPost | Monk's Hill Ventures | Zamrud
OneWeb	USA	Telecoms	Stake purchase	$550m	Eutelsat
QuintoAndar	Brazil	Services	E and beyond	$300m	Alta Park Capital | Dragoneer Investment Group | KaszeK Ventures | LTS | Maverik | private investors | Ribbit Capital | SoftBank | undisclosed investors
Hesai	China	Transport	D	$300m	Citic | Hillhouse Capital Management | Huatai Securities Company | Lightspeed Venture Partners | Meituan-Dianping | Qiming Venture Partners | Xiaomi
Sightline Payments	USA	Financial Services	Undisclosed	$270m	Cannae Holdings | Genting Group | Point Break Capital | private investors

Source: GCV Analytics

Corporates from the services sector invested in large multi-million-dollar rounds, raised by enterprises from primarily from a variety of sectors. Three of the top 10 deals stood above the $1bn mark.

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

credit: Lineage Logistics

International warehousing group Lineage Logistics secured $1.9bn in equity funding

2 US-headquartered cold chain services provider Lineage Logistics secured $1.9bn in equity funding from investors including Oxford Properties and investment bank Morgan Stanley's MS Tactical Value and Conversant Capital vehicle. Real estate investment firms CenterSquare Investment Management, BentallGreenOak and Cohen & Steers, hedge fund manager D1 Capital Partners and pension fund manager OP Trust also participated in the round. Founded in 2008, Lineage provides chilled transportation for food in addition to temperature-controlled storage through a network of 340 warehouses across five continents, utilising technology to make its activities more efficient.

credit : Ninja Van

Ninja Van received $578m in a series E round featuring e-commerce group Alibaba

3 China-based ride hailing service T3 Chuxing has raised RMB7.7bn ($1.2bn) in series A funding from investors including smart cloud network service Yingtong Technology and LY.com (Tongcheng). Investment banking firm Citic Group led the round, which also featured private equity fund Redview Capital and investment firm Virtue Capital. T3 provides an on-demand ride app which has 54 million users and operates across 41 Chinese cities. It was incubated by automotive groups Changan Automobile, FAW Group and Dongfeng Motor, Tencent, e-commerce firm Alibaba and retailer Suning, which had provided about $1.45bn for the joint venture in early 2019.

4 Food delivery service DoorDash led a $750m series B round for Germany-based grocery ordering app operator Flink. Abu Dhabi state-owned investment vehicle Mubadala Capital and unnamed new and returning backers also took part in the round, which valued Flink at $2.85bn post-money. It also included debt financing from unnamed entities. Founded in late 2020, Flink has built an online platform that allows users to buy grocery items for delivery within 10 minutes. It operates in some 60 cities across its home country, Austria, the Netherlands and France.

5 US-based autonomous vehicle developer Nuro raised $600m in series D funding from investors including internet technology provider Google, grocery chain Kroger and SoftBank's Vision Fund 1. Tiger Global Management led the round, which also featured automotive manufacturer Toyota's Woven Capital fund, investment and financial services group Fidelity, Baillie Gifford, Gaorong Capital and funds and accounts advised by T Rowe Price. Nuro has developed autonomous electric vehicles used to deliver products such as groceries or medication. It will allocate the cash to technology development, hiring and expanding the commercial deployment of its technology.

6 Singapore-headquartered delivery services provider Ninja Van received $578m in a series E round featuring e-commerce group Alibaba and logistics services firm GeoPost's DPD Group subsidiary. B Capital Group, the venture capital firm backed by consulting firm Boston Consulting Group, also took part in the round, as did VC firm Monk's Hill Ventures and Zamrud, a Bruneian sovereign wealth fund. Founded in 2014, Ninja Van has built a Southeast Asia-focused e-commerce order fulfilment services platform covering markets including its home country, Malaysia, Indonesia, Thailand, Vietnam and the Philippines.

7 Satellite operator Eutelsat Communications invested $550m in UK-headquartered 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 paid $350m for a 30% stake in the resurrected company in January 2021 while Hughes Network Systems invested $50m.

8 Brazil-based rental e-commerce platform operator QuintoAndar secured $300m in series E funding from investors including SoftBank's Innovation Fund. Venture capital firm Ribbit Capital led the round, which included Alta Park, Dragoneer Investment Group, Kaszek Ventures, LTS, Maverik, private investor Kevin Efrusy and an unnamed US-based asset management firm with more than $2 trillion under management. Founded in 2012, QuintoAndar has built an online real estate marketplace featuring over 100,000 properties for rent across some 40 Brazilian cities. Having added property brokerage services in 2020, it intends to now expand its offering into mortgage, title, insurance and escrow transactions.

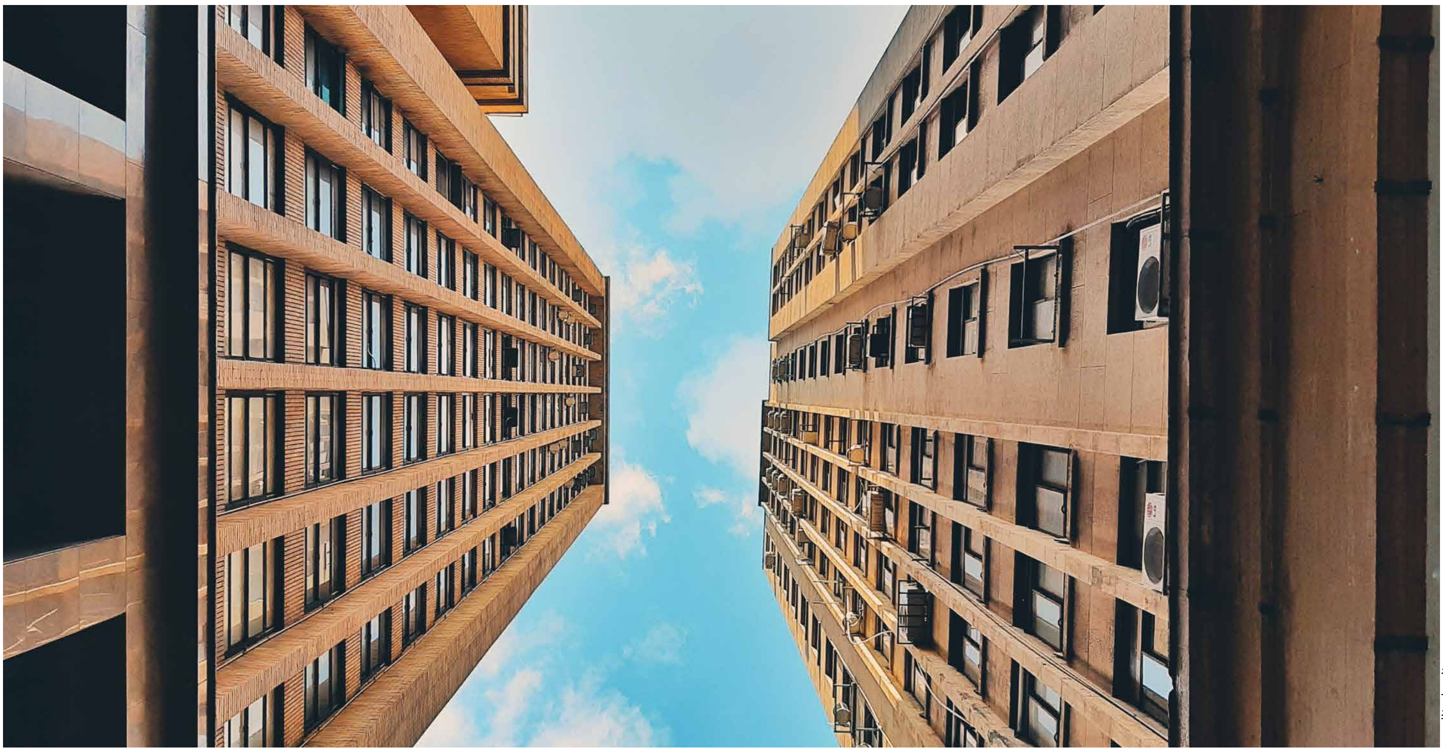
9 Hesai, a China-based developer of light detection and radar (lidar) technology, received $300m in a series D round co-led by electronics producer Xiaomi and local services portal operator

credit : Hensai

Hesai received $300m co-led by Xiaomi

Meituan Dianping. The round was co-led with GL Ventures, the venture capital arm of hedge fund manager Hillhouse Capital, and CPE, a private equity subsidiary of investment banking group Citic. It included Lightspeed Venture Partners and its China-based affiliate, Lightspeed China Partners, as well as Qiming Venture Partners and Huatai Securities. Founded in 2014, Hesai provides lidar technology for use in autonomous driving and robotics systems in addition to handheld and drone-mounted methane leak detectors. The funding will support the mass production of hybrid solid-state lidar products for original equipment manufacturer customers.

10 US-based digital betting payments service Sightline Payments raised $270m in a funding round featuring resort and casino conglomerate Genting Group, at a valuation of over $1bn. Cannae Holdings led the round with a $240m investment, while the remainder was provided by investors including Point Break Capital Management and founder Walter Kortschak. Founded in 2010, Sightline provides a digital payments platform for cashless transactions across the sports betting, lottery, racing and casino segments. Its lead product, Play+, is a cashless payments service with 1.5 million registered accounts and more than 70 partners across the industry. GW of capacity by the end of 2023. It said the round is the largest so far disclosed by a Bitcoin miner.



credit : Ionity

QuintoAndar has built an online real estate marketplace featuring over 100,000 properties for rent across some 40 Brazilian cities.

Top 10 deals by services sector corporate investors January-December 2021

Portfolio company	Location	Sector	Round	Round size	Investors list
J&T Express	Indonesia	Services	Undisclosed	$2.5bn	Boyu Capital | Hillhouse Capital Management | Sequoia Capital | Susquehanna International Group | Tencent
Lineage Logistics	USA	Services	Undisclosed	$1.9bn	BentallGreenOak | CenterSquare Investment Management | Cohen & Steers | D1 Capital Partners | Morgan Stanley | OP Trust | Oxford Properties
Yanolja	Singapore	Services	Undisclosed	$1.7bn	SoftBank
Byju	India	Services	Undisclosed	$1bn	B Capital Group | Baron | Disruptive Technology Advisers | Footpath Ventures | GSV Financial Group | Olay and Investments | Owl Ventures | Prudential Financial | Silver Lake | T Rowe Price | XN Exponent Holding
Eruditus	India	Services	Undisclosed	$650m	Accel Partners | Canada Pension Plan | SoftBank
Ninja Logistics (Ninja Van)	Singapore	Services	E and beyond	$578m	Alibaba | boston consulting group | GeoPost | Monk's Hill Ventures | Zamrud
Jobandtalent	Spain	Services	E and beyond	$500m	Atomico | BlackRock | DN Capital | InfraVia | KIBO Ventures | Kinnevik | Quadrille Capital | SoftBank
Vacasa	USA	Services	Undisclosed	$450m	Assurant | TPG Pace Solutions | undisclosed investors
Unacademy	India	Services	E and beyond	$440m	General Atlantic | Mirae Asset Ventures | private investors | SoftBank | Temasek | Tiger Global Management
Kitopi	United Arab Emirates	Services	C	$415m	B. Riley Financial | Chimera Investments | DisruptAD | Dogus Group | Next Play Capital | Nordstar | SoftBank

Source: GCV Analytics

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

1 Indonesia-headquartered logistics provider J&T Express received $2.5bn in funding from investors including Tencent. Boyu Capital, Hillhouse Capital and Sequoia Capital China also contributed to the round while one of the sources named SIG China, a subsidiary of quantitative trading firm Susquehanna International Group, as an additional participant. The capital was raised at a $20bn valuation. J&T operates an express delivery and warehousing business focused on the e-commerce space, which has boomed in Indonesia with the entry of domestic online platforms such as Tokopedia, Bukalapak and Sociolla in recent years. J&T operates in several Southeast Asian countries as well as China, and is planning expansion there and in Latin America. The round preceded the company's planned initial public offering (IPO) expected to take place in Hong Kong in early 2022.

credit : J&T Express

J&T Express gained funding from Tencent

2 SoftBank's Vision Fund 2 supplied $1.7bn in funding for South Korea-based 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.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. It intends to build a global travel platform that leverages artificial intelligence technology and big data to provide more automated and personalised services.

3 Byju's, the India-based online education provider that counts corporates Tencent, Naspers and Bennett Coleman & Co (BCC) as investors, secured over $1bn in funding. Baron Funds, B Capital Group and XN Exponent Holding co-led the transaction, which included Silver Lake Management, Owl Ventures, T Rowe Price, Disruptive Technology Solutions, Footpath Ventures, Prudential Assurance Company, GSV and Olay and Investments. Founded in 2011, Byju's offers a range of online learning programmes for students aged 4 to 18 through a freemium service. At the time of the deals It was reportedly closing in on a $150m acquisition of domestic peer Toppr.

4 SoftBank's Vision Fund 2 has co-led a $650m funding round for India-based online adult education provider Eruditus with venture capital firm Accel. The round consisted of a mixture of $430m in primary funding and $220m in secondary investments, with Canada Pension Plan Investment Board supplying primary funding in addition to buying stock from existing shareholders. Selling shareholders included media group Bertelsmann, and the round valued the company at $3.2bn, up from about $700m from a September 2020 series D round sized at $113m. Launched in 2010, Eruditus runs an online platform which provides executive education and coaching through courses supplied by a range of higher education partners. The funding will go to product development and the expansion of its course range.

5 Spain-based temporary job portal operator Jobandtalent raised $500m in series E equity funding from investors including SoftBank's Vision Fund 2. Investment firm Kinnevik led the round, which also featured Atomico, DN Capital, Infravia, Kibo Ventures and Quadrille Capital. It was supported by an additional $75m in debt financing from asset manager Blackrock, and valued Jobandtalent at $2.35bn. Founded in 2009, Jobandtalent runs an online staffing platform that helps temporary employment seekers find prospective job opportunities in industries such as logistics, e-commerce and manufacturing. The platform has some 10 million registered jobseekers and 150,000 businesses from nine markets across Europe and the Americas.

UAE-based Kitopi operates an end-to-end cloud kitchen platform which partners restaurants

The funding will be used to expand the company's business in countries including the United States and increase the size of its executive, technology and sales teams.

6 India-based remote education software provider Unacademy secured $440m in series H funding featuring SoftBank's Vision Fund 2. The round was led by Singaporean state-owned investment firm Temasek and backed by Mirae Asset, General Atlantic, Tiger Global, Deepinder Goyal and Ritesh Agarwal, valuing Unacademy at $3.44bn. Established in 2015, Unacademy has built an app targeting students preparing for tertiary education institutions' entrance, providing learning materials including practice exams and live and pre-recorded classes. The funding will help it to increase its offerings beyond education technology, adding products in categories including professional training and recruitment.

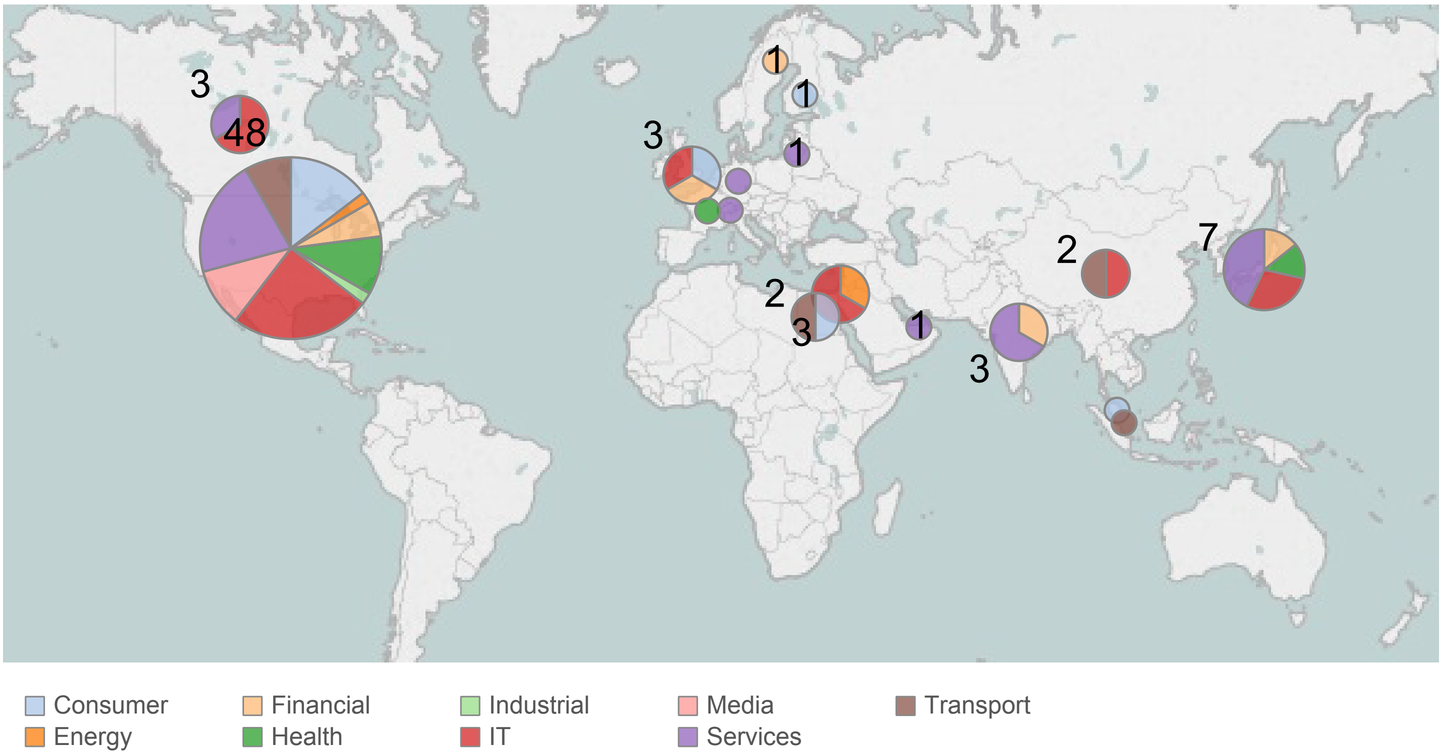
7 SoftBank led a $415m series C round for Kitopi, the United Arab Emirates-headquartered provider of a cloud kitchen software platform, through its Vision Fund 2. Diversified conglomerate Dogus Group also took part in the round, along with B. Riley Financial, Chimera Investment, DisruptAD, Next Play Capital and Nordstar. The cash was reportedly secured at a valuation above $1bn. Launched in 2018, Kitopi operates an end-to-end cloud kitchen platform which partners local restaurants, taking orders, sourcing ingredients, recreating recipes and handling delivery on their behalf. The funding will support continued growth in the Middle East and entry into Southeast Asia in addition to enhancing the company's technology and expanding its restaurant partnerships.

Exits

Corporate venturers from the services sector completed 80 exits between January and December 2021 – 55 acquisitions, 11 IPOs, 11 other transactions (including mergers with special purpose acquisition companies – Spacs) as well as three mergers of equals. The total estimated exited capital in those transactions was $31.82bn, reflecting several large exits described below. On a year-on-year basis, the number of exits went up 82% from 44 such transactions tracked in 2020, while the total estimated capital in those exits increased multi-fold from $6.15bn.

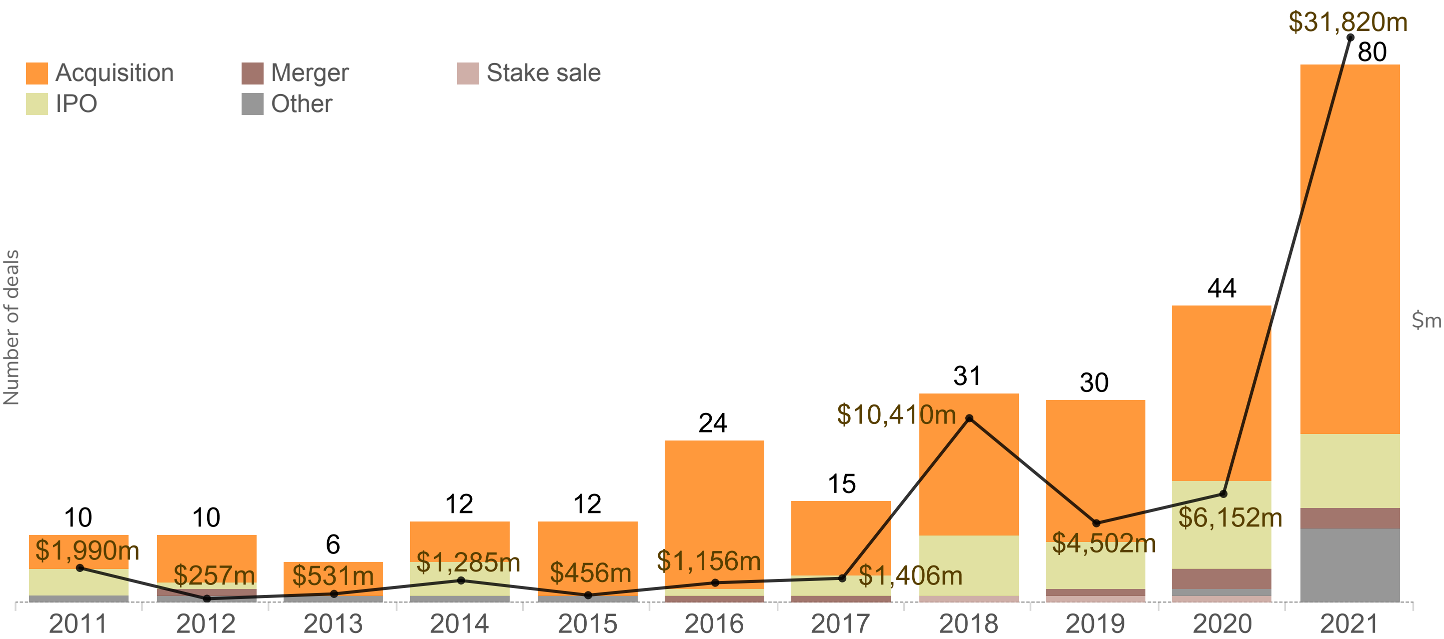
Global view of past year's exits

Total number of exits: 80



Source: GCV Analytics

Exits by services corporates 2011-21



Source: GCV Analytics

Top exits by services corporate investors January-December 2021

Portfolio company	Location	Sector	Exit type	Acquirer	Exit size ($m)	Exiting investors
Wolt	Finland	Consumer	Acquisition	DoorDash	$8.1bn	83North | Coatue | DoorDash | DST Global | EQT Ventures | Goldman Sachs | Highland Europe | Iconiq | KKR | Lifeline Ventures | Naspers | Tiger Global Management | Vintage Investment Partners
Didi Chuxing	China	Transport	IPO		$4.44bn	Alibaba | Apple | Bank of Communications | BlackRock | Booking Holdings | CDC Capital International | Chia Life | China Investment Corporation | China Merchants Bank | Citic | Coatue | DST Global | eHi Car Rental | GSR Ventures | Matrix Partners | Mubadala | New Horizon Capital | Ping An Bank | Silver Lake | Sina | SoftBank | Temasek | Tencent | Tiger Global Management | Toyota | Uber
Paidy	Japan	Financial Services	Acquisition	PayPal	$2.7bn	500 Startups | Arbor Ventures | Cherubic Ventures | CyberAgent | Fidelity | Goldman Sachs | Itochu | JS Capital Management | MS Capital | PayPal | Recruit Holdings | SBI Group | Soros Fund Management | Susquehanna International Group | Tybourne Capital | Visa | Wellington Management
Tink	Sweden	Financial Services	Acquisition	Visa	$2.1bn	ABN Amro | Creades | Dawn Capital | Eurazeo | Heartcore Capital | HMI Capital | Insight Partners | Nordea | Nordnet | Opera | PayPal | Poste Italiane | private investors | SEB | Sunstone Capital
Depop	UK	Consumer	Acquisition	Etsy	$1.62bn	Balderton Capital | Creandum | General Atlantic | Georg von Holtzbrinck | H-Farm | Lumar | Octopus Ventures | private investors | Red Circle Investments | TempoCap
Hippo	USA	Financial Services	Other		$1.2bn	Comcast | Dragoneer Investment Group | Lennar | MS&AD Ventures | Munich Re Ventures | Reinvent Technology Partners Z | Ribbit Capital | Standard Industries
Grab	Singapore	Transport	Other		$1.2bn	Altimeter Capital Management | Altimeter Growth Corp | BlackRock | Booking Holdings | Central Group | Didi Chuxing | Djarum Group | Experian | Fidelity | Honda | Hyundai | Janus Henderson Investors | Kasikornbank | Mirae Asset-Naver Asia Growth Fund | Mitsubishi UFJ Financial | Morgan Stanley | Mubadala | Nuveen Real Estate | Permodalan Nasional | Ping An Insurance | private investors | Qunar | Shinsegae I&C | Sinar Mas | SoftBank | T Rowe Price | Temasek | TIS Intec Group | Tokyo Century Corporation | Toyota | Uber | Yamaha
Faraday Future	USA	Transport	Other		$975m	China Evergrande | Property Solutions Acquisition Corp
PB Fintech	India	Financial Services	IPO		$750m	Aberdeen Global Income Fund | Abu Dhabi Investment Authority | Aditya Birla Group | Alpha Wave Global | American Funds & Trusts | Axis Mutual Fund | Baillie Gifford | Bajaj Allianz Life | Baron | BlackRock | Canada Pension Plan | Carmignac | DSP Group | Fidelity | Franklin Advisers | Goldman Sachs | HDFC Bank | ICICI Prudential Life Insurance | Info Edge | Intel | Kotak Investment Advisors | Max Life Insurance | New World Group | Nippon Life | Nomura | SBI Group | Schroder & Co Bank | SoftBank | Tencent | UTI Capital | Ward Ferry Management
XM Cyber	Israel	IT	Acquisition	Schwarz Group	$700m	Macquarie | NASDAQ OMX | Our Innovation Fund | Swarth Group

Source: GCV Analytics

1 Online food ordering service DoorDash agreed to acquire Wolt, a Finland-based food and consumer delivery service that counts internet group Prosus as an investor, in a €7bn ($8.1bn) all-share deal. The transaction is expected to close in the first half of next year and it includes a retention pool sized at about €500m for Wolt's 4,000 employees and its management team. The company had raised approximately $856m in funding. Founded in 2014, Wolt operates an online platform which allows customers in 23 countries to order food, groceries and other consumer goods from local shops to be delivered to them at home. The purchase will allow DoorDash to expand its reach to a host of new markets.

2 China-headquartered ride hailing service provider Didi Global went public in a $4.44bn IPO on the New York Stock Exchange (NYSE). The company counted multiple corporates among its backers, including internet SoftBank, Tencent, 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. Shortly after the IPO and after its stock rose, it was announced that Didi was to delist from the NYSE. There was at the time pressure and investigation from Chinese authorities concerning national security and new users were not

allowed to register in its app at the time. 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.

3 Digital payment processor PayPal agreed to acquire its Japan-based consumer finance service portfolio company Paidy for about \$2.7bn. The company was previously backed by payment operator Visa and Recruit Holdings. The deal is expected to definitively close during the fourth quarter of 2021. Paidy will continue to operate under the leadership of its founder and executive chairman Russell Cummer and president and CEO Riku Sugie. Launched in 2008, Paidy offers a buy-now-pay-later service that enables its customers to make instant credit purchases, which they can repay on a monthly basis. PayPal plans to use this acquisition to strengthen its capabilities and presence in the domestic payments market in Japan.

4 Payment services firm Visa agreed to acquire Sweden-based open banking software provider Tink for €1.8bn (\$2.1bn), facilitating an exit for corporates Poste Italiane, SEB, PayPal, Nordnet, ABN Amro, BNP Paribas and Nordea. Tink has built an open banking platform that enables financial services companies to share customer data and build new features such as personal finance management tools. It has integrated its

credit : Paidy

PayPal agreed to acquire its Japan-based consumer finance service company Paidy for \$2.7bn

application programming interface with more than 3,400 banks and financial services organisations.

5 E-commerce marketplace Etsy agreed to buy UK-headquartered social commerce platform developer Depop, which counts consultancy group Lumar among its backers, for more than \$1.62bn. The company had raised \$100m by the time the acquisition was announced. Lumar had contributed to a \$8.25m round in 2016. Founded in 2011, Depop runs an online marketplace with 30 million registered users, 90% of whom are reportedly under 26 years of age. Users of the platform can buy and sell second-hand and new fashion items in addition to offering styling services. The company had generated \$70m in revenue during 2020.

6 Hippo Enterprises, a US-based online home insurance provider backed by corporates Comcast, Lennar, MS&AD, Munich Re and Standard Industries, agreed to a reverse merger with Spac Reinvent Technology Partners Z. Homebuilder Lennar joined fellow existing backers Dragoneer and Ribbit Capital to co-lead a \$550m private investment in public equity (PIPE) together with Reinvent Capital and unnamed mutual funds. Hippo will have access to about \$1.2bn in cash once the transaction closes, also including some \$230m held in Reinvent's trust account. Founded in 2015, Hippo uses real-time data and smart home technology to provide an end-to-end insurance platform. It has built an underwriting engine that relies on AI to prefill applications and to assess and price risk in under a minute.


credit : Faraday Future

Faraday has developed and launched an electric vehicle called the FF91, provides an intelligent driving software platform and design services

7 Grab, a Singapore-headquartered ride hailing service backed by range of corporate investors, agreed a reverse takeover with Spac Altimeter Growth Corp at an initial pro-forma equity value of $39.6bn. The combined business will take the position secured by Altimeter Growth Corp, an affiliate of technology investment firm Altimeter Capital Management, when it floated in a $450m IPO in October 2020. Funds managed by Altimeter Capital are putting up $750m for a $4bn PIPE financing deal supporting the transaction that includes conglomerate Sinar Mas, clove cigarette producer Djarum and investment and financial services group Fidelity, among many other investors. Formerly known as GrabTaxi, Grab's core business is its on-demand ride service but it has diversified into food and package delivery as well as financial services, through an offshoot that raised more than $300m in January 2021.

8 Faraday Future, the US-based electric car and smart vehicle developer backed by real estate developer China Evergrande, agreed to a reverse merger with a Spac. The deal allowed Faraday to take the Nasdaq Capital Market listing secured by Property Solutions Acquisition Corp (PSAC), which had floated in July 2020 in a $200m IPO. The transaction was boosted by $775m in PIPE financing anchored by investors including undisclosed Faraday shareholders and an unnamed original equipment manufacturer and tier-1 Chinese city. Founded in 2014, Faraday has developed and launched an electric vehicle called the FF91 and also provides an intelligent driving software platform in addition to design and engineering services.

9 PB Fintech, the India-based, corporate-backed marketing and consulting group that owns insurance listings platform PolicyBazaar, floated in a Rs 56.3bn ($750m) IPO. The offering will be open until November 3 and each share is priced at Rs 980 ($13.10). PB Fintech issued 26.2 million new shares totalling $500m while existing shareholders including SoftBank and its Vision Fund (through SVF Python II) are divesting $250m. Founded in 2008, PB Fintech runs insurance policy comparison platform PolicyBazaar and PaisaBazaar, a similar tool focused on financial services products. The company received $343m in pre-IPO funding from 155 anchor investors including insurers ICICI Prudential, Nippon Life, Bajaj Allianz Life, HDFC Life, SBI Life and Max Life.

10 Retail group Schwarz Group acquired Israel-based cybersecurity technology provider XM Cyber in a deal sized at $700m, allowing stock exchange operator Nasdaq and IT services provider UST Global to exit. Founded in 2016, XM has developed an automated software platform that helps organisations to head off cyberattacks and proactively stop them by finding attack paths and closing them off before they compromise IT infrastructure. The company will continue to operate independently following the acquisition and will support Schwarz's recently formed cloud software platform.

