Global Corporate Venturing

Powerlist

Powerlist 100 2018

THE CORPORATE VENTURE LEADERS

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Sue Siegel
General Electric
Jeffrey Li
Tencent
Rajeev Misra
SoftBank
Tom Heyman
Johnson & Johnson
Ethan Xie
Alibaba
Larry illg
Naspers
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Nagraj Kashyap
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Barbara Dalton
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BASF Venture Capital
Jonathan Tudor
Centrica
Lin Wang
JD Finance

Feeling 'the greatest joy'

By James Mawson, editor-in-chief

In Churchill's history of the Second World War he wrote of his emotions upon hearing that Japan had attacked US forces at Pearl Harbor on December 7 1941 that only "silly people, and there were many," underestimated American strength.

For him, the entry of the US into the war meant that the ultimate outcome—favourable for his countries (his mother was American and father British)—was now assured. Feeling "the greatest joy" that the attack had arrayed the US on the side of Britain, he "went to bed and slept the sleep of the saved and thankful".

An alliance can alter the balance of power. In the 15 years since Henry Chesbrough published in Harvard Business Review the theory of open innovation the impact has been enormous.

Companies spend more time thinking about the potential changes and disruption happening externally and their responses. And even if research and development budgets still dwarf the resources allocated to startups – Battery Ventures noted Amazon's and Alphabet's combined R&D spend last year was $39.2bn compared with global venture investments in software of $32bn, corporate venturing has become more strategic as a way to hedge bets. It is, hence, more important to companies and one signal to this is the increasing numbers of CVC leaders, such as Sue Siegel (now ranked second), Vanessa Colella and Busy Burr, being promoted to chief innovation officer or combining the venture role with other innovation tools or functions, such as mergers and acquisitions.

Florian Reuter, CEO of Intel Capital's portfolio company Volocopter, said at Intel's corporate venturing unit's global summit this month that the flying-car maker's founders had tried to effectively create a whole new category of travel by coming to the industry as software engineers rather than domain experts.

Within three years, if regulatory approval granted as expected, then mobility as a service could see it as easy to fly from an airport into the centre of a city in 30 minutes for the cost of a taxi but in less time, Reuter said. Volocopter is among several startup initiatives being tried, including another Intel Capital portfolio company, Joby, as well as Tencent-backed Lilium, JetBlue-backed Zunum and Uber's Elevate project.

In 2011 for his manifesto, What Happened to the Future, investor Peter Thiel drily noted: "We wanted flying cars, instead we got 140 characters [Twitter's messaging limitation at the time]."

Inside a decade, Thiel might have his wish but through collaboration between startups and large corporations.

And it is worth looking more closely at the collaboration between corporations inside syndicates as much as between them and startups. As the leaders of the GCV Powerlist 100 show, the next step in the industry is now coming as much from the leaders thinking about their syndicates with each other as with whether or how to convince management to invest in startups and how to do so as this battle has effectively already been won over the past five years or so.

To take Joby as an example. As well as Intel Capital, its syndicate for the $100m B round earlier this year included JetBlue Technology Ventures and Toyota AI Ventures, the respective corporate venturing subsidiaries of airline JetBlue Airways and automotive manufacturer Toyota. Joby's round came days after jet charter service Victor raised $18m in a round co-led by oil major BP Ventures and aviation services provider BBA, while Volocopter (parent company E-Volo) in November had Intel and car maker Daimler in its syndicate. Lilium is backed by Tencent and, in an irony Thiel would perhaps appreciate, Twitter co-founder Ev Wililams's venture firm, Obvious Ventures.

Boeing and JetBlue are backing Zunum Aero, while the UberAir subsidiary of the ride-hailing service backed by SoftBank, Didi Chuxing and a host of other corporations invited a host of suppliers to its Elevate summit in Los Angeles this month.

Startups have long understood the power of diversity among their investors to meet their five primary needs of capital, customers, product development, hiring and an exit. Why have just one corporate venture in a round if you can have several if they bring complementary resources to meet these needs or reduce signalling risk in event of longer-term divergence on financial and/or strategic goals?

What has been less clear is how corporations understand how they work with each other to source deals and help portfolio companies. One of the quantitative metrics used to rank the GCV Powerlist is number of co-investors but in submissions even large CVC units often lack the data (GCV Analytics calculates it regardless but submissions validates the data and signals their understanding of its importance).

What has been less clear is how corporations understand how they work with each other to source deals and help portfolio companies

One group, however, that has clearly thought hard about this area of investing is one of the oldest and largest, Intel Capital.

What is informally known at Intel Capital as the "Wendell doctrine" has the president of Intel Capital ask its entire team to think about how it partners other corporations. He describes the doctrine as "we are better when we work together". Another part of the doctrine looks at the diversity angle behind forming CVC teams internally through hiring and investment syndicates.

In part this is a logical response to the changed venture investment landscape through the rise of particularly Asia-based corporate venturing leaders, such as SoftBank, Tencent and Alibaba, over the past few years.

Intel Capital put out more money than almost ever before last year with $690m but SoftBank through its near-$100bn Vision Fund seemingly does that in almost every deal. Tencent reinvests practically all its net income in venturing and is now reaping the rewards with paper returns of about $14bn from a handful of flotations last year and at least that to come this year if its pipeline holds.

Table stakes for the best entrepreneurs have just become larger and investors are having to respond or miss out – Tencent's main corporate venturing backer, Naspers has finally just sold 2% of the company to realise $10bn to reinvest in the next generation or avoid being washed out in future rounds for its existing holdings, such as India-based retailer Flipkart, which Walmart has just agreed to buy majority control at more than $20bn in enterprise value.

SoftBank built its Vision Fund on long-term successful dealmaking – primarily investing in Alibaba – then bringing in outside investors as debt to magnify the equity returns. Tencent, modelling Naspers' own strategy, has already built perhaps the pre-eminent network or ecosystem of portfolio companies as co-investors inside China and partly through the GCV Leadership Society developing its international one.

Wendell Brooks's response, therefore, to focus on partnership to leverage its strength is smart. Tasking Bryan Wolf from its five-man investment committee and industry leader Lee Sessions, who had developed the Intel Capital Global Summit and demo days into a unique opportunity for startups to meet intel's customers, creates a senior leadership to scale the idea and create more proactive dealflow and understanding of who brings what value to the group.

Venture has traditionally relied on personal connections or meeting at the door of the portfolio company through chance to form syndicates. Institutionalising the process and connections between CVCs fits corporations' often-international mandates and process-driven strengths.

As GCV said at its Global Corporate Venturing and Innovation Summit in January to nearly 700 attendees representing corporations with aggregate annual revenues of $6 trillion, the industry is moving from effectively village capital – local, small scale and investing in college roommates – to city-scale: international, large rounds and heterogenous.

Addressing a gathering of 90 or so peer CVCs attending the summit, Brooks spoke of the collective benefit corporate investors can bring startups. "We can add more [to the entrepreneur] than just helping hire a chief accounting officer," said Brooks, noting the ability of CVCs to plug portfolio startups into their global ecosystems of technologists, salespeople, customers and partners.

Ultimately, strength can come through diversity when allied to common goals and transparent communication.

So while the past two years' winners, Jeffrey Li at Tencent and Rajeev Misra at SoftBank, remain vital and powerful forces, as judged by the GCV Powerlist 100, their own responses to the alliances model being developed by Intel will be interesting to see.

For its part, the GCV Leadership Society is developing its Analytics and communications platform to support any and all such collaboration and deal syndication opportunities.

The GCV platform offers metrics for showing to existing and prospective portfolio companies how its CVC investors are helping them.

The Collaboration and Deal Syndication Platform (CDSP) will initially have GCV Leadership Society members be notified when portfolio companies reach a certain time milestone without appearing to have raised a subsequent round or event (eg, exit).

This notification in the platform will say: "GCV Analytics data shows X portfolio company has reached its 18-month milestone without a subsequent round so we want to give you an opportunity to show its thought-leadership to the community and so potentially develop new customers and suppliers, attract staff and deepen its syndicate if a future round of funding is needed or explore its exit options.

"If this process has already been completed or is well in hand or the company is not considering this option then congratulations. If you do want to consider adding another corporate relationship for your portfolio then one option is to look for investors that have done or are considering deals in a similar subsector so here are some curated leads from your peers you can message privately. You control who is invited in and how much information they receive and through GCV's events around the world in California, London and Hong Kong we can arrange in-real-life personal meetings between you to build the relationship further."

If there is anything we can help with concerning the CDSP platform or your own collaboration initiatives, let me know as we are, to paraphrase Churchill and in thanks to Brooks and the other members of the GCV Leadership Society, more at the end of the beginning than the beginning of the end in this process.

Methodology

At our May Symposium in London, Global Corporate Venturing runs the Powerlist of the top 100 heads of corporate venturing units out of the 2,200 globally we cover.

These are celebrated at an awards dinner at the Shard, Europe's tallest building, sponsored by GE Ventures.

We use a number of metrics for selecting the Powerlist, including the GCV Power Index, which looks at eight metrics from our GCV Analytics *(http://gcvanalytics.com)* insights-as-a-service data platform *(see below)*.

In addition, we look for strategic and leadership measures, such as thought-leadership, vision and motivational abilities, including who from the team was part of our Rising Stars *(http://www.globalcorporateventuring.com/pages/global-corporate-venturing-rising-stars-awards-2018.html)* awards selected in January at our sold-out GCVI Summit *(http://www.gcvisummit.com)* in California.

Strategic and leadership measures:

* Any examples of corporate acquisitions of portfolio or venture-backed companies
* Business unit partnerships and development with portfolio companies
* Product or strategy roadmaps and public leadership position in conferences and associations/societies
* Team member in GCV Rising Stars and other awards
* Team expansion and recent promotions

The eight metrics used for the financials KPI to form the GCV Power index are:

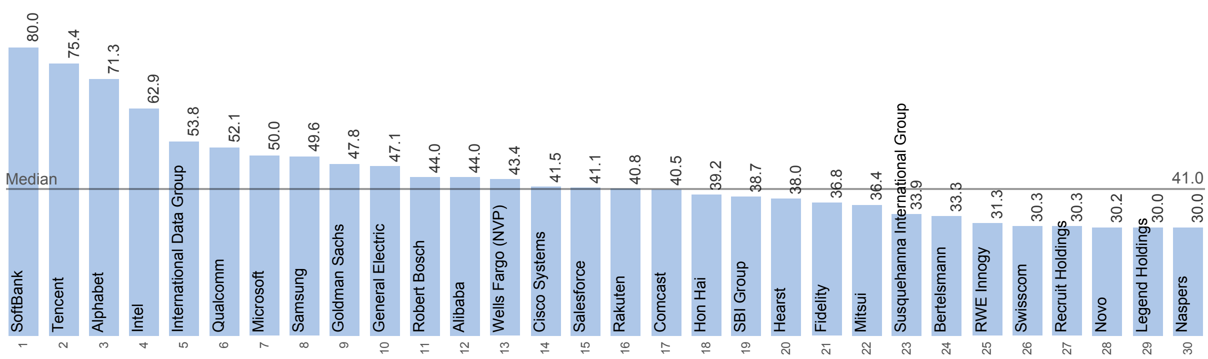
* The number of investments participated in
* The total dollars of investments participated in
* The number of exits participated in
* The total dollars of exits participated in
* The number of unique countries invested in
* The number of unique sectors invested in
* The number of unique rounds types (ie, seed, series A, B, C etc) invested in
* The total number of co-investors

For all Power Index metrics, the highest scoring organisation is given a score of 100 for that metric – All others' scores are normalised by that top scorer.

A simple average of all eight scores is used to determine an organisation's overall power ranking.

Whenever filters are applied (such as for a specific country), the numbers are calculated for that subset of data, including the normalisation values.

In the graphs attached to the top 25 profiles, the blue lines and the figures above them are maximum values investors have reached in each of the examined categories, according to GCV Analytics data. The graph below shows the top 30 in the power rankings.



Global Corporate Venturing Leadership Society

GCV Leadership Society mission:

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

	Premium* (Company) $12,500 per year	Luminary (Company) $50,000 for 2 years
Executive Advisory Role - act as GCV Leadership Society Ambassador for a two-year period	–	✓
Branding on Leadership Society materials as Luminary members	–	✓
Invitations to exclusive leadership society networking events worldwide	✓	✓
Showcase portfolio companies during GCV events	–	✓
Right to join and use the *'GCV Leadership Society'* Name	✓	✓
Get the Weekly Community Newsletter	✓	✓
Entry in the Member App	✓	✓
Pro Bono - Bridging communications to third parties	✓	✓
Enhanced Company Profile in the Directory app	✓	✓
Free Ticket to either the annual Summit or Symposium	TWO	THREE
Assistance in arranging one-to-one meetings and/or private meeting space during GCV events	✓	✓
GCV Subscription** - access the monthly magazine (pdf), news website and special reports	UNLIMITED USERS	UNLIMITED USERS
GCV Analytics for 1 user (add an extra user for $5,000 more) - access 10,000+ deals through GCV Analytics for bespoke reports	✓	✓

* GCV Subscribers can upgrade for a limited time. Subscription fee already paid will be subtracted from the amount due on a pro-rated basis.
** Includes access to Global Government Venturing and Global University Venturing.

The benefits of the Mawsonia brands under one umbrella

Why Join?

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

GCV Industry Partner (Firm or other industry professional (e.g. Academic, Government)

$10,000 per year*

* Non-corporate venturers will have more limited access to the GCV Leadership Society unless authorised by its board.

Luminaries include:


Wendell Brooks
Intel Capital


Barbara Burger
Chevron Technology Ventures


David Gilmour
BP Ventures


Jacqueline LeSage Krause
Munich Re / HSB Ventures


Jeffrey Li
Tencent


Michael Redding
Accenture Ventures


Jaidev Shergill
Capital One


Bonny Simi
JetBlue Technology Ventures


Bill Taranto
Merck


Marianne Wu
GE Ventures

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GCV-BMG 2018 CVC trends and insights project

An excerpt of report findings and analysis

By Heidi Mason and Liz Arrington
Bell Mason Group

Introduction

In our inaugural 2017 CVC Trends & Insights summary report *(http://www.bellmasongroup.com/insights/)* we capped a look at the last five years' explosive growth of global corporate venturing programs, highlighting the professionalisation of CVC specialty practices, the standardisation of foundational CVC team roles and with now documented external benchmarks framing compensation design, and noting the progressive acknowledgment of CVC as a mainstream contributor to corporate innovation strategy and growth.

For 2018, we're continuing that line of questioning and also looking forward: How are Corporate Venturing programs, at various maturity levels, leveraging their current mainstream positioning to accelerate scale and ongoing sustainability, particularly as a potential market correction period may be approaching? In the past, market corrections and economic downturns have signaled the end of a cycle for CVC programs, as they are often among the early victims of cutbacks when parents respond to market uncertainties by retrenching and reorganising with more near term focus on cash conservation and core business profitability.

Is this time going to be different? If so, what are the key factors that will improve the odds of ongoing, uninterrupted CVC program operation? How are CV professionals currently accelerating their program's strategic impact and financial performance in ways that persuade parents of their continuous value to the company?

In this year's research, we zero in on end to end investing, fast becoming the unique hallmark of Corporate Venturing & Innovation Partnering (CV&IP) practices and performance enablers. This perspective is accompanied by improved understanding, new clarity in definitions and starting point formalisation of key elements and tools that enable end to end performance: dedicated Corporate Venturing BD (CVBD) capabilities, high performance innovation partnering programs, up-levelled role of CV portfolio management. All these elements, taken together, translate into new types of CV programs, tools and team designs that more effectively deliver on timely and mutually impactful parent/portfolio co. engagement.

In the external investment ecosystem, we explored what's behind the current up-levelling of CVC investor positioning and syndicates, the increasingly common occurrence of CVC-CVC collaborations, and integration of new types of funds, as well.

In this article, we provide some high-level excerpts of our 2018 findings, sampling some of the most notable trends and CV program developments, as well as a current friction points and key corporate antibodies between CV programs and their parents that may hobble newly-charged end to end investing impact.

Top-level 2018 CVC market trends

- Growing importance of CV program/leadership in corporate strategy – – As CVC has become a mainstream corporate innovation tool, CV teams are playing more important roles in bringing outside-in perspective to guide corporate strategic thinking and drive innovation impact –and increasingly have more operational roles in corporate strategy development. Corporate perception of CV and its specialty practice skills continues to evolve, from optional tools in corporate innovation tool kit to a required corporate capability, critical to effectiveness of parent's core business pivots and transformational initiatives.
- Broad recognition that an integrated CV end-to-end investing focus and process – from initial investment to business relationship and "landing spots" – is fuelling high performance CV program, team and network design, and is seen as essential to acceleration of CV program impact that is both meaningful to the parent, and enhances investment value and market making potential. This is achieved through effective integration of specialised CVC investment, business development, partnering and portfolio management practices, with dedicated senior level CVC/CVBD professionals and managed internal/external CV partner and portfolio co. relationships.
- Emerging professionalisation of specialised, dedicated corporate venture business development (CVBD) practice, program, processes and team design for accelerating portfolio development/strategic leverage for parent company – the key to enabling faster/better commercial traction and advancing CV program strategic performance. CVBD team designs, job descriptions, comp and career path options have become more visible, are just now in early days of taking more formal shape/standardising, with growing understanding of essential qualifications, best practice requirements, including depth of internal/external networks (from corporate executive leadership to soft middle), etc. Note: CVBD following in footsteps of CVC path to specialty professionalisation. Core functions/early team in place in 0-3 years as portfolio momentum quickly developed; formalisation of CVBD programs and dedicated team, plus internal/external innovation partnering programs initiated by year 4.
- CVC, CVBD and Corp BU/Functional collaborators working together to more effectively track/measure impact of strategic investing and innovation partnering – CVCs now beginning to track their end to end investing waterfalls from deal sourcing through to investee landings targeted at accelerating portfolio/portfolio co. value and commercial traction. Strong investment financial performance seen as table stakes for most, also as evidence of rigor and discipline re: fiduciary responsibilities to corporate parent, as well as means to end in certain program goals for evergreen or offset funding.
- Corporate-to-corporate collaborations and new types of investment syndicates being proactively developed (portfolio partnerships – investing and engagement) to accelerate market/ecosystem development, startup commercial traction opportunities and increased valuations.
- CV LP positions in specialised Funds – re-envisioned and also on the rise (e.g., for specific domains, geographies, ecosystems, stages) – redefining the role of funds as element in CV program strategy and design, as well as CV Program/professionals proactive side by side involvement in them (note: LP fund positions previously seen as passive investment vehicle for CV programs who lacked skills or didn't seek to build out a dedicated investment program/team. Not any longer)
- Growing trend: newer programs are leap-frogging established programs' development paths and lead times to scale – setting a new high bar, 50% continuous acceleration over

past high performers. Current high performers in the program startup phase (0-3 year) have learned from their own senior level experience, CV peers and others who have gone before them. They are accelerating sophisticated program creation, development and impact at a rate 50% faster than was possible for the mature programs/teams who pioneered ways forward, in different times and circumstances. Strategic vision drives charter and array of initiatives, integrated tools and team design, required to achieve results in more imminent time horizon (e.g., 2020 goals), with directional strategies for investment/business development focus areas. Given rapidly changing environments, focus areas and roadmap design are understood to be variable over time, require senior level domain, landscaping and ecosystem profiling skills. Also, newer programs with experienced teams are quicker to attract quality co-investors/syndicate partners, as well as reliable, sophisticated CVC to CVC collaborators and innovation partners at the strategic portfolio level (design for building multiple points of value for each individual investment).

Top-level 2018 challenges for CV program impact investing – friction points and corporate antibodies

- Executive/board level support for CV program and open innovation as key part of corporate strategy doesn't always translate into committed resourcing and middle management-driven execution and accountability. Still hesitancy on part of many corporations to commit to multi-year funding to enable minimal viable CV program implementation. Also, exec level governance on CV investment decisions and strategic priorities doesn't insure priority alignment and implementation support in soft middle of parent company.
- Portfolio company landing spot impediments: Natural cultural, operational and organisational challenges/antibodies at BU/functional levels threaten effective portfolio company landing spots in parent corps, with eventual timelines for hand offs from CV team. In addition to agreement on approach, this requires creation of performance objectives and incentives that align desired behaviors as frame for professional development support for BU/functional dept. catchers. This is essential if corporate engagement with startups is to consistently work well, with trackable, meaningful performance.
- CVC investment teams with significant portfolios are running into bandwidth issues in staffing critical board/observer positions with qualified (parent-certified) senior professionals – increases risks, raises opportunity costs on senior people's time/rate-limits growth. Typically, certification requires specific corporate curriculum & on-the-job shadowing – can be up to 2-4 years before ok to solo. And even senior new hires require time to effectively season in board/observer roles at level that ensures competency, corporate familiarity and reduction of corporate risk/exposure.

Note: General agreement that effective CVC board member or observer roles are increasingly important for managing risk and accelerating value of portfolio. This is forcing senior qualified investment professionals to exceed recommended number of board/observer positions per person (5) in order to manage – eating up limited time resource, while also increasing risks and potentially reducing quality of support per portfolio company.