Top exits from services enterprises January–December 2021

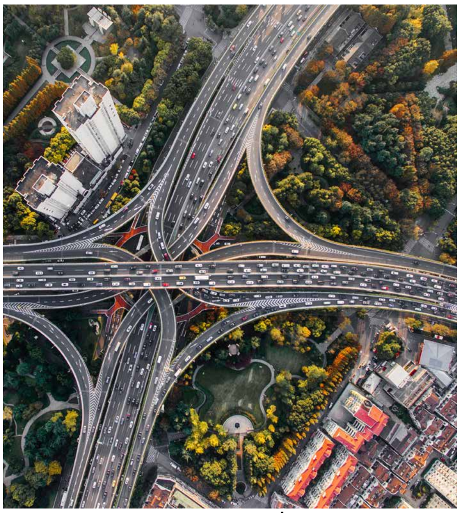
Portfolio company	Location	Sector	Exit Type	Acquirer	Exit size	Exiting investors
JD Logistics	China	Services	IPO		$3.2bn	China Development Bank | China Life Insurance | China Merchants Group | China Structural Reform Fund | Hillhouse Capital Management | Industrial and Commercial Bank of China | JD.com | Sequoia Capital | Tencent
Manbang Group	China	Services	IPO		$1.57bn	Advanced Technology Investment Company (ATIC) | All-Stars Investment | Alphabet | Baidu | China Structural Reform Fund Corporation | DCM | Fidelity | Genesis Capital | GSR Ventures | Hillhouse Capital Management | International Finance Corporation (IFC) | Lightspeed China Partners | Lightspeed Venture Partners | Ontario Teachers' Pension Plan Board | Permira | Sequoia Capital | SoftBank | Tencent | Tiger Global Management | Ward Ferry | YF Capital | Zhongding Capital
WeWork	USA	Services	Other		$1.22bn	BlackRock | BowX Acquisition Corp | Centaurus Capital | Fidelity | SoftBank | Starwood Capital Group
Freshworks	USA	Services	IPO		$1.03n	Accel Partners | Alphabet | Sequoia Capital | Tiger Global Management
Kanzhun	China	Services	IPO		$912m	Banyan Capital | Capital Today | Ceyuan Ventures | Coatue | CTG Evergreen Investment | Delicate Master | Gaorong Capital | GGV Capital | Goldman Sachs | Heyu Capital | Hina Group | Huaxing Capital Partners | Inspiring Link | Meridian Capital | MSA Capital | Shunwei Capital | Sunshine Life | Tencent
Monday.com	Israel	Services	IPO		$631m	Entrée Capital | Genesis Partners | Hamilton Lane | HarbourVest | ION Crossover Partners | Sapphire Ventures | Stripes Group | Vintage Investment Partners
Doma	USA	Services	Other		$600m	Assurant | Capitol Investment Corp V | HSCM Bermuda | Lennar | Scor Global Life | SoftBank
Sonder	USA	Services	Other		$m600	Atreides Management | BlackRock | Fidelity | Gores Metropoulos II | Moore Capital | Principal Global Investors | Senator Investment Group
Codecademy	USA	Services	Acquisition	Skilsoft	$525m	O'Reilly Media | Prosus
Duolingo	USA	Services	IPO		$521m	Alphabet | Drive Capital | Durable Capital Partners | General Atlantic | Kleiner Perkins | NEA | private investors | Union Square Ventures

Source: GCV Analytics

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

1 JD Logistics, the logistics offshoot of China-headquartered e-commerce group JD.com, floated on the Hong Kong Stock Exchange in a HK$24.6bn ($3.2bn) IPO. The offering consisted of approximately 609 million shares priced at HK$40.36 each, towards the lower end of the IPO's HK$39.36 to HK$43.36 range set earlier. Formed by JD.com as its delivery services arm, JD Logistics combines artificial intelligence technology with a China-wide network of warehouses to deliver e-commerce products to customers within 24 hours. The IPO proceeds went to strengthening its logistics infrastructure, part of a drive that has involved it opening some 200 warehouses.

2 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.



Full Truck Alliance raised $1.57bn in an IPO

WeWork, the workspace provider, which counts SoftBank as its largest investor, agreed a reverse takeover with Spac BowX Acquisition Corp

3 WeWork, the US-headquartered workspace provider which counts SoftBank as its largest investor, agreed a reverse takeover with Spac BowX Acquisition Corp. The deal granted WeWork an initial enterprise value of about $9bn and it will acquire the place on secured by BowX through a $420m IPO on the Nasdaq Capital Market in August 2020. Financial and investment group Fidelity Management & Research is joining Insight Partners, funds managed by Starwood Capital Group, Centaurus Capital and funds and accounts managed by BlackRock in an $800m private placement supporting the transaction. Founded in 2010, WeWork runs a network of co-working spaces spanning 118 cities across the world. It failed in an attempt to go public in 2019 and required an extensive bailout from SoftBank to remain operational, but has since restructured and divested non-core holdings.

4 US-based customer relationship management (CRM) software developer Freshworks, backed by Alphabet, raised $1.03bn in an IPO on the Nasdaq Global Select Market. The company priced 28.5 million shares at $36 each, above the $32 to $34 range set earlier. Freshwork's shares closed at $47.55, giving it a market capitalisation of $13.5bn on the first day of trading. Founded in India and previously known as Freshdesk, Freshworks develops a variety of software employed by companies for CRM, customer experience and IT service management processes. The company claims that more than 52,000 businesses use its software-as-a-service products. It had raised $400m in funding prior to the offering.

5 Kanzhun, a China-based online job portal operator backed by Tencent and insurance firm Sunshine Life, floated in a $912m IPO on the Nasdaq Global Select Market. The company issued 48 million American depositary shares (ADSs), each representing two ordinary shares, priced at the top of the IPO's $17 to $19 range. Founded in 2014, Kanzhun is the developer of a big data-equipped social recruitment platform called Boss Zhipin which focuses on corporate reviews, employer branding and employee information sharing.

6 Monday.com, the US-based software development platform operator backed by Salesforce and video communication software provider Zoom, closed its IPO at $631m. The corporates each purchased $75m of shares in a private placement alongside the offering, which involved Monday issuing an initial 3.7 million shares on the Nasdaq Global Select Market priced at $155.00 each. The underwriters subsequently took up the option to buy another

370,000 shares to close the offering. Spun off by Wix in 2012, Monday provides software which helps businesses create their own applications and work management tools. It more than doubled revenue from $78.1m in 2019 to $161m in 2020, though its net loss increased from $91.6m to $152m during that period.

7 Doma, a US-based real estate technology provider backed by risk management technology producer Assurant, property developer Lennar and reinsurance providers Scor and HSCM Bermuda, agreed a reverse takeover. The deal will involve Doma merging with Spac Capitol Investment Corp V following the latter's flotation on the New York Stock Exchange in a $300m IPO in December 2020, at an enterprise valuation of $3bn. The transaction will be boosted by $300m PIPE financing from investors including Lennar and SB Management, a subsidiary of SoftBank, among other investors. Founded in 2016 and formerly known as States Title, Doma provides machine intelligence-equipped technology that streamlines the real estate transaction process. Its shareholders will own at least 80% of the merged company.

8 Sonder, a US-based hospitality services provider backed by homebuilder Lennar, agreed to a reverse takeover with Spac Gores Metropoulos II at a pro forma enterprise value of $2.2bn. The merged business will take the position on the Nasdaq Capital Market acquired by Gores Metropoulos II, sponsored by affiliates of investment firm Gores Group and businessman Dean Metropoulos, when it floated

credit : Sonder

Sonder runs an online platform to book high-quality rooms in 35 cities across eight countries

in a $400m IPO in January 2021. A Gores Group affiliate is leading a $200m PIPE deal supporting the transaction that includes investment and financial services group Fidelity, Atreides Management, Principal Global Investors, Senator Investment Group, affiliates of Moore Capital Management and funds and accounts managed by BlackRock. Formerly known as Flatbook, Sonder runs an online platform that allows users to book accommodation in high-quality rooms and apartments run by the company in 35 cities across eight countries, with services available through guests' mobile devices.

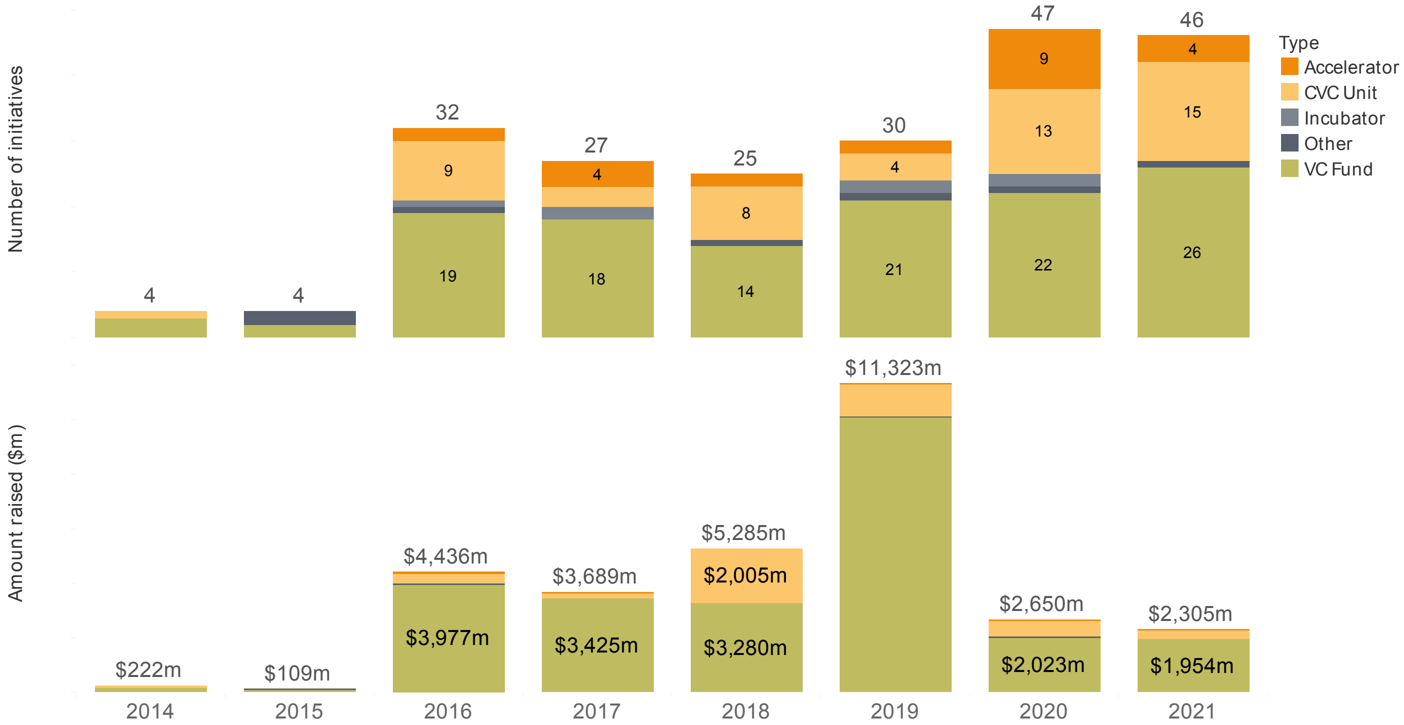
9 Enterprise education platform operator Skillsoft acquired Codecademy, a US-based online coding education provider backed by internet group Prosus and publisher O'Reilly's respective corporate venturing arms Prosus Ventures (formerly Naspers Ventures) and O'Reilly AlphaTech, for about $525m in cash and stock. The company had raised more than $82m as of a $40m series D round closed in February this year. Founded in 2011, Codecademy provides an online education platform enabling users to learn computer coding languages such as Java, HTML and Python. It claims to have helped more than 50 million people across some 190 countries to learn coding through its platform.

10 DuoLingo, the US-based language learning platform developer backed by Alphabet, went public in a $521m IPO on the Nasdaq Global Select Market. The company issued 3.7 million class A shares while its shareholders sold just over 1.4 million class Bs. They were priced at $102.00 each, above a $95 to $100 range already increased from $85 to $95. It shares closed at $139.01 on their first day of trading. Founded in 2011, Duolingo built an app with 40 million monthly active users who can learn any one of 40 languages through the use of games. The platform uses artificial intelligence to assess each user and tailor the education to their abilities. The company's net loss rose slightly to $15.8m in 2020 but its revenue more than doubled to nearly $162m in the same period.

Funds

For the period between January and December 2021, corporate venturers and funds investing in the services sector secured over $2.3bn in capital via 46 funding initiatives, which included 26 VC funds, 15 CVC units, four accelerators and one incubator. On a calendar year-to-year basis, the number of funding initiatives in the sector was comparable to the 47 registered in 2020, much like the total estimated capital which stood at $2.3bn, somewhat lower than the $2.65bn in the previous year.

Services sector funding initiatives 2014-2021



Source: GCV Analytics

Top services funding initiatives January-December 2021

Fund Name	Type	Funds Raised	Location	Focus	Backers
V-Capital	VC Fund	$235m	USA	Health, Telecommunications, IT, Services, Industrial, Energy	Huaxi Holding
Moderne Ventures II	VC Fund	$200m	USA	Services, Financial	AvalonBay Communities | Camden Property Trust | Greystar | JBG Smith | Leading Real Estate Companies of the World | Moderne Ventures | Oaktree Capital Management | Realogy
RET Ventures II	VC Fund	$165m	USA	Services	BH3 Management | Bozzuto | Cortland | Edward Rose & Sons | Essex Property Trust | Greystar Real Estate Group | Invitation Homes | Mid-America Apartment Communities (MAA) | RET Ventures | Starlight Capital | Starwood Capital Group | UDR | Waterton
Reach Capital III	VC Fund	$165m	USA	Services	CapRock | Hall Capital | Kaiser Foundation Hospitals | National Geographic Society | Reach Capital | Sesame Workshop
Kompas Fund 1	VC Fund	$160m	Denmark	IT, Energy, Industrial, Services	Kompas (Denmark) | VKR Holdings
2150 Fund I	VC Fund	$158m	Denmark	Industrial, Services	Chr Augustinus Fabrikker | family offices | Green Future Fund | Novo | NREP
Fifth Wall?s Climate Technology Fund	VC Fund	$140m	USA	Services, Energy	Fifth Wall | Invitation Homes | Ivanhoé Cambridge
3One4 Capital III	VC Fund	$135m	India	IT, Media, Financial, Services	3One4 Capital Advisors | CDC Group | Krafton (PUBG) | Nippon India Digital Innovation | private investors
OpenAI Startup Fund	CVC Unit	$100m	USA	Health, Services, Energy	OpenAI
Thomson Reuters Ventures	CVC Unit	$100m	Canada	Financial services, IT, Media, Services	Thomson Reuters

1 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 government-backed funds and corporations have committed capital as limited partners (LPs), as have new and returning other investors. The vehicle will target cultural services, developers of healthcare, telecommunications, semiconductors, IT, smart manufacturing and new energy technologies across China.

2 US-headquartered early-stage venture capital firm Moderne Ventures 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. Moderne Ventures was launched in 2015 by managing partner Constance Freedman, the founder of National Association of Realtors' venture capital unit. The firm now has nearly $350m in total assets under management.

Reach Capital raised $165m including funds from the National Geographic Society

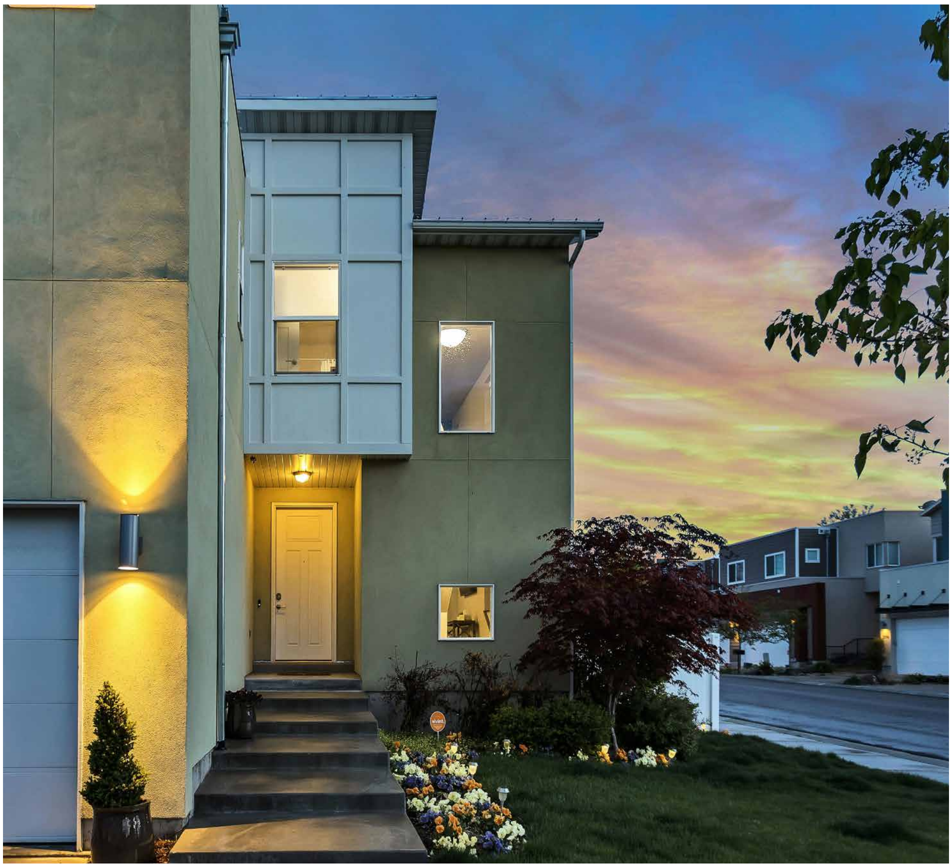
3 US-based venture capital firm RET Ventures' second fund has reached a $165m final close with backing from real estate investment trusts Essex Property Trust, Invitation Homes, Mid-America Apartment Communities and UDR. 40 North America-based multifamily and single-family real estate owners, operators and developers including BH Management, Bozzuto, Cortland, Edward Rose & Sons, Greystar Real Estate Group, Starlight Capital, Starwood Capital Group and Waterton were also among the LPs for the fund. The firm's debut fund closed at $108m in 2018 and also featured Essex Property Trust, Mid-America, UDR, Starwood Capital and Cortland among its LPs in addition to peers Aimco, Boardwalk and GID. Founded in 2017 and also known as Real Estate Technology Ventures, RET Ventures targets real estate technology developers with the potential to help LPs manage their investment portfolios.

4 US-based edtech-focused venture capital firm Reach Capital has raised $165m for its third fund from investors including children's entertainment producer Sesame Workshop and scientific organisation National Geographic Society. Kaiser Foundation Hospitals, the medical care centre of health system Kaiser Permanente,

is also among the LPs, as are philanthropic organisation Ford Foundation, wealth management firm Caprock and investment company Hall Capital. Unnamed employee retirement funds have also invested in the vehicle. Reach Capital focuses on educational technology developers that aim to remove barriers, particularly those faced by ethnic minorities, disabled students and under-resourced communities.

5 Kompas, a Denmark-headquartered venture capital partnership managed by former corporate venturers Sebastian Peck and Talia Rafaeli, formed a $160m first fund anchored by building materials manufacturer VKR Holding. Kompas' Fund 1 will target late seed to series A-stage startups across Europe, Israel and the United States working on smart city, climate, enterprise software and industrial automation technologies applied in the real estate, construction and manufacturing sectors. The initial ticket size will be between $1m and $5m per deal. Netherlands-based Peck had previously been managing director for InMotion Ventures, the investment arm of automotive manufacturer Jaguar Land Rover, for nearly five years from 2016 in the UK. His deals there included ride-hailing service Lyft, roadside assistance provider Urgently and Zeelo, which operates an on-demand coach travel service.

6 2150, a venture capital firm incubated by Denmark-headquartered real estate developer NREP, reached the €130m ($158m) first close of a flagship fund anchored by NREP. Pharmaceutical company Novo, the Denmark state-backed Green Future Fund and investment firm Chr Augustinus Fabrikker have also committed to the fund together with unnamed family offices and investors from the real estate sector. 2150 is targeting developers of technology that can impact the efficiency and sustainability of urban environments, for example, those developing new materials for the construction sector or producing software to improve the safety of buildings. The firm is looking to raise €200m for the vehicle and expects to reach a final close by mid-2021. It plans to build a portfolio of 20 companies and will initially invest approximately $1.2m to $8.5m per deal, with the capacity to invest upwards of $48m per company in total.


VC firm Fifth Wall's Climate Technology Fund will invest in decarbonisation in real estate

7 New York-listed housing provider Invitation Homes and property manager Ivanhoé Cambridge 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. Brendan Wallace, Fifth Wall's co-founder and managing partner, said: "Decarbonising the residential sector is critical to the future of our environment." 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.

8 India-based venture capital firm 3one4 Capital aims to increase the size of a third fund backed by game developer Krafton from its Rs 7.5bn target to Rs 15bn ($202m). The vehicle has raised approximately $135m since it was

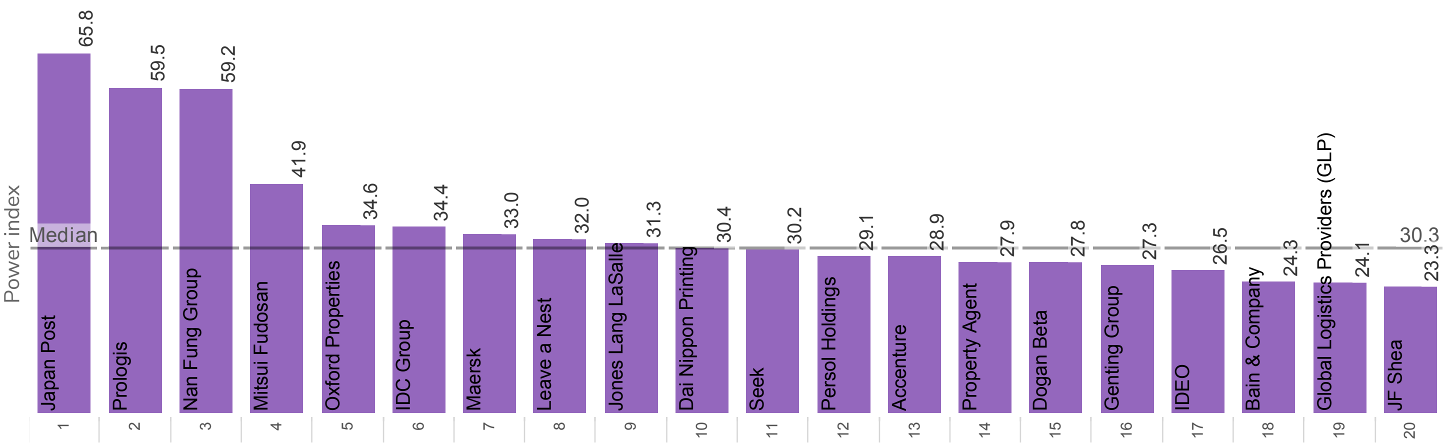
launched in December 2019 and 3one4 plans to extend an existing over-allotment option to reach its new target. Its LPs also include Nippon India Digital Innovation, CDC Group and undisclosed family offices, institutional investors and endowment funds. 3one4 invests in developers of technology in areas such as software-as-a-service, financial technology, digital media, deep technology, enterprise automation, health technology and direct-to-consumer products.

AI developer OpenAI formed a $100m CVC vehicle which has been backed by Microsoft

9 US-headquartered artificial intelligence researcher and technology developer OpenAI formed a $100m corporate venture capital vehicle to make early-stage strategic investments. OpenAI Startup Fund will provide funding for startups developing technology which will utilise AI in socially responsible areas such as healthcare, education or climate change in addition to products that harness AI to improve productivity. The fund will be managed by OpenAI but it has recruited several eternal backers as LPs. They include software producer Microsoft, which agreed in mid-2019 to invest $1bn in the company. Portfolio companies will also be able to access future OpenAI systems before they become commercially available, and will also receive support from the company's staff in addition to credit for Microsoft's cloud services platform, Azure.

10 Canada-headquartered news and information tools provider Thomson Reuters launched a $100m corporate venturing fund dubbed Thomson Reuters Ventures which will focus on technology capable of supporting 'future professionals'. The unit will make investments in developers of technology which can enhance work in areas such as legal work, tax and accounting, fraud detection, regulatory compliance, news and media. Although it has not overseen a dedicated corporate venturing vehicle, Thomson Reuters has made selected early-stage investments over the past decade, in companies including data analysis software provider Tamr and distributed ledger technology developer Axoni.

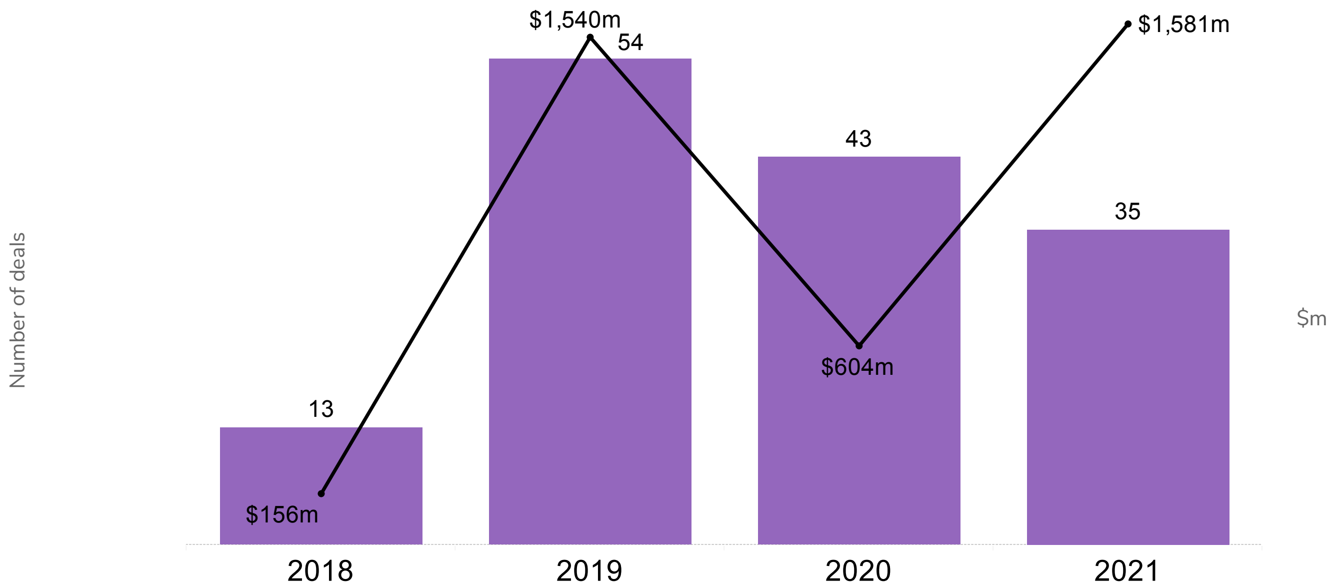
Services sector power rankings



University backing for sevices companies

By the end of 2021, we tracked 35 rounds raised by university spinouts developing services-related technologies, a considerable drop from the 43 and 54 recorded in the previous two years. The level of estimated total capital deployed in 2021, however, stood at $1.58bn, more than double the $604m from 2020. This clearly suggests that there has been some surge in valuations of such businesses coming from academia and, indeed, the top three deals we have outlined here were multi-million dollar rounds at unicorn valuations.

Deals in university spinouts in services 2018–2021



Source: GCV Analytics

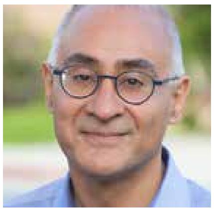
1 FlixMobility, the Germany-based public transport provider backed by UVC Partners, raised over $650m in debt and series G equity financing at a $3bn valuation. Investment firm Canyon Partners joined existing investors including General Atlantic, Permira, TCV, HV Capital, Blackrock, Baillie Gifford and Silver Lake in the round. Founded in 2013, FlixMobility runs an inter-city bus service called FlixBus which spans most of Europe and parts of the US, and which promises efficient onboard wifi and an easy-to-use online ticketing system. The capital will support growth in FlixBus's existing markets as well as the expansion of the company's FlixTrain service in Germany and Sweden.

2 Germany-based human resource and recruiting platform developer Personio, spun out of the Technical University of Munich, raised $270m in a series E funding round, reportedly at $6.3bn valuation. The round was led by Greenoaks Capital Partners, with new investors Altimeter Capital and Alkeon joining previous backers Index Ventures, Accel, Meritech, Lightspeed, Northzone and Global Founders Capital. The funds will be used by the company to launch a new people workflow automation software for SMEs that automates HR processes across departments. Founded in 2015, Personio provides recruiting and onboarding, payroll, absence tracking and other major HR functions in an all-in-one platform aimed at European SMEs, with between 10 and 2,000 employees. The company claims to have 5,000 customers.

3 Go1, an Australia-based corporate education provider backed by University of Oxford, secured $200m in a series D round co-led by SoftBank's Vision Fund 2 and Salesforce's investment arm, Salesforce Ventures. The round, which valued the company at more than $1bn, was co-led with venture capital firm AirTree Ventures and included human resources provider Seek and M12, the corporate venturing subsidiary of Microsoft. Founded in 2015, Go1 provides an AI and machine learning-powered online content platform for on-demand corporate education that supports more than 3.5 million learners. The company's hub can integrate with Microsoft's remote communication platform, Microsoft Teams, as well as products by enterprise software providers SAP and Workday.

People

We reported several notable people moves in the serices sector in 2021.



Raj Singh

Raj Singh joined real estate services provider JLL's corporate venturing subsidiary, JLL Spark, as managing partner, after five years as managing director at air carrier JetBlue's Technology Ventures unit. US-headquartered JLL established its Spark unit in 2017 under co-CEOs Yishai Lerner and Mihir Shah. Both then set up JLL Technologies as a business unit to offer property clients modern tech. Singh was a joint GCV Powerlist award winner for 2020 at JetBlue Technology Ventures alongside Bonny Simi.

Tanja Kufne

Tanja Kufner was 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 telecoms firm Telefonica's Wayra unit in Germany.

Greg Smithies left his partner position at Germany-headquartered carmaker BMW's investment arm, BMW i Ventures, to head up a fund for US-based venture capital firm Fifth Wall. Fifth Wall invests in real estate technology developers and closed a $503m second fund in July 2019 with backing from 50 corporate LPs, before securing $100m for a retail-focused vehicle in February this year. Smithies will manage the firm's Climate Tech fund, which will target developers of technology that can help decarbonise the real estate industry. The move came after a stint heading up climate investing at BMW i Ventures, which Smithies joined in 2019.

Donald Tucker

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, joined e-signature platform developer DocuSign. 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. 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.

Jeffrey Housenbold

Jeffrey Housenbold, formerly a managing partner at SoftBank Investment Advisers (SBIA), the fund management arm of SoftBank, has joined US-based home improvement service Leaf Home. Founded in 2019, Leaf Home provides direct-to-consumer home safety and enhancement products including gutter guards and accessibility equipment such as stairlifts, as well as water filtration systems. It has appointed Housenbold president and CEO, and he will help the company's leadership team support its growth plans. Housenbold had joined SBIA in 2017 and helped launch and manage the unit's investment activities through its SoftBank Vision Funds 1 and 2. He ranked fifth on Global Corporate Venturing's Rising Stars roster in 2019. Investments led by Housenbold on behalf of the Vision Funds included food ordering service DoorDash, property transaction management service OpenDoor, logistics platform operator Rappi and Memphis Meats, which is developing cellular meat.

Stanford case study: Workboard

Strategic venture capital: funding and partnership

By Nagraj Kashyap, managing partner, SoftBank Vision Funds and Deidre Paknad, co-founder and CEO, Workboard

The strategic partnership with a corporate venture capital unit can be even more valuable than just the capital injection, that is, a go to market partnership, sell to, sell with, sell through, all can be critical to the early success of a startup company. With the increased relevance of corporate venture capital and the acceleration of its key models of engagement, this class will leverage both the case study on Corporate Venture Primer as well as a very current reference article of a strategic investor's engagement with a successful entrepreneur founder / CEO to allow the students to better understand from both their perspectives in selecting and engaging with one another that resulted in a strong partnership that enabled the young company for growth. This session will provide entrepreneurs with references on best ways to leverage this strategic source of capital as well as its strategic in-kind resources. It will also provide key learnings to students that want to pursue a career in strategic corporate investing.

One recent study of corporate venture capitalists (CVC) by Stanford found: "More than 60% of respondents also believe that their executives do not understand the norms of the venture space, and that educating them (including those on the investment committee) is a constant struggle, compounded by frequent turnover of parent executives."[1]

Deidre Paknad, serial entrepreneur and founder and CEO of Workboard, would agree. She has just seen Microsoft as the corporate parent of one of her largest partners and investors acquire a rival in the enterprise OKR solutions software space.

Talking in October 2021 a few weeks after Microsoft's purchase of peer Ally.io, Paknad said: "Microsoft had invested in our series A through D rounds – the last one in April 2021 just a few months before it decided to purchase Ally. WorkBoard drove more $10m in Azure and Teams consumption for Microsoft as a premier partner, and its sales team and Microsoft actively partnered in winning deals together. Microsoft was a large WorkBoard customer using over 40,000 seats of our software – all outside of the business unit that bought Ally."

Paknad continued, "Buying Ally gives CVC a bad name. It is the worst-case scenario CVC: Invest early stage, get educated on the value of the space, then buy your way in cheap, and use distribution power to compete with a less offering. It is so back alley but perhaps classic Microsoft."

As far as Paknad knows and according to Microsoft's M12 corporate venture team, M12 was not aware of the pending Ally acquisition by the Viva employee experience group. Microsoft's cloud platform, Azure, which is the largest user of WorkBoard inside Microsoft, was also not

Reading matter

Mandatory reading

1. Strategic investors in Workboard by James Mawson

Optional reading

1. Meeting entrepreneurs on their terms: Why we don't require any 'special rights'

2. Corporate Venture Capital Strategic metrics (GCV)

3. 2020 Global CVC Report

4. Corporate VCs are Moving the Goalposts

consulted by the Viva team before the Ally purchase. Unlike WorkBoard, Microsoft had not used Ally software nor was Ally on the Microsoft cloud or stack.

WorkBoard revenues at the time of the Ally acquisition were 4-5x that of Ally which was single-digit revenues at the time according to its own early investors. Moreover, Paknad says WorkBoard's last round valuation of $825M April 2021 was at least double what Ally shareholders received in value; the decision to buy Ally appears price-driven so rather than purchase the category leader, Microsoft chose to buy a low-end competitor to compete with WorkBoard (and its own investment).

No public valuation has been disclosed for Ally's purchase but PitchBook data indicated that Ally was worth a $345m post-money valuation when the company raised $50m in early 2021 for a total of $76m raised, according to news provider TechCrunch.[3]

Paknad said this created a false-promise experience for entrepreneurs. The CVC unit, M12, touted a "new Microsoft" and Microsoft itself had done much to re-engage the startup community after years of tarnished brand in Silicon Valley. One of its primary themes was a "partner first" mantra. Paknad sees this as "pure marketing" and views Microsoft as using its learnings gained from WorkBoard to compete itself and says "actions are louder than marketing."

Looking back on the experience, Paknad said: "It is okay to dance with the devil as long as it is not disguising itself as an angel."

Early on, Paknad took a calculated approach to corporate investors bringing Microsoft into her Series A and adding Workday in her Series B rounds to keep potential competitors close, balance power, and create close alliances. Alongside M12 in the latest round led by SoftBank were corporate venture investments from Intel, Capital One, Silicon Valley Bank and Workday.