- CVBD team recruitment and retention – While more programs have successfully addressed CVC investment professional role definition, recruitment and retention, sophistication of CVBD organisation design and its build-out (in early stages of specialty practice standardisation and professionalisation) may often lag, being misperceived as rotational, non-dedicated junior level role, subordinate in positioning, compensation and career path opportunity to the more established category of CVC investment professionals. CVBD skills vs. more general, junior to senior-level BD skills are not yet well-differentiated, leading to internal confusion and distributed, ad hoc BD support vs. dedicated CVBD program personnel recruitment and retention.

- Program maturity and scale is no guarantee – No room for complacency. Cycles of executive transitions and corporate reorganisations, shifts in corporate strategy, business pivots, or more dramatic turns driven by changes in parent company status – for example, M&A, market share losses, poor financial performance and so on – demand ongoing agility and adaptability and even painful, disruptive CV program redesigns or creation of other options. Well-known, successful CVC programs, with lengthy track records and brand positioning, are increasingly experiencing different types of team retention threats, especially if there are changes in team incentive structures or if experienced team members have topped out on their internal career paths. These professionals become increasingly attractive recruitment targets for other Corporates and innovation investment ecosystem players. The potential of loss of key professionals can, for their current CV program and team, be a real setback and even create a crisis for making program performance goals, covering already stressed board and observer positions, keeping rest of team in place, and having to rebuild internal, external relationships and network nodes.

For a complimentary copy of the complete GCV-BMG 2018 CVC Trends & Insights Report, email your request to *info@bellmasongroup.com*.

Stay tuned in coming months for more of our 2018 findings as part of GCV webinars, drill-down topical articles, and events.

BMG-GCV CVC insights project

Our annual Global Corporate Venturing–Bell Mason Group CVC Trends & Insights Project came about as an effort to document five years of rapid and remarkable changes in corporate venturing strategies, program design and development.

Our goal and research approach: Get in front of the data to qualitatively capture key trends and implications through an annual series of confidential BMG discussions with a select group of about 30 leading corporate venture professionals – global, cross-sector, and grouped by the maturity of their CVC programs.

Topic areas for annual drill down discussions: Market trends, operational agility and innovation, new opportunities and challenges, as well as perspective on continuously improving best practices, program, process and team designs for accelerating performance and overcoming the typical corporate antibodies that inhibit program impact and scalability.

Standard analysis and report format:

- High-level trends and challenges.
- Drill down across five dimensions: charter, process, team, innovations partnering, performance.
- Trends, best practices, friction points and CVC-corporate antibodies across three phases of CVC program development:

1. Program start-up (0-3 years): Foundational design and first build-out of CV program and core team. Testing while doing: operations/ organisation/ governance structures.
2. Portfolio development (4-6 years): Core team retention and expansion, early performance indicators and operations and organisation refinement for standardisation and institutionalisation at scale.
3. Scale and sustainability (7-9-plus years): Continuous mainstream program and core capability in corporate parent strategy and operations for innovation and growth; funding and operations that routinely survive management reorganisations, strategy changes and down-market cycles.

1

Wendell Brooks INTEL CAPITAL

Brian Krzanich, CEO of US-based chip developer, summed up the change brought by his president of Intel Capital and senior vice-president responsible for all areas of strategic group over the past few years.

Kraznich said: "Wendell [Brooks] has sharpened the focus of Intel Capital as the leading strategic investor. More than ever, Wendell is at the heart of innovation at Intel.

"He and his team provide insights to accelerate our transition to a data-centric company. Just as important, Wendell is a leading advocate in the VC industry for greater diversity and inclusion."

The corporate venturing unit's importance to Krzanich's vision of a data-centric company becomes clear in his own keynote at this month's Intel Capital global Summit when he described how data fuels experience through the two-times faster speed of decline in the cost of data storage against that of processing power. Thirty years ago storage was a burden now it is so relatively cheap and processors so powerful that data "is the most transformational commodity on the planet. Data is the new oil. It is the most precious thing out there."

And Brooks, who stepped into the shoes of Arvind Sodhani, who his peers had described as the person most responsible for the successful development of the corporate venturing industry over 25 years, in 2016, has focused on Intel Capital's strategic role in its dealmaking and work with peers in the ecosystem.

And rather than consolidating further decision-making instead delegated responsibilities to a reorganised and refocused team as part of a comprehensive overall of the unit that has seen substantial change in personnel.

With the swing of Intel Capital's investing pendulum more towards strategic than purely financial returns, Brooks has set clear parameters on achieving this through helping portfolio companies add value and realising Intel Capital is better when it investors together with other corporations and if it has diversified teams and investments.

At his first public speech at the Global Corporate Venturing and Innovation (GCVI) Summit in January 2016, Brooks paraphrased former US President John F Kennedy when he asked not what can portfolio companies do for us, but what we can do for them.

For this year's Powerlist award, Brooks said: "I am honoured to lead Intel Capital, where we create shareholder value, make pathfinding investments for the future of the corporation, influence corporate and business unit strategy, and contribute to social responsibility. We play a critical role in Intel's growth and the ecosystems we touch by 'getting paid to learn'.

"The key is adding value to the companies in which we invest while seeing where money is flowing, where new technologies are headed, and where entrepreneurs are trying to innovate. These learnings are shared across Intel to refine our strategies.

"Making money for our shareholders isn't enough, it is important to be socially responsible and promote diversity and inclusion across our industry. At CES [Consumer Electronics Show] in 2015, Brian [Krzanich] announced Intel's commitment to diversity and goal of achieving equal workforce representation by 2020, and the following summer Intel Capital announced a $125m initiative to seek out qualified technology entrepreneurs with diverse backgrounds. And we've found them, with leadership from former GCV Rising Star Trina Van Pelt, Intel Capital has exceeded our dollar commitment and we now have more than 45 diverse teams with over $250m of capital in our portfolio. In 2017, we more than doubled our 2016 record for backing diverse companies, and those diverse companies represented over 20% of our total investments in 2017.

"Going forward, we are not only committed to continued investment in diverse companies, but also to build a more diverse and inclusive VC community. We have launched a two-year internship program targeting women and underrepresented minorities in their sophomore year of undergrad. They join Intel Capital for a summer, then work with a portfolio company the following year, and receive an offer to join us full time after graduation. Whether or not these individuals join Intel, our goal is to seed the ecosystem and, at the GCVI Summit earlier this year, I challenged our community to do the same – if each of the 300 companies takes at least one intern per year, we can tackle the talent imbalance in the VC industry together. I am pleased to report that many leading CVCs have already embraced this challenge and I encourage those who haven't to join us."

With the team reorganised has come sharper focus on what deals are being done and supported.

Brooks said: "We partner with our portfolio companies to deliver business plans and own our investment thesis. Internally, we are structuring our organisation to double down on Intel Capital's value proposition to portfolio companies by expanding the portfolio management team led by another former GCV Rising Star, Tami Hutchinson. Tami's team strategically manages the investment thesis and support plan by helping our portfolio companies build productive relationships within Intel and by providing external outreach through Intel Technology Days, access to Intel's Global 2000 customers, and through our annual Global Summit."

CEOs of our portfolio companies supported this approach. Babur Ozden, co-founder and CEO of our portfolio company Maana, said: "Events like the annual Intel Capital Global Summit and numerous Intel Technology Days. These have been the single most pipeline generating events for Maana in its early history. And no money, no marketing, no connection can replicate that. This is something Intel Capital does so well for its portfolio companies."

Brooks, who has this year taken over from Claudia Fan Munce as chairman of the GCV Leadership Society representing the corporate venturing community globally, added: "The power of partnership doesn't end at Intel and its portfolio companies, we believe that by working with other CVCs the value proposition relative to financial VCs is further differentiated. I'm committed to growing the CVC ecosystem by building syndicates where we provide better outcomes for entrepreneurs. Together, we can share due diligence, offer specific industry expertise, refine technologies and give business guidance, and accelerate the route to market through access to our customers. To support this initiative within my team, I have asked former GCV Rising Star Bryan Wolf and Lee Sessions to team with the CVC ecosystem to find the right opportunities with mutual interest for co-investment. For example, in our recent investment with Joby Aviation, we co-invested with JetBlue Technology Ventures and Toyota AI Ventures because the combination can deliver unique value that would not be possible individually.

"How do we know that our formula is working? Last year nearly 10% of our portfolio companies had successful exits – 10 IPOs and 26 M&A deals. I am proud to highlight how the Intel Capital team has captured learnings to influence the direction of Intel's corporate strategy, taken a leadership role in fostering diversity and inclusion in venture capital, transformed our portfolio companies, and grown the impact of the CVC ecosystem. Looking to 2018, I am confident that our team of seasoned investment professionals, including current GCV Rising Stars Mauro D'Amato and Nick Washburn, will deliver on our goal of getting paid to learn as Intel Capital shapes Intel's transformation to a data-centric company and positions Intel for success for another 50 years."

Overall, Brooks said: "I have the best job in Venture Capital – I work at the preeminent engineering company in world, see emerging technology innovations, and am responsible for shaping our corporate strategy through inorganic investment and growing new businesses internally. As Intel Senior Vice President and President of Intel Capital, I identify and execute M&A transactions and integrate companies like Mobileye and Altera; manage divestitures like McAfee and Wind River; lead our global venture capital investing team and our corporate business development organisation. I recently expanded my scope to include Intel's New Technology Group, Intel's incubator for new businesses.

"In its 50th year, Intel is undergoing one of the largest transformations in corporate history. A few years before Brian Krzanich took over as CEO, three-quarters of Intel's revenue from our PC [personal computer] business, and today it is nearly 50:50 split with data centric. By data centric we mean powering the ability to process, store, transfer, and gain insights from data. Our strategy spans from the internet of things, generating billions of bits of data, that data filters through connectivity to our data centre and the cloud, and there are incredible new artificial intelligence algorithms and technologies to take that data and use for better purposes, which then crave more data and drive demand for more devices – this is the virtuous cycle of growth.

"Shifting to investing, last year I talked about our plans to drive value around artificial intelligence, automated driving, merged reality (AR/VR), 5G, the data centre and immersive sports and entertainment – and we delivered. Intel Capital has invested over $1bn in artificial intelligence companies, and over $16bn in autonomous, which is skewed by the $15bn acquisition of Mobileye. Going forward, we continue to focus on 'autonomous everything,' including drones, cars, and robots, hardware and software enabling new applications of artificial intelligence, and workload accelerators optimised to improve performance of targeted applications.