Microsoft as a highly referenceable customer was "super valuable in getting to $30m in annual recurring revenue (ARR), shaping the category, and establishing ourselves as the leader." Microsoft was one of WorkBoard's earliest high-scale customers which helped it gain more at-scale customers. Now with many large enterprise customers like Walmart, Ford, vmware, Cisco and others, the purchase of Ally is less significant and WorkBoard continues to use its Microsoft users as references.

Paknad said her focus has always been on the individual rather than VC fund as a whole when considering investors. "The person matters more than the fund. There is an enormous difference between investors in how they show up, hear you or help."

Workboard had been one of the first investments for M12 when it was formed by Nagraj Kashyap after his move from running peer Qualcomm Ventures in 2016. After his move in 2021 to become managing partner at SoftBank's Vision Funds, Kashyap led WorkBoard's latest round – a no brainer for Paknad.

Paknad said she had been introduced to Kashyap by another entrepreneur at a launch reception for M12 and valued his "humble expert" approach. She added: "As an early stage investor, you need imagination and vision to see what founders see –because there are few proofs but big ideas. For checks in the A round founders might talk with 40 people but 38 will not get it. Founder-VC fit is a real thing – if they do not see your vision, they cannot help you achieve it."

As the company grows, its proof points, the round sizes, and valuations get bigger, and VC behaviour changes. It is no longer based purely on vision and there are plenty of proofs like revenue and references. If your proofs are good, the money and VCs will come to you with bear hugs, wine and roses.

"It is no secret that very few dollars go to women founders and in enterprise software, just 2% of CEOs are women which quotes this survey. There is just more friction every stage of the race, and I have heard my share of shocking or appalling statements. VC has an arrogance problem and

a bias problem. Nagraj, however, operated differently and was first to have a balanced investor team, he invested in unconscious bias training for his portfolio companies, and he extended funds in several global women entrepreneur programs to create access far from Silicon Valley. One of my favourite memories of Nagraj is right after the bias training when he offered us all dollars to bring it in-house: He also told us if we do not run these programmes it will be the last dollar we got from him.

"Nagraj is extraordinarily helpful – he will take a text anytime if I need help or have a question. And perhaps what stands out most, is that his help is not less helpful because he is a CVC but is actually best in class VC."

"When we decided to raise money earlier this year, I went straight to Nagraj in his new role at SoftBank. My confidence in his good faith and my experience with him were such that I did not 'valuation' shop. A speculative $20m in valuation (on $825m) was immaterial when I weighed the process cost, who would join the board, and how he could help me build the business. More typically and without that kind of relationship, it is a time consuming auction or beauty pageant."

Postscript: In November 2021, Deloitte named WorkBoard 162 on its list of the 500 fastest growing tech companies in North America (based on three years of financial data) – one of 22 led by a woman and the fastest women-led tech company in Silicon Valley.

Kashyap, speaking earlier in the month before news of the Ally acquisition by Microsoft had been released, said for his part Paknad was a classic founder to back at an early stage.

"This was her third CEO job. Her prior company she sold to IBM where she presented a new category, OKRs, but was rejected so instead took it out and raised money.

"For M12 this was a new category where Microsoft had no competing interests but a chance to see signals about the next generation of innovation. Then we had to work hard to make it mutually beneficial [for Microsoft and Workboard].

"An investor sources deals based on a thesis – they have a prepared mind on a topic, opportunistically if the network brings one forward or if a prior angel investor where you have a developed relationship introduces the idea. For Workboard, a seed investor made the introduction.

Deidre and I had three meetings. At the first I liked the vision and gave her homework to come back if she delivered x, y and z – customers and ARR. For the second meeting with an update and at the third I was 85% sure and liked her persistence so told what she needed to do to get over the line.

"For an entrepreneur it is hard to do reference calls on a new investor [such as M12 at the time] so required a leap of faith, which they would only do if critical.

"Meanwhile I had gone back to Microsoft to see if there were any internal efforts or roadmap so Workboard could help Microsoft as a customer and partner. If you promise for the mothership it has to be true and deliver as a customer.

"Once the A round had closed I joined the board and did not tell her what to do but made introductions to customers for top line growth, such as Best Buy, and to be there where things were not going well. It is hard to get to the first $1m. I was not a life coach but to hear struggles and help get to the next financing round. It is a lonely job trying to evangelise a category

"A good CVC gives a longer time line if an entrepreneur misses a quarter versus VCs that can panic and cut assistance."

This potential issue has not been seen from the outside. As TechCrunch reported before Workboard's D round, it grew its top line by 350% in 2018, 300% in 2019, around 100% in 2020, and the expectation was of another double in 2021. Alex Wilhelm at TechCrunch said: "That is smackingly close to the (in)famous triple-triple-double-double-double model of startup growth that gets companies to $100m in recurring revenue at a venture-ready pace."[4]

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Study questions for students can begin to think about after reading the article

- How can entrepreneurs gain an advantage if she/he better understood the models and metrics of a CVC?
- What type of startups and at what stage of their financing should they consider corporate investors?
- Imagine that you are in Deidre Paknad's position, sitting across the boardroom table from Nagraj. What is the most important question you have for him regarding his investment strategy?
- If you are Deidre Paknad, what would you have done differently?
- The information flow between the CVC and the portfolio company can be bi-directional. How should both parties be sensitive to this confidential information flow?
- How effective is the corporate venture approach to helping large companies strategically adapt to an ever-changing business environment? Especially given the covid-19 experience.
- How could trends in CVC partner compensation and organisational structure (increased salaries, carried interest and reporting to CEOs), potentially influence the types of deal that they pursue? How may this influence the mandate of a CVC group?
- Is pursuing a career with a CVC be a good stepping stone for those that seek a career in venture investing? If so, why?

Comment

Two ways corporates can support women entrepreneurs

- Women founders face serious challenges in accessing venture capital and this lack of investment in women means many opportunities are being missed
- Two main ideas emerged from our research: improve opportunities for women entrepreneurs via non-financial investment; grow the pipeline of women with skills to serve on investment teams
- First published by World Economic Forum as part of its Davos Agenda

By Ram Jambunathan, SVP and managing director, SAP and SAP.iO and Joanna Maryewska, general manager, SAP.iO

Corporate venture capital (CVC) teams are responsible for 24% of all venture capital investment, accelerating hundreds of startups a year. Yet CVC teams are potentially missing out on investment opportunities by not doing more to actively seek out and support women entrepreneurs with bankable projects.

Most conversations about improving diversity in venture capital focus on generic steps that any investor could take – such as adopting standardised interview questionnaires, scorecards and metrics – rather than on corporates specifically.

Women founders currently face serious challenges in accessing venture capital. In the US, all-women founder teams received only 1.9% of venture capital in the first three quarters of 2021, down from 2.2% in 2020. In the EU, that figure was just 0.7%, also down from 2.2% in 2020. The covid-19 pandemic is likely having an impact on these trends, as it has on women in work more widely.

The lack of investment in women means many opportunities are being missed. Over a five-year period, for every dollar of venture capital invested, women-led or co-led startups generated

78 cents of revenue compared to 31 cents for startups led by men only. On average, companies with more diverse leadership teams report almost 20% higher revenue from innovation.

Unconscious bias against women entrepreneurs

Research on the gender gap in tech and VC finds that many biased decisions are made unconsciously. For example, most VC funding has historically gone to all-male founding teams, which means men feature more prominently than women in media coverage about IPOs and unicorn status. When looking at potential investments, investors may, therefore, subconsciously assume that male entrepreneurs are more likely to enjoy positive outcomes and higher returns.

This is less likely to happen if the investors themselves are women. However, according to research in 2019, just 3.4% of assets under management were held by women-founded VC firms – another manifestation of the opportunity gap.

Rather than try to change individuals, research finds it is more impactful to create an environment, initiatives, metrics and guidelines that limit the scope for such unconscious biases to manifest themselves. This means investing in solutions that limit the influence of bias in decision making and equipping decision makers with tools to notice and act on bias-prone contexts or processes.

Our project built on more general research – notably the Women and Public Policy Program at Harvard Kennedy School's project Advancing Gender Equality in Venture Capital – and focused

Atomico's The state of European tech survey (2020)

specifically on how corporate VC can close the opportunity gap. Two main ideas emerged from our interviews, surveys and expert workshop. A full list of identified actions is presented in the infographic above.

1. Improve opportunities for women entrepreneurs through non-financial investment

Access to revenue and an ability to scale quickly are the two key factors that enable entrepreneurs to succeed and access more funding for further growth. Beyond financial investment, corporate venturing teams are uniquely positioned to help in two ways: accelerating the timeline to a viable product, and connecting the startup to customers and suppliers.

If corporates invest in entrepreneurs whose products complement their offerings, they can then partner on product development. Through their corporate partner, entrepreneurs gain access to market intelligence, design, testing and strategy resources they would not be able to hire on their own. When the time is right, the corporate team can also assist with pilots or beta testing.

Getting the product right is just one part of the equation. The right pricing, packaging and go-to-market strategy are also critical. Corporates can assist entrepreneurs with price modeling and assistance navigating the regulatory landscape.

When the product is ready for market, corporate venturing teams can offer additional support by connecting the entrepreneur to their vast customer and supplier networks – at a minimum, providing introductions, offering guidance for negotiations and helping to close deals. To maximise their impact, corporations can:

- Include the entrepreneur's products in their sales plays;
- Incentivise sales teams to sell the entrepreneur's products;
- Run joint marketing and advertising campaigns;
- Feature success stories and testimonials for the entrepreneur's products via their communication and marketing channels;
- Purchase from the entrepreneur's company and include them in their supplier diversity programme;

- Endorse the entrepreneur's products; and
- Simplify access to becoming a supplier to their company and to others.

Even from a mentoring standpoint, corporates can offer access to unique resources, effectively augmenting the entrepreneur's staff by providing access to legal, financial, and other business expertise as needed. Specifically, corporate venturing teams can set up mentorship programmes for women seeking funding; provide coaching on how to pitch and fundraise; and make introductions to internal and external advisors.

2: Grow pipeline of women entrepreneurs with skills to serve on investment teams

Corporates should:

- Get more women interested in being part of investment teams as a career opportunity (for example internship, venture scout and rotation programmes);
- Improve the experience of women who are already part of investment teams (for example mentorship, increasing networking opportunities);
- Increase leadership opportunities for women in investment teams (for example executive sponsorship, transparency on roles and opportunities, training).

According to research by Atomico, 36% of VCs have not introduced quantifiable targets on diversity. Our research found this issue to be even more widespread among corporate VCs: 70% of corporate VCs who responded to our survey indicated that "Diversity is important but we do not have specific targets".

It is clear much remains to be done to tap the potential of corporate venture capital to close the opportunity gap for women entrepreneurs.

Comment

Unleashing the innovation power of alliances

- Companies are increasingly turning to strategic alliances to address hot new innovation topics like autonomous driving and AI
- Alliances are quicker to form and require less commitment than a merger or a joint venture, yet they can be powerful
- But alliances can be tricky — BCG offers below 10 insights on how to make sure they create value, including making an exit plan before you even start

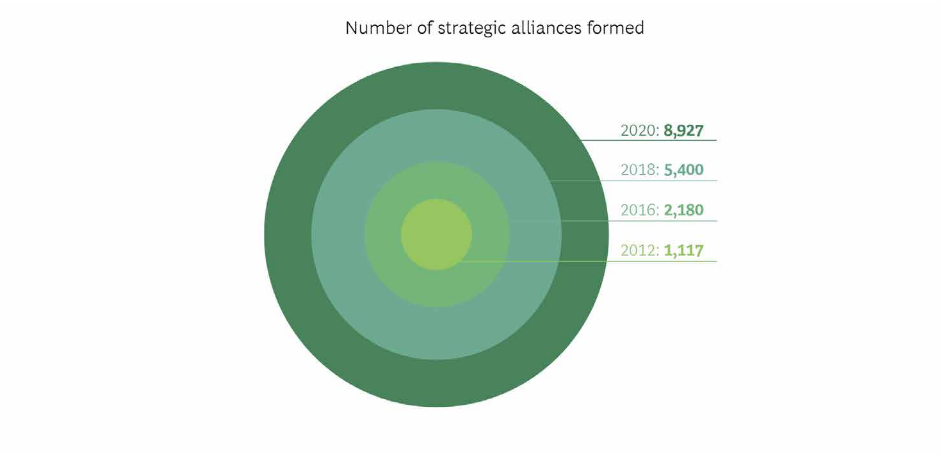
By Gözde Yalazı Özbek, Konrad von Szczepanski, Nikolaus Lang, Huseyin Batu Yigit, André Kronimus and Benjamin Gansel, all from BCG

The development and deployment of covid-19 vaccines in less than a year was a stunning achievement for science. But it also illustrated the power of a particular kind of partnership: the strategic alliance.

Strategic alliances brought together biotech ventures with revolutionary vaccine technologies. They united pharmaceutical giants with the capabilities and infrastructure required to successfully speed the drugs through clinical trials and regulatory approval and into mass production and distribution. And the partnerships, which produced the Pfizer-BioNtech, Moderna, and AstraZeneca-Oxford vaccines, were executed with impressive efficiency.

The speedy development of covid-19 vaccines illustrates why the number of strategic alliances has grown dramatically in recent years, *(see figure 1)*. Companies in sectors as diverse as healthcare, transportation equipment and discretionary consumer products are scrambling for competitive advantage in an era of swift, disruptive technological change on multiple fronts. And they are finding that strategic partnerships offer one of the best ways to meet the crushing need to innovate, scale up, and get to market.

Figure 1: Strategic alliance deals surged eightfold from 2012 through 2020



Sources: Refinitiv/SDC Platinum; BCG Transaction Center; BCG analysis.

Note: Strategic alliances are mid- to long-term partnerships devoted to achieving common strategic goals, enabled by a two-way exchange of nonmonetary value.

Building and managing a successful collaboration is not easy, however. Indeed, a high percentage of strategic alliances fail. That is a risk many companies can no longer afford. In today's rapidly transforming business landscape, investing six months to a year in an unproductive effort to jointly develop a cutting-edge mobility, industrial internet of things (IoT), blockchain, or remote health care-delivery solution, for example, can translate into big missed opportunities and a loss of market share.

Why more companies are choosing alliances

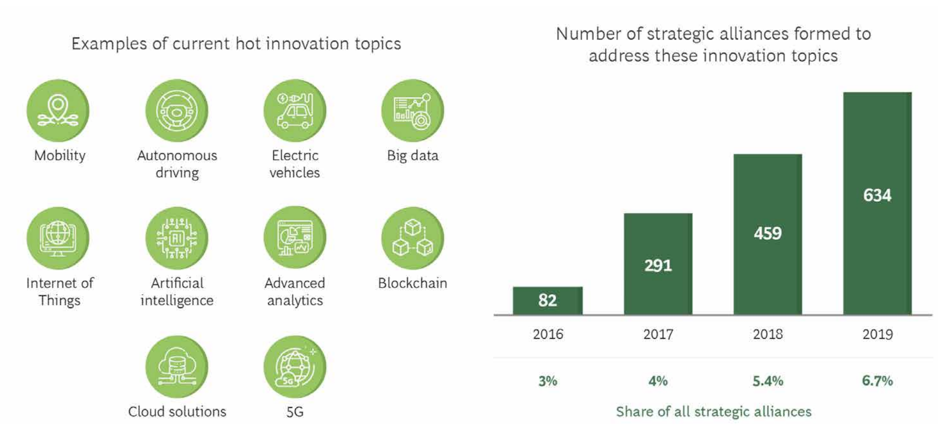
Strategic alliances are medium to long-term partnerships in which each participant contributes non-monetary assets to achieve a joint goal. The core advantage of strategic alliances is that they can enable deeper collaboration and higher agility than other forms of partnerships. Alliances are typically preferable to straightforward transactional contracts when both parties share a strategic goal, need more than a short-term collaboration and are not certain of the outcome. They are also much easier to establish and dissolve than joint ventures, mergers and acquisitions and require less commitment. Alliances enable narrower, more-focused collaborations. For example, the two companies can collaborate on a single product line. And they do not require a merger with or acquisition of the entire company in order to create synergy. Alliances can also take on more experimental projects that move partners into unknown territory.

In fact, alliances are often a means for two companies to test the waters with each other before committing to a joint venture. The strategic alliance Sony and Panasonic formed in 2013 is a good example. After collaborating successfully, the two companies formed a joint venture that manufactures televisions with organic light-emitting diode screens.

Companies often have several motivations for forming alliances. Of the 200 alliances we studied that were formed in 2019, acquiring know-how, distribution, and scale were the most frequently cited objectives. But the innovation power of alliances is increasingly becoming a key motivation. We counted 634 strategic alliances in 2019 devoted to such hot tech topics as mobility, big data, artificial intelligence, blockchain, and IoT. Three years earlier, only a few dozen a year were formed, *(see figure 2)*.

These arrangements can be powerful tools for innovation, which often requires collaboration and the pooling of different capabilities among different partners. Because innovation also requires agility and speed, alliances tend to be preferable to joint ventures or mergers, which take longer to set up. Alliances also allow companies to share risk in investments with uncertain outcomes – and are easier to exit if a programme fails.

Figure 2: More companies are turning to alliances to tackle disruptive innovation



Sources: Refinitiv/SDC Platinum; BCG Transaction Center; Google Trends; BCG analysis.

Note: Strategic alliances are mid- to long-term partnerships devoted to achieving common strategic goals, enabled by a two-way exchange of nonmonetary value.

What it takes to build an alliance that creates value

By analysing a number of alliances and interviewing a range of executives and other experts, we were able to identify ten key insights into building a successful alliance. They cover three broad topics: alliance strategy, partner screening, and mode selection; negotiating and designing the alliance; and relationship management, *(see figure 3)*.

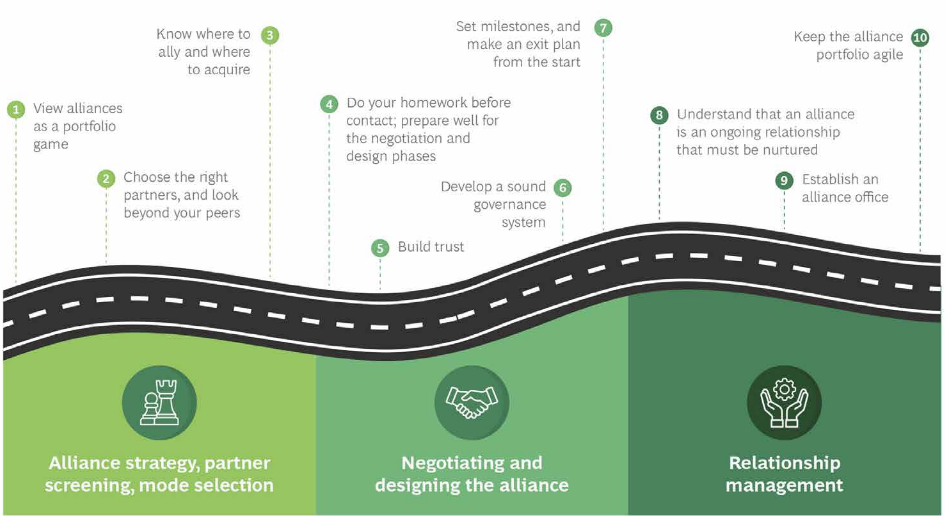
Alliance strategy and partner selection

It is important that companies *view strategic alliances as a portfolio game*. Because alliances are more agile and require less commitment than other types of collaboration, companies can team up with the best potential partner for each topic that aligns with the company's strategy. A portfolio also enables companies to better enjoy the benefits of larger scale.

Daimler, for example, is tapping top capabilities across the industry to address the future of mobility by using a portfolio of alliances as well as joint ventures. In electric mobility, it has alliances with Beijing-based BAIC Group, which owns several auto companies, for the China market and with US electric-bus maker Proterra. It is also partnering with BMW, Bosch, and Torc Robotics to develop autonomous driving systems and with ChargePoint for electric infrastructure solutions.

Pfizer draws on a broad ecosystem of partners along the pharmaceutical value chain and product lifecycle, spanning research, drug development, manufacturing, commercialisation, and distribution. This is how Pfizer came to partner with BioNtech

Figure 3: Ten key insights for creating value through strategic alliances



and other companies to create a covid-19 vaccine in record time.

The most critical factor in the success of an alliance is to *choose the right set of partners*. According to a study by Swiss public research school University of St. Gallen, roughly three-quarters of failed alliances can be attributed to the wrong choice of partners and lack of commitment.

One key insight from our research is that it is critical to figure out which kinds of collaborators can help achieve the alliance's strategic objective. If the goal is to enter new markets or expand scale, partners within the same industry are often the best fit. A good example is the Renault, Nissan, and Mitsubishi alliance, which collaborates on purchasing, engineering, and manufacturing while maintaining each OEM's brand identity. If the objective is to acquire new capabilities and innovate, however, companies should be willing to look for partners in different parts of their value chain – and even beyond their own industry. Among Google's many innovation-based alliances, for example, is its relationship with upmarket eyewear manufacturer Luxottica, which it relies on for developing wearable devices. The alliances between Tesla and Panasonic to develop and produce lithium-ion batteries for electric cars and between Uber and the Spotify for mobility solutions illustrate how participants can leverage their partners' different roles in the value chain to innovate.

It is also important that the collaboration partner be the right fit throughout the lifecycle of the alliance. Does the partner have sufficient capabilities and experience with its alliances, for example, and a reputation for providing good reciprocal give and take? Companies should also do their research to ensure the potential partner is financially sound and presents no legal or reputation risks.

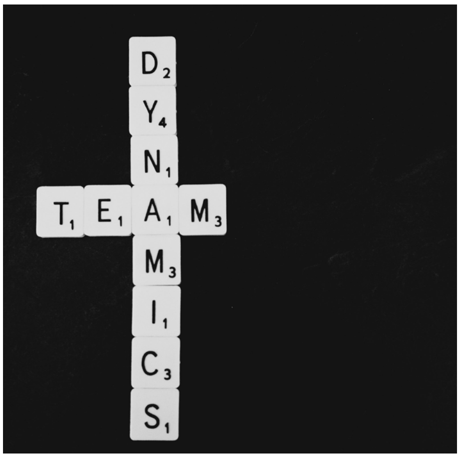
In addition, *companies need to know where to ally and where to acquire*. In some cases, an outright acquisition is the best route.

Negotiating and designing the alliance

Companies must do their homework before contacting a potential partner. They need to prepare well for negotiations and design. They should also develop a game plan for each phase of the negotiation and design process.

It is critical to *build trust with partners from the outset*. Remember that, unlike with an acquisition, the key objective of an alliance is not to get the transaction done – it is to capture the highest value from the relationship. Approach the negotiations constructively, and do not try to conceal agendas. Both sides, even if they have well-entrenched corporate cultures, should find common ground and commit to a shared set of values for the partnership. Companies should approach the relationship with an "abundance" mindset – viewing it as a pie that can grow larger as each partner expands on the alliance's achievements, not as a fixed entity from which maximum gain is to be extracted.

Set milestones, and plan on how to exit the alliance. Expectations for the alliance over a range of time horizons – such as quick wins, medium-term goals, and ultimate goals – and a detailed roadmap for the partnership's lifecycle should be established early in the negotiating process. It is important to determine how the value created through the alliance will be shared among the partners and to define conditions, processes, and a time frame for exiting the arrangement. When aluminium manufacturer Alcoa and mining company Rio Tinto formed a strategic alliance to develop a low-emission aluminium production process, for example, they agreed on a one-year target for the collaboration to either evolve into a joint venture or dissolve. The alliance fulfilled its objectives, and the two companies decided to form a joint venture, Montreal-based Elysis.



Furthermore, companies should *develop a sound governance system*. Diligently designing and negotiating a governance structure will help ensure that the partnership is sustainable and can create value. The governance structure should carefully distribute power in the steering body and specify each partner's role in operations. Although many archetypes exist for alliance governance structures, only a design tailored for the desired strategic objective and partners' unique capabilities can unleash the full potential of the alliance.

Relationship management

Understand that *an alliance is an ongoing relationship that must be nurtured*. Productive partnerships develop over time, and the value they create depends on how well they are executed. Managing the "soft" aspects of the relationship is particularly important because an alliance, by its nature, is not as binding as a joint venture or merger. Therefore, it is vital that all partners remain aligned on scope and get along well. Both sides must invest effort to nurture a successful relationship.

Conflicts will inevitably arise. Rather than shy away from differences, partners should learn to leverage them. Hewlett-Packard and Microsoft, for example, found that their complementary strengths were valuable to their alliance but also made collaboration challenging. Executives from both companies systematically documented differences and discussed them in working sessions. They learned from each other, and the collaboration benefited.

Establish an alliance office to manage the collaboration on an ongoing basis and to ensure that it remains on track to meet targets. Regular meetings among personnel at all levels of the partners' organisations will strengthen commitment.

Finally, *keep the portfolio of alliances agile*. Leaders should continuously assess their mix of alliances to ensure it puts them in the best position to compete as technologies, business models, and market demands change. They should remain flexible to form new alliances to meet new needs and exit those that no longer serve their purpose.

Companies have been entering into strategic alliances – with mixed results – for decades. In today's environment of disruptive change on multiple fronts, however, alliances have become critical to remaining at the vanguard and securing competitive advantage. And the consequences of success or failure have never been greater. A sound strategic approach, a well-conceived design, and careful attention to relationship management will help unleash a strategic alliance's powerful innovation potential.

The authors wish to thank Oskar Wilczynski for his contributions to this article published by BCG

www.bcg.com/publications/2022/innovation-power-of-alliances

Comment

Who should serve on your corporation's investment committee?

> Five qualifications to keep your organisation from making dysfunctional decisions
> First published on Medium here

By Scott Lenet, Touchdown Ventures

You may have heard the idiom that the camel is what would result if a horse were designed by a committee. Corporate investment committees are often what results when a *committee* is designed by a *committee*. Like the camel, investment committees – also known as "ICs" in the world of corporate innovation – can feature lumpiness, poor temperament and even spitting.

The corporate IC plays a crucial role in the external innovation deal process, however. Depending on the purview of the committee, this can include transaction approvals for multiple types of investments: (1) acquisitions, (2) business development deals, (3) funding for internally incubated new businesses, and of course, (4) corporate venture capital (CVC) funding.

In my experience guiding the structure, launch, or ongoing management of more than 15 corporate venture capital programmes, poor design and selection of the IC is one of the most glaring weaknesses that plague CVC programmes. Participation on the investment committee can become a political aspiration or expression of status, overshadowing the fact that serving on the investment committee is a job that requires specific training and expertise.

How can corporations get this right?

For starters, corporate decision makers need to understand the purpose and function of the investment committee, which is to embody service and not express power or prestige.

The primary role of the investment committee is to enforce the business plan (or "charter") that has been agreed upon by senior leadership for the corporate investment function. The IC is an oversight or governance body whose job is *to help ensure the team that does the work is as effective as possible on behalf of the corporation, and that the best decisions are made with the information that is available.* It is important to remember that the IC itself has not done the work, and lacks the first hand knowledge of the working team members who evaluated the investment opportunity.

The first step is to ensure that the corporation has adopted a logical charter that is aligned with the overall strategy of the business. A good charter provides "guard rails" that greatly simplify decision making by establishing objective criteria for what is in scope.

For example, if our charter prescribes that transactions should be blue, triangular, and no more than five centimetres wide, the decision committee can quickly raise concerns about deals that are orange, square, or 10 centimetres wide. This is simple pattern recognition and application of rule sets. In the world of corporate venture capital, the committee evaluates conformance to criteria such as sector fit (which measures strategic


Scott Lenet

relevance), *stage* (which captures risk), and *geography* (which approximates the ability to work effectively together), and other standard investment factors.

If a deal that matches the majority of agreed upon criteria is brought to the committee, the deal should be approved. The committee should challenge the team that prepared the investment recommendation with questions to ensure likely potential problems have been anticipated, and that the pricing of the transaction compensates the corporate investor for the risks to be undertaken.

If a deal is brought to the committee that materially diverges from agreed upon criteria, that opportunity should receive extra scrutiny. The burden is on the investment working team – not the IC – to justify why an exception to the rules might make sense.

This sounds straightforward, but even when the charter is clear and aligned with corporate strategy, the process is often complicated by staffing the committee with personnel who are unqualified for the job.

In my experience, the following types of participants create problematic dynamics on the IC, clogging decision making

The investment committee lacks the first hand knowledge of the team members who evaluated the opportunity

and frequently preventing the corporation from acting in its own best interest:

- Scientists who bring relevant product expertise but cannot evaluate a business opportunity. It is critical to keep in mind that as investors, we are buying a piece of the startup's *business*, not the product or service, and not the technology. While the product, service, and technology are important, these factors are secondary to evaluating the business opportunity itself. Scientists who are not oriented to evaluate the business merits of an investment can still play a valuable role by serving on an advisory board or science committee instead.
- Business unit leaders who take too narrow a view of the corporation and cannot usefully opine on each opportunity. Especially in larger conglomerates, business unit operators may bring a very specific lens to the investment committee. In effect, they take a selfish view of what would benefit their P&L only, lacking a perspective on the needs of the larger organisation. The views of a P&L operator can be extremely useful to the investment committee when relevant; so these team members should

be invited to champion specific deals *when they have expertise*.

- Naysayers who want to keep too tight a control on decision making and actively disempower the investment team. While playing "devil's advocate" is essential for evaluating the risks of any deal, naysayers champion bureaucracy and fear, sitting with crossed arms and seemingly unhappy no matter what they hear — potentially even disagreeing with themselves if it serves the function of blocking a deal. If the governance board does not have trust in the competence of the working team to evaluate investment opportunities, the investment working team should be replaced. But naysayers who simply want to halt progress for sport have no productive role on the investment committee.

These challenges can be overcome by following best practices in structuring and staffing the investment committee. In my opinion, ICs should be set up with no more than five voting members, to facilitate ease of scheduling meetings and to ensure an agile decision making process. As noted, it is fine to invite guests and observers as participants in committee meetings.

Each corporation's committee should determine its own ideal voting rules. In some organisations, the CEO participates and might hold a veto. Many ICs require a majority vote for approvals. Some organisations decide by consensus and defer to strong conviction on the part of the investment working team, which is the most productive and culturally constructive model I have personally experienced, in both corporate and institutional venture capital.

To inoculate against potential challenges in staffing a corporate investment committee, here are my five qualifications that should be required of every member of the IC:

1. Fiduciary mindset

Experience serving as a fiduciary, including having served as a founder or board member of private or public companies, is essential to setting the right tone on the IC. The job of the investment committee is fundamentally representative in nature. Those who view themselves through a lens of stewardship and service have the best disposition for the task.

2. Financial skills

Investments are also financial transactions at their core. Choose investment committee representatives with the ability to make financial decisions and evaluate equity, especially as demonstrated by prior venture capital transaction experience. The IC job includes not just new investments, but also monitoring portfolio company performance and allocating reserves. Ultimately, the investment committee will be respected and effective if its members collectively have financial authority and expertise.

3. Strategic fluency

The investment committee must ensure adherence to fund investment mandates and sector focus areas. This requires a company-wide perspective on what is strategic and important. Fluency with CVC program objectives, rules, and "guard rails" facilitates agile decision making. This also requires IC representatives to consider not just what helps the corporation today, but what will allow the company to continue to thrive in the future.

4. Availability

Investment committee members are useless if they do not show up. Availability and interest to meet as needed, when provided sufficient notice and concise materials, is a requirement of the job. The organisation needs to act when there is opportunity and speed is important in corporate venture capital decision making.

5. Willingness to trust

Finally, the IC should extend trust to the team who does the hands-on work. The committee is a governance body, not a working team. The IC should demand rigour and provide feedback to the working team to ensure thorough diligence, empowering those professionals to grow in their capabilities and confidence.

While the bottom line task of the IC is to approve or deny transactions, the best investment committee processes I have seen are Socratic in their approach and ultimately do approve the majority of investment recommendations brought for a decision. This emulates the norms of institutional venture capital in a way that will help CVCs fit in with the rest of the industry, while also protecting the interests of the corporation.

By stepping back to ensure the corporate investment committee is staffed by those with the right skills and temperament, your organisation can set a rational path to navigate through the often unforgiving landscape of corporate venture capital.

Innovative region

US innovation leaders

By Liwen-Edison Fu, features and supplements editor with additional reporting by James Mawson, editor-in-chief

The United States ranked third after Switzerland and Sweden in the Global Innovation Index 2021 compiled by Cornell University's SC Johnson College of Business, Insead and the World Intellectual Property Organisation. However, judging by its venture capital (VC) industry, the US is clearly ranked first again after a wobble in 2018 when China almost caught up by investment activity.

Overall, the US saw record venture activity across practically all metrics last year, according to the local trade body, National Venture Capital Association, using PitchBook data.

The Q4 2021 PitchBook-NVCA Venture Monitor found US VC-backed companies raised nearly $330bn in 2021 – roughly double the previous record of $166.6bn raised in 2020.

Non-traditional investors, described by PitchBook as corporate VC funds, hedge funds, private equity firms and sovereign wealth funds, participated in nearly 77% of total annual deal value, according to PitchBook data.

Exits were a huge part of the story of 2021, the report said, with more than $774bn in annual exit value created by VC-backed companies that went public or were acquired.

And some of these returns were ploughed back to new funds. US VC firms raised a "record-shattering $128.3bn in 2021, representing a 47.5% year-on-year increase over 2020's fundraising figure of $86.9bn," PitchBook said.

All this money over decades has helped the US develop some of the world's most valuable brands, such as e-commerce group Amazon, internet technology provider Google, electronics producer Apple, software supplier Microsoft, social media platform Facebook, big-box retailer Walmart, wireless network operator Verizon and telecoms firm AT&T.

As the Economist said: "America's VC funds have seeded firms that are today worth at least $18trn of the total public market. Seven of the world's 10 largest firms were VC-backed."

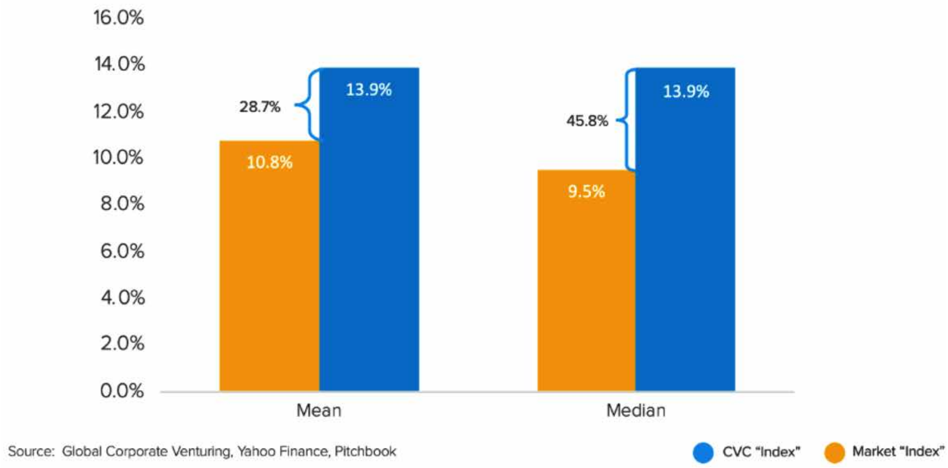
Many of these corporations have either been venture-backed or set up corporate venturing units, either through direct investments or fund-of-funds strategy.

Almost three-quarters (71) of the top 100 US companies in the Fortune 500 list by market capitalisation have active CVC units, according to GCV Analytics prepared for the new book, Transformative Innovation, being published this month by co-authors Christine Gulbranson and James Mawson.

This was substantial 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.

Amazon operates the Alexa Fund while Google's parent firm Alphabet has various vehicles: Gradient Ventures, GV and CapitalG.

Mean and median stock price performance for US-based GCV 2020 Top 100 CVCs



Analysis and chart prepared by Touchdown Ventures

Facebook began investing in emerging technology developers through its New Product Experimentation subsidiary. Walmart invests directly and runs Store No 8 incubator while Disney owns Disney Accelerator in addition to participating in funding rounds directly. Verizon Ventures represents Verizon in the innovation ecosystem, and AT&T and The Home Depot conduct corporate venturing without dedicated vehicles.

And, without mistaking correlation for causation, there are indications that having had a CVC in the intervening two decades has potentially been a help.

A look at the corporations in the Fortune 100 list of top companies by market capitalisation found nearly half (47) had left the list by 2020s ranking compared to the year 2000.

Partly, this is a result of take-private deals (delisting a public company), such as personal computer maker Dell, or mergers and acquisitions, including Bank One and Time Warner, as well as bankruptcy, such as MCI Worldcom and Enron. Sometimes it is just lower performance than peers.

Of the top 100 in 2000, just seven, such as government-backed mortgage providers Freddie Mac and Fannie Mae, or pension provider TIAA-CREF, or supermarket chains Kroger and Costco, that had broadly chosen against corporate venturing as an innovation tool and remained in the Fortune ranking in 2020.

Ten of the 47 that dropped out have since set up a corporate venturing unit to try and get back into the top 100 while the vast majority of the 2000 vintage that have remained in the ranking by 2020 have had an active CVC unit in this period (often all of it), including pharmaceutical group Merck, oil major Chevron, chipmaker Intel and investment bank Goldman Sachs.

Similarly, almost all the entrants in the 2020 Fortune 100 list compared with the 2000-era cohort have had a corporate venturing unit.

The exceptions include Delta Air Lines, oil group Marathon Petroleum and Valero Energy, and retailers Albertsons and Publix Super Markets, according to GCV Analytics.

The same pattern is holding true for modern vintages. As of May 28, 2021, venture capital-as-a-service manager Touchdown Ventures found the median stock price of the average US corporation – out of 29 on the "Global Corporate Venturing top 100 most active CVC list" – appreciated 45.8% more than the price of its listing index from the time of CVC unit establishment.

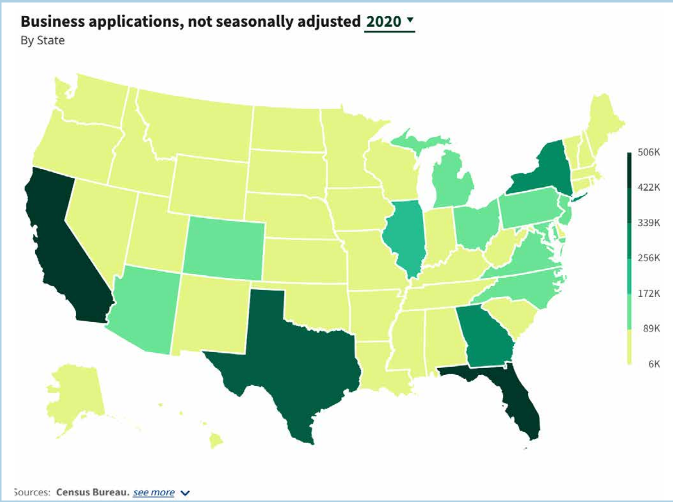
Since the mean can amplify the effect of outliers, the median is preferred but, as of May 29, 2021, the average compound annual growth rate (CAGR) of these 28 companies' stock prices (measured from the time each corporation launched its CVC) was 13.9% compared with a time-weighted average exchange growth (measuring the NYSE and NASDA Q) of 10.8% during the same period. This 3.1 percentage point gross difference represents an outperformance of the index of 28.7%.

And while much of the venture money flowed to the main entrepreneurial and innovation ecosystems including Silicon Valley, New York, Houston and Boston, corporations are often active in developing local entrepreneurial ecosystems across the country, such as in Seattle, Austin, Miami, Atlanta, Chicago and Los Angeles.

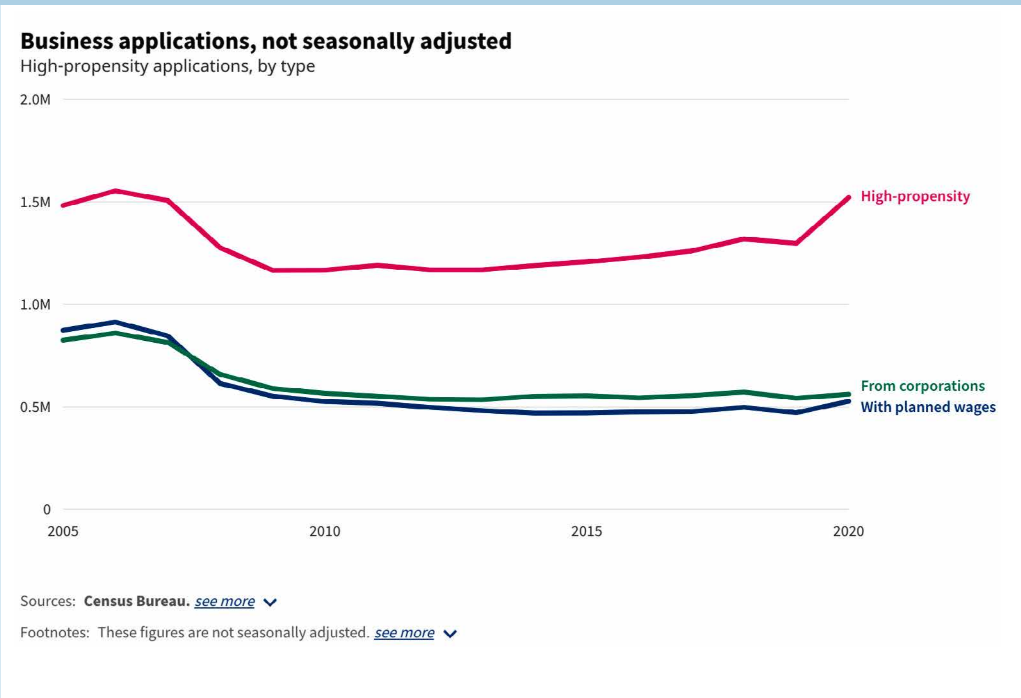
USAFacts finds America's entrepreneurial centres

Florida, California and Texas are the three most popular states for startups – at least judging by tax records called the Employer Identification Number (EIN), according to USAFacts using Census Bureau data.

While these EIN applications do not always lead to actual businesses, the US Bureau of Labor Statistics tracks them as a measure of entrepreneurship across the country. And the pandemic seems to have helped inspire a record level of entrepreneurial activity with 4.4 million business applications in 2020, the bureau said, compared to almost 3.5 million in 2019 and up from about 2.5 million in 2005.



Source: Census Bureau



Ones that the agency considers particularly likely to become businesses with payroll are marked as high-propensity. Among high-propensity business applications, the agency further identifies those that come from a corporation, as well as those that have set a date for paying their workers. These applications with planned wages are associated with an even higher likelihood of eventual business formation.

California

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

Financial data aggregator PitchBook data showed 2021 was a record year for corporate-backed funding efforts in California, with the investment amount reaching $48bn across 838 transactions, up from $23bn across 623 deals the year before.

Alphabet's GV unit is the top corporate VC subsidiary in the region based on the number of deals from the past five years, followed by Salesforce Ventures, Intel Capital, M12 and Coinbase Ventures, respective vehicles for enterprise software provider Salesforce, chipmaker Intel, diversified software supplier Microsoft and cryptocurrency exchange Coinbase.

Another Alphabet unit Gradient Ventures, which invests in artificial intelligence (AI)-focused deals on behalf of the conglomerate's Google subsidiary, is part of the top investors, as are Comcast Ventures, Alexandria Venture Investments, SAP.io and Dell Technologies Capital, part of mass media group Comcast, life sciences real estate investment trust Alexandria Real Estate Equities, enterprise software producer SAP and computing technology firm Dell Technologies respectively.

Most funded rounds raised by corporate-backed companies headquartered in California in 2021 have included cybersecurity software provider Lacework, spacecraft producer and data analytics software developer Databricks.

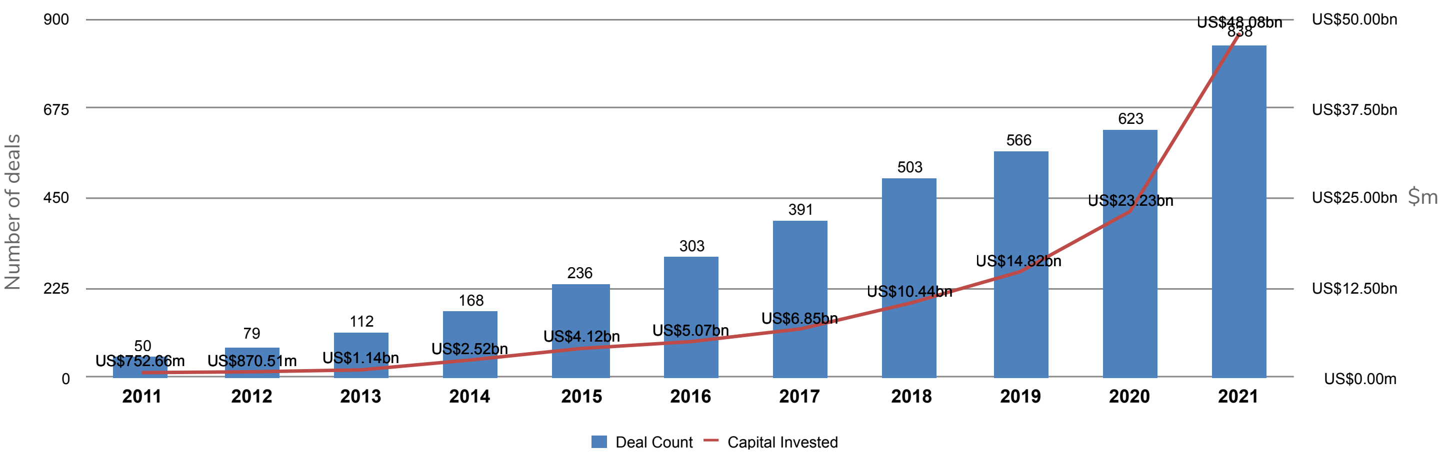
However, that status is gradually changing, according to Beyond Silicon Valley, a report jointly published by venture capital firm Revolution and PitchBook last year. Roughly 27.2% of VC money in the US has been directed to companies based in the Bay Area by December last year, the report said, which marked a new low for the cluster in more than a decade as the country's overall funding has reached record levels.

Top corporate investors in California-based deals

Investor	Investments past five years
GV	178
Salesforce Ventures	91
Intel Capital	89
M12	67
Coinbase Ventures	63
Gradient Ventures	57
Comcast Ventures	51
Alexandria Venture Investments	50
SAP.io	47
Dell Technologies Capital	46

Source: PitchBook

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



Source: PitchBook

Top corporate-backed deals in California-based businesses

Companies	Series	Deal date	Deal size ($m)	Post-valuation ($m)	Investors
Lacework	Series D	18-Nov-2021	1,300	8,300	Altimeter Capital Management, Coatue Management, Counterpoint Global(Dennis Lynch), D1 Capital Partners, Dragoneer Investment Group, Durable Capital Partners, Franklin Templeton (NYS: BEN)(Matt Cioppa), General Catalyst, Human Capital, Liberty Global Ventures, Snowflake Ventures, Sutter Hill Ventures(Michael Speiser), Tiger Global Management, XN
SpaceX		14-Apr-2021	1,164	74,314	1435 Capital, 75 & Sunny, Alpha Wave Global, Alphabet (NAS: GOOGL), ARC Capital (Brazil), Blue Opal Capital, Champion Hill Ventures, ChinaLink, Cloud Toronto (VC), D1 Capital Partners, Darsana Capital Partners, Das & Co., Dedicated Venture Capital, Deep Ventures (Venture Capital), DFJ Growth, Dragon Capital (California), Elevation Capital, Ericsenz Capital, Ethos VC, Falkon Ventures, Ferter, Flux Capital, Founders Fund, Future Communities Capital, Hedonova, Irving Investors, K3 Ventures, London Impact Ventures, Metaplanet Holdings, Midway Venture Partners, Mindrock Capital, Nicoya Capital Group, Nucleus Adventure Capital, Oakhouse Partners, Pelenea Ventures, Phoenix Capital Ventures, PreIPO Club, Sequoia Capital, Side Door Ventures, Soul Ventures, SpaceFund, Summit Peak Investments, Thirdbase Capital, Toy Ventures, Trousdale Ventures, Type One Ventures, UpVentures, Vis Capital, Vy Capital
Databricks	Series G	01-Feb-2021	1,000	28,000	Alkeon Capital Management, Amazon Web Services, Andreessen Horowitz(Benjamin Horowitz), BlackRock (NYS: BLK), Canada Pension Plan Investment Board, CapitalG(Derek Zanutto), Coatue Management, Discovery Capital Management(Jon Redmond), Dragoneer Investment Group, Fidelity Management & Research, Founders Circle Capital, Franklin Templeton (NYS: BEN) (Jonathan Curtis), Geodesic Capital(Ashvin Bachireddy), Government of Singapore Investment Corporation (GIC), Green Bay Ventures, Greenoaks Capital Partners, Microsoft (NAS: MSFT)(Scott Guthrie), New Enterprise Associates(Peter Sonsini), Octahedron Capital, Salesforce Ventures, T. Rowe Price (NAS: TROW), Tiger Global Management, Whale Rock Capital Management
Generate		14-Jan-2020	1,000		AP Fonden 2, AustralianSuper, Broadscale Group, Inherent Group, QIC(Ross Israel), Railway Pension Investments
Stripe	Series G	08-Dec-2020	850	36,000	Addition(Lee Fixel), Andreessen Horowitz(Alastair Rampell), Ben Jen Holdings, DFJ Growth, General Catalyst, Glynn Capital, GV, Late Stage Management, Novator Partners, SciFi VC, Sequoia Capital(Michael Moritz), The Factory (France), Troy Capital Partners
Resilience	Series B	23-Oct-2020	755	1,605	8VC(Drew Oetting), ARCH Venture Partners(Robert Nelsen), GV(David Schenkein), Koch Disruptive Technologies, Lux Capital, Magnetic Ventures, New Enterprise Associates(Scott Gottlieb), Pfizer Ventures, R2 Risk & Return(Robert Kerrey)
Airtable	Series F	13-Dec-2021	735	11,735	Benchmark (San Francisco)(Miles Grimshaw), Caffeinated Capital, Coatue Management, D1 Capital Partners, Franklin Templeton (NYS: BEN), Greenoaks Capital Partners, ICONIQ Capital, J.P. Morgan Growth Equity Partners, MSD Capital, Salesforce Ventures, Silver Lake, Thrive Capital, XN(Gaurav Kapadia)
Forte (Software Development Applications)	Series B	12-Nov-2021	725		Andreessen Horowitz, Animoca Brands, big bets, Griffin Gaming Partners, Kora Management(Daniel Jacobs), Overwolf, PLAYSTUDIOS (NAS: MYPS), Polygon Studios, Sea Capital, Solana Ventures, Tendermint, Tiger Global Management, Warner Music Group (NAS: WMG), zVentures
Chime	Series E	05-Mar-2020	700	6,000	Access Technology Ventures, Coatue Management, Dragoneer Investment Group, DST Global, General Atlantic, ICONIQ Capital, Menlo Ventures(Shawn Carolan), Veligera Capital
SambaNova Systems	Series D	13-Apr-2021	678	5,000	BlackRock (NYS: BLK), Celesta Capital, Government of Singapore Investment Corporation (GIC), GV(Dave Munichiello), Intel Capital(Vijay Reddy), SoftBank Investment Advisers(Dipchand Nishar), Temasek Holdings, Walden International
Nuro (Road)	Series D	02-Nov-2021	600	8,600	Alphabet (NAS: GOOGL), Baillie Gifford, Fidelity Management & Research, Gaorong Capital, Kroger (NYS: KR)(Yael Cosset), SoftBank Investment Advisers, Tiger Global Management(Griffin Schroeder), Woven Capital (Tokyo)(Michiko Kato)
Stripe	Series H	15-Mar-2021	600	95,000	Addition(Lee Fixel), Allianz X, AXA (PAR: CS), Baillie Gifford, Blue Opal Capital, Durable Capital Partners, Ethos VC, Fidelity Investments, Franklin Templeton (NYS: BEN), Ireland Strategic Investment Fund, Leyden Ventures, PreIPO Club, Sequoia Capital(Michael Moritz), Silver Lake, Soul Ventures
Chime	Series F	15-Oct-2020	533	14,500	Access Technology Ventures, Aliya Capital Partners, Coatue Management, Dragoneer Investment Group, DST Global, Esalen Ventures, Flourish Ventures, Gaingels, General Atlantic, ICONIQ Capital, JUMP Investors, Kilmahew Ventures, Midway Venture Partners, Next Play Capital, Opera Tech Ventures, Tiger Global Management, Whale Rock Capital Management
Lacework	Series C	07-Jan-2021	525	1,525	Altimeter Capital Management, Alumni Ventures Group, Andrew Wesbecher(Andrew Wesbecher), Catherine Lu(Catherine Lu), Clement Pang(Clement Pang), Coatue Management, Courtney Broadus(Courtney Broadus), D1 Capital Partners, Dev Nag(Dev Nag), Dragoneer Investment Group, Liberty Global Ventures, Snowflake Ventures(Christian Kleinerman), Sutter Hill Ventures(Michael Speiser), Tiger Global Management, Victor Deng(Victor Deng)
Impossible Foods	Series F	13-Mar-2020	500	4,000	Ahmir Thompson(Ahmir Thompson), Alexis Ohanian(Alexis Ohanian), Anton Zaslavski(Anton Zaslavski), DX Ventures, Horizons Ventures, Jaden Smith(Jaden Smith), Jay Brown(Jay Brown), Kal Penn(Kal Penn), Katy Perry(Katy Perry), Khosla Ventures(Samir Kaul), Kirk Cousins(Kirk Cousins), Mindy Kaling(Mindy Kaling), Mirae Asset Global Investments, Paul George(Paul George), Peter Jackson(Peter Jackson), Phil Rosenthal(Phil Rosenthal), Qatar Investment Authority, Ruby Rose(Ruby Rose), Serena Williams(Serena Williams), Shawn Carter(Shawn Carter), Temasek Holdings, Trevor Noah(Trevor Noah), William Adams(William Adams)

Source: PitchBook

Texas

After a covid-19-related slump in 2020, PitchBook logged a record-breaking $1.5bn figure in corporate-backed funding across 64 deals last year in the Texan ecosystem.

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

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

Houston's Texas Medical Center is situated next to Rice University and has the largest medical complex in the world with more than 60 medical institutions under the non-profit Texas Medical Center Corporation that include hospitals, universities and other academic and research institutions. National Aeronautics and Space Administration's

Top corporate investors in Texas-based deals

Investor	Investments past five years
Cathexis Ventures	11
HOLT Ventures	8
Chevron Technology Ventures	6
Equinor Ventures	6
Northwestern Mutual Future Ventures	6
SAP.io	6
Saudi Aramco Energy Ventures	6
Citi Ventures	5
Coinbase Ventures	5
M12	5

Source: PitchBook

Johnson Space Center is located in Houston and helps foster an aerospace ecosystem.

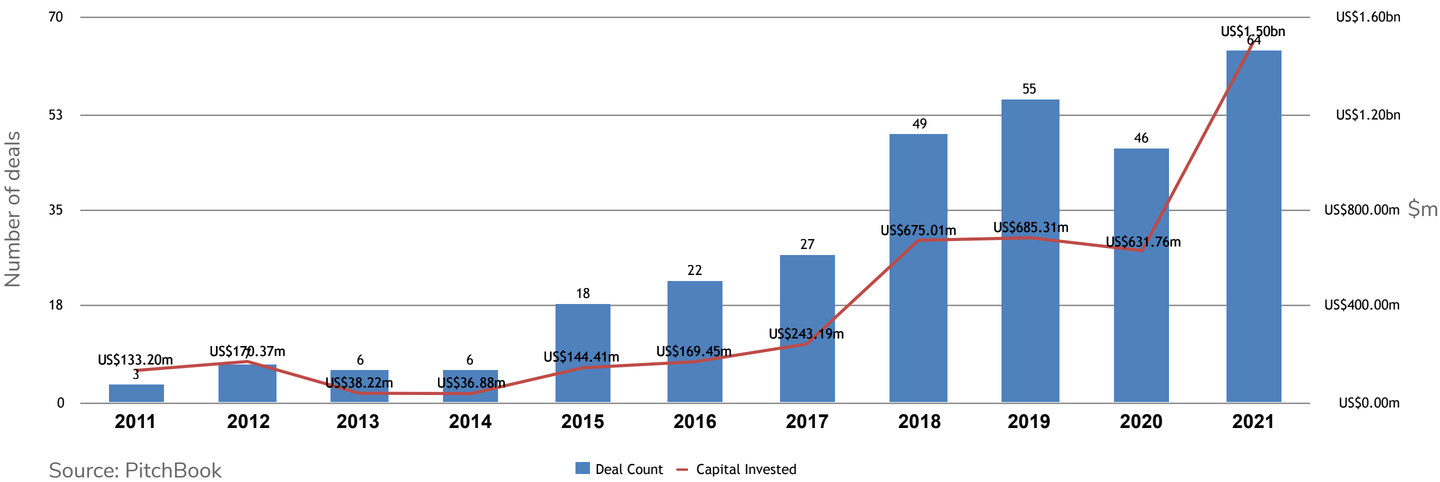
Cathexis Ventures, part of family office Cathexis Holdings, leads the region as the top corporate venture capital (CVC) investor, followed by Holt Ventures, a vehicle for construction machinery provider Caterpillar's dealership subsidiary Holt Cat, as well as Chevron Technology Ventures and Equinor Ventures, investment arms of energy groups Chevron and Equinor.

Northwestern Mutual Future Ventures, a VC unit of financial services firm Northwestern Mutual

Future Ventures, and SAP.io are also among the most active corporate venturers in the state, and are joined by Saudi Aramco Energy Ventures and Citi Ventures, respective subsidiaries of energy and chemicals group Saudi Aramco and financial services providers Citi. Coinbase Ventures and M12 are also identified as top CVC investors in Texas.

Robotics-powered construction technology developer Icon Technology and car and home insurance platform The Zebra, both of which headquartered in Austin, were among the most funded corporate-backed companies in Texas in 2021.

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



Source: PitchBook

Top corporate-backed deals in Texas-based businesses

Companies	Series	Deal date	Deal size ($m)	Post-valuation ($m)	Investors
ICON Technology	11-Aug-2021	Series B	207		8VC, Bjarke Ingels Group, Bond Capital (San Francisco), Bond Corporation, Citi Ventures, Crosstimbers Capital Group, Ensemble VC, Fifth Wall, G-51 Capital, Gaingels, Lennar Ventures, Moderne Ventures(Constance Freedman), Norwest Venture Partners(Jeffrey Crowe), Oakhouse Partners(Jason Portnoy), PROOF, Sand Hill Angels, Upside Growth Partners
The Zebra	12-Apr-2021	Series D	150	1,100	Accel(John Locke), Ballast Point Ventures(Paul Johan), Daher Capital, Floodgate Fund, KdT Ventures, Keith Melnick(Keith Melnick), Koch Disruptive Technologies(Byron Knight), Silverton Partners(Morgan Flager), Weatherford Capital(David Seider)
HighRadius	06-Jan-2020	Series B	125	1,030	Citi Ventures, ICONIQ Capital, Susquehanna Growth Equity(Ben Weinberg), Susquehanna Private Capital(Amir Goldman)
Elevance	10-Jul-2012	Series E	104	831	Genting Genomics(Tan Thay), TotalEnergies Ventures(Veronique Hervouet)
Elevance	13-Jan-2011	Series C	103	286	Mike Giardello(Mike Giardello), Naxos Capital Partners(Carole Piwnica), TotalEnergies Ventures(Veronique Hervouet), TPG(Geoffrey Duyk)
Hedera (Financial Software)	01-Aug-2018		100		Blockchange Ventures, BlockTower Capital, Blockwall Management, CMCC Global, DHVC, Digital Currency Group, Eterna Capital, Fenbushi Digital, FirstMile Ventures(William Miller), Kosmos Ventures, Mind Fund, Multicoin Capital, Struck Capital, Team in Residence, Visary Capital
Outdoorsy	24-Jun-2021	Series D	100	1,694	A-Force Ventures, Adar Capital Partners, Altos Ventures(Anthony Lee), Convivialité Ventures, Greenspring Associates, iAngels, Monashee Investment Management, Moore Strategic Ventures, SiriusPoint (NYS: SPNT)(Siddhartha Sankaran)
SparkCognition	25-Oct-2019	Series C	100	750	Alameda Ventures, Andrew Liveris(Andrew Liveris), Ann-Kristin Achleitner, Blue Horizon Capital, Boeing HorizonX Global Ventures(Brian Schettler), CME Ventures, Dalus Capital(Rogelio De Los Santos), Founders Equity Partners, Hearst Ventures, John Chambers(John Chambers), John Thorton(John Thorton), Kerogen Digital Solutions, Laetitia Garriott de Cayeux(Laetitia de Cayeux), Malcolm Turnbull(Malcolm Turnbull), March Capital(Sumant Mandal), Millennium Technology Value Partners, MSD Capital(Michael Dell), National Grid Partners(Lisa Lambert), Pankaj Patel(Pankaj Patel), Paul Achleitner(Paul Achleitner), Richard Garriott de Cayeux, Sternhill Associates, Sustainable Technologies Fund, Temasek Holdings
Cart.com	11-Aug-2021	Series B	98	403	Active Capital, Arsenal Growth(John Trbovich), Clearco, G9 Ventures, Mercury Fund, Oak HC/FT(Allen Miller), PayPal Ventures, Philip Krim, Sebastian Rymarz, Starboard Star Venture Capital, Titan Capital, Valedor Partners
Firefly Aerospace	29-Apr-2021	Series A	75	1,000	1/1 CAPITAL, Astera Institute(Jed McCaleb), Canon Ball, Dada Holdings(Ryan Boland), Raven One Ventures, Reuben Brothers, SMS Capital Investment, XBTO Ventures
Nuro (Road)	Series D	02-Nov-2021	600	8,600	Alphabet (NAS: GOOGL), Baillie Gifford, Fidelity Management & Research, Gaorong Capital, Kroger (NYS: KR)(Yael Cosset), SoftBank Investment Advisers, Tiger Global Management(Griffin Schroeder), Woven Capital (Tokyo)(Michiko Kato)
Stripe	Series H	15-Mar-2021	600	95,000	Addition(Lee Fixel), Allianz X, AXA (PAR: CS), Baillie Gifford, Blue Opal Capital, Durable Capital Partners, Ethos VC, Fidelity Investments, Franklin Templeton (NYS: BEN), Ireland Strategic Investment Fund, Leyden Ventures, PreIPO Club, Sequoia Capital(Michael Moritz), Silver Lake, Soul Ventures
Chime	Series F	15-Oct-2020	533	14,500	Access Technology Ventures, Aliya Capital Partners, Coatue Management, Dragoneer Investment Group, DST Global, Esalen Ventures, Flourish Ventures, Gaingels, General Atlantic, ICONIQ Capital, JUMP Investors, Kilmahew Ventures, Midway Venture Partners, Next Play Capital, Opera Tech Ventures, Tiger Global Management, Whale Rock Capital Management
Lacework	Series C	07-Jan-2021	525	1,525	Altimeter Capital Management, Alumni Ventures Group, Andrew Wesbecher(Andrew Wesbecher), Catherine Lu(Catherine Lu), Clement Pang(Clement Pang), Coatue Management, Courtney Broadus(Courtney Broadus), D1 Capital Partners, Dev Nag(Dev Nag), Dragoneer Investment Group, Liberty Global Ventures, Snowflake Ventures(Christian Kleinerman), Sutter Hill Ventures(Michael Speiser), Tiger Global Management, Victor Deng(Victor Deng)
Impossible Foods	Series F	13-Mar-2020	500	4,000	Ahmir Thompson(Ahmir Thompson), Alexis Ohanian(Alexis Ohanian), Anton Zaslavski(Anton Zaslavski), DX Ventures, Horizons Ventures, Jaden Smith(Jaden Smith), Jay Brown(Jay Brown), Kal Penn(Kal Penn), Katy Perry(Katy Perry), Khosla Ventures(Samir Kaul), Kirk Cousins(Kirk Cousins), Mindy Kaling(Mindy Kaling), Mirae Asset Global Investments, Paul George(Paul George), Peter Jackson(Peter Jackson), Phil Rosenthal(Phil Rosenthal), Qatar Investment Authority, Ruby Rose(Ruby Rose), Serena Williams(Serena Williams), Shawn Carter(Shawn Carter), Temasek Holdings, Trevor Noah(Trevor Noah), William Adams(William Adams)

Source: PitchBook

Massachusetts and Connecticut

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

Connecticut's strategic location between Boston and New York, paired with its lower cost of living facilitates startups to create their headquarters there. Many leading universities such as Yale University, Fairfield University, the University of Connecticut, Wesleyan University and the United States Coast Guard Academy produce top-notch entrepreneurs.

Massachusetts and Connecticut-based companies raised almost $13.6bn in corporate funding last year across 167 deals, up from the $5.09bn for 130 transactions the year before.

Top corporate investors in Massachusetts and Connecticut-based deals

Investor	Investments past five years
Alexandria Venture Investments	51
GV	43
Salesforce Ventures	21
Intel Capital	15
Pfizer Ventures	15
Takeda Ventures	15
AbbVie Ventures	12
Johnson & Johnson Innovation - JJDC	12
MassMutual Ventures	12
Optum Ventures	12

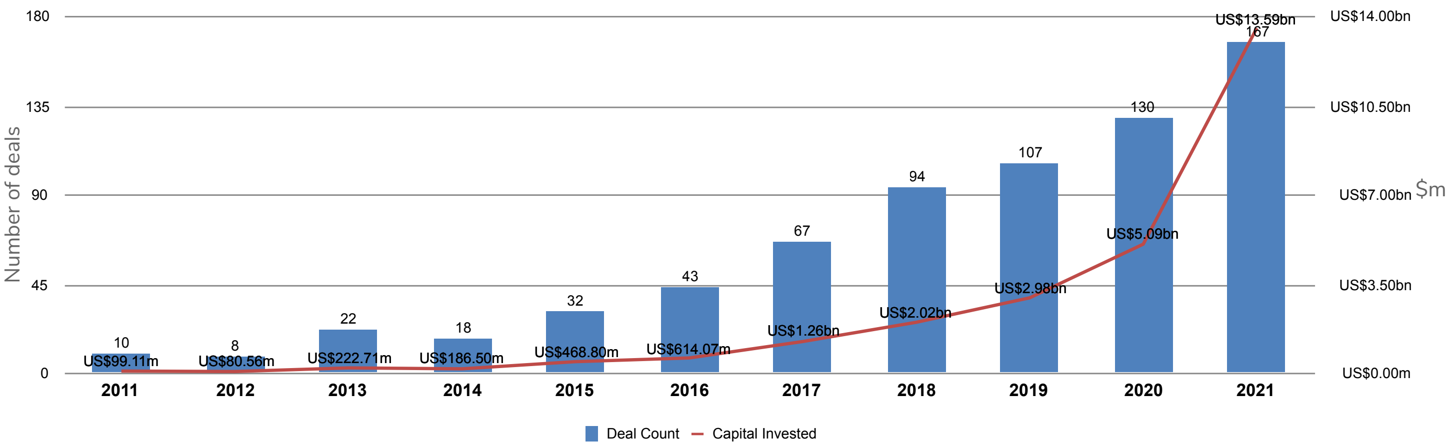
Source: PitchBook

Startups based in greater Boston concentrate their efforts on AI, big data and robotics technologies that can be applied in the pharmaceutical and healthcare industries. Alexandria Venture Investments and GV, both of which have a strong interest in life sciences, lead the region and are joined by Salesforce Ventures and Intel Capital.