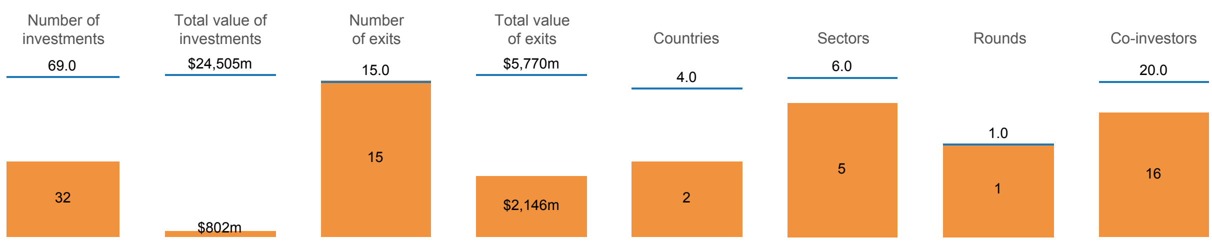
"How we invest is continuously refined. We are deliberately reducing the number of new investments, from 60-70 deals to 30-40 per year, while increasing check size to take leadership positions in rounds with active board seats instead of observer rights – in 2017 we deployed $690m in 42 new and 45 follow on deals."

Before joining Intel in 2014 as president of mergers and acquisitions, and his promotion to SVP and president of Intel Capital in 2016, Brooks spent 23 years as an investment banker, most recently at Allen & Co, and before that at Citigroup. Half the time of Brook's investment banking career was spent in Europe. He set up Allen & Co's London office in 2008, having previously headed Citigroup's European telecom, media and technology group. Brooks has a degree in industrial and operations engineering and is a master in business administration from the University of Chicago.

Brooks has successfully taken on what was then corporate venturing's largest program and legacy and, in an era of $100bn corporate venturing funds and multi-billion-dollar investment programs from Asian peers has shaped Intel Capital to compete through more focus and commitment allied to soft power strengths to leverage and magnify its resources.

It is impressive strategic thinking and execution in a short space of time.

Intel's investment activity since the beginning of 2017



2

Sue Siegel GE VENTURES

After her promotion to chief innovation officer at US-based General Electric as well as her existing role as CEO of its corporate venturing unit, GE Ventures, one peer of Sue Siegel described it as having the responsibility for the company's survival.

This might be too much credit but reflects her high regard both inside and outside the company.

Siegel now reports directly to John Flannery, GE's chairman and CEO, the company said. Siegel's role as CIO includes being a member of the company's capital allocation and portfolio management governance and helping it grow, incubate and accelerate horizontal, adjacent and transformational businesses.

Flannery said: "Sue combines operational excellence with an entrepreneurial mindset to identify and unlock new value for GE. Her ability to spot new market opportunities, develop new business models, partner with the entrepreneurial ecosystem and help her make market-backed capital allocation decisions has made GE stronger."

Siegel herself joined GE from venture capital firm Mohr Davidow Ventures along with partners Marianne Wu and Alex De Winter.

Siegel's background was in healthcare investing for Mohr Davidow from 2007 and a career in the industry stretching back 30 years to 1985 at chemicals company DuPont and Bio-Rad Laboratories, then later as president of both Affymetrix and Amersham (acquired by GE) and before that as a student in Boston and Puerto Rico.

This was a time at the dawn of medical genetics and biotech industries and venture investing, Kleiner Perkins Caufield & Byers having become the first VC firm to set up a life sciences group a year earlier, in 1984, after it backed the first biotech company, Genentech, founded in 1976.

This outsider perspective has been important in her value to GE. Her former CEO of GE, Jeff Immelt, at the end of November at Healthegy's annual Digital Healthcare Innovation Summit when he said of CVC: "I would say most of us have stunk at it, really for a long time. We have been company killers.

"She [Siegel] really trained us on how bad we were."

And while part of the solution was in having a leadership team that comes from the venture capital world and knows how to work with startups, as Immelt said, the second step is delivering on the opportunities created by the changes in the innovation landscape to drive GE's future.

"The pace of change will never be as slow as it is today." Such were the words of Sue Siegel, chief innovation officer (CIO) at GE and CEO of GE Ventures, who was co-chairwoman of the third annual Global Corporate Venturing and Innovation (GCVI) Summit, which hit a new record high this year, with close to 700 attendees from 350 companies with aggregate annual revenues of $6 trillion and nearly $200bn in venture assets under management gathered for the two-day event in Monterey, California.

"Change is going so fast," she added. "If you think of it, today is as slow as it is going to get; in the future, you will see the current time as slow, which means things are only going to accelerate – which is a scary perspective. We already feel how tumultuous everything is, and how we struggle to keep up with all of technologies. And yet things are only going to get faster.

"What this means from a CVC point of view, is that we cannot get complacent. We need to continue challenging ourselves."

GE Ventures' five main units are equity investing, which invests in and partners startups, GE Licensing, New Business Creation, Healthymagination and Catalyst, its new early-market development discipline. Under Siegel, GE Ventures has become the primary unit backing earlier-stage entrepreneurs, and she nominated a few from her team.

Siegel remarked at the Global Corporate Venturing & Innovation Summit in California last year: "We earn our stripes by being engaged in corporate strategy for our business units, educating on new business models, emerging technology trends, and working to always sense emerging trends.

"We have helped do this through the infusion of talent from the VC and entrepreneurial world. These are among a few things that we have done, and yet there is much more to do both internally and externally."

Now, the sights and tools able to be used have broadened. In a GCV profile published in March 2016, Siegel referred to the GE Ventures platform as a business toolkit – a multi-pronged approach aimed at accessing innovation. This toolkit consists of traditional corporate venture capital investing, new business creation, licensing and early market development practices.

Siegel said for her Powerlist 2017 profile that five new businesses had been created over the prior 18 months through New Business Creation, a practice area led by Risa Stack. Last year alone saw new business launches for Avitas Systems and Drawbridge Health and the series A round for Vineti.

Avitas Systems, which uses predictive data analytics, robotics, and artificial intelligence to deliver advanced inspection services to the oil and gas, transportation, and energy industries signed a partnership with gaming chips developer Nvidia – an example of a wider trend for GE Ventures to partner portfolio companies with commercial engagements.

GE said half of "GE Ventures portfolio companies have a commercial engagement with our business units. As strategic investors we ensure strong alignment with the business units and ensure that our portfolio helping GE industrialise innovation."

Other examples from the past year included Upskill, which received backing from GE Ventures, and started working with Glass (formerly Google Glass) and GE Aviation to build an augmented reality (AR) service that connects a smart torque to perfect all of the steps in building a jet engine that require tightening nuts.

Add to this toolkit Catalyst, an early-market development practice that put in place "a discipline that helps identify and develop collaborations with leading science entrepreneurs creating breakthroughs that are market disruptors and could be the next big thing", as Siegel said.

Siegel also pointed to the Healthymagination platform, which works on catalysing solutions for major global health challenges. The HealthyCities initiative and brain health efforts are two examples.

She was recognised in Fortune's list of 34 Leaders Who Are Changing Healthcare and was named one of the Top 50 Most Powerful Women by the California Diversity Council. Outside of co-chairing the GCVI Summit, her leadership positions at conferences have been focused on healthcare, including Harvard Partners' Healthcare Innovation Advisory Board, the Scientific Advisory Board of Brigham and Women's Hospital, Stanford Medicine Board of Fellows, University of California's Innovation Council and USC's Schaeffer Centre for Health Policy and Marshall School of Business Board of Leaders.

Siegel added that "as a CVC, we are being asked to expand our focus to move beyond the role of tech scout and equity investor" in the quest for future growth. She affirmed that "GE Ventures has expanded GE's access to the innovation ecosystem, its technologies, new business models and practices, and the incredible entrepreneurs that power them".

GE Ventures has set up its Edge program under Lisa Coca, managing director of corporate venture investments and commercial development, to provide what Siegel said was support for "our portfolio companies through what we can bring to their growth and development by providing access to our research and development experts, our distribution channels, our worldwide footprint and our regulatory and policy expertise".

Siegel added: "We have really fuelled this effort by also offering leadership educational programs at our Crotonville campus, with a curriculum ranging from leadership skills and hiring to marketing and the art of storytelling, geared at enhancing entrepreneurs' development."

Corporate venture capital investments "aimed at transforming industries and generating meaningful returns might require more capital or global access than a financial VC might be interested in doing".

Siegel also emphasised the importance of collaboration among players in the field. "Corporates understand that innovation is broad and diverse, and that we cannot do it alone. Partnerships are key and GE welcomes partners in the growth journey."

At the time of the May 2017 profile, GE Ventures had inked more than 100 equity deals, and technology and commercial collaborations across its five focus areas – software and analytics, healthcare, energy, advanced manufacturing and corporate productivity and operational efficiencies. GE Ventures last year alone added 22 new companies to the portfolio and made 47 follow-on investments in existing portfolio companies. In aggregate these deals went from seed, right through to D and E rounds and across all of GE Ventures' focus areas, including software, energy, healthcare, advanced manufacturing and enterprise, and involved more than 200 new and existing co-investors.

In terms of investment trends, Siegel said for Powerlist 2016 profile: "Everything is going digital in every industry. Everything will be connected via the cloud. Data is the new currency. Business models that are established in the tech vertical will be widespread into other verticals such as healthcare, energy and in oil and gas, to name just a few."

GE Ventures, however, has not been directly responsible for all investments since inception. In 2013, the company invested $104m in Pivotal, a spinout of data services provider EMC/VMWare, in return for a 10% stake.

That deal was made by the GE software centre's business development team and, according to an unnamed insider, "since it was such a large deal, it is not considered GE Ventures for the purpose of budget, but it went through the same channels". Pivotal floated on the New York Stock Exchange at its midpoint of $15 per share, which allowed Pivotal to raise $555m at a market capitalisation of more than $3bn. GE Ventures itself said it had five exits last year, including the sale of low-power semiconductor maker Arctic Sand Technologies to Murata Manufacturing's US subsidiary, Peregrine Semiconductor, for $68m in March. GE had earlier announced it would acquire Bit Stew Systems for $168m at the end of 2016.

GE Ventures, therefore, is increasingly seen as an effective tool to drive the innovation and growth inside the parent. As Siegel, who has also joined the board of directors at Nasdaq-listed Align Technology and at The Engine, MIT's new startup accelerator, said in a speech at the GCV Rising Stars awards in Sonoma, California, in January 2016: "GE has given us, the GE Ventures team, a chance. We had to earn our place in the fabric of the company, and we have to keep doing that every day."

General Electric's investment activity since the beginning of 2017

3

Jeffrey Li TENCENT

The headline of the Wall Street Journal's Business and Finance section at the start of May caught the shift in economic power and financial returns that has been underway for some time: Chinese unicorns rush out IPOs (initial public offerings).

"A handful of Chinese technology offerings expected this year will dwarf the largest on record so far," The WSJ's lead story on 3 May summarised.

And behind $165bn of these potential IPOs by Didi Chuxing, Meituan-Dianping and Tencent Music lies Tencent, China's largest listed tech company and its most active corporate venturer.

Meituan-Dianping, a China-based local services platform, for example, plans to go public was valued at $30bn as of a $4bn funding round led by Tencent that closed last year but could list at $60bn, according to latest reports.

Tencent Music Entertainment (TME), a subsidiary that manages internet group Tencent's music streaming and karaoke services, that is expected to float with a $25bn valuation also exchanged equity stakes with music streaming platform Spotify, which had its own well-received listing this year.

In addition, Tencent will make its own investment in Spotify by purchasing secondary shares from existing backers, having reportedly been trying to wholly acquire the company earlier this year.

China-based, corporate-backed ride hailing platform Didi Chuxing is considering an initial public offering that could value it at up to $80bn, the Wall Street Journal reported.

The offering could take place before the end of 2018 and the company, whose shareholders include Uber, SoftBank, Tencent, Foxconn, Alibaba, China Life and Apple.

Add in another expected flotation by Ant Financial, an affiliate founded and backed by rival Alibaba, for about $150bn and a potential $100bn valuation for hardware maker Xiaomi, which is closely connected with Tencent, and the $400bn-plus in valuations for these five companies alone are multiples the values of Chinese tech IPOs in any prior year.

If they and another handful of peers do issue the expected $50bn-plus in new shares then these Chinese IPOs will broadly match the proceeds from the 10 largest tech IPOs globally, according to the WSJ using Dealogic data.

Tencent's sophisticated approach to corporate venturing under Zhaohui (Jeffrey) Li, co-managing partner at Tencent Investment with Forest Lin since September 2015, uses the capital markets as just another stage in building out its ecosystem development for local and global market success and in competition with Alibaba.

Best-known for its flagship social products, WeChat and QQ, Tencent since 2016 has been China's largest listed company with a total market cap of about $500bn. The company for last year's Powerlist award said it was "committed to an open platform strategy, through which they aim to provide users one-stop lifestyle services by working with different partners".

It added: "As part of the efforts in developing such an open platform, Tencent Investment's team of 40-plus professionals, including a post-investment management team, has built an investment portfolio of hundreds of companies across all stages and in various sectors, including online gaming, social, e-commerce, online-to-offline (O2O) services, content, finance and healthcare, with multiple notable names like Riot Games, Didi, 58.com and JD.com."

Li and Lin run a venturing and M&A team that draw on exceptional dealmaking experience in two former Goldman Sachs alumni, Martin Lau, Tencent's president, and James Mitchell, its senior executive vice-president and chief strategy officer. Both Lin and Li report to Mitchell, who spent more than a decade experiencing "frequent jet lag", as he described in his LinkedIn profile, as Goldman Sachs's head of communications, media and entertainment research.

Analysing why China-based corporate venturing units had been so quick to develop their activities, Li for last year's Powerlist said: "The competitive landscape of China internet space, especially the very high iteration speed of the market, forced all major players to capture future innovation. In that case, there might be relatively more minority deals [in China] compared with the US market. And the giants might leverage their market resource to speed up the growth of the investee company."

The unit's vision for the future is significant, with its sights set on a huge ecosystem that includes gaming, entertainment, transport, e-commerce and local services and its investments of more than $10bn in at least 300 companies have shown fantastic results already.

Last year, China-based internet company Tencent was involved in another five large IPOs for Asia-based companies that have floated in either Hong Kong and New York.

Tencent's ownership positions in the five is estimated by Global Corporate Venturing Analytics to be about $14bn. In terms of return size, it is worth looking at some of the most famous wins in venture capital history, such as VC firm Accel's stake in social network Facebook, which was worth $9bn at the time of its 2012 IPO, and peer Sequoia Capital's $60m investment in messaging application WhatsApp, which was worth $3bn in its sale to Facebook in 2014, according to data provider CB Insights.

It appears as though the mere presence of Tencent among a company´s shareholders potentially drives its price up, given a user base of nearly one billion for its WeChat app, and strategic positions across the economic landscape in China.

The positive secondary effect was clearly observed in the stock price of Snap, the owner of messaging app Snapchat, which rose after Tencent revealed its 13.9% stake. Tencent's purchase of a 5% stake in China International Capital Corp in September 2017sent the investment bank's shares in Hong Kong to an all-time high.

Yixin Group, a China-based e-commerce marketplace operator spun out of automotive transaction services provider BitAuto, raised HK$6.77bn ($867m) in its IPO last year.

Tencent has a 24.3% shareholding in Yixin, which also counts e-commerce firm JD.com (in which Tencent also owns 16.6%) and internet company Baidu as backers. Yixin issued almost 879 million shares on the Hong Kong Stock Exchange priced at the top of the IPO range, giving it a market cap of about $6.54bn and Tencent a stake worth almost $1.6bn.

A week earlier than Yixin's IPO, Tencent had successfully floated its e-book publishing subsidiary, China Literature, on the Hong Kong Stock Exchange. China Literature raised approximately $1.1bn when it floated near the top of the $6.60 to $7.70 range.

China Literature's share price soared by almost 100% in the morning session of its first day of trading, reaching HK$105 per share. Tencent owns 63% of the issued shares, worth about $7.1bn of its $11.3bn market cap.

Sogou, a China-based search engine operator backed by internet companies Sohu and Tencent, floated in the US raising $585m in an IPO on the New York Stock Exchange (NYSE), priced at at the top of the range it had set. Tencent's stake was diluted from 43.7% to 38.7%, worth $2.05bn of Sogou's $5.3bn market cap.

Singapore-based online services provider Sea raised $884m in an IPO late in October on NYSE with shares priced at $15.00 each, above the $12 to $14 range. Founded in 2009, Sea runs a diversified online business that incorporates a digital media and game offering (Garena), an e-commerce marketplace (Shopee) and a financial services platform (AirPay).

Tencent invested in Sea at an early stage and held a 39.8% stake pre-offering that was diluted to 35.1%. It then purchased additional shares in the offering to take a 37.6% holding as at the end of September, worth $1.88bn of its $5bn market cap.

Tencent recorded another IPO exit in In September 2017, when online insurance platform ZhongAn recorded the largest ever fintech IPO in Hong Kong. The $1.5bn IPO was priced at the top of the IPO's range.

Tencent and insurer Ping An each owned 12.1% stakes pre-IPO, worth $1.7bn pre-dilution based on ZhongAn's $14.1bn market cap, while the share held by Ant Financial, e-commerce firm Alibaba's financial services affiliate, stood at 16%.

These IPOs will not be the last in the streak, as Tencent seems to have backed at least a quarter of the noted unicorns – companies worth at least $1bn – in China, according to GCV's October issue analysis.

As news provider Fortune noted after Tencent's recent results, "one investment looks particularly shrewd. Tencent owns 40% of Epic Games, the North Carolina maker of the runaway hit Fortnite. Breakingviews cites analysis from researcher SuperData that Fortnite alone rang up sales of $223m in March."

Tencent appears to be using IPO less as an exit than an extra funding round for its portfolio companies (with the option to potentially sell shares later). Jeffrey Li, managing partner at Tencent Investment, said at the GCV Asia Congress in September its returns from holdings after they had become unicorns were better than those taken before they reached that status, so the approach makes sense.

Certainly, Tencent's own history in having South Africa-listed media company Naspers as a long-term shareholder, as its value has risen above $400bn and it continues to deliver quarterly results that surpass expectations, would encourage this thinking.

Taking as a starting point probably the most comprehensive list of such unicorns in China – the 108 tracked by China Money Network (CMN) as at 28 August – and more than 90% of them appeared from public records to have at least one corporate venturing investor in the syndicate, according to GCV Analytics.

For context, data provider Pitchbook's list of 345 unicorns in countries other than China shows fewer corporate-backed ones in all the other main regions. Only a third (11, as matched in GCV Analytics' database,) of the 34 unicorns in Asia-Pacific ex-China have corporate backing, a similar proportion to Europe's 17 out of 50 and the Middle East's three out of nine.

The US and Canada come closest to China, with 103 out of 240 unicorns backed by corporations. And, just as in China, a handful of corporations dominate Pitchbook's list of North American unicorns. Alphabet, primarily through its GV and CapitalG units (formerly Google Ventures and Google Capital, respectively,) have backed 20 unicorns in North America, while other notable corporate venture capital (CVC) investors include Goldman Sachs, which has 17, while there are 11 for Salesforce, 10 for SAP's US-based Sapphire unit, seven for Intel Capital and five for Qualcomm.

In China, however, the concentration of a handful of sophisticated CVCs in the most successful deals is more extreme. Nearly half of CMN's list of Chinese unicorns, 46, had at least one of the BATJs as an investor, GCV Analytics found. Even adding in another 15 or so reported or estimated unicorns by 28 August, such as VIPKid and Cambricon, yet to be tracked by CMN at that time and the pattern continues to play out that the largest private sector companies are driving the entrepreneurial ecosystem.

Tencent has backed 24 unicorns in the CMN list, plus another handful (four) of others in China from the broader list tracked by GCV Analytics, and Alibaba's 18 unicorns in its portfolio indicate how dominate the two are, even excluding their track records outside of the country.

Overall, Tencent had another bumper year in 2017. Tencent participated in almost 20 nine-figure venture capital rounds over the course of the year, the largest being the $4bn raised by online services provider Meituan-Dianping in October, which was led by Tencent at a $30bn valuation. The corporate had initially invested up to $500m for a 20% stake in Dianping in 2014 prior to its merger with Meituan, and has maintained a substantial position ever since.

Like some of the other biggest spending corporate venturers, Tencent went big on ride hailing in 2017. Already a prominent investor in domestic on-demand ride service Didi Chuxing (though it did not publicly take part in the company's 10-figure rounds this year), Tencent led a $1.2bn round for Indonesia-based Go-Jek in May at a $3bn valuation, before backing a $1.1bn round for India-based Ola in October.

Tencent's transport deals weren't confined to ride hailing however. It led a $600m series E round for bicycle rental service Mobike in June at a reported $3bn post-money valuation, led a $1bn round for electric vehicle (EV) developer Nio and, as the year approached its end, was rumoured to be considering an investment in WM Motor, another EV developer which had raised $1bn from unnamed backers in August.

Other highlights for Tencent over the course of the year included the $1.4bn round closed by India-based e-commerce company Flipkart at an $11.6bn valuation in April, and which Walmart has just agreed to buy a majority stake at more than $20bn valuation; a series B round for cancer diagnostics startup Grail that closed at $1.2bn in November; and a $150m investment in Maoyan, an online event ticketing spinoff from Meituan-Dianping, the same month, giving it a 5% stake in the company.

An intriguing feature of Tencent's deals is that it has increasingly begun to partner Japan-based telecoms and internet group SoftBank and domestic ride hailing service Didi Chuxing – one of its portfolio companies – in investments. Flipkart for example received a $2.5bn SoftBank investment four months after it closed the Tencent-backed round.

All three invested in the $1.1bn Ola round and are also among Singapore-based ride hailing platform Grab's backers; Tencent and Didi Chuxing are both investors in second-hand car trading platform RenRenChe and publicly-listed telecoms firm China Unicom; and Tencent and SoftBank's joint portfolio companies also include artificial intelligence software developer Petuum and Didi Chuxing itself.