Other pharmaceutical groups such as Pfizer, Takeda, AbbVie and Johnson & Johnson and their specialised CVC units Pfizer Ventures, Takeda Ventures, AbbVie Ventures and Johnson & Johnson Innovation – JJDC are among the most prolific corporate investors in the region, as are MassMutual Ventures and Optum Ventures, respective vehicles for insurer MassMutual and healthcare provider Optum.

However, the largest funding rounds involving corporates last year were raised outside of biotech. Cambridge, Mass.-headquartered fusion energy technology developer Commonwealth Fusion Systems as well as Boston-based cybersecurity system provider Snyk and identity authentication software supplier Transmit Security.

Corporate-backed deals in Massachusetts and Connecticut-based businesses 2011-2021



Source: PitchBook

Top corporate-backed deals in Massachusetts and Connecticut-based businesses

Companies	Series	Deal Date	Deal Size ($m)	Post Valuation ($m)	Investors
Commonwealth Fusion Systems	Series B	01-Dec-2021	1,800		Alphabet (NAS: GOOGL), Armada Investment, Bill Gates(Bill Gates), Breakthrough Energy Ventures(Carmichael Roberts), Coatue Management, DFJ Growth(Randall Glein), Emerson Collective, Eni (MIL: ENI)(Claudio Descalzi), Equinor Ventures(Carri Lockhart), Fine Structure Ventures, FootPrint Coalition, Future Ventures (San Francisco), Gray's Creek Capital Partners, Happiness Capital, Hostplus Superannuation Fund, JIMCO Technology Fund(Fady Jameel), John Doerr(John Doerr), JS Capital (M), Khosla Ventures, Lowercarbon Capital, Moore Strategic Ventures, Safar Partners, Sand Hill Angels, Schooner Capital, Senator Investment Group, Soros Fund Management, Starlight Ventures, Temasek Holdings, The Engine(Katie Rae), Tiger Global Management, Time Ventures
Snyk	Series F	08-Sep-2021	605	8,600	Accel(Philippe Botteri), Addition, Alkeon Capital Management, Atlassian Foundation, Atlassian Ventures, Baillie Gifford, BlackRock (NYS: BLK), Boldstart Ventures(Edward Sim), Canaan Partners, Coatue Management, Franklin Templeton (NYS: BEN), Geodesic Capital(Ashvin Bachireddy), Koch Industries, Leaders Fund, Lone Pine Capital, OMERS Ventures, Salesforce Ventures, Sands Capital, T. Rowe Price (NAS: TROW), Temasek Holdings, Tiger Global Management, Whale Rock Capital Management
Transmit Security	Series A	22-Jun-2021	543	2,743	Artisanal Ventures, Citi Ventures, CyberStarts, General Atlantic(Paul Stamas), Geodesic, Geodesic Capital(Ashvin Bachireddy), Insight Partners(Matthew Gatto), SYN Ventures, The Goldman Sachs Group (NYS: GS), Vintage Investment Partners
Indigo Agriculture	Series F	22-Jun-2020	535	2,755	Aberdare Ventures, FedEx (NYS: FDX)(Frederick Smith), Flagship Pioneering(Geoffrey von Maltzahn), frogVentures, Lian Group, MicroVentures, Olive Tree Capital, Olive Tree Growth, Riverstone Holdings, Saltwater Capital, SchindlerAM Ventures
Laronde	Series B	28-Jul-2021	440	1,590	BlackRock (NYS: BLK), Canada Pension Plan Investment Board, Federated Kaufmann Fund (NAS: KAUAX), Fidelity Management & Research, Flagship Pioneering(John Mendlein), LifeSci Venture Partners, Longevity Vision Fund, Nextech Invest, Quan Capital, T. Rowe Price (NAS: TROW), The Invus Group
Neumora	Series A	07-Oct-2021	400	800	Alexandria Venture Investments, Altitude Life Science Ventures, ARCH Venture Partners(Kristina Burow), Catalio Capital Management, Citadel (Hedge Fund), F-Prime Capital(Stacie Weninger), Logos Capital, Mubadala Capital-Ventures, Newpath Partners, Polaris Partners, re.Mind Capital, SoftBank Investment Advisers, The Invus Group, Waycross Ventures
Lendbuzz	Series C	21-Jun-2021	360	390	MUFG Innovation Partners, Poalim Equity, The Goldman Sachs Group (NYS: GS), Wellington Management
Adagio Therapeutics (NAS: ADGI)	Series C	19-Apr-2021	335	1,735	Adimab(Tillman Gerngross), ArrowMark Partners, Bain Capital Life Sciences, Federated Hermes (NYS: FHI), Fidelity Management & Research, Foresite Capital Management, GV, Mithril Capital Management(Ajay Royan), Omega Funds, OrbiMed, Polaris Partners(Terrance McGuire), Population Health Partners, Premji Invest, RA Capital Management(Peter Kolchinsky), Redmile Group, Resolved Ventures
XtalPi	Series C	28-Sep-2020	318		5Y Capital, China Life Private Equity, CICC Capital, CITIC Capital, CMB International Capital, CSII, Hermitage Capital, HuaAn Future Asset, IMO Ventures, Morningside Capital Management, Oceanpine Capital, PICC Capital Investment Management, Prudence Investment Management, Sequoia Capital China, Shunwei Capital, SoftBank Investment Advisers(Eric Chen), Susquehanna Asia Investments, Tencent Investment
DataRobot	Series F	09-Dec-2020	317	2,817	Altimeter Capital Management(Bradley Gerstner), B Capital Group(Rashmi Gopinath), BlackRock (NYS: BLK), Celesta Capital(Steven Fu), Citi Ventures, ClearBridge, Cross Creek(Peter Jarman), DTCP, Glynn Capital, Hewlett Packard Pathfinder(Abhishek Shukla), Late Stage Management, New Enterprise Associates(Anthony Florence), Omega Venture Partners, PruVen Capital, Salesforce Ventures, Sapphire Ventures(Jayendra Das), Silver Lake, Snowflake Ventures, T. Rowe Price (NAS: TROW), Tiger Global Management, West Coast Equity Partners
Cardurion Pharma		27-Oct-2021	300		Bain Capital(Adam Koppel), Bain Capital Life Sciences(Adam Koppel), Polaris Partners(Amy Schulman), Takeda Pharmaceutical Company (TKS: 4502)
DataRobot	Series G	27-Jul-2021	300	6,300	Aliya Capital Partners, Altimeter Capital Management, Counterpoint Global, Fama Ventures, Franklin Templeton (NYS: BEN), GoldenArc, Norwest Venture Partners, RTP Global, Salesforce Ventures, SBI Investment, ServiceNow Ventures, Sutter Hill Ventures(Chad Peets), The Westly Group, Tiger Global Management(John Curtius)
Valo	Series B	11-Mar-2021	300		Atinum Investment (KRX: 021080), E Squared Capital Management, Flagship Pioneering(David Epstein), HBM Partners, Koch Disruptive Technologies, Longevity Vision Fund, Mirae Asset Capital, MissionBlue Capital Partners, Municipal Employees' Retirement System of Michigan, Public Sector Pension Investment Board, The Invus Group
Form Energy	Series D	24-Aug-2021	240	1,200	ArcelorMittal (AMS: MT)(Greg Ludkovsky), Breakthrough Energy Ventures(David Danielson), Capricorn Investment Group, Coatue Management(Jaimin Rangwalla), Energy Impact Partners, Eni Next, Macquarie Asset Management, NGP Energy Technology Partners(Philip Deutch), Perry Creek Capital, Prelude Ventures(Gabriel Kra), Sleeping Bear Capital, Temasek Holdings, The Engine(Katie Rae), TPG(Marc Mezvinsky), VamosVentures
Affinivax	Series C	06-Jan-2021	226	1,086	Bain Capital Life Sciences(Andrew Hack), BlackRock (NYS: BLK), CARB-X, Citadel (Hedge Fund), Cormorant Asset Management, EcoR1 Capital, Foresite Capital Management(Dorothy Margolskee), Logos Capital, Perceptive Advisors, Rock Springs Capital(Kris Jenner), T. Rowe Price (NAS: TROW), Viking Global Investors, Wellington Management, Ziff Capital Partners(Steven Altschuler)

Florida

The Miami metropolitan area – which includes Miami-Dade, Broward and Palm Beach counties – has seen small businesses flourish, and in recent years has evolved into an entrepreneurial hub for innovative technology startups.

Kauffman Index ranked Miami first in startup activity in the country and Mashable named it the US's third emerging tech hub. It now hosts a number of accelerator schemes and startup support initiatives and corporates are gradually ramping up their presence there.

Corporate-backed deals in Florida reached an all-time high in 2021, with PitchBook logging roughly $825m in funding across 27 deals, compared with $271m across 22 transactions the year before.

The money came from corporate venturers including Sprim Ventures, the investment arm of healthcare consulting agency Sprim, SAP.io and Artisan Venture Capital, part of media service agency Artisan Media Group.

Endeavor Catalyst, In-Q-Tel and Raine Ventures, which invest on behalf of non-profit organisation Endeavor, the US intelligence community and merchant bank Raine Group respectively, have also been active in Florida, as have Samsung Venture Investment and Slack Fund, vehicles for electronics manufacturer Samsung and business communication platform Slack. The aforementioned Alexandria Venture Investments and Cathexis Ventures are also prolific in the state.

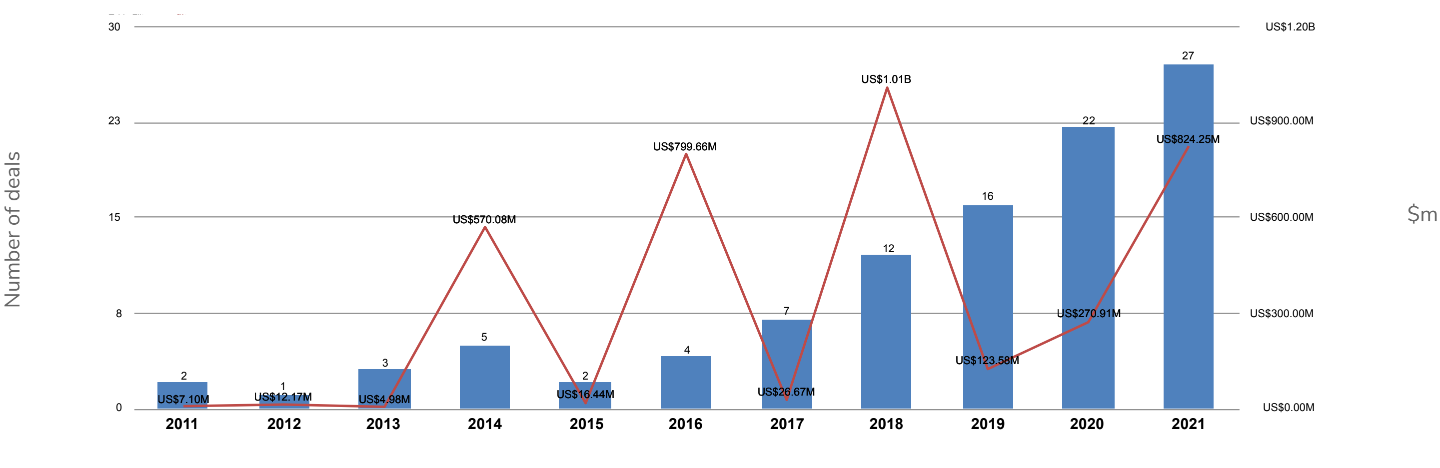
Some of the Florida-based companies that raised considerable corporate funding last year included recurring revenue trading platform Pipe, construction materials ordering service Material Bank, export finance provider Marco Financial, severe RNA-mediated disease therapy developer Expansion Therapeutics and banking software developer Finxact.

Top corporate investors in Florida-based deals

Investor	Investments past five years
SPRIM Ventures	7
SAP.io	4
Artisan Venture Capital	3
Endeavor Catalyst	3
In-Q-Tel	3
Raine Ventures	3
Samsung Venture Investment	3
Slack Fund	3
Alexandria Venture Investments	2
Cathexis Ventures	2

Source: PitchBook

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



Source: PitchBook

Top corporate-backed deals in Florida-based businesses

Companies	Series	Deal Date	Deal Size ($m)	Post Valuation ($m)	Investors
Magic Leap	07-Mar-2018	D	963	6,413	Alibaba Group (HKG: 09988)(Joseph Tsai), Alphabet (NAS: GOOGL)(Donald Harrison), AT&T (NYS: T)(John Donovan), Axel Springer Digital Ventures, Chasella, EDBI, Fidelity Management & Research, Grupo Globo, Janus Henderson Investors (NYS: JHG), JPMorgan Chase, Quantum Global Partners, Saudi Arabia's Public Investment Fund, StraightPath Venture Partners, Syren Capital Advisors, T. Rowe Price (NAS: TROW), Temasek Holdings, Troy Capital Partners
Magic Leap	02-Feb-2016	C	793	4,500	Alibaba Group (HKG: 09988)(Joseph Tsai), Alphabet (NAS: GOOGL)(Sundar Pichai), Andreessen Horowitz, Fidelity Investments, Hartford Financial Services Group (Mutual Fund Business), JPMorgan Chase, Kleiner Perkins, Kohlberg Kravis Roberts (NYS: KKR), Legendary Entertainment(Thomas Tull), Morgan Stanley (NYS: MS), Obvious Ventures, Principal Asset Management, Qualcomm Ventures(Richard Tapalaga), Sahsen Ventures, T. Rowe Price (NAS: TROW), Vulcan Capital, Warner Bros. Entertainment, Wellington Management
Magic Leap	14-Oct-2014	B	542	1,542	Alphabet (NAS: GOOGL)(Sundar Pichai), Andreessen Horowitz, Fidelity Investments, Kleiner Perkins, Kohlberg Kravis Roberts (NYS: KKR), Legendary Entertainment(Thomas Tull), Obvious Ventures, Peter Diamandis(Peter Diamandis), Qualcomm Ventures(Richard Tapalaga), Vulcan Capital
Pipe	25-Jul-2021		250	2,000	10X Capital, 3L Capital, Browder Capital, Captain Partners, Chamath Palihapitiya(Chamath Palihapitiya), CreditEase Fintech Investment Fund, Fin Venture Capital, Grand Slam Partners, Greenspring Associates(Ashton Newhall), Guy Oseary(Guy Oseary), HOF Capital, HubSpot (NYS: HUBS)(Andrew Lindsay), Joseph Lonsdale(Joseph Lonsdale), MaC Venture Capital, Mango.vc, Mantis VC, Marc Benioff(Marc Benioff), Morgan Stanley (NYS: MS), MSD Capital, National Investments Company, Next47(Matthew Cowan), Oceanic Partners, Okta (NAS: OKTA), Okta Ventures, Parkpine Capital, Raptor Group(James Pallotta), Republic, Republic Capital New York, Rosecliff Venture Partners, SBI Investment, Seven Seven Six(Alexis Ohanian), Shopify (TSE: SHOP)(Brandon Chu), Side Door Ventures, Siemens (ETR: SIE), Slack Fund, Social Capital, Sound Ventures, Sutton Capital, Thirdbase Capital, Time Ventures(Marc Benioff), Vis Capital
Material Bank	06-May-2021	C	100	975	Annox Capital(Robert Mylod), Bain Capital Ventures(Merritt Hummer), Bond Capital (San Francisco), Burch Creative Capital, Durable Capital Partners, General Catalyst(Holly Maloney), IPD Capital, Lead Edge Capital, Raine Ventures
Marco	13-Jul-2021		82	27	342 Capital, Antler (Private Equity), Antler Elevate, Arpegio, Flexport, Florida Funders, Fox Ventures, Kayyak Ventures(Cristóbal Silva Lombardi), Naman Budhdeo(Naman Budhdeo), Phil Bentley, Struck Capital(Yida Gao), Tresalia Capital, Village Global
Expansion Therapeutics	29-Sep-2021	B	80	100	5AM Ventures, Cormorant Asset Management(Raymond Kelleher), Kleiner Perkins(Beth Seidenberg), Logos Capital, Novartis Venture Fund(Laura Brass), RA Capital Management(Andrew Levin), Sanofi Ventures, Surveyor Capital, Westlake Village BioPartners(Beth Seidenberg)
Finxact	18-Feb-2021	A	74	326	Accenture Ventures, Ally Ventures, American Bankers Association, First Data, Georgian, LiveOak Venture Partners, SunTrust Bank, T.N. Incorporation, Truist Ventures, Woodforest National Bank
Pipe (Other Financial Services)	24-Jun-2020		66	166	Anthemis (Specialized Finance)(Jillian Williams), Chapter One Ventures, Craft Ventures(David Sacks), Cross Culture Ventures, Fika Ventures, Fin Venture Capital(Peter Ackerson), Ground Up Ventures, Lachy Groom(Lachy Groom), Liquid 2 Ventures, MaC Venture Capital, Naval Ravikant(Naval Ravikant), Raptor Group, Reshape (Investor), Slack Fund, Tribe Capital, Uncorrelated Ventures, Weekend Fund, Work Life Ventures
X-Vax	18-Jul-2019	A	56		Adjuvant Capital, Alexandria Venture Investments, Founders Fund, Helicase Venture, Johnson & Johnson Innovation - JJDC, Scientia Ventures, Serum Institute of India, Thynk Capital
Everphone	28-Jul-2020	B	38	104	AlleyCorp, DTCP, NIBC Holding, Signals Venture Capital(Marcus Polke), Tony Jamous
ObvioHealth	01-Jul-2021	B	31		AT Capital Group, Dedalus(Giorgio Moretti), Novotech CRO(John Moller), SPRIM Ventures(Michael Shleifer)
Material Bank	30-Apr-2020	B	28	248	Bain Capital Ventures(Merritt Hummer), Barry Sternlicht(Barry Sternlicht), Raine Ventures(Jeffery Sine)
Clearsense	11-Nov-2020		27		Caron Capital, KMMT Capital, Providence Ventures, Wildermuth Endowment Strategy Fund
Aspen RxHealth	18-Dec-2020	A	27	64	Bessemer Venture Partners(Stephen Kraus), dRx Capital(Neil Tiwari), Flare Capital Partners(Michael Greeley), Humana (NYS: HUM), McKesson Ventures(Jennifer Carter), Takeda Digital Ventures(Bruce Meadows)

Midwest

The US Midwest startup ecosystem – spanning across cities such as Minneapolis, Chicago, Cincinnati, Detroit, Indianapolis, Pittsburgh, Columbus, and Cleveland – have also experienced considerable growth in corporate funding, reaching about $371m last year, making it the largest figure in the past decade. It was spread across nine deals, slightly lower than the 11 logged in 2020 or 12 in 2017.

CVC investors active in the Midwest region include Leaps by Bayer, Gen7 Investments, Syngenta Group Ventures and Accenture Ventures, respective vehicles for pharmaceutical firm Bayer, media company Forum Communications, agrochemical producer Syngenta and consultancy Accenture.

Assurant Ventures, Comporium Ventures and Evergy Ventures, part of insurer Assurant, communications equipment maker Comporium and energy utility Evergy respectively, also featured the roster, as did Gradient Ventures, Holt Ventures and research services provider RTI International.

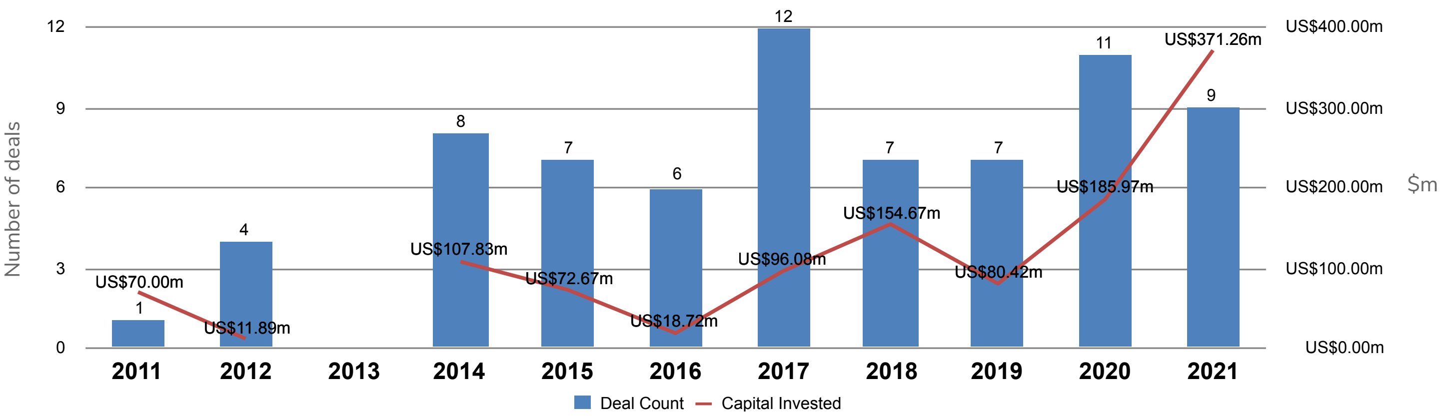
Oncology therapy developer Wugen and colorectal cancer diagnostics technology developer Geneoscopy, both of which headquartered in St Louis in the US state of Missouri, were the most corporate-funded startups last year.

Top corporate investors in Midwest-based deals

Investor	Investments past five years
Leaps by Bayer	6
Gen7 Investments	3
Syngenta Group Ventures	3
Accenture Ventures	2
Assurant Ventures	2
Comporium Ventures	2
Evergy Ventures	2
Gradient Ventures	2
HOLT Ventures	2
RTI International	2

Source: PitchBook

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



Source: PitchBook

Top corporate-backed deals in Midwest-based businesses

Companies	Series	Deal Date	Deal Size ($m)	Post Valuation ($m)	Investors
Wugen	Series B	09-Jul-2021	172		Abingworth Management(Bali Muralidhar), Aisling Capital(Stacey Seltzer), Alexandria Venture Investments, Alpha Wave Global, Fidelity Management & Research, Intermediate Capital Group (LON: ICP)(Peter Kiener), Lightchain Capital(Drew Dennison), LYZZ Capital(Kevin Li), RiverVest Venture Partners(John Mckearn), Sands Capital, Tybourne Capital Management(Bosun Hau), Velosity Capital
Geneoscopy	Series B	16-Nov-2021	105		BioGenerator, Cultivation Capital(Bobby Sandage), Innovatus Capital Partners, LabCorp Ventures, Lightchain Capital(Drew Dennison), Morningside Group(Jason Dinges), NT Asset
C2FO	Series F	27-Feb-2018	100		Allianz X(Nazim Cetin), Mithril Capital Management(Ajay Royan), Mubadala Capital-Ventures(Luke Nicklin), Temasek Holdings(Pradyumna Agrawal), Union Square Ventures(John Buttrick)
Essence Healthcare	Series 3	12-May-2014	71	701	Blue Venture Fund(John Banta), Camden Partners(Christopher Kersey), Deerfield Management, Kleiner Perkins(John Doerr), Sandbox Industries(Matthew Downs)
Essence Healthcare	Series 2	26-Oct-2011	70	265	Blue Venture Fund(John Banta), Camden Partners(Christopher Kersey), Deerfield Management, Kleiner Perkins(John Doerr), Passport Capital(John Burbank), Sandbox Industries(Matthew Downs)
TrueAccord	Series B1	23-Sep-2020	63		American Bankers Insurance Group, Arbor Ventures(Melissa Guzy), Assurant Ventures, Caffeinated Capital, David Waxman(David Waxman), Kevin Maher(Kevin Maher), Nyca Partners(John Morris), SciFi VC, Viola FinTech(Daniel Tsiddon)
C2FO	Series E	01-Aug-2015	43	750	BlackPine Group, Citi Ventures(Arvind Purushotham), Mithril Capital Management(Ajay Royan), Summerhill Venture Partners(Joe Catalfamo), Temasek Holdings(Pradyumna Agrawal), Tiger Global Management, Union Square Ventures(John Buttrick)
Digital Diagnostics	Series A	12-Sep-2018	33	182	8VC(Drew Oetting), Alpha Edison(Robey Miller), DVI Equity Partners, Heritage Provider Network, Optum Ventures(Sarah London)
NewLeaf Symbiotics	Series C	07-Sep-2017	30	80	Alumni Ventures Group(Michael Madden), Koch Fertilizer, Leaps by Bayer, Lewis & Clark AgriFood, Lewis & Clark Ventures, Middleland Capital, Open Prairie Ventures(Jason Wrone), Otter Capital(John Pasquesi), Pangaea Ventures(Keith Gillard), RockPort Capital Partners(Daniel Hullah), S2G Ventures(Sanjeev Krishnan), Syngenta Group Ventures
PierianDx		02-Nov-2021	30	127	ATW Partners(Kerry Propper), Health Catalyst Capital Management, Inova Health System, OrbiMed, RTI International(Matthew Jenkins), SJF Ventures
Moov (Financial Software)	Series A	01-Dec-2020	27	110	Aaron Frank(Aaron Frank), Abstract Ventures(Ramtin Naimi), Andreessen Horowitz(Angela Strange), Bain Capital Ventures(Matthew Harris), Brad Bialas(Brad Bialas), Brandon Dewitt(Brandon Dewitt), Bruno Werneck(Bruno Werneck), Bryan Kelly(Bryan Kelly), Calanthia Mei(Calanthia Mei), Canapi Ventures(Dan Beldy), Charley Ma(Charley Ma), Commerce Ventures(Daniel Rosen), Daniel Holt(Daniel Holt), Don Parker(Don Parker), Emily White(Emily White), Gokul Rajaram(Gokul Rajaram), Gradient Ventures(Zachary Bratun-Glennon), Imagine Capital Group, Jason Henrichs(Jason Henrichs), Justin Overdorff(Justin Overdorff), Mark Goldberg(Mark Goldberg), Mengxi Lu(Mengxi Lu), Michael Ferrari(Michael Ferrari), Michael Giles(Michael Giles), Peter Levine(Peter Levine), RRE Ventures(Maria Palma), Shawn Ward(Shawn Ward), Sima Gandhi(Sima Gandhi), Steven Hufford(Steven Hufford), The Veridian Group(Nick Evens), Tom Carden(Tom Carden), Tyler McIntyre(Tyler McIntyre), Uncorrelated Ventures(Salil Deshpande), William Hockey(William Hockey), Zachary Bruhnke(Zachary Bruhnke)
PierianDx	Series B	13-Nov-2019	27	102	Album VC(Jeff Burningham), ARUP Laboratories, ATW Partners(Kerry Propper), Health Catalyst Capital Management, Inova Health System, Inova Strategic Investments(Peter Jobse), Intermountain Ventures, RTI International(Matthew Jenkins), SJF Ventures, TLSG Investments
TripleBlind	Series A	18-Oct-2021	24	109	Accenture Ventures(Shail Jain), Basecamp Fund, Clocktower Technology Ventures, Dolby Family Ventures(Andrew Krowne), Flyover Capital(Thad Langford), General Catalyst(Quentin Clark), KCRise Fund, Mayo Clinic(John Halamka), NextGen Venture Partners, Parity Innovation Fund, Wavemaker Three-Sixty Health
TrueAccord	Series B	13-Nov-2017	22		American Express Ventures(Dana Eli-Lorch), Arbor Ventures(Melissa Guzy), Assurant Ventures, Caffeinated Capital, Capital One Ventures, Experian Ventures, Felicis Ventures, Nyca Partners(John Morris), OS Fund(Jeffrey Klunzinger), TenOneTen Ventures, TI Platform Management
ZAF Energy Systems	Series A	30-Apr-2020	22	80	Catalus Capital Management, Coventry Asset Management(Gen Fukunaga), Elevage Capital Management, HOLT Ventures(Meg Paulus)

Innovative region

China's ecosystem evolves under pressure

- China's top CVCs under pressure to reduce non-core investments
- Focus shifts to LP stakes and national strategic interests
- Overseas investments closely watched

A review of China's venture activity last year will be published this month in the World of Corporate Venturing 2022 by Kaloyan Andonov. This section looks first at the corporate venturing upheaval in the country through regulatory pressure before the three following academic papers look at how CVCs and VCs formed in differing ways to their US and European peers. This topic will be explored at the next GCV Symposium in London on May 18-19 before the GCVI Summit convenes in California on June 20-22

By James Mawson
Editor-in-chief

Take probably the best venture capital exit you can think of, such as say Meta (then known as Facebook's) $22bn acquisition of social messaging application WhatsApp in 2014. It was a big win for Sequoia Capital, the company's only venture investor, which turned its $60m investment into a reported $3bn.

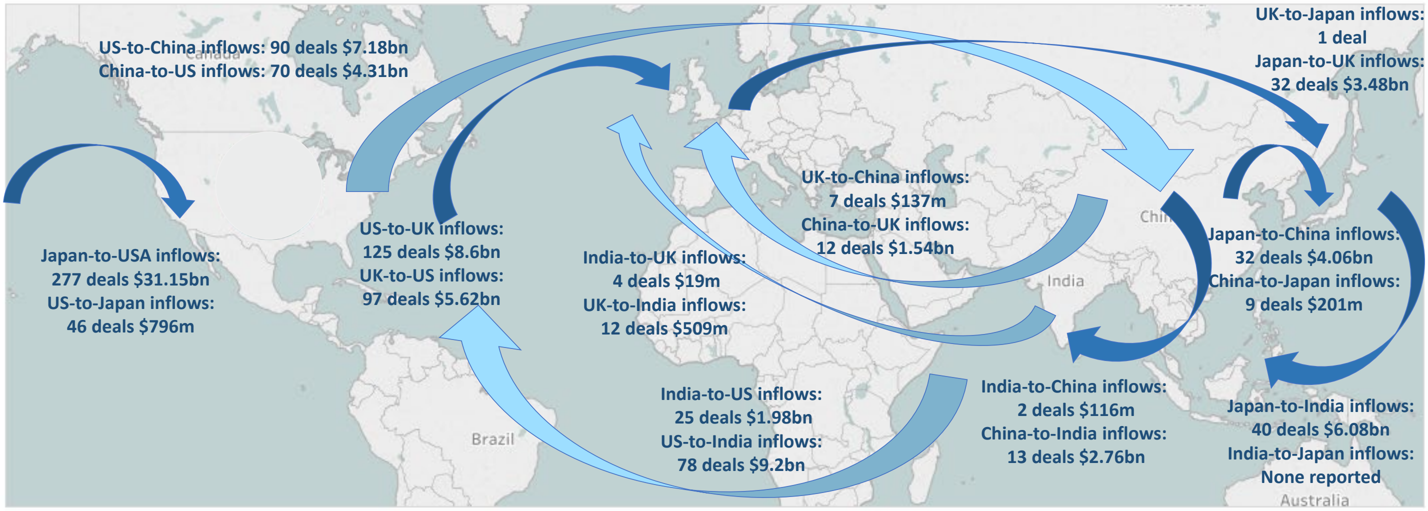
Then multiply it. China-based gaming and internet group Tencent at the end of last year said it would pay a $16.4bn dividend in the stock of China's second-biggest ecommerce group, JD.com, of which it is the largest shareholder.

This comes seven years after Tencent paid $214.7m in cash and transferred its e-commerce businesses QQ Wanggou and Paipai and a minority stake in Yixun to JD.com. Tencent took a 15% stake in JD.com at that time and also agreed to buy a further 5% at its May 2014 flotation on the Nasdaq stock exchange.

More importantly, JD formed a strategic partnership with Tencent, giving JD exclusive access to Tencent's WeChat and Mobile QQ platforms, which then had more than 200 million users and now have 1.2 billion.

But whereas Sequoia has set up a master fund structure to try and

Capital inflows into US corporate-backed deals 2021



* $ amounts are total amounts reported in rounds, not just corporate contribution

** Some deals may be double counted if syndicates include corporate backers from different geographies

hold its assets longer, especially after they list, Tencent is being forced in the other direction.

As the Financial Times notes: "The Chinese government is forcing Chinese tech groups to retract the financial tentacles that tie them together to the detriment of consumers – and state power."

The HK$127bn ($16.4bn) transfer cuts down Tencent's stake in JD from 17% to 2%, leaving Walmart as JD's largest investor. US-listed retailer Walmart acquired 5% of JD.com in June 2016 and agreed a strategic partnership.

Last month, Tencent trimmed its stake in Singapore-based, listed shopping and gaming application Sea by selling shares worth $2.8bn to $3bn. Tencent sold the shares at $208 each and, after the sale, Tencent's stake in Sea declined to 18.7% from 21.3%.

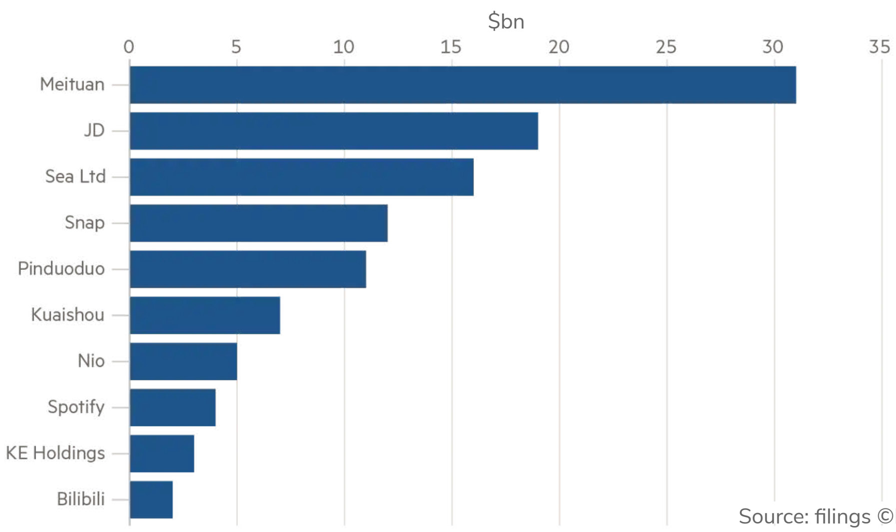
Tencent had participated in five rounds of funding to Sea between 2014 and 2017's initial public offering, investing a total of approximately $268m, according to its prospectus. Tencent's remaining 18.7% stake was worth about $19bn, more than 70 times its pre-IPO investment, according to news provider Nikkei.