Tencent and Didi Chuxing were two of the five Chinese online-focused corporates that combined to invest $11.7bn in China Unicom in August, and the former backed up its VC investments with a series of large-scale private equity deals this year.

Tencent paid $367m for a 5% share of investment banking firm China International Capital Corp in September and invested $2bn for a 12% stake in Snapchat owner Snap last month before capping the year by buying $604m in shares of e-commerce platform Vipshop this week.

As with Tencent's CVC investments, transport was a key area. It spent $1.7bn to buy up 5% of EV producer Tesla's stock in March and followed that by joining JD.com and Baidu to provide $1bn for Yixin, a spinoff from automotive data and e-commerce firm Bitauto that went on to raise $867m in a Hong Kong IPO in November.

Tencent looks set to continue its strategic investment approach to expansion in 2018, and will likely continue to invest in ride hailing in tandem with Didi Chuxing and e-commerce in partnership with online retailer JD.com, which is also an investor in Vipshop, Go-Jek and Unicom, and perhaps in a range of sectors with SoftBank. If previous years have resembled a land grab for individual CVCs, it now looks as if they're forming partnerships big enough to go for all the chips.

The domestic corporate venturing industry in China only took off in 2011 when Tencent set up a

RMB10bn corporate venturing program, three years after it began corporate venture capital investing, and Alibaba's own blockbuster that raised $25bn — more money than any IPO in history – only came in 2014.

At the time of Tencent's CVC fund launch, Global Corporate Venturing opened and concluded its analysis: "It seems oxymoronic to describe a company as cautiously aggressive but these two descriptors come up most commonly when people privately discuss Tencent, a China-based, corporate venturing-backed, online media conglomerate that has this year set up the world's biggest debut corporate venturing fund.

"That, and smart. It is an investment and development strategy that asks to be judged on actions and results rather than hype."

Given many of the current crop of unicorns have only benefited from the competition between the BATJs since 2011 it is a remarkable development in the ecosystem. Alibaba and Tencent were each understood to have invested in more than 100 deals in 2015 alone, although the pace reportedly dropped slightly last year.

Jeffrey Li, managing partner at Tencent Investment, at the Global Corporate Venturing Asia Congress last year explained why the innovation tool was so important to the company. He said: "For Tencent, CVC is a survival game, as organisation structures mean it is hard for big companies to survive.

"If you do not sit there [as a corporation] and wait for a black swan to come in then your fundamental response has to be CVC [to reinvest profits from the core business].

"We invest now because they are good years for our core business to reinvest profits."

Tencent's ambitions stretch increasingly into deep tech and other sectors, such as robotics – UBTech Robotics, a China-based developer of intelligent humanoid robots, this month raised $820m in its C round with a market valuation of $5bn, in what it said was the single largest funding round ever for an artificial intelligence company.

The investment was led by Tencent, and also includes funding from ICBC, Haier, Minsheng Securities, Telstra, Easyhome Furnishings, Chia Tai Group, China Minsheng Bank, China Film and TV Capital, CGN, Sichuan Railway Investment Group, Green Pine Capital Partners, Whale Capital, Shenzhen JinFuZi Network Technology and CDH Investments.

As part of its investment, Tencent said it would work closely with UBTech on future product development. Tencent has already worked with UBTech, launching the humanoid robot Qrobot Alpha last December – the first robot to feature the Tencent Cloud Xiaowei service; and the personalised educational robot Alpha Ebot in February which integrates the high-quality, comprehensive, and open AI services and interactivity of the Tencent Dingdang assistant.

Li, who was promoted at the end of 2014 from executive director covering earlier-stage deals to managing partner, and he said helping investee companies was one of his main successes for last year's award and this approach has been fundamental to its success.

Li joined Tencent in 2011 and launched and led Tencent Investment's efforts to penetrate key O2O sectors, including automotive, education and healthcare. He was responsible for Tencent's investments in Huayi brothers, Zhihu, Netmarble Games, Howbuy and many others around the world.

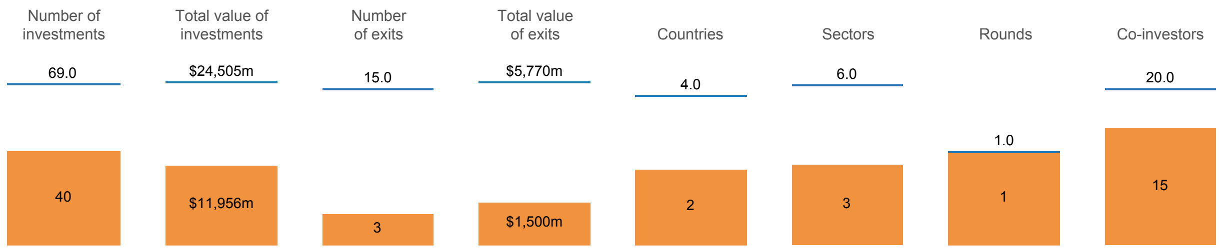
Before joining Tencent, Li worked as an investment principal at Germany-based publisher Bertelsmann's Asian corporate venturing unit run by Annabelle Long for two years.

He led deals there for Chinese automobile industry content and marketing services firm BitAuto and others, such as Phoenix New Media, in which Bertelsmann invested $2.8m for a 2.9% stake as part of a $25m round. Bertelsmann sold its stake in BitAuto to unidentified buyers for $65m at the start of 2014.

Bertelsmann had reportedly invested $12m in BitAuto in 2009 and it floated on the New York Stock Exchange a year later, a year before Phoenix New Media.

Before that, Li worked for Google and Nokia in various product and business roles, where he gained substantial experience in the internet and mobile arenas. He holds a bachelor's degree from Peking University and an MBA from Duke University's Fuqua School of Business.

Tencent's investment activity since the beginning of 2017



4

Rajeev Misra SOFTBANK VISION FUND

This month Japan-based internet conglomerate SoftBank Group was reportedly considering ways to sell its stake in India-focused online retailer Flipkart without attracting a hefty tax liability.

Flipkart was near a deal to sell a majority stake to US-based retailing peer Walmart, for up to $21bn.

SoftBank at time of writing was still deciding how much of its 20-21% holding in Singapore-registered Flipkart it would sell and when, according to news provider LiveMint, which said SoftBank might retain all of its stake for at least one year more to avoid paying a large tax, sources said.

SoftBank through its near-$100bn Vision Fund run by Rajeev Misra became the largest shareholder in Flipkart when it invested more than $2.5bn last August. Potentially nearly doubling returns inside a year for such a large deal helps answer at least one concern that the Vision Fund would effectively overpay for deals and struggle to deliver financial returns back to limited partners, which include SoftBank.

However, the premise of raising such a large fund from sovereign wealth institutions and other corporations was a theory that technology and disruption was only speeding up and on a longer-term time horizon it was important to own the industries of the future.

Local press reports had expected SoftBank's investment in Flipkart would eventually lead to a four-way merger between Flipkart, its smaller rival Snapdeal, in which SoftBank acquired a $500m stake in 2015, Paytm Mall, in which SoftBank invested $1.4bn last year and the Paytm's China-based backer Alibaba's operations in India. SoftBank tried to sell Snapdeal to Flipkart, but the deal fell through leading to SoftBank accepting a potential exit to Walmart.

These strategic underpinnings and the resources to create global champions have already started transforming whole industries, particularly ride-hailing. SoftBank intends to transfer its shareholding in ride hailing companies Uber, Ola, Grab, 99 and Didi Chuxing to its Vision Fund, the Financial Times reported.

Merging all five companies into the Vision Fund portfolio would provide them with access to the fund's resources and allow them to collaborate and create synergies more easily.

Misra has previously expressed his wish for Uber to focus on core markets such as the US and Europe, as opposed to pursuing a worldwide strategy that would pit it against numerous domestic rivals.

There is already a substantial crossover between the various companies. Uber agreed to sell its Southeast Asian operations to local competitor Grab in February 2018 – though the deal is being investigated by Singapore's regulator – and sold Uber China to Didi Chuxing in 2016.

Uber has also entered discussions to sell its Indian business to Ola, and Didi Chuxing acquired a majority stake in 99 in January 2018, after SoftBank had injected $100m in 99 in May 2017.

Didi Chuxing raised $5bn in April 2017 from SoftBank as part of a $5.5bn funding round, and the corporate returned in December to also back a $4bn round. SoftBank has also invested in Grab multiple times, beginning with a $250m series D round in 2014.

SoftBank acquired an 18% stake in Uber in December 2017 as part of a secondary share purchase and a direct investment with a combined value of more than $8bn.

While disruptive to taxis and private car ownership in the shorter-term, the ambitions of these portfolio companies and SoftBank are wider as the data flows allow transformation of city transport and delivery more widely.

SoftBank said the Vision Fund was a "new fund created by the Masayoshi Son-led SoftBank Group as a result of its strongly held belief that the next stage of the information revolution is imminent, and unprecedented large scale long-term investment is required".

The fund's broadest strategy involves making long-term investments in the foundational platform businesses that will enable the next age of innovation by being active across a wide range of technology sectors from artificial intelligence to robotics and cloud technologies.

SoftBank could be seen as building a capability to see and understand full public and private dealflow while securing the financial tools to capitalise on insights gathered from trends identified in its operational businesses, such as Sprint or ARM.

The vision is effectively corporate venturing on steroids, involving the application of corporate strengths in operational performance and technology roadmaps paired with financial execution and an ability to make money as the cycle shifts up and down.

Although it has made multiple investments in sectors such as online lending, biotech and ride hailing, in a general sense the firm's larger investment strategy appears to have three distinct patterns.

The first involves the gaining of stakes in large e-commerce or mobile service providers in specific markets (Ola, Flipkart, One97 and short-term accommodation booking platform Oyo in India; Grab in Southeast Asia), allowing it to acquire a central position in their online services industries.

The second is to take a substantial position in market leaders in specific online or mobile subsectors. That includes OneWeb and WeWork, but also the likes of workplace messaging platform Slack, tech-focused real estate brokerage Compass, urban farming company Plenty, sports memorabilia seller Fanatics and AI-equipped insurance provider Lemonade, all of which have received nine-figure investments from SoftBank last year.

The third prong would be SoftBank's investment in cutting-edge software producers and chipmakers such as Arm, the semiconductor maker it acquired for about $32bn in 2016. It took a $4bn stake in publicly-listed graphics processor producer Nvidia in May, and made substantial investments in endpoint cybersecurity software provider Cybereason, navigational technology developer Brain Corporation and autonomous driving software developer Nauto.

All three areas take a large amount of funding. SoftBank revealed in its financial report for Q3 2017 that it had grown the Vision Fund to $97.7bn, putting an additional $4.5bn into the vehicle itself. SoftBank had initially committed $25bn to in the fund. Limited partners also include consumer electronics companies Apple and Sharp, mobile semiconductor producer Qualcomm and contract manufacturing services provider Foxconn.