The divestments were a reversal of Tencent's prior policy to hold and invest more in portfolio companies even after their flotations.

Last summer, China-listed Meituan raised an additional $400m from Tencent. Tencent increased its share of the local services and ecommerce group to 17.2% from 17%. Meituan said it would use the proceeds for technological innovations, such as unmanned vehicles and delivery drones, and it remains Tencent's most valuable holding.

The FT added: "Over the past decade Tencent has been one of the country's most active investors, nurturing hundreds of tech startups and slowly accruing a publicly traded investment portfolio valued at Rmb1.2tn ($190bn) as of September 30, equalling roughly one-third of its total market value....

Tencent's most valuable stakes



Source: filings ©FT

"Tencent shares rose 4% following the dividend announcement. They are down a fifth this year. It will remain a risky investment so long as Beijing's break-up of big Chinese tech groups continues."

Similar moves to unwind the conglomerate model of growth investing at Alibaba, Bytedance and other active CVCs in the country will have potentially important ramifications for China's innovation ecosystem given the historical make-up of the CVC and VC industry.

Alibaba-backed financial services provider Ant Group shut down its online crowdfunded medical aid service Xianghubao on January 28.

China's Banking and Insurance Regulatory Commission (CBIRC) has said since last year that all online financial activities must be overseen and licensed by regulators. Mutual aid platforms, such as Xianghubao – with 100 million members - and Tencent-backed Waterdrop, are not licensed by the CBIRC and have been closed.

ByteDance, the China-based owner of short-form video app TikTok, said it was dissolving its corporate venture capital team, according to newswire Bloomberg.

ByteDance said it wanted to "strengthen the focus of the business, reduce investments with low connection (to the main business) and disperse employees from the strategic investment department to various lines of business," ByteDance told CNBC.

Instead, some corporations are focusing more on externally-managed VC funds to avoid regulatory pressure.

China-listed Yangzijiang Shipbuilding has committed RMB900m ($141.5m) as a limited partner in Wuxi Jinyu Yangchuan Venture Capital, which is managed by Tibet Gold Investment Management. Yangzijiang has committed 90% of the fund, which will provide seed capital in China's Jiangsu province's healthcare, new materials, information technology services, smart manufacturing, new energy and ecological environment industries over the next seven years.

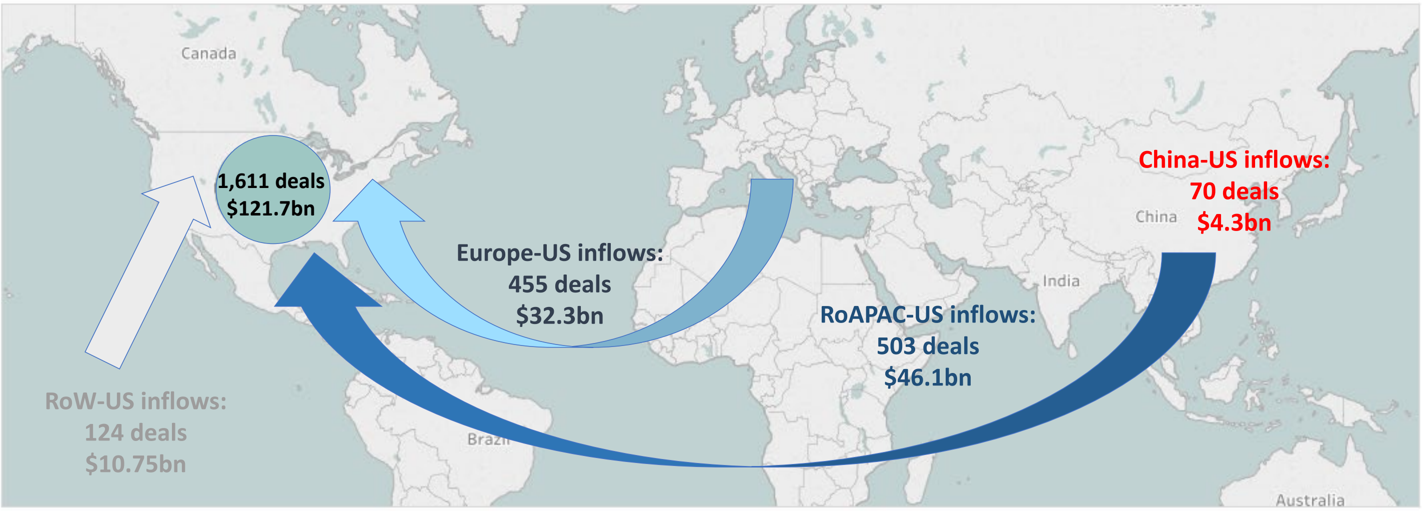
After a quiet end to 2020 as Alibaba and its related Ant Financial group suffered regulatory pressure, the company's corporate venturing units have bounced back by the end of 2021 and helped the country reach record investment activity last year.

Venture-capital investors put $129bn into more than 5,300 startups in China in 2021, higher than the market's last record of around $115bn for 2018, according to data from investment database Preqin quoted by the Wall Street Journal (WSJ).

And where the CVCs are investing directly it seems more focused on government-approved investment areas of strategic importance to the country, such as deep tech and chips.

The WSJ added: "Unlike in previous years, when most Chinese tech

Capital inflows into US corporate-backed deals 2021



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funding went to internet startups in e-commerce, the bulk of the money in the past year headed into areas that hew more closely to Communist Party priorities, such as semiconductors, biotechnology and information technology....

"The country's new five-year plan labelled technology development a matter of national security and announced aims to increase spending on research and development by 7% annually – higher than budget increases for its military. The economic blueprint included plans to speed up development of technologies from chips to artificial intelligence and quantum computing, which officials hope can reduce China's reliance on foreign providers or allow it to take the lead in advanced technologies."

Tao Liu has recently moved to the strategic investment group at China-based online retailer Alibaba Group.

He will back cloud and tech companies having spent the past seven months at sister company Alibaba Cloud making undisclosed technology investments on semiconductors and silicon, sensing, artificial intelligence (AI) and virtual reality.

Alibaba Cloud, the cloud services subsidiary of e-commerce group Alibaba, last year pledged $1bn to an initiative to support tech startups and developers. Project AsiaForward, as the initiative was dubbed, is intended to support some 100,000 recipients over the next three years while also providing training for prospective software developers and linking entrepreneurs to venture capital investors.

In addition, Chinese technology companies are considering expanding overseas much earlier in their lifecycles, a venture capitalist told CNBC – marking a shift in attitude among firms in the world's second-largest economy.

That shift has been prompted in part by China's tighter regulatory scrutiny on technology as well competitive pressure in certain sectors, according to Ben Harburg, managing partner at venture capital firm MSA Capital.

He added early-stage companies in sectors from artificial intelligence to health care were going global or "thinking about plotting their globalisation strategy".

Such Chinese firms could find that their business models work in emerging markets in particular, Harburg said.

Xiaomi is now the third-largest smartphone player by market share globally – thanks to big gains in India – while Tencent and Alibaba have also been investing more overseas.

New research by Harvard Business Review into "Xiaomi's growth strategy suggests that the Beijing-based electronics giant has developed a blended approach, borrowing elements of both traditional ecosystem and CVC firms to create a broad ecosystem of strongly-supported partner ventures....

"Xiaomi structures its investments to incentivise innovation and build trust while still ensuring alignment, proactively fosters an ecosystem mindset throughout its organisation, and takes a deliberate, measured approach to expanding the scope of its ecosystem over time."

Other Chinese companies, such as Huawei, Oppo, and Vivo, are also pursuing strategies modelled on Xiaomi's blended approach, HBR added.

Nevertheless, regardless of approach, China will require the country's biggest firms to get approval for any investment deals they make.

The Cyberspace Administration of China, the country's main internet regulator, recently enacted a new protocol that means internet companies must obtain formal approval for investment deals if they have 100 million users or more or have posted revenue of at least RMB10bn ($1.5bn) in the past year, people told the WSJ.

The Cyberspace Administration of China said on WeChat that it has not publicly announced any new rules.

But just as China tightens control on domestic firms the US has started paying closer attention to inward venture investment into the Asian country, while other countries, such as the UK *(see box on p87)* tighten their own scrutiny of dealmaking.

A proposed new screening regime would have seen up to 43% of US investment in China between 2000 and 2019 come under review under the proposed new legislation.

Lawmakers have debated the so-called National Critical Capabilities Defence Act (NCCDA), which was introduced by US senators last year, and would follow rules focused on Chinese investment into the US through the Committee on Foreign Investment in the United States (CFIUS) and Foreign Investment Risk Review Modernization Act of 2018 (FIRRMA).

But other countries are continuing to invest *(see box below)*, potentially limiting impact as the world moves into bipolar areas of geopolitical and financial influence between its two largest economic and military superpowers: China and the US.

One question, if in the legend of giants Mothra and Godzilla, which one is analogous to the US and which to China?

Alternative ways into China

South Korea-based financial services company Qraft Technologies has raised $146m from SoftBank Group.

Part of SoftBank's money will be used to help the company expand in the US and China while an undisclosed amount will be used to fund share purchases from undisclosed investors. Qraft said it would open offices across New York, San Francisco as well as Hong Kong.

SoftBank said it would become a customer of Qraft to run an artificial intelligence (AI)-enabled public portfolio management system.

Qraft develops and operates deep learning-based algorithms that provide portfolio weight signals which can be alpha-generative. The company has used its AI engine for its NYSE-listed exchange-traded funds (ETFs).

Kentaro Matsui, managing partner at SB Investment Advisers, which runs the two Vision Funds, and former managing director at SoftBank Group, said: "Qraft can revolutionise the way financial institutions manage public equity assets, by providing their own AI technologies that have been tested and proven in the US equity market."

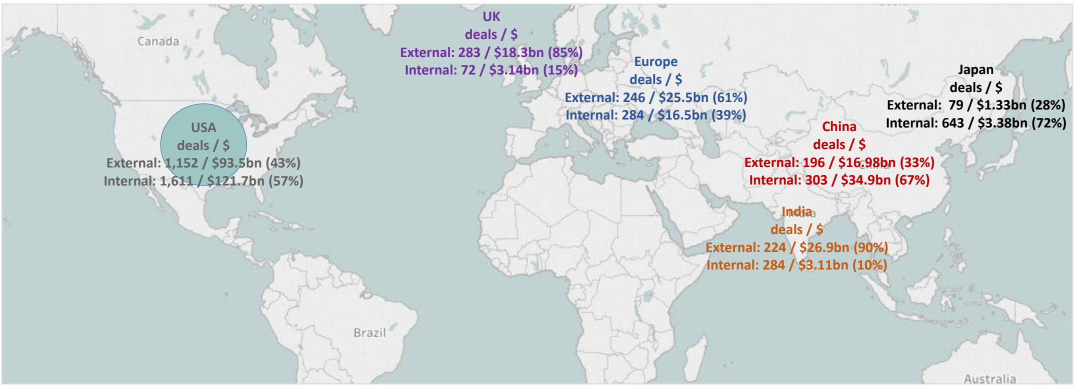
Robert Nestor, former president of Direxion ETFs and head of BlackRock's iShares Factor ETF business, who recently took charge of Qraft's US expansion as US CEO, said outside of trading, AI technology had only started to change the $100tn asset management industry.

In a call he added that traditionally managers tried to find alpha - the excess return on an investment after adjusting for market-related volatility and random fluctuations – by developing a hypothesis and testing it against data to support disprove the model. With AI, however, the algorithms can look at the data and come up with models to generate outperformance.

SoftBank's private company data from its portfolio and insights could bring unique insights to public trading Nestor said.

"It is an inevitable evolution," he added.

Inflows into corporate-backed deals in major regions



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UK implements security act

The UK's government's switch-on moment for its National Security Investment Act that came into force last month followed insights from Lord Gerry Grimstone, UK Minister for Investment at the UK's Department for International Trade (DIT) and the Department for Business, Energy and Industrial Strategy (BEIS), at the GCV Symposium in November .

The act requires minority investments in sensitive sectors to be reviewed before clearance, similar to the US's CFIUS and FIRRMA regulations.

Lord Grimstone had promised clarity and speed in his earlier keynote discussion at the 10th GCV Symposium but also the prospect of the "more investment opportunities than I have seen in my lifetime" due to the reinvention of the economy around sustainability and decarbonisation.

Hosted the Institute of Chartered Accountants in England and Wales (ICAEW), Martin Callanan, a UK Minister in the House of Lords, explained the rationale behind the move that will affect deals in 17 core sectors that might impact UK national security – similar to approval rules in the US (CFIUS), Germany, Australia and Canada.

Chris Blairs from the UK ministry running the supervision unit, BEIS, and Andy Sellars at the CSA Catapult representing entrepreneurs and researchers from a majority (nine) of the affected tech areas said about a third of deals could require notifications with maybe 10 reviewed based on prior analysis, although lawyers and advisers said almost all public deals would likely be put forward.

However, the Act replaces the Enterprise Act of 2002, which has only had about a dozen cases called in for review and none blocked, including the controversial Newport Wafer deal in the summer when the UK's only fab was seized by one of its corporate venturing investors for failure to hit a conditional clause (delivery of chips) – a type of negative ratchet often used by Chinese investors. Although the Newport deal is nominally still under review Companies House shows a transfer of shares have happened - a move very hard to unpick ex post facto, lawyers said.

Of greater impact than a potentially toothless Act that just slows down dealmaking and creating more work for lawyers, therefore, will be how BEIS approaches protecting university researchers and startups before a controlling (defined as a share of at least 25% of shares or voting rights or with material impact on governance) takeover or investment happens. Here a little more progress is being made behind the scenes to limit university vice-chancellors' proclivity to take hostile actors' money but almost nothing on the training for venture investors and procurement support for startups to tackle cybersecurity.

Nicole Perlroth's sobering investigation into the cyber weapons arms race, This Is How They Tell Me the World Ends, has just been named Financial Times and McKinsey Business Book of the Year for 2021 and should be read more inside government as well as business.

Innovative region

Why do incumbents fund startups? A study of the antecedents of corporate venture capital in China

> Research policy, forthcoming, Available at [SSRN]

By Gary Dushnitsky, London Business School
and Lei Yu, Sun Yat-sen University

Entrepreneurial ventures are an important source of economic growth and technological advance. China is a vibrant entrepreneurial setting, second only to the US in total startup numbers and funding amounts.

Increasingly, incumbent firms seek to harness innovative ventures through a practice known as corporate venture capital (CVC).

Corporate venturing has expanded well beyond the US setting. While CVC investments in North America accounted for more than 60% of global CVC deals in 2013, by 2018 the proportion had declined to 41%, and is now on par with CVC activity in Asia, according to 2019 Global CVC Report by CB Insights. Our integrated dataset covers 3,298 public firms in 286 industries; of which 173 firms in 70 industries disbursed 3,571 CVC investments between 2013 and 2017.

China's CVC objectives

Cross-industry analyses of CVC patterns in China underscore a novel objective by making equity investments in entrepreneurial ventures; one that is predominantly associated with harnessing growth through market expansion rather than the prevailing view of CVC as a window on technology.

"We believe that the education industry will have a great development in the future. There are many opportunities in the industry. We intend to grasp these opportunities, but it is not suitable for us to develop some of them internally. Therefore, we use our capital, business, and resources to support the external ventures," according to Bangxin Zhang, chairman and CEO of TAL Group at its 2016 Annual Conference.

Joseph Tsai, vice-president of Alibaba, a year later said: "When evaluating the potential target, we consider: (1) whether the firm can help us acquire more users and improve their engagement, (2) whether the firm can help us improve customer's experience, (3) whether the firm can help us expand our products and services."

While CVC activities in developed countries are usually driven by technological ferment and a strong corporate research and development (R&D) base, we find only partial support for such factors in China. Specifically, technological advance can be an important inducement for CVC activities, but its effects do not rely on the R&D bases within a particular industry. In China, industries that provide firms with resources and opportunities to expand (namely, munificent industries) exhibit a substantial level of CVC activity.

This is supported by responses from 50 CVCs, such as Tencent, Baidu, and Alibaba, which reveal that, contrary to peers in the West, their focus is not on assimilating new technologies and capabilities. Rather, they are focused on profiting by deploying their existing resources in rapidly growing settings, and building relationships with partners in their industry.

Top CVC industries

SIC code	Industry description	CVC intensity	Notable CVC investors
5961	Catalog and Mail-Order Houses	22.75	JD.Com, Vipshop
7370	Computer Programming, Data Processing, and Other Computer Related Services	15.12	Tencent, Alibaba
3944	Games, Toys, and Children's Vehicles, Except Dolls and Bicycles	14.8	Rastar Group, Alpha Group
2711	Newspapers: Publishing, or Publishing and Printing	9.75	Huawen Media, Zhejiang Daily Digital
8200	Educational Services	8.56	Tal Education Group, New Oriental Ed & Tech
7812	Motion Picture and Video Tape Production	6.43	Beijing Enlight Media, Huayi Brothers Media
4812	Radiotelephone Communications	6	China United Telecommunication
5140	Groceries and Related Products	5.75	Baofeng Group
3711	Motor Vehicles and Passenger Car Bodies	5.61	Saic Motor Corp, Baic Motor Corp
5700	Home Furniture, Furnishings and Equipment Stores	5.5	Suning.Com

* *In this table, we list the top 10 industries with most active CVC activities across 2013-2017. CVC intensity is calculated as the total CVC investment rounds of all firms in the industry during 2013-2017 divided by the number of unique firms in the industry. We only list the industries with 3 firms or more.*

The respondents provided information about the CVC's main objectives. Each objective was rated on a 5-item Likert scale where the values 1 and 5 designate 'Least Important' and 'Highly Important,' respectively.

National directive

Given the command-and-control nature of the Chinese context, we advance a third government-based argument, whereby CVC is most salient in industries of national strategic priority.

Through a set of directives and policies, the government emphasised the advantages of entrepreneurship. A big push towards that end took place during the mid-2010s, as reflected in the words of Premier Li's speech at the 2014 summer Davos meeting: "Just imagine how big a force it could be when the 800 or 900 million labourers among the 1.3 billion population are engaged in entrepreneurship, innovation and creation. I believe the key to realising that is to further liberate our mind, further liberate and develop the creativity of society, further energise businesses and the market, and remove all institutional obstacles to development so that everyone interested in starting a business is given more space for entrepreneurship and the blood of innovation could flow unhampered."

For example, in our research setting the Chinese government put forward the "strategic emerging industry" plan in 2010 to prioritise the development of specific industries. In those industries, technological innovation is regarded as a key impetus to development, and national and local governments direct and support entrepreneurship and venture capital activities within them.

The plan was formally outlined in the 13th National Five-Year Plan in 2016 (chapter 23). The latest strategic industry index consists of nine general categories: new-generation IT industry, high-end equipment manufacturing industry, new-materials industry, biological industry, new-energy automobile industry, new-energy industry, energy-saving industry, digital creative industry and related services industry.

Established firms may follow an explicit directive and engage in CVC investment. Alternatively, the increase in CVC may simply reflect that supportive government policies stimulate entrepreneurial activity in those industries and thus create many attractive investment opportunities for corporations.

Notably, however, the cross-industry CVC patterns do not map onto industries designated by the government as sectors of national priority.

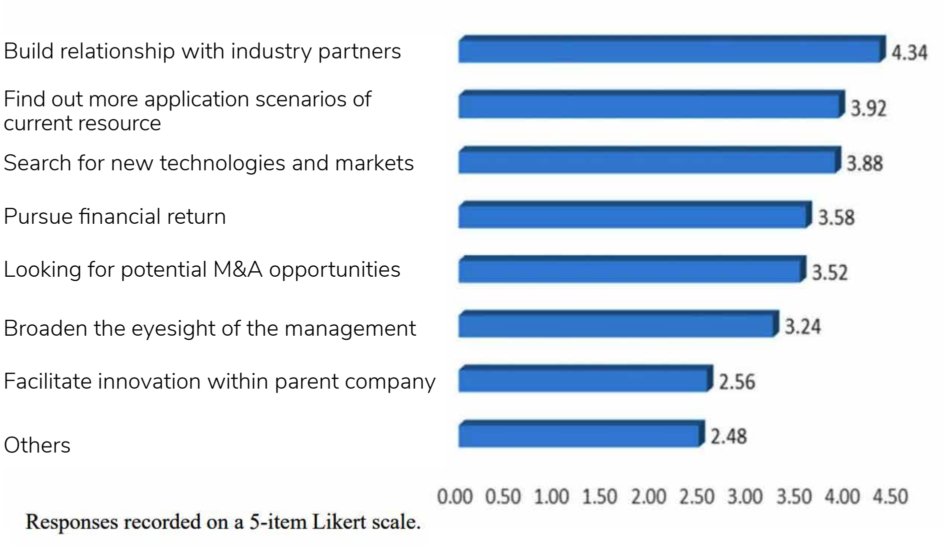
Conclusion

Taken together, the findings suggest that Chinese CVC activity predominantly follows a 'harness industry growth' rationale and, to a lesser extent, exhibits a 'window on technology' objective.

The findings likely reflect structural differences between the US and Chinese economies. However, the scholarly focus on the 'window on technology' explanation began from the early 2000s, and was partially a reflection of underlying business activity in the semiconductor and telecommunication industries as incumbent firms formed CVC units to pursue innovative startups.

But, at the same time, the narrow focus is also an artefact of academic practices. In the early 2000s, patent data became readily available and scholars exploited the data to demonstrate that incumbent firms' innovation output is positively associated with their CVC activity.

Strategic objectives of CVCs in China



Notably, the findings underscore the different roles of CVC (in particular) and incumbent-startup collaboration (more generally) in unlocking corporate growth. We believe the Chinese setting can offer insights into different evolutionary paths for CVCs among countries.

The findings mirror the features of the Chinese setting, where entrepreneurs profit from the dramatic expansion in economic activity and serve as a vehicle to leverage the global innovation frontier.

Investigation into the investment practices of VC firms in China: a comparison with Europe and the US

> **This is a provisional study ahead of a full paper presented at the annual conference of the Institute for Small Business and Entrepreneurship (ISBE) in Cardiff, Wales, in 2021**

By Keith Arundale, ICMA Centre, Henley Business School, University of Reading and Ying Zhao, University of Chester Business School

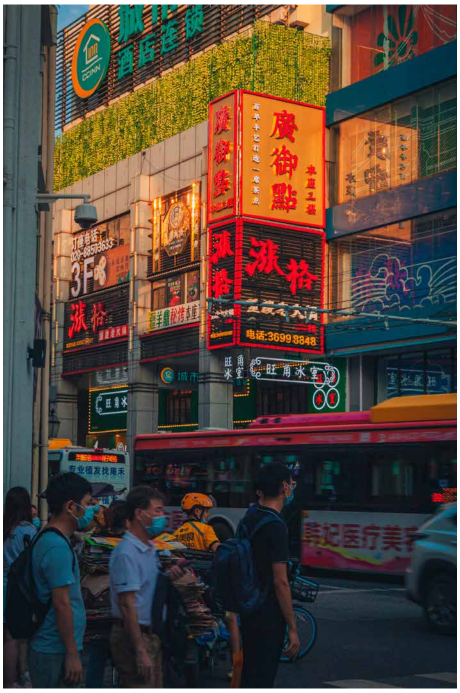
Venture capital (VC) in China has grown significantly since its establishment in the mid-1980s such that the level of VC investing is now second only to the US. Yet there have been few studies of the investment practices of Chinese VC firms, and none have compared these specifically with those in both Europe and the US, which have more mature markets and regulations, according to Arundale's prior paper, Venture Capital Performance: A Comparative Study of Investment Practices in Europe and the USA.

The development of the VC market in China is closely related to government policies. In 1985 the Chinese Central Government issued the policy "Decision on the Reform of the Science and Technology System" and the first VC firm in China was launched in the following year. With a registered capital of about $10m from different government ministries, its primary function was to invest and provide loans for high-tech industry development. In 1991, further provisions issued by the Chinese State Council promoted the practice of VC in the high-tech industrial development zones. This led to the first joint-venture VC, a collaboration between the Shanghai Commission of Science and Technology (SCST) and IDGVC (former IDG Capital, the then-local corporate venturing unit of US-based International Data Group).

In 1995 and 1996, China successively issued regulations encouraging domestic non-banking financial institutions and China-controlled foreign institutions to invest in domestic projects, and large companies, research institutions and individuals were permitted to participate in VC investment. In 2001, foreign VC institutions were allowed to invest in China. Since then a large number of foreign VC firms have entered the Chinese market, although these now only represent a relatively small proportion of the market; several foreign firms have left China recently.

There are now generally three types of funds in China: independently owned, onshore domestic-invested funds in RMB, onshore government backed RMB funds and foreign funds in either US $ (offshore) or RMB (onshore). US$ funds tend to have larger funds under management than RMB funds and have longer-term capital from typical, though largely overseas, institutional investors. The main source of RMB funding is city government funds for promoting industry within that city, then from large corporates and wealthy individuals. Most government funds are RMB domiciled funds; some local VCs with previously RMB funds are now raising US $ funds with foreign capital for investing in China.

From data provided specifically to the authors by Preqin, government sources comprised just 4% of VC funding in 2019 with pension funds at 17% and corporates at 14%. Preqin found the median



net internal rate of return (IRR) from inception of Greater China VC funds has exceeded that of Europe and USA, notably for 2009 and 2013 through 2017, reaching 59.3% in 2014 compared to 20.0% for Europe and 16.6% for US. However, the sample size of the Greater China VC funds is small, given the difficulty of sourcing such data.

RMB funds are typically smaller than US$ funds. The typical life of a Chinese VC fund is seven years with extensions of up to two years compared to the norm of 10 years plus two years in Europe and the US. This tends to favour later stage investing with a quick route to exit.

Investment partners in Chinese VC firms come from a variety of backgrounds, including finance and investment, operational often from working with large technology companies, and entrepreneurial, much the same as the US firms in the earlier study where proportionately more partners with operational and, to a lesser extent, entrepreneurial backgrounds were engaged than was the case with European firms. The older generation of partners tend to be investment bankers, the younger generation are from operational and entrepreneurial backgrounds and have in-depth sector experience from working in those sectors and/or starting companies in those sectors.

There was evidence of Chinese investment partners working collaboratively together on deals, as was found particularly with US firms in the earlier study. Advisory boards of technical experts were engaged by some of the VCs in the study whilst others called upon their networks of technology experts from universities and large corporates on a deal by deal basis: "Our partners all have industry backgrounds, so they are familiar with the top tier persons in that industry and we have good relationships with the institutions and universities, so normally we will consult them as well."

The use of advisory boards and / or networks of technical experts was similar in Europe and the USA to that in China.

RMB funds in the sample tended to invest at later stages where companies are closer to exit; US$ funds were prepared to invest in early and subsequent stages. European VCs are largely proactive in sourcing deals whereas US VCs rely more on their branding and profile in the marketplace to attract entrepreneurs.

However, Chinese VCs may be prepared to invest in ground-breaking technology because "they know that the growth will be exponential and there would be a very high return and so they are willing to take the risk".

The precise sectors that the more established VCs invest in China are often determined through relationships: "The guanxi network of relationships and as a result the sectors they end up with are absolutely all over the shop."

Both state-backed and independent VC funds in China invested predominantly in the technology sectors, with a focus on semiconductors, big data, artificial intelligence, biotech and med/healthtech. In the earlier study there was no particular difference between European and US VC firms in terms of their stage and sector focus.

In the earlier study it was apparent that UK/European VCs have fewer resources than US VCs to develop investment themes and so adopt more of a follower approach. In China, some VCs are more likely to be following on from an investment trend that has been set up in the US rather than looking at completely new innovative technologies, though others may carry out considerable research into sectors.

The operational aspects of VC firms in China concerned their investment practices. Government RMB funds adopted a lower risk investment strategy than US$ funds which is reflected in their investing in later stage companies.

Investment committees to approve investments were comprised not only of investment partners but also anchor limited partners and municipal government representatives, with the latter having votes and even veto rights in some instances.

Majority vote tends to prevail but a senior person may the ultimate decision maker, similar perhaps to the practice of senior partners in some US VC firms being able to railroad deals through the investment committee.

There may be separate investment committees for each fund. Government representatives largely observe but may have a vote. The chairman of the investment committee may have a veto but needs a vote or consensus to get a deal approved. At one government backed VC firm, committee decisions can be over-ridden by people higher up the management chain.

Investment terms used by Chinese VC firms were considerably more "investor friendly" than either European or US VCs with the Chinese enforcing onerous term sheet clauses on their investee companies. These included negative ratchets, common with state-owned funds, and if management teams fail to make their revenue or profits targets they may even have to pay cash or equity compensation to the VC. *(See box on UK's security act on p87)*.

On the other hand, investments which are strategic and not purely financial may also exhibit fairer terms and preference shares, often used by European and US VCs to limit downside exposure, are not used in China unless through an offshore holding structure as Chinese company law does not clearly state the legitimacy of preferred shares in limited liability companies.

In addition, Chinese company law does not permit use of the "safe note", a type of convertible loan note. Government backed funds tend to be risk-averse and take considerable care about the security of their investments as reflected in their investment terms and through investing at later stages. If the government invests say as much as 40% in a fund they will want to have significant influence about which investments are made by the fund. "They all have the concept that you want to find a brilliant deal, own the whole of it and live happily ever after, so the whole concept of portfolio theory does not apply."

Syndication with other VCs, both local Chinese and foreign VCs, was common, as is the case with European and US VCs, though government backed VCs do not usually syndicate with foreign VCs. In the earlier study it was found that US VCs can be reluctant to syndicate with European VCs because of their lower risk propensity and more investor friendly investment terms.

In terms of monitoring post investment, this can be quite informal in China, with calls and social events more of the basis for keeping in touch with portfolio company performance rather than necessarily attending board meetings and reviewing reporting packs as would be the case in Europe and USA. Periodic portfolio reviews are however carried out formally often on a quarterly basis with more frequent discussion among the partners.

Government backed funds will certainly require regular updates on current investment values. Under a new regulation funds are now required to be audited annually and LPs provided with valuations.

Value adding activity is largely through leveraging contacts for the benefit of portfolio companies through the VC's personal network and guanxi, much as is the case in

Europe and US. Foreign investors in China are seen as weak in terms of adding value to their portfolios as they do not have "the right relationships".

Government VCs can enable their portfolio companies to benefit from favourable local policies in terms of subsidies and public procurement. They also enjoy a greater chance of gaining approval for IPOs.

VCs in China pay much attention to the geographical location of projects due to concerns about the public policies of local governments and the supply of human resources in specific areas.

The state-owned economy and the political system has a large impact on the sector with VC activity heavily influenced by policy makers. The government will provide grants and support as leverage to the investor if projects are in accordance with the five-year plan but "if you are trying to do something that is outside the objectives of the five-year plan then forget it".

The focus is more about selling to state-owned enterprises and meeting needs at the provincial or national level. One interviewee said: "The bulk of all commercial and capitalist activity is not really oriented towards capital markets as it is in the West it is really oriented to servicing the needs of the nationalised state economy and so most businesses will exit by sale to a SOE [state-owned enterprise] or setting up a joint venture with a SOE."

Another added: "The pace in China is quicker or faster than the pace in Europe so that is a very normal thing; if in Europe you need 10 years to build a startup, in China maybe you just need five years to get the same level"

Differences in investment practices between Chinese, European and US VC firms and funds

	China	**Europe**	**USA**
Structural **Fund life**	5 to 7 years + 2	10 years + 2	10 years + 2
Fund performance of sample	14% to 30% pa	-18.9% to 72%	-34% to 188.4%
Principal source of funds	Government, large corporates, wealthy individuals	Government agencies, family offices and private individuals, funds of funds	Pension funds, university endowments
Partner backgrounds	Finance & investment, operational, entrepreneurial	More finance/investment/consultant than US VCs	More operational/ entrepreneurial than European VCs
Working style	Collaborative	Continental Europe less collaborative than UK	More deals involving two partners
Stage of investment	Later stage – for govt funds Early stage – independent / foreign	Early to late	Early to late
Operational **Risk approach**	Low risk – for govt funds Higher risk for independent/foreign funds	Low to medium risk	High risk
Deal sourcing	Personal networks / guanxi	Proactive	Brand & profile
Due diligence	In house + networks	More use of external consultants	Mainly in house
Investment committee	Can include major LPs and govt reps	Investment partners plus others, including external	Investment partners; no other internals or externals involved
Investment approval	Majority vote and/or senior decision maker can veto	Unanimous or consensus	Senior partner can approve
Investment terms	Investor friendly, can be draconian	Investor friendly	Entrepreneurial friendly – West Coast, Investor friendly – East Coast
Monitoring	Informal, with quarterly portfolio reviews	Formal	Don't always take board seats; use of metrics
Exits	Quick exits – short investment period; sales to SOEs	Exit sooner to show realisations	Wait for best exit
Wider environmental **Culture**	"Get up and go"	Protect downside	"Think big"
Location of VCs	In big cities, not in separate tech centres	London and big city tech centres	Silicon Valley, Boston and other tech centres

Innovative region

Managing 'forced' technology transfer in emerging markets: The case of China

> Extract from the paper published in [Journal of International Management]

By Dan Prud'homme, University of Oxford and Max von Zedtwitz, GLORAD Center for Global R&D and Innovation, School of Economics and Business, Kaunas University of Technology

Major challenges that foreign multinational corporations (MNCs) face when doing business in emerging markets, such as China, can be conceptualised in terms of the risks that host countries' institutions present to them.