Other limited partners include Saudi Arabia's sovereign wealth fund Public Investment Fund, which has committed $45bn, and Abu Dhabi state-owned Mubadala Investment Company, which put in $15bn.

Press reports indicate a second Vision fund of about $100bn could start to be raised as early as this year.

Misra grew up in India before moving to the US to study at University of Pennsylvania where he gained engineering bachelor's and master's degrees, three years later returning to education to gain an MBA from Sloan MIT.

Misra's professional life started in the 1980s designing satellites at the Los Alamos National Laboratory, then a technology startup. But it was upon leaving Sloan MIT when he joined Merrill Lynch that saw the start of a career in the financial sector defined by bold investment decisions and a rapid rise to management roles.

At Merrill Lynch, Misra joined the derivatives trading desk and was promoted to managing director in a record five years, before joining Deutsche Bank in 1996. Misra spent the next decade leading a team that built one of the world's biggest and most powerful investment banks from scratch.

Greg Lippmann, who worked under Misra, made headlines when he famously shorted the sub-prime market making Deutsche Bank about $1.5bn in profit while every other bank was losing money as the financial crisis loomed.

Leaving Deutsche Bank in 2008, Misra joined UBS in 2009 and was responsible for rejuvenating the business as head of the fixed-income operation for four years.

Misra, now in his mid-50s, joined SoftBank as head of strategic finance more than two years ago after leaving global investment management firm Fortress Investments Group, where he had worked for less than a year. He now effectively owns his former employer as, in March last year, SoftBank agreed to buy Fortress for $3.3bn and could probably buy UBS or Deutsche Bank too.

In a 2014 interview published on SoftBank's website and identified by news provider VC Circle, he said he had joined the Japanese company "because it is very stimulating and educational to work in a different industry", adding: "We are playing a role in the latest industrial revolution on our planet."

SoftBank has operations in broadband, fixed-line telecoms, e-commerce, internet, technology services, finance, media and marketing, semiconductor design and other businesses, including robotics and a baseball team.

The Fortress acquisition was announced just five months after SoftBank completed its purchase of UK-listed chip designer ARM, paying $31.4bn, which is just a bit more than it paid when it bought 80% of US phone operator Sprint in mid-2013.

Misra has a reputation inside the company for unconventional and visionary approaches. At SoftBank Group he was responsible for the decision to raise money based on the future value of Alibaba shares, rather than simply selling them, in order to fund the takeover of ARM Holdings. Misra was also behind the idea of Sprint issuing cheaper bonds that were secured by the company's access to spectrum airwaves, which led to a much lower interest rate than the company had paid previously.

Misra has known Masayoshi Son, founder, chairman and CEO of SoftBank Group since Deutsche Bank worked with SoftBank in 2002, and has been tasked with implementing Son's vision for the fund.

Misra's elevation to head the Jersey-domiciled SoftBank Vision Fund, with its main office in London and others in New York and Tokyo, came just under four months after SoftBank's India-born former president and chief operating officer Nikesh Arora quit the Japanese telecoms and investment company after a group of anonymous shareholders accused him of leading SoftBank into making poor investment decisions as well as of conflict of interest. Arora quit soon after even as an internal probe cleared him of any wrongdoing, but he had reportedly pushed for the sale of part of the Alibaba stake and also its holding in Finland-based games maker Supercell, which Tencent snapped up.

Arora's departure and Misra's promotion could be seen as a supercharging of its investment efforts headlined by Son's purchase of this original Alibaba stake during the first dot.com bubble, although its initial corporate venturing efforts started 25 years ago with the launch of SoftVenture Capital Company (currently SBI Holdings, according to the group's website history).

A quarter of a century on and SoftBank's strategy is still being marked out by Son and his senior executives, including Ron Fisher, and newer hires, such as Misra, Alok Sama, and Jonathan Bullock.

Misra has a master's in computer science from the University of Pennsylvania and an MBA from Massachusetts Institute of Technology's Sloan School of Management.

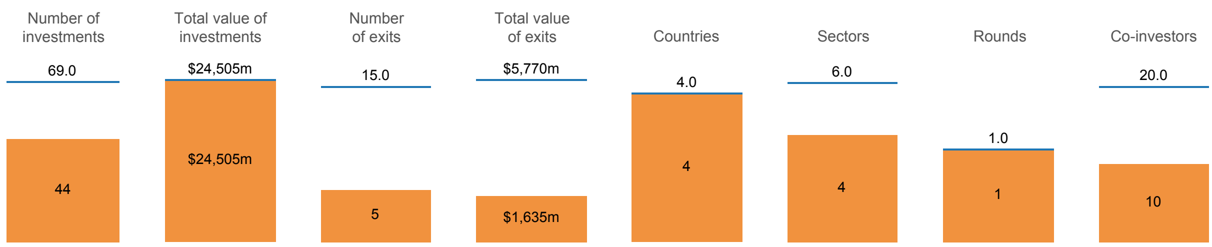
According to his Facebook profile, seen by VC Circle, he also holds a BTech in mechanical engineering from the Indian Institute of Technology Delhi and did his schooling at Delhi Public School.

His name could probably now be added to the highly-regarded fee-paying school's Wikipedia list of successful alumni in business.

In a career spanning derivatives, global markets and technology investments and dealmaking – as the New York Times noted, Misra has "the rare ability to reinvent himself". As CEO of the SoftBank Vision Fund, the company summed up the expectations now on him: "We eagerly await his next success."

One gauge of this success will be whether , as CEO Masayoshi Son last year said, SoftBank can raise successor funds that could collectively dwarf the original. What is clear is that regardless of how fast it is spending money – and it is going through that $98bn very quickly – there seem to be no competitors, among corporates or VC firms, that can match the size of its wallet.

SoftBank's investment activity since the beginning of 2017



5

Tom Heyman JOHNSON & JOHNSON

Although US-based healthcare company Johnson & Johnson (J&J) had been making venture investments since the 1960s, the creation of Johnson & Johnson Development Corporation (JJDC) in 1973 and its unbroken history of taking minority equity stakes in third-party entrepreneurs marks it as one of the oldest and most consistent investors – perhaps surpassed only by mutual fund manager Fidelity in any sector.

Tom Heyman, leader for Johnson & Johnson Innovation–JJDC when he replaced Brad Vale in 2015, has done his best to continue the group's finest traditions. During that time, it has remained one of the largest and most active groups, investing more than $400m in more than 30 investments last year.

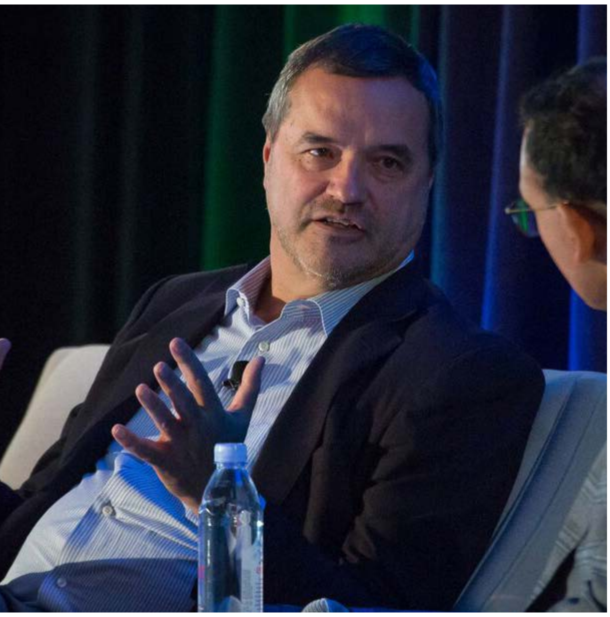
In an interview with Andrew Gaule for his Question Time column in Global Corporate Venturing at the start of the year, Heyman said: "JJDC is the oldest corporate venture group in healthcare. It was created 45 years ago and it is amazing to see what foresight people had – management and leadership – at that moment in time, to start off with this corporate venture group at a time when there were not that many such groups, especially in healthcare.

"We are a separate legal entity reporting into Johnson & Johnson Innovation. We are involved in external innovation through equity investment in young companies that have products, technologies or assets that might be important to one of our key sectors in the future.

"It is a small team. It is not a venture capital fund in the traditional sense of the word, so we do not have a certain amount of capital assigned to us. We have access to J&J's balance sheet, so we can make small to really large investments. Our investments range from a few hundred thousand dollars to sometimes more than $100m, depending on circumstances. So it is not a closed-end fund like you would see with a traditional venture capital group.

"Our investors are based in the ecosystem where a lot of innovation is ongoing, so they are together with the people in our four innovation centres. We have investors in Boston, California, London and Shanghai. We have one person based in Tel Aviv because Israel is such an important source of innovation, especially in the medical device sector.

"We are strategic investors in the first place. We are not financial investors. We do not invest in order to make money for Johnson & Johnson. We invest to build the pipeline and the portfolio of the sectors within J&J. So we look at opportunities and making investment in those companies that have assets or technologies or platforms that are of interest to one of the three sectors – medical devices, consumer or the pharmaceutical group.



However, in his interview with Gaule, Heyman added: "JJDC should start to play a more prominent role in looking at opportunities that do not easily fit today within the strategies of the sector, but are technologies that are potentially transformational towards the future. And trying to learn more about these technologies through an equity investment is something that is important.

"But in the end it is something that has to be in areas that have at least some support by key leaders within Johnson & Johnson. We have learned, from the past and from our own mistakes, that we might want to make an investment because it is something that we like, but it may never find a home within Johnson & Johnson because no one is interested in bringing it in or they do not see the strategic intent at all – then it is financial, it is not strategic anymore. And these things, then, often do not give us the returns we would be looking for.

"So investing in what we call white space – maybe that is not a great word, in potentially transformation technologies – is something I think is an important role we could play. But to me it is going to be very important that either the executive committee or the management committee of Johnson & Johnson support those kinds of investment, so at least they acknowledge that this is something that might be transformational for the future of Johnson & Johnson."

As examples of its deals, Heyman told Gaule: "We have made a very important investment in a company we have co-created with Verily, which is the healthcare arm of what is now called Alphabet, Google before that. We poured in a tremendous amount of money to build a new surgical robot. We are putting in not just money. We have seconded people. They are working very closely with our Ethicon affiliate to develop instruments that would work with the robot.

"Another example is when we made an equity investment in a company based in California that is developing a completely new breast pump. Very innovative. We have put those people in touch with retailers, so that they understand what it takes to commercialise a consumer product like this one to the retail sector.

"We have an investment in a company that is developing a medical device to treat heart failure. They have a product in the marketplace in Europe to treat hypertension. They have some issues with respect to reimbursement. We have brought in our people to help them out in thinking through how to improve that situation. We have brought in our people to help them out in developing their clinical trials and their protocols.