We focus on hazards attributed to intellectual property (IP) regimes in particular and, even more specifically, forced" technology transfer (FTT) policies.

Among the risks that IP regimes pose to foreign MNCs, those related to appropriability appear to be most directly relevant to FTT policies.

"Appropriability" is the ability to protect knowledge from imitation via some form of monopoly, which allows economic returns from such knowledge to be captured. Or, somewhat more broadly, the term refers to the ability of a firm to capture, as it chooses, the profits generated by its knowledge.

IP regimes are an important tool to ensure appropriability. So-called "appropriability hazards" are often present in a host market when inadequate protection of IP rights – usually because of "voids" in IP institutions – enables leakage of technological knowledge.

Meanwhile, on the other end of the spectrum, excessive or otherwise

Top 10 most effective strategies for managing risks from China's FTT policies

Strategy category	Orientation of strategy	Perceived effectiveness
Policy and law monitoring	Internal	58%
Resources devoted to in-house IP department and external IP services	Internal and external	50%
Lobbying via external business groups	External	38%
Efforts to get home government to pressure China	External	31%
Keeping trade secrets	Internal	31%
Lobbying via own government affairs department	External	27%
IP risk assessments	Internal	27%
Avoiding entry into JVs with Chinese partners	Internal	21%
Invention patent filings	External	19%
Establishment of a JV only after careful due diligences	External	19%

suboptimal institutional structures in IP regimes can also create appropriability risks. For example, excessive legal appropriability afforded by the IP regime to some firms can sub-optimally limit the appropriability of other firms.

Further, the state's aggressive/excessive use of institutions, such as anti-trust regulation over IP monopolies, can also create appropriability hazards.

FTT policies appear to be an example of the excessive use of institutions rather than the previously mentioned forms of appropriability hazards often attributed to "weak" IP regimes.

We choose to focus on China in this paper because it is a hotspot for FTT policies that appear to be of growing concern to MNCs whose value chains are increasingly dependent on China. For example, the US Trade Representative [in 2018] found that "while these [FTT] policies and practices [in China] are not necessarily new, their actual and potential effects on foreign companies and their technologies have become much more serious".

FTT policies in China can take various forms, including: (1) "Lose the market" policies (including market access preconditioned on meeting technology transfer requirements); (2) "No choice" policies (including unfair IP civil litigation rulings, and de facto requirements to excessively divulge trade secrets to receive regulatory approvals and then sharing that information with competitors); and (3) "Violate the law" policies (for example, appropriability-weakening legal provisions governing the interface between anti-trust and IP, IP and technical standards, and the import and export of technology).

Foreign MNCs who have committed to and invested in China during a time when FTT policies were less damaging, or who have increasingly dispersed upstream and downstream value chain activities in China, are acutely affected by the shift in bargaining power facilitated by China's FTT policies at present.

For example, in 2017, some US technology companies derived over 80% of their global revenues from China (Goldman Sachs, 2018). Foreign MNCs appear heavily exposed to China's FTT policies: for example, in 2017, at least one fifth of firms answering the European Union Chamber of Commerce's Business Confidence Survey reported they had to transfer technology in China as a precondition to gain market access

Between 2013 and 2017, we collected empirical data via a survey of 106 of which top five strategies (34 total listed) "worked best for mitigating the detrimental effects" posed by Chinese FTT policies in the last five years.

Interviews with 42 Western MNCs followed the survey about the design of Chinese FTT policies and how foreign MNCs respond to them. Then, to update our research, in 2019 we reviewed laws, government reports, and other sources to provide a discussion of events that have transpired since the start of the recent US-China trade war, which is substantially fuelled by foreign MNCs' concerns over China's FTT policies.

Global University Venturing

Humanity's golden age is coming

> We are but at the beginning of fundamental change brought about by university research commercialisation

By Thierry Heles
Editor, Global University Venturing

There were 61 investments in spinouts in December 2021, the lowest number in two years. However, more than $3.2bn flowed into companies through those deals, putting the month into the top half of the year and – bar June 2020 – still higher than the preceding year. Notably, the large sum was due to one deal in particular: the jaw-dropping $1.8bn series B round for fusion energy technology developer Commonwealth Fusion Systems (CFS). The company, based on research at Massachusetts Institute of Technology and backed by its affiliate venture fund and incubator The Engine, is emblematic of what has become known as deep tech: innovations that will have a fundamental impact on humanity and the planet but that will take inordinate amounts of capital and often decade-long timespans to commercialise.

It is the type of innovations that attract philanthropist billionaires like Bill Gates (who backed that aforementioned series B round) and are prompting visionaries such as Harry Destecroix to build entire ecosystems essentially from scratch. In the case of Destecroix, he was a PhD researcher who turned his attention to building incubators and raising a venture fund for deep tech companies after selling his own University of Bristol spinout, Ziylo, to Novo for up to $800m.

The potential rewards are almost unimaginable: from unlimited, clean energy and eradicating cancer are all within grasp in our lifetime

Established fund managers are equally moving to support this area with an increased focus: Parkwalk Advisors, for example, launched its second Knowledge Intensive EIS Fund earlier this month with a target of £25m ($34m). If it sounds like a relatively modest sum for an area that is gobbling up cash, note that EIS – the Enterprise Investment Scheme – is a tax relief in the UK for private investors and those £25m will not come from institutional backers. And if raising that much money from individuals sounds like a challenge, notice that the first fund raised last year attracted a similarly impressive £21m.

All of this is happening within the macroeconomic reality of stock markets globally struggling at the prospect of costlier borrowing, the yield on two-year UK government debt hitting its highest level in two decades and the US Federal Reserve indicating an increase in interest rates. Meanwhile, consumers are facing higher food prices, larger energy bills and, in the UK, a 1.25% tax increase from April.

In this struggle, it really takes universities and patient capital funds to take a long-term view through any potential downturn (and it is not certain one will come, that the bubble will burst has been predicted time and again since the 2008 crisis, but it would be foolish not to prepare for it).

This does not mean that smaller rounds will stop being important. For every blockbuster series B, we will continue to need hundreds of rounds that will fly under the radar. But that is also a reflection of deep tech: these inventions often require moderate amounts at the seed and series A stage – even CFS only secured $115m in its series A and another $84m in its series A2 – but their capital requirements will shoot up dramatically once the companies hit the growth stage.

The risks will be significant – inevitably, not every fusion energy or cultured meat investment will pay off. But the potential rewards are almost unimaginable: from unlimited, clean energy and eradicating cancer to feeding entire populations without the need for traditional farming are all within grasp in our lifetime.

How that will shape humanity is a question for the philosophers – but perhaps there is a commercial idea in that too, after all tech transfer offices are also increasingly noticing their social sciences, humanities and arts departments. Tumultuous times may be ahead, but with a little bit of luck and continued hard work, a golden age may be just around the corner, too.

Global Impact Venturing

Storage and distribution to lead clean energy economy

By James Mawson
Editor-in-chief

To transition to a clean energy economy, abundant energy storage must be deployed quickly and at scale to allow supply to match demand when both can be variable.

Under traditional energy systems, power from nuclear plants has been effectively constant with top-up or base load from coal or gas as demand from industry or consumers required. Relying more on renewable sources, such as solar and wind, makes the supply side more vulnerable to the weather.

Countries, therefore, are exploring options such as wider-area transmission networks, such as cables from North Africa to the UK, improved energy efficiency to tamper demand and giving greater control to the end-user through software.

US-based Fermata Energy's bidirectional electric vehicle (EV) charger and software can take power from stored energy in EV batteries directly back into the grid, building, or home. This functionality turns EVs into energy storage resources.

In July 2021, as part of their participation in the 5G Studio, a collaboration between US-listed phone operator Verizon and Newlab, Fermata Energy's V2X energy management software used Verizon's 5G Ultra Wideband network to react to changes in the grid based on near real-time data and with near-zero latency. Through this partnership, Fermata Energy was connected to Verizon Ventures, the corporate strategic investment arm of Verizon, which contributed to its $40m round in January 2022.

"Distributed energy use and storage continue to grow in importance, in part due to the fast-growing EV space," said Kristina Serafim, managing director of Verizon Ventures. She added: "Both 5G and mobile edge compute are integral to the future of managing and tracking distributed clean energy."

There has been increased interest in the demand-side of energy investing from other CVCs, too. A record number of corporate-backed venture deals last year came with nearly an order of magnitude increase in deal value, according to data provider PitchBook.

Particularly active in the sector were traditional energy groups, such as Shell, TotalEnergies and Equinor, PitchBook noted.

This is part of massive investments made in climate tech with funding having increased 210% over the past year, the Financial Times said. According to PwC's recent State of Climate Tech report, some 6,000 investors, ranging from venture capital and private equity firms to government funds and philanthropists, have backed more than 3,000 climate tech startups since 2013. In total, investors have sunk about $222bn into these startups.

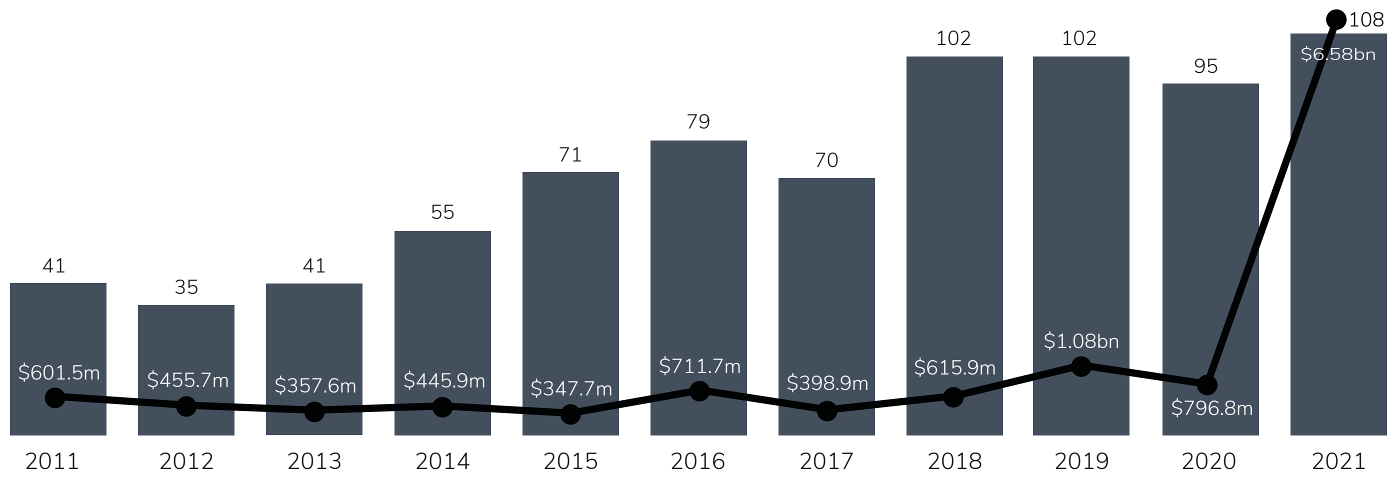
As the FT said: "There have been some stunning advances in the efficiencies and cost dynamics of solar, wind and battery technologies.

"Many investors are betting big on hydrogen, next-generation nuclear and carbon capture, too. Further out, hopes are rising that nuclear fusion tokamaks and space-based solar power may provide carbonless sources of energy across the world."

But at the heart of the innovations will be technology to align supply and demand.

There has been increased interest in the demand-side of energy investing from other CVCs, too. A record number of corporate-backed venture deals last year came with nearly an order of magnitude increase in deal value

Corporate-backed deals in demand side energy technology 2011–2021



Source: Pitchbook

Monthly data

Corporate venturing kicks off anew in January

- **Higher deal numbers and similar dollars compared with the same month last year**
- **Exits similar to same month in 2021**
- **Funding initiatives similar to last year's level**

By Kaloyan Andonov
Analyst
GCV Analytics

According to GCV Analytics, in January, the number of corporate-backed deals from around the world stood at 302, up 5% from the 287 rounds from the same month last year. Investment value stood at $19.66bn in total estimated capital – comparable to the $20.18bn of January 2021. The US came first in the number of corporate-backed deals, hosting 120 rounds, while Japan was second with 32 and China third with 22.

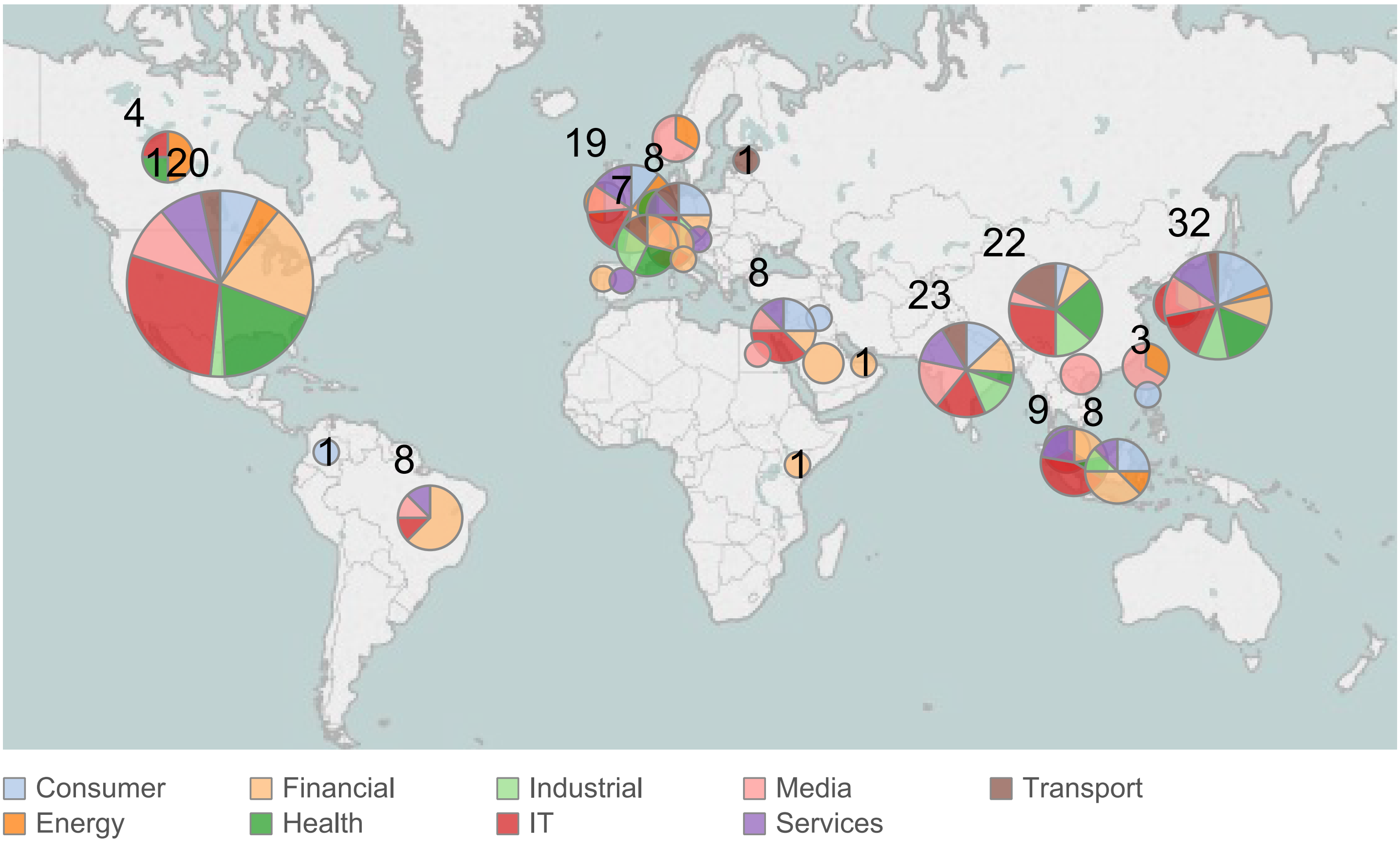
Deals
302

Exits
37

Funding initiatives
32

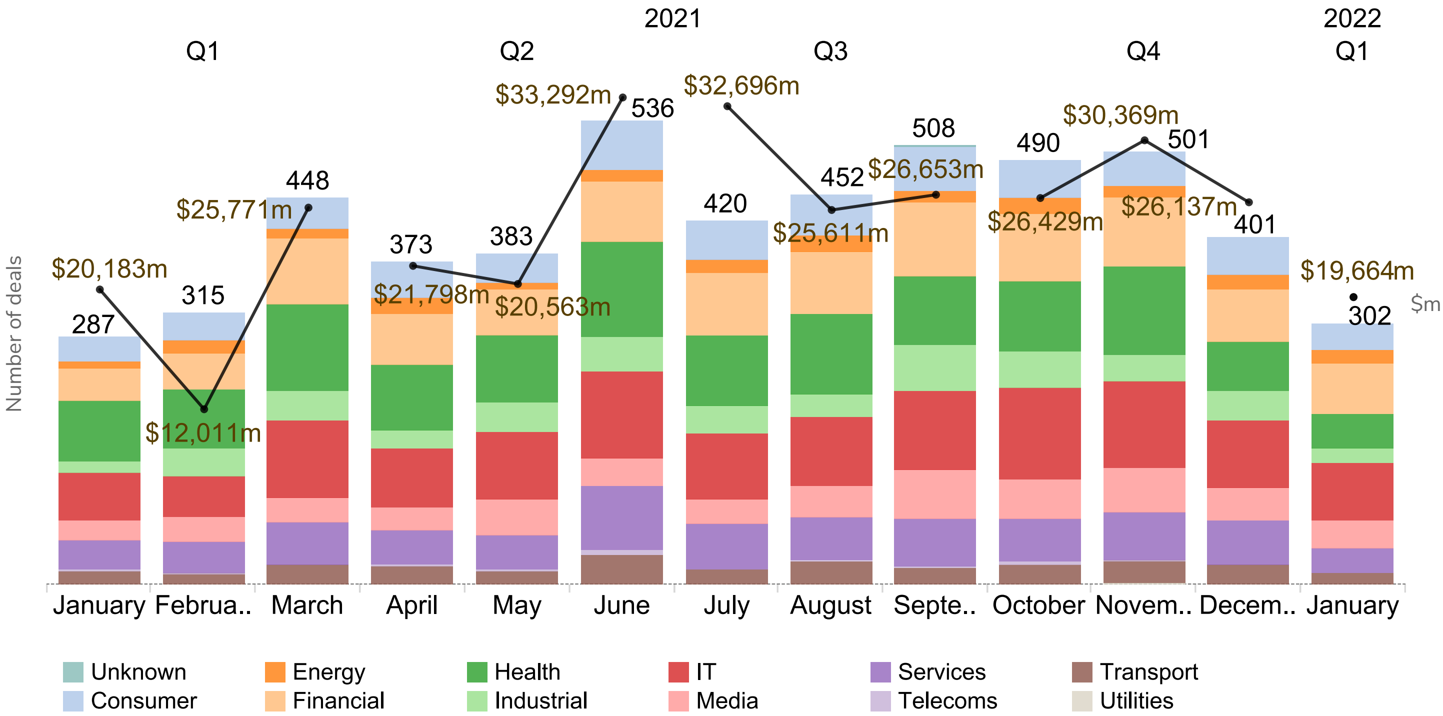
Global view of deals

Total number of deals: 302



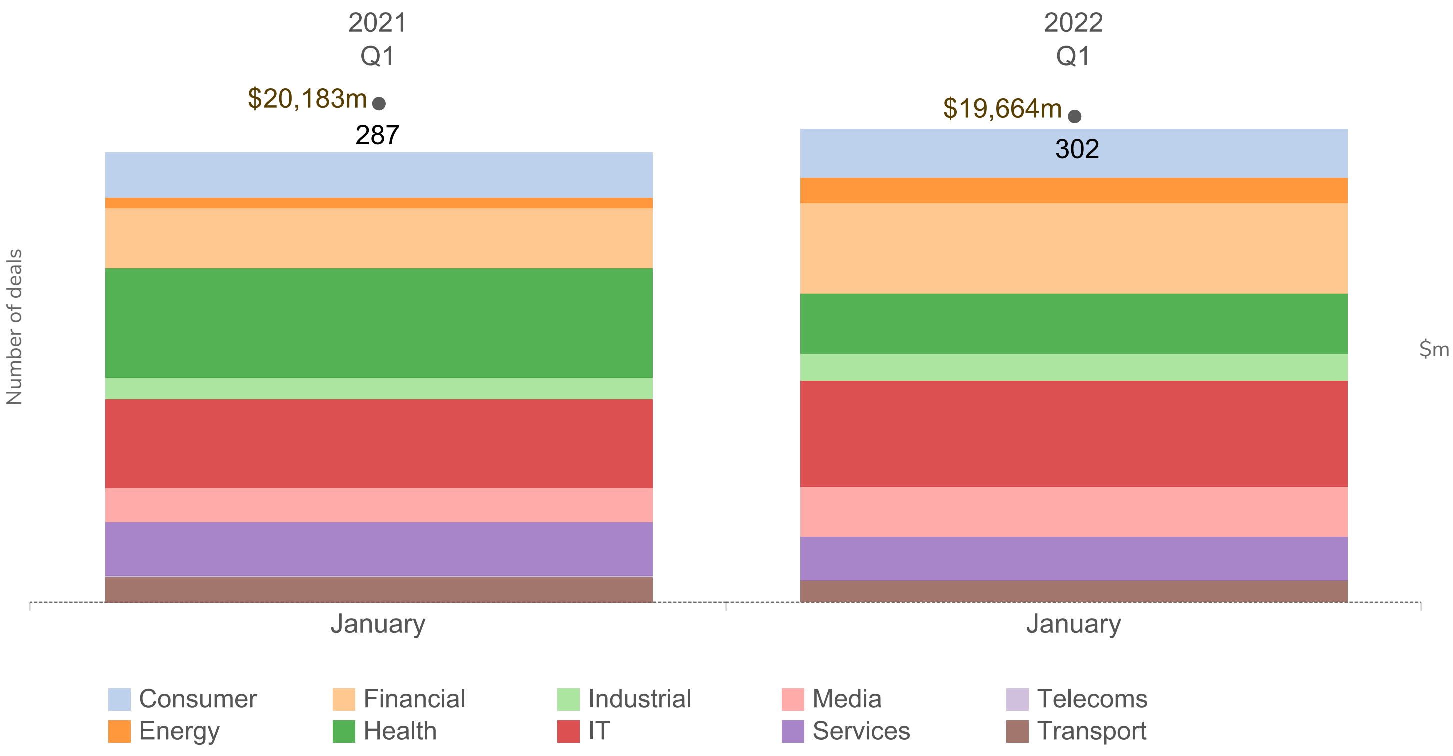
Source: GCV Analytics

Monthly deals by number and value



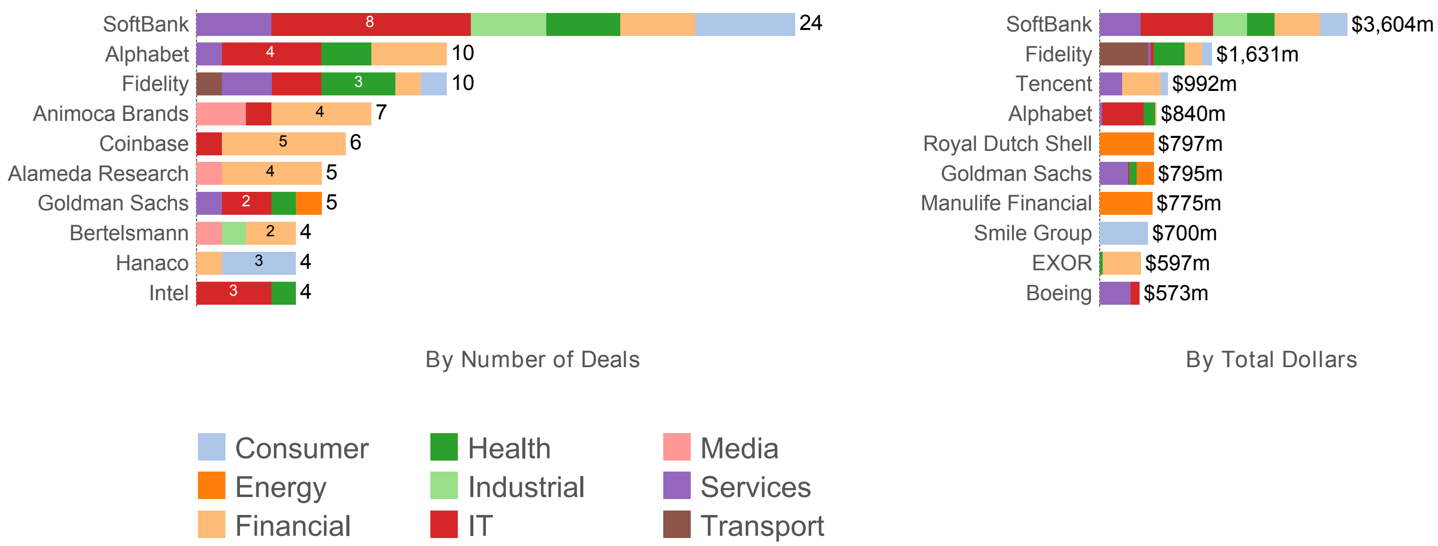
Source: GCV Analytics

Deals during January 2021 vs January 2022



Source: GCV Analytics

Top investors



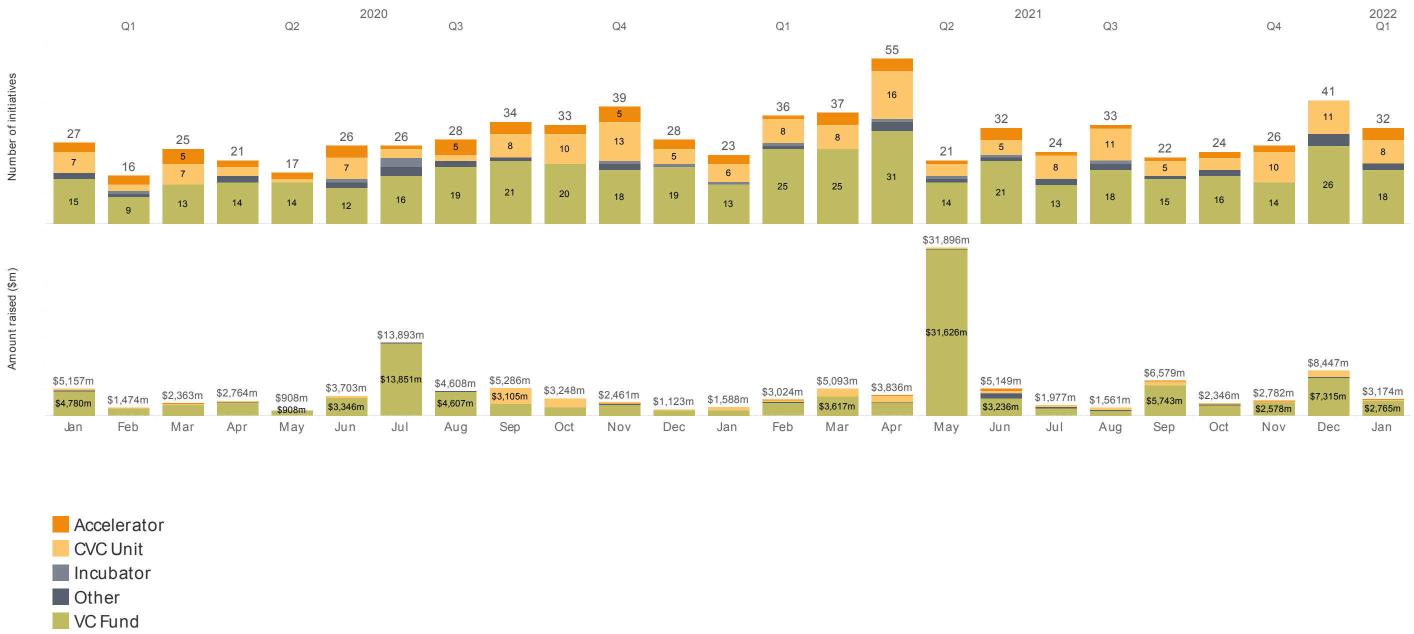
Source: GCV Analytics

The leading corporate investors by number of deals were telecoms and internet conglomerate SoftBank, diversified internet conglomerate Alphabet as well as investment and financial services group Fidelity.

In terms of involvement in the largest deals, Softbank, Fidelity and internet company Tencent were on the top of the list.

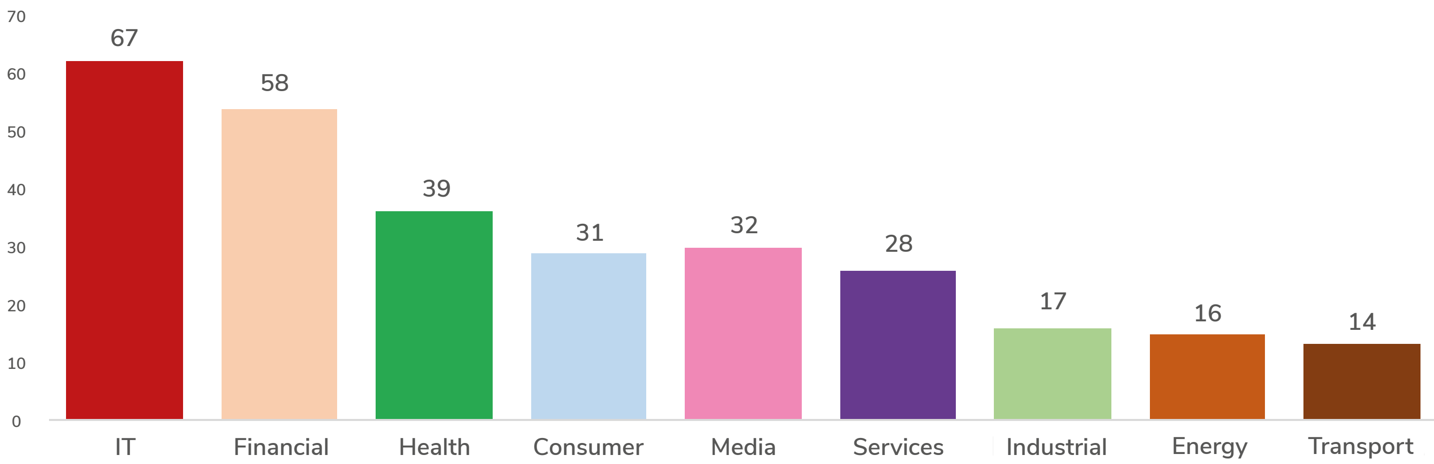
GCV Analytics reported 32 corporate-backed funding initiatives, including VC funds, new venturing units, incubators, accelerators and other. This figure was 39% higher than the one from January 2021, which had registered 23 such initiatives. The estimated capital stood at $3.17bn, nearly double the $1.59bn from the same month last year.

Monthly funding initiatives by number and value



Source: GCV Analytics

Number of deals by sector



Source: GCV Analytics

Deals heatmap

	Financial Services	IT	Media	Services	Consumer	Telecoms	Health	Industrial	Energy	Transport
North America	51	25	17	15	7	12	19	8	6	7
Asia	41	16	17	18	20	9	3	9	7	5
Europe	20	9	8	3	2	7	4	5	6	6
Middle East	5	3	2		3	1		2		
South America	4			1	3	3		1		
Africa				1						

Source: GCV Analytics

Top 10 deals in January 2022

Portfolio company	Location	Sector	Round	Round size ($m)	Co-participant list
Silicon Ranch	USA	Energy	Undisclosed	$775m	Manulife Financial | Mountain Group | Royal Dutch Shell | Toronto-Dominion
Bolt (Taxify)	Estonia	Transport	Undisclosed	$709m	Blue Owl Capital | D1 Ventures | Fidelity | G Squared | Ghisallo | Research Products Development Company | Sequoia Capital | Tekne Capital Management | undisclosed investors | Whale Rock Capital Management
Swiggy	India	Consumer	Undisclosed	$700m	Alpha Wave Global | Ark Impact Asset Management | Axis Mutual Fund | Baron Capital Group | Ghisallo | IIFL AMC | Invesco | Kotak Investment Advisors | Prosus | Qatar Investment Authority | Segantii Capital | Sixteenth Street Capital | Smile Group | Sumeru Equity Partners
Qonto	France	Financial Services	D	$552m	Alkeon Capital | Alven Capital | DST Global | Eurazeo | EXOR | Gaingels | Insight Partners | KKR | private investors | TCV | Tencent | Tiger Global Management | Valar Ventures
Fireblocks	Israel	IT	E and beyond	$550m	Alphabet | Altimeter Capital Management | Canapi Ventures | D1 Capital Partners | General Atlantic | Iconiq Strategic Partners | Index Ventures | Mammoth VC | ParaFi Capital | Spark Capital
Eikon Therapeutics	USA	Health	B	$518m	Abu Dhabi Investment Authority | AME Cloud Ventures | Canada Pension Plan | E15 Ventures | EcoR1 Capital | Foresite Capital | General Catalyst | Harel Insurance Company | Hartford Healthcare | Horizons Ventures | Innovation Endeavors | Lux Capital | Schroders | Soros Fund Management | StepStone Group | T Rowe Price | The Column Group | University of California
Wisk	USA	Services	Undisclosed	$450m	Boeing
Jidu	China	Transport	A	$400m	Baidu | Zhejiang Geely Holding Group
Plenty	USA	Industrial	E and beyond	$400m	JS Capital Management | One Madison Group | SoftBank | Walmart
FTX US	USA	Financial Services	A	$400m	Greenoaks Capital | Lightspeed Venture Partners | Multicoin Capital | New Enterprise Associates | Ontario Teachers' Pension Plan Board | Paradigm | SoftBank | Steadview Capital | Temasek

Source: GCV Analytics

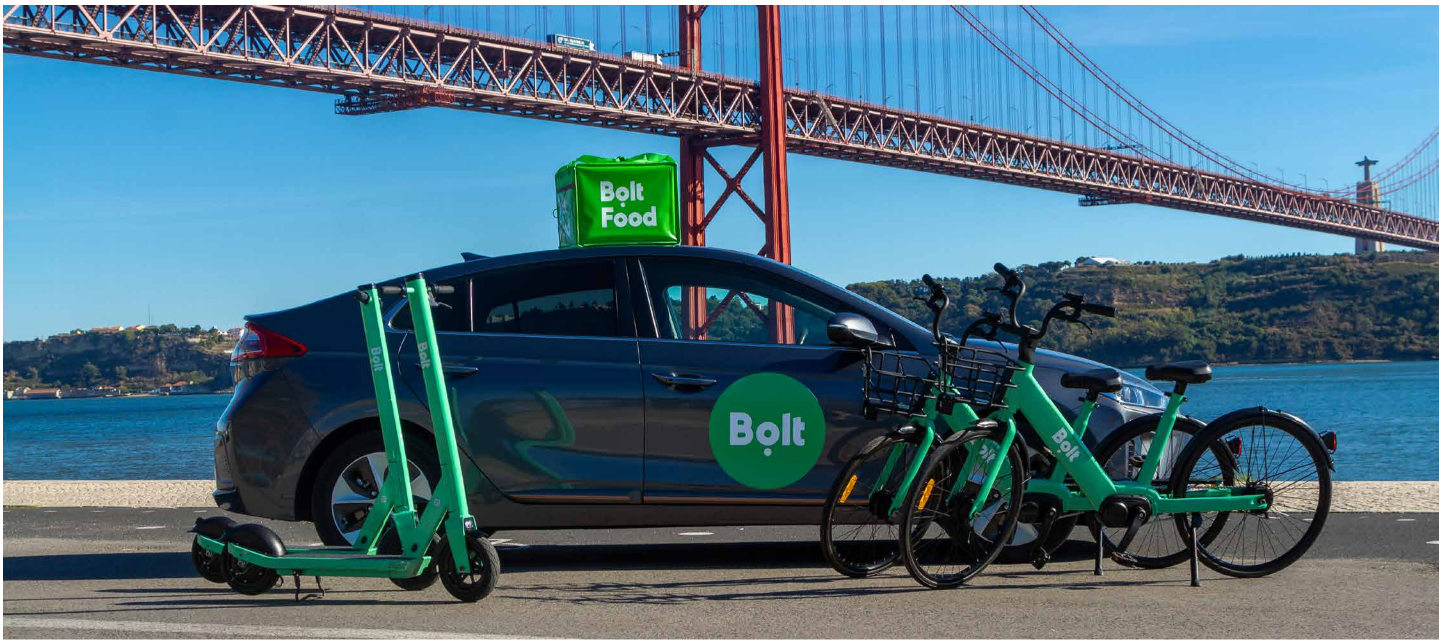
Deals

Emerging businesses from the health, IT, financial, health and consumer sectors led in raising the largest number of rounds in first month of 2022. The most active corporate venturers came from the financial, IT, media and services sectors, as shown on the heatmap.

1 US-headquartered solar power producer Silicon Ranch Corporation secured $775m in an equity funding round led by insurance firm Manulife's Investment Management vehicle, part of a resurgence in funding in the sector. Manulife Investment Management put up $400m for the round, which included oil and gas supplier Shell, investment manager TD Asset Management's TD Greystone Infrastructure Fund and venture capital firm Mountain Group Partners. Silicon Ranch functions as the solar branch of Shell's power distribution arm, Shell Energy, and runs a portfolio of solar farms and large-scale utility solar plants, on behalf of large businesses and governmental facilities. The company's solar and energy storage projects run to 4 GW across North America and the capital will support the fulfilment of its project pipeline as well as an expansion into new markets and potential strategic investments.

2 Estonia-based ride hailing services provider Bolt raised €628m ($709m) in Series F funding round, led by Fidelity Management & Research and Sequoia Capital. The transaction reportedly valued the company's pre-money €6.77bn ($8.4bn) pre-money valuation. G Squared, Ghisallo, Whale Rock Capital Management, Blue Owl Capital, D1 Capital Partners, Tekne Capital Management, CSVE Ventures, and other undisclosed investors also participated in the round. The fresh funds will help the company to continue expanding into new geographies and bring more consumers and partners. Founded in 2013 as Taxify, Bolt has developed an on-demand transportation platform that enables its users to book a variety of vehicles online, giving them access to affordable and accessible ride-hailing, micro-mobility and food delivery alternatives.

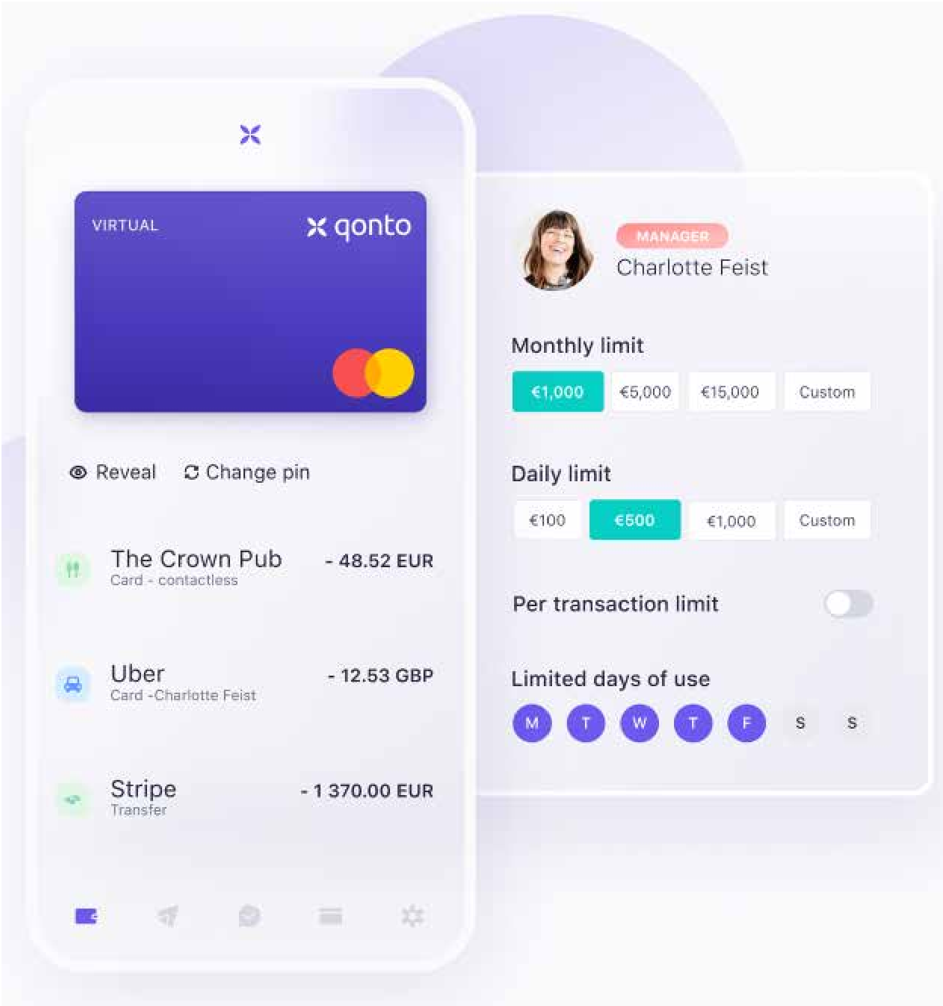
3 India-based food ordering service Swiggy secured $700m in a series K round featuring internet groups Prosus and Smile Group. Investment firm Invesco led the round, participating alongside financial services firms India Infoline and Kotak as well as Baron Capital Group, Sumeru Venture, Axis Growth, Sixteenth Street Capital, Ghisallo, Segantii Capital, Alpha Wave Global, Qatar Investment Authority and Ark Impact. Prosus and India Infoline were represented by Prosus Ventures and IIFL AMC Late Stake Tech Fund respectively, and the round valued the company at $10.7bn. Founded in 2014, Swiggy provides a machine learning-equipped on-demand delivery platform that enables users to order food from hundreds of thousands of local restaurants across some 500 Indian cities. It has more than 5,000 employees and 200,000 on-the-road delivery staff members.



credit : Bolt

Estonia-based ride hailing provider Bolt raised ($709m) in Series F funding, led by Fidelity Management & Research and Sequoia Capital

4 France-based business-focused digital bank Qonto secured €486m ($552m) in a series D round that featured Tencent and valued it at $5bn. The round was co-led by Tiger Global Management and TCV and also featured Exor Seeds – on behalf of diversified holding company Exor – as well as Alkeon, Eurazeo, KKR, Insight Partners, Valar, Alven, DST Global, Gaingels and private investors Guillaume Pousaz and Ashley Flucas. Founded in 2016, Qonto has built a platform that enables small and medium-sized businesses and freelancers to maintain an online account and manage their finances in a more streamlined fashion. Some 65,000 businesses use the service, which allows them to secure specialised credit cards and integrate the account with their existing finance and bookkeeping tools.



credit : Qonto

Some 65,000 businesses use Qonto to maintain an online account and manage their finances

5 US-based asset transfer infrastructure operator Fireblocks raised $550m in series E funding from investors including Alphabet's CapitalG unit, at a time when more traditional banks are looking into cryptocurrencies. Investment group D1 Capital Partners and venture capital firm Spark Capital co-led the round, which included General Atlantic, Index Ventures, Mammoth, Altimeter Capital, Iconiq Strategic Partners, Canapi Ventures and Parafi Growth Fund. Founded in 2018, Fireblocks operates a secure multi-party computation-equipped cryptocurrency platform that helps enterprise users make digital transactions quickly and safely. The round lifted its total funding to $1bn and its valuation to $8bn, making it the world's most valuable digital asset network operator, it said. The cash will be used to double the size of Fireblock's 300-strong team by the end of this year, placing emphasis on engineers and customer service technicians. In addition, it plans to expand beyond the US, Europe and Asia-Pacific markets into Southeast Asia, Eastern Europe and Africa.

6 Eikon Therapeutics, a US-based drug discovery and development company co-founded by University of California (UC), Berkeley researchers, completed a $517.8m series B round from investors including UC Investments. Insurance provider Harel Insurance took part in the round, as did T Rowe Price Associates, Canada Pension Plan Investment Board, EcoR1 Capital, StepStone Group, Soros Capital, Schroders Capital, General Catalyst, E15 VC and Hartford HealthCare Endowment. Abu Dhabi Investment Authority's ADIA subsidiary and AME Cloud Ventures were also among the investors, as were existing shareholders Column Group, Foresite Capital, Innovation Endeavors, Lux Capital, and Horizons Ventures. Founded in 2019, Eikon Therapeutics is building on super-resolution microscopy that enables the precise characterisation of protein interactions in living cells – offering a much more comprehensive insight than the static snapshots of frozen materials that are currently used. Eikon plans to focus on previously undruggable targets, though it has not revealed details yet.

7 Aerospace manufacturer Boeing invested $450m in US-based flying taxi developer Wisk, highlighting the interest from the industry in commercially viable vertical take-off and landing (VTOL) vehicles. Founded in 2010 as Zee Aero, Wisk is working on automated electric VTOL (eVTOL) technology and is currently in the process of building its sixth generation machine. Zee Aero was acquired by Kitty Hawk Corporation in 2017 and Wisk was formed as a joint venture with Boeing in 2019. In contrast to other companies working on VTOL technology, Wisk is going straight to automated vehicles as opposed to human-operated taxis. Automation, the logic goes, is the best way for the industry to scale, as it means operating costs will be lower along with the resulting prices.

8 Internet group Baidu and carmaker Zhejiang Geely Holding Group provided $400m in series A funding for their China-based electric vehicle (EV) joint venture, Jidu. Baidu now owns a 55% stake in Jidu while Geely reportedly holds the remainder. Baidu had first revealed in January 2021 that it would form a smart EV-focused company with Geely. Incubated in March 2021 with $300m, Jidu is working on an artificial intelligence-enhanced autonomous EV system equipped with machine learning algorithms that help improve its self-driving capabilities. The series A money will go toward research and development (R&D) efforts and mass production of the company's products due to begin next year. Its first concept car model is set to be released at the upcoming Beijing Auto Show in April 2022.


credit : Plenty Unlimited

Plenty works with indoor vertical farms growing vegetables that do not contain pesticides

9 US-based urban farm service Plenty Unlimited raised $400m in series E funding from investors including big-box retailer Walmart and internet and telecoms firm SoftBank, as the latter continues to invest in the space. Investment firms One Madison Group and JS Capital co-led the round, which represents the largest yet for an indoor farming technology company, according to Plenty, while SoftBank took part through its Vision Fund 1. Founded in 2013, Plenty is working with a network of indoor vertical farms to produce sustainable vegetables that do not contain pesticides and which are not genetically modified. The produce is delivered locally in California, where the company is headquartered, though it maintains a research facility in the state of Wyoming. The money will be used to improve Plenty's software platform, which helps farms sell their crops directly to retail partners.

10 FTX US, part of Bahamas-registered cryptocurrency marketplace operator FTX Trading, raised $400m in a series A round featuring SoftBank's Vision Fund 2 at an $8bn valuation. Other investors in the round, which marked the subsidiary's first external funding, included Temasek, Multicoin Capital, Paradigm, Ontatio Teachers' Pension Plan, Greenoaks Capital, Steadview Capital, New Enterprise Associates and Lightspeed Venture Partners. The funding will be used to grow the user base of FTX US, launch new business lines and further develop its derivatives products as it seeks to become the largest crypto exchange in the United States, having entered the market in May 2020, a year after parent company FTX Trading was founded.

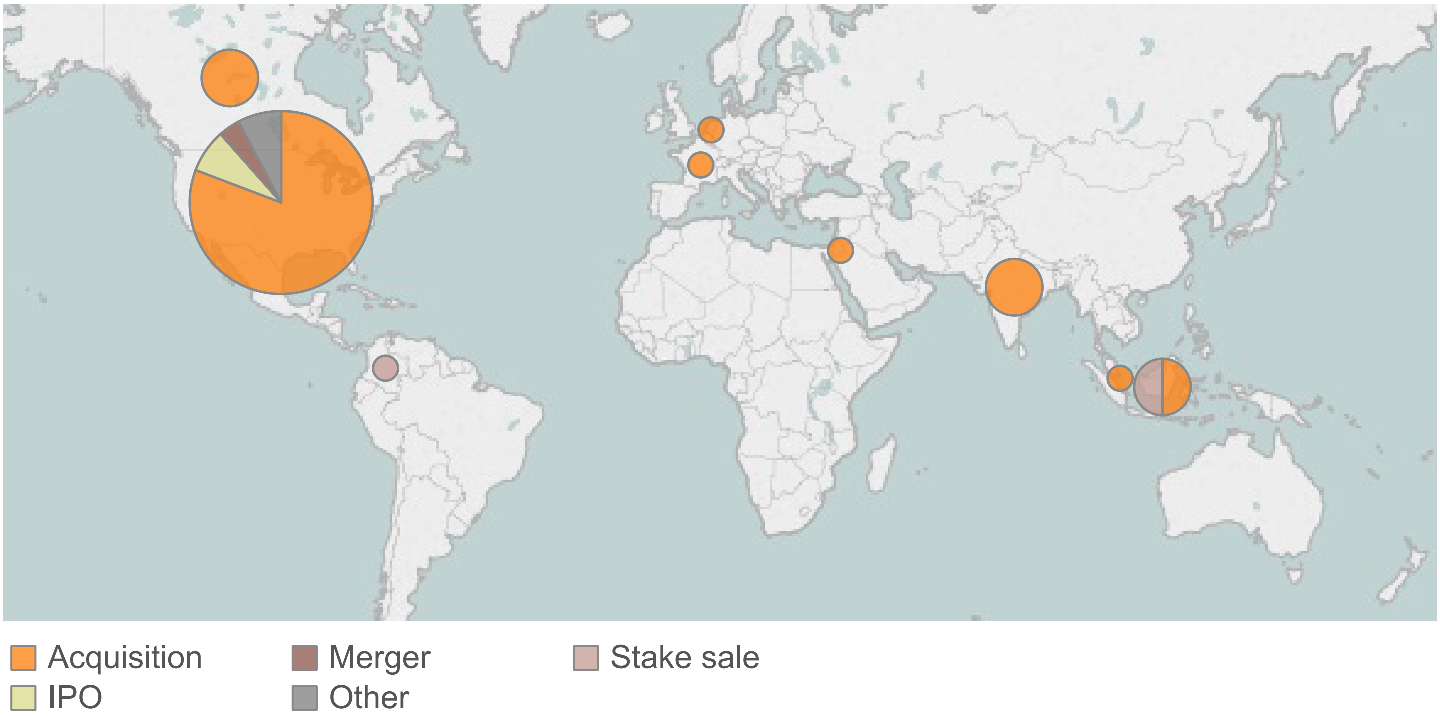
Exits

GCV Analytics tracked 37 exits involving corporate venturers as either acquirers or exiting investors in January. The transactions included 30 acquisitions, two stakes sales, two initial public offerings (IPOs), two other transactions and one merger of equals.

The exit count was comparable to the January 2021 figure (38). The total estimated exited capital stood at $1.25bn, considerably smaller than the $7.16bn from same month from last year.

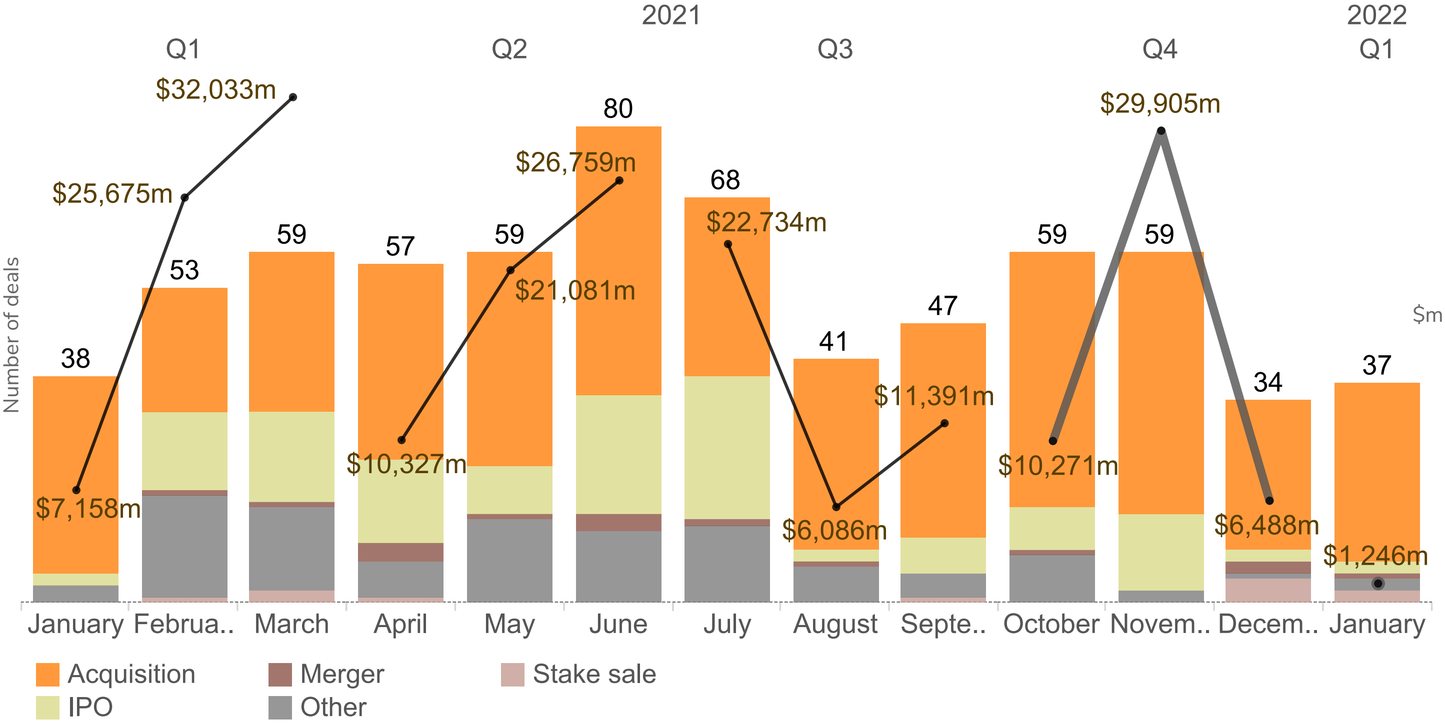
Global view of exits

Total number of exits: 37



Source: GCV Analytics

Monthly exits by number and value



Source: GCV Analytics

Top 10 exits in January 2022

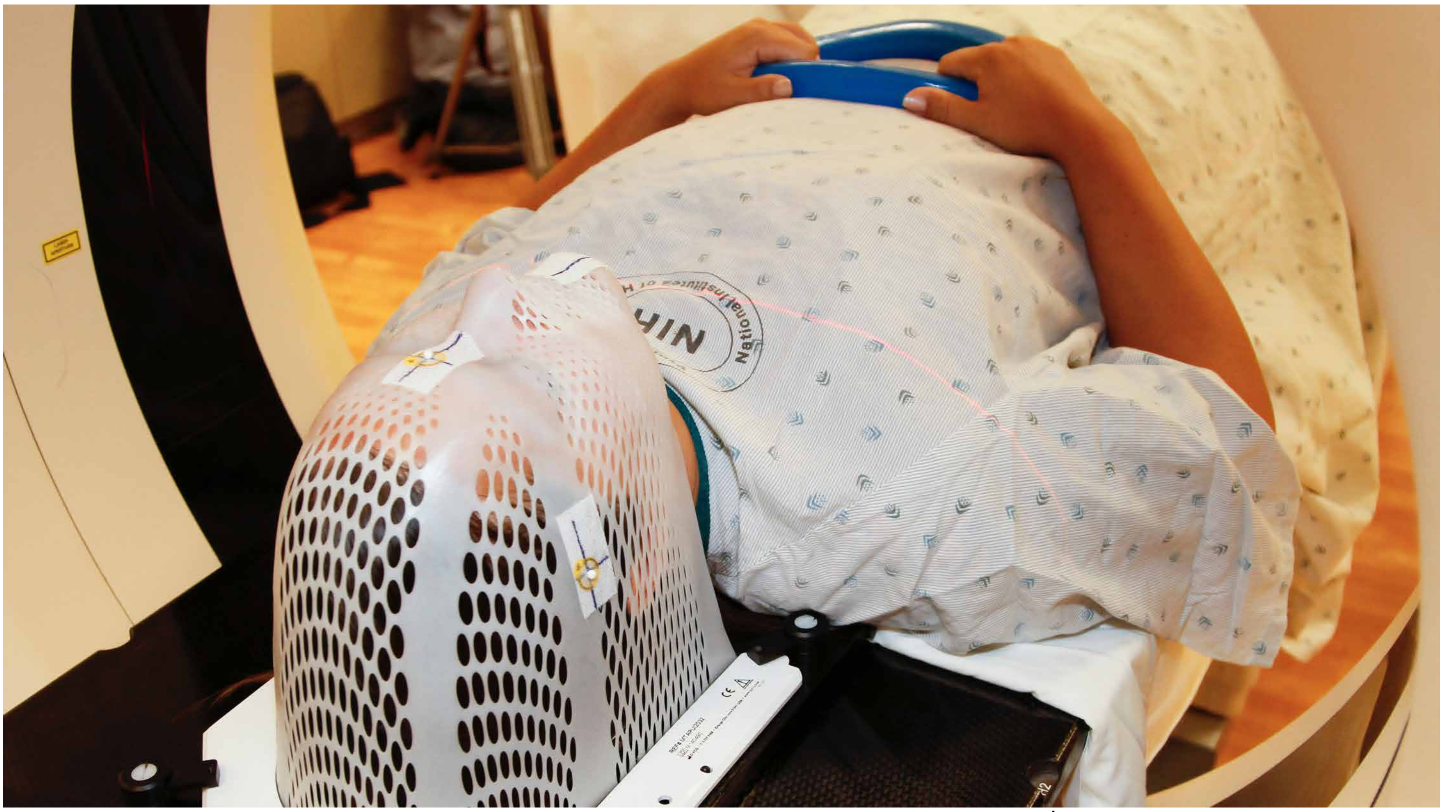
Portfolio company	Location	Sector	Exit type	Acquirer	Exit size ($m)	Co-participant list
The Athletic	USA	Media	Acquisition	The New York Times	$550m	Advancit Capital | Amasia Ventures | Bedrock Capital | Bertelsmann | Chernin Group | Comcast | Courtside Ventures | Emerson Collective | Evolution Media Capital | Founders Fund | LionTree | Luminari Capital | Plus Capital | Powerhouse Capital | Precursor Ventures | private investors | Y Combinator
CinCor Pharma	USA	Health	IPO		$194m	Eli Lilly
Rappi	Colombia	Consumer	Stake sale		$150m	Delivery Hero
LoopMe	USA	Media	Acquisition	Mayfair Equity Partners	$120m	Claret Capital | Georg von Holtzbrinck | Impulse VC | Open Ocean Capital
Vigil Neuroscience	USA	Health	IPO		$98m	Amgen | WuXi AppTec
Bank Fama International	Indonesia	Financial Services	Stake sale		$70m	Grab | Singtel
Enview	USA	IT	Acquisition	Matterport	$35.5m	Ahoy Capital | BrightCap Ventures | Crosslink Capital | Statkraft | Toivo Annus
Tanker	France	IT	Acquisition	Doctolib	$28m	Allianz | AXA
POSRocket	Jordan	Financial Services	Acquisition	Foodics		Edgo Group | Jabbar Internet Group | Kadi Group Holding
Bright Computing	USA	IT	Acquisition	Nvidia		DFJ Esprit | DFJ Growth | ING | Prime Ventures

Source: GCV Analytics

1 Media company The New York Times agreed to purchase US-headquartered online sports media platform The Athletic in a $550m deal, allowing media group Bertelsmann and mass media company Comcast to exit. The transaction represents a profitable exit for all the company's investors and marks a contrast with the fortunes of the previous wave of digital media companies, which focused on a free-to-read business model and which have seen their valuations decline in recent years. Founded in 2016, The Athletic oversees a subscription-based online platform covering a range of sports using experienced journalists familiar with specific regional sports markets. In theory, this makes it easier for them to form in-depth contacts and focus on news applicable to fans of specific teams. The company has 1.2 million subscribers internationally and will boost the offering of New York Times, which has 8 million subscribers of its own. It remains one of the most widely read dailies in the world and increased its net profit 63% year on year to $54.7m in Q3 2021.

The Athletic has a subscription-based online sports platform using experienced journalists

2 CinCor Pharma, a US-based developer of drugs for cardio-renal diseases, raised almost $194m in an IPO on the Nasdaq Global Market enabling pharmaceutical firm Eli Lilly to exit. It priced 12.1 million shares at $16.00 each, in the middle of the $15 to $17 range, and they have since fallen to $13.95, valuing it at $510m. CinCor had raised a total of $193m as of a $143m series B round in October 2021 featuring Eli Lilly vehicle Lilly Asia Ventures. Founded in 2018, CinCor specialises in developing treatments for diseases affecting the heart and kidneys. The capital will be used to further develop its aldosterone synthase product drug candidate, CIN-107, designed to treat high blood pressure, chronic kidney disease (CKD) and primary aldosteronism. The capital will also help advance the existing phase 2 trials of brigHTN – a prospective drug treatment for resistant hypertension – as well as to carry out phase 2 clinical trials on the candidate.



Neurodegenerative disease drug developer Vigil Neuroscience floated in an $98m IPO on the Nasdaq Global Market

3 Local food delivery service provider Delivery Hero sold $150m of shares in Colombia-based delivery service Rappi as food delivery services continue to grow around the world. The divestment took place over a serious of transactions, which retained a 7.9% stake in Rappi on a fully diluted basis, worth over $400m based on the $5.25bn valuation for its $500m series F round in July 2021. Delivery Hero said the $150m is close to the total amount of capital it has invested in Rappi. Founded in 2015, Rappi operates a delivery app that operates across 250 cities in nine countries in Latin America, delivering groceries, medicine and consumer electronics in addition to food. The online food delivery market has been thriving in Latin America in recent years, particularly since the onset of the covid-19 pandemic caused a spike in demand, growing by more than 30% between 2019 and 2020, according to Statista.

4 UK-based mobile advertising platform LoopMe, previously backed by Holztbrinck Ventures, entered into a definitive agreement to be acquired by Mayfair Equity Partners through a $120m leveraged buyout. The transaction valued the company at $200m. The proceeds from it will be used to accelerate the company's growth in its core markets such as the United States while expanding into new geographies, including Japan. Founded in 2012, LoopMe has developed a platform that works with all mobile video ad formats, including pre-roll, full screen and native video, and uses artificial intelligence and big data to improve engagement rates. The company had previously opened offices in Berlin and Paris.

5 US-based neurodegenerative disease drug developer Vigil Neuroscience floated in an $98m IPO on the Nasdaq Global Market, marking a potential exit for pharmaceutical firm Amgen. The company sold a total of 7,000,000 shares at a price of $14 per share. After the offering, there was a total of 28.26 million outstanding shares (excluding over-allotment option) priced at $14 per share, giving a market capitalisation of roughly $396m. Underwriters were granted an option to purchase up to an additional 1,050,000 shares from the company. Founded in 2020, Vigil Neuroscience uses microglia, the main active immune cells in the central nervous system, as the basis for drugs intended to target and treat neurodegenerative diseases. It has set a $100m placeholder target for the offering. Any proceeds from the IPO will go toward the development of the company's line of monoclonal antibodies, VGL101, to treat adult-onset leukoencephalopathy with axonal spheroids and pigmented glia (ALSP) – a progressive disease affecting the brain and spinal cord.

6 Telecommunications firm Singtel and ride hailing app operator Grab each invested Rp 500bn ($35m) in Bank Fama International, an Indonesia-based digital bank owned by media group Emtek. The corporates both acquired 2.4 billion shares from Bank Fama equating to a 16.3% stake each. Emtek's Elang Media Visitama unit had agreed to acquire the company in November 2021, and the latest deal reduced its stake from 93% to 62.8%. Founded in 1993, Bank Fama operates a digital consumer bank through a network of offices across the Indonesian cities of Bandung, Jakarta and Tangerang. It focuses on retail customers such as small and medium-sized enterprises. Singtel and Grab had joined forces to apply to Singapore's Monetary Authority for a digital full bank licence which was granted in December 2020, before the two obtained another similar permit from Malaysia's central bank seven months later.

7 Spatial data technology producer Matterport closed the purchase of Enview, a US-based 3D automation software provider backed by power producer Statkraft, for $35.5m in cash and 1.59 million shares. Enview had secured a total of $18m as of a $12m round in May 2020 led by BrightCap Ventures that included Statkraft unit Statkraft Ventures, Ahoy Capital, Crosslink Capital and Toivo Annus. Founded in 2015, Enview has created a software platform that uses artificial intelligence to process 3D geospatial data at high speeds.

8 Medical administration software provider Doctolib acquired France-based medical data protection technology provider Tanker in a stock and cash transaction reportedly sized between $28m and $34m. The deal marked an exit for insurance groups Axa and Allianz, both of which invested in a $7.2m round for the company in 2017 through respective subsidiaries Axa Strategic Ventures and InnovAllianz, bringing its total funding to $8.8m. Founded in 2015, Tanker has built an end-to-end encryption and key management platform for developers of software-as-a-service (SaaS) packages. The coding can be embedded in each SaaS development kit, removing the need for a standalone approach.

credit : Matterport

Spatial data producer Matterport purchased Enview, a 3D automation software provider

9 Internet company Jabbar Internet Group, energy services provider Edgo and diversified holding company Kadi Group Holding have exited Jordan-based point-of-sale software provider POSRocket in an acquisition of undisclosed size by restaurant technology producer Foodics that was disclosed. Founded in 2016, POSRocket has developed a cloud-based point of sales device designed to help clients in managing and growing their businesses by replacing traditional cash registers. The company's device assists managers in optimising their manpower resources, regulating inventory stocks, generating different types of sales reports and monitoring all the operations in real-time from anywhere in the world.

10 Financial services firm ING exited Bright Computing, a Netherlands-based developer of high-performance computing technology, in an acquisition of undisclosed size by graphics chip producer Nvidia. ING's Corporate Investments unit had invested an undisclosed amount in the company in 2010 and returned four years later for a $14.5m series B round co-led by DFJ and DFJ Esprit that included Prime Ventures. Founded in 2009, Bright Computing has developed a cluster management software designed to automate the process of building and managing Linux clusters. The company's software helps to monitor and build clusters of different sizes and engages in the distribution of data centres provisioning, enabling clients to reduce the risk of cluster failure.

Note: Monthly data can fluctuate as additional data is reported after each issue of GCV magazine goes to press

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Informing, connecting and transforming the global corporate venturing ecosystem

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Portfolio Company Showcase	n/a	2	4
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Branding on Leadership Society Marketing Materials	n/a	n/a	Included
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