"In all the companies in which we have a board seat, we will bring in, or we will offer at least, the resources of Johnson & Johnson. Those are the things that we do on an almost day-to-day basis, when we make an equity investment."

JJDC's newest area of investment is in consumer, such as its La Lumiere deal. La Lumiere is the developer of light-based phototherapy device to treat acne. JJDC contributed to a $20m series B round for the company in November 2014 and later J&J acquired it before launching its product under J&J's Neutrogena brand.

Stacy Feld, vice-president at Johnson & Johnson Innovation–JJDC and GCV Rising Star 2018, for her profile this year said: "I see it as a great example of identifying a need, working creatively to advance the science and then leveraging J&J's market expertise to bring the product to consumers on a global scale.

"It represents an important illustration as to how J&J collaborates with entrepreneurs to develop, commercialise and scale first-in-category products."

JJDC launched its consumer investment practice five years ago but keeps the majority of its consumer portfolio confidential. Feld did disclose in her profile that the organisation has eight companies in the portfolio, including two successful exits, across a range of segments.

JJDC is one of the first corporate investors in the consumer market and one of the challenges it has faced is ensuring there is a clear firewall in place to prevent spillover of sensitive information from companies it is investing in to J&J and its consumer products divisions.

"As consumer investing expands, it will be important for newcomers to similarly demonstrate to entrepreneurs their process for managing confidential information – it is critical in gaining trust. Trust is essential to an effective board, building a strong management team and growing the company to reach its full potential," she said.

This is an ethic Heyman has done much to encourage. Heyman has kept his ties with Belgium as since April 2012 he has been a member of the board of directors and the general assembly of innovation and research hub IMEC.

Heyman was from 2008 until November 2016 was CEO of Janssen Pharmaceutical in Belgium, responsible for its Beerse campus, which is one of eight research centres in Europe spending an aggregate €1.5bn-plus ($1.7bn) in research and development each year.

Beerse is also the site of J&J's only incubator – called JLabs in Europe, after the company decided late last year to avoid setting one up in the UK as planned. Called JLABS @ BE, Belgium, therefore, was the location of its 10th JLabs, which can house up to 30 life sciences startups focused on innovations across the entire healthcare spectrum, including biotech, pharmaceuticals, medical devices, consumer and healthtech sectors.

JLABS @ BE benefited from €2.1m ($2.5m) of financial support granted by the European Regional Development Fund (ERDF) and the government agency Flanders Innovation & Entrepreneurship (VLAIO –Hermesfonds) in 2017.

At its longest-established JLabs, on the west coast of the US, it has 51 companies and 36 alumni.

Further down the coast, and J&J has 47 companies in JLabs San Diego – of which 11% are consumer.

However, one of the interesting outcomes from its facility has been the number of partnerships between portfolio companies, not just to J&J itself. For example, Abilta Bio and Primordial Genetics, Amplyx and Linnaeus, and Xycrobe Therapeutics and Kode Biotech have all partnered with each other.

In Europe and more broadly, J&J has had an excellent record of coinvesting and working with partners, its leading syndicate corporate venturing peer is Switzerland-based Novartis, according to GCV Analytics, which reflects back to the experience and trust its approach has generated under Heyman and his predecessors.

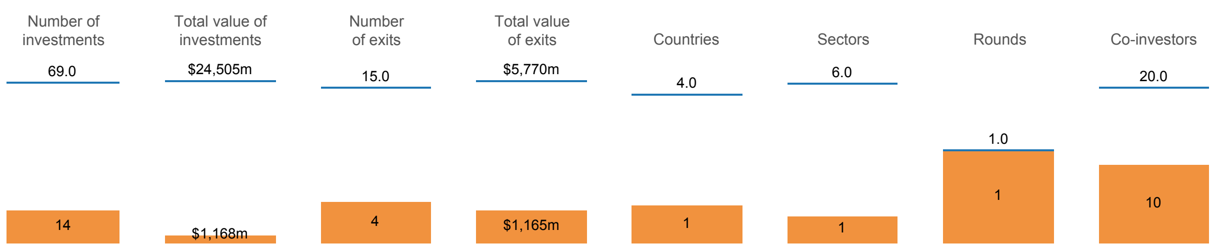
Heyman was also responsible for acquiring companies for J&J, including Tibotec, Centocor, Cougar Pharmaceuticals, Aragon Pharmaceuticals, Covagen and Alios Biopharma, and "hundreds of transactions for both early and late-stage pharmaceutical products and technologies", according to his J&J profile. So after 25 years in business development, adding corporate venturing leadership might seem almost straightforward, even in what was a record three years since he took over.

Heyman started at Johnson & Johnson in 1982 in its law department of the Janssen affiliate back in Belgium. Then in 1990 he was asked to come to the US as vice-president of corporate development for Ortho, which was one of the other pharmaceutical companies within the Johnson & Johnson family of companies. Then in 1992 he was then asked to lead the business development group of the pharmaceutical group of Johnson & Johnson.

Born in the Congo, Africa, and graduating with a master of law from the KU Leuven in Belgium, Heyman started out hoping to have a "real impact" on his country through foreign policy.

In a 2013 interview with PharmaBoardroom, Heyman said: "I am a lawyer by training. My dream was to enter the diplomatic service of Belgium but I quickly came to the conclusion that Belgium is too small a country to have a real impact on foreign policy. I therefore started to get more and more interested in international law and economics."

Johnson & Johnson's investment activity since the beginning of 2017



6

Ethan Xie ALIBABA

As news provider Fortune said, in 2003, as Alibaba battled US peer eBay for control of China's online shopping market, Jack Ma, co-founder of Alibaba, predicted that in their home market Chinese startups like his would inevitably triumph over Barbarian invaders, no matter how deep the foreign firms' pockets or how sophisticated their technology. EBay, he said, might be a "shark in the ocean", but Alibaba was a "crocodile in the Yangtze River". As Ma put it in Fortune's article: "If we fight in the ocean, we lose – but if we fight in the river, we win."

And while much credit goes to chairman Ma, it is his other co-founder, Joseph Tsai, executive vice-chairman and who controls its investments and corporate venturing strategy along with direct report, Ethan Xie, managing partner of Alibaba Innovation Ventures and member of the Global Corporate Venturing Powerlist 100, that have built up its market dominance.

Ma also underestimated Alibaba's growing clout outside of China. Having joined in March last year as head of enterprise and emerging technology investments in the US, Bo Zhai, GCV Powerlist 2018 award winner, is developing China-based online retailer Alibaba Group's corporate venture capital CVC investment efforts in enterprise, cloud and emerging tech, such as artificial intelligence, outside Asia-Pacific.

Zhai said for his profile in January: "My primary responsibilities include both minority stake equity investments, acquisitions and joint ventures. Some areas I closely follow include cloud infrastructure, AI infrastructure and applications, autonomous, big data, and security.

"In additional to investment transactions, I also introduce the best innovators to the right Alibaba business units in China for commercial collaboration.

"My role ultimately is to be the bridge between east and west. It is not an easy task and remains a work in process."

Zhai added on his LinkedIn profile: "Some areas I am looking into – artificial intelligence], deep learning, cloud, security, big data, computer vision, voice, neuro-linguistic programming and the internet of things."

The scope of his interest reflects the interests and influence of Alibaba, which has expanded from a China-focused ecommerce company to a global company with a market capitalisation of more than $500bn in less than 25 years, which is less than a quarter of its planned lifespan.

Alibaba aims to be a company that lasts at least a 102 years, so that it will have operated across three centuries, and many of the company's current plans hinge on the abilities of Ethan Xie, who joined Alibaba in January 2013 and is now managing partner of its corporate venturing unit.

Xie, a former speaker at the GCV Academy in Shanghai, China, runs Alibaba Innovation Ventures, the investment arm of Alibaba Group that provides venture and growth-stage funding to technology companies.

He said his unit was separate from the Alibaba Pictures corporate venturing unit, which announced a $300m fund ahead of a bigger $1.5bn initiative as part of Alibaba Digital Media & Entertainment Group to oversee all Alibaba's entertainment subsidiaries.

And with growth at payment platform Alipay, which is owned mainly by Alibaba's founders, Jack Ma and Simon Xie, rather than Alibaba, and financial unit Ant Financial Services Group, which Alibaba spun off ahead of listing expected later this year at about $150bn in market capitalisation, the group has strong potential inside and outside China.

Taking as a starting point probably the most comprehensive list of such unicorns in China – the 108 tracked by China Money Network (CMN) as at 28 August – and more than 90% of them appeared from public records to have at least one corporate venturing investor in the syndicate, according to GCV Analytics in October.

In China, however, the concentration of a handful of sophisticated CVCs in the most successful deals is more extreme. Nearly half of CMN's list of Chinese unicorns, 46, had at least one of the BATJs as an investor, GCV Analytics found. Even adding in another 15 or so reported or estimated unicorns by 28 August, such as VIPKid and Cambricon, yet to be tracked by CMN at that time and the pattern continues to play out that the largest private sector companies are driving the entrepreneurial ecosystem.

Alibaba's 18 unicorns in its portfolio indicate how important it is, even excluding their track records outside of the country.

Similarly, Alibaba's affiliate, Ant Financial, has backed a couple of other unicorns, including UrWork and Qufenqi, even outside of those, such as Koubei, Ofo and Ele.me, it has coinvested alongside Alibaba in. The crossholdings become more complicated once affiliated, subsidiary or personal investments are included.

Alibaba founder, Jack Ma's, personal investment vehicle, Yunfeng Capital, which has also invested in Koubei, Alisports and VIPKid among others. Yunfeng also backed BGI Genomics, a division of BGI Group, which in mid-July completed a RMB547m ($81m) initial public offering by selling 40.1 million shares at a list price of RMB13.64 each on the Shenzhen Stock Exchange's ChiNext board. After the first day's 44% share price pop – or increase – BGI Genomics was worth $1.15bn.

BGI, in turn, has also become a corporate venturing investor, backing UK-based genomics company Congenica, developed at University of Cambridge, while its alumni have also left to set up some of the most exciting unicorns, such as Wang Jun's departure to create healthcare analytics firm ICarbonX, backed by Tencent and the fastest to reach such a status in the world.

Alibaba first began investing heavily in 2013 when Xie joined. Joe Tsai, executive vice-chairman of Alibaba, summed up the vision when he said in 2013: "Alibaba is run by entrepreneurs, and we believe in supporting entrepreneurs with great vision and a strong sense of mission for their companies."

At that time, Alibaba was launching an investment arm in the US to seek startups working in the e-commerce and emerging technologies spaces. It has since scaled up in the US, including leading the $793.5m series C round for augmented reality company Magic Leap in February 2016 and joining last October's $502m D round.

Leading such a high-profile round affirms Alibaba's status as one of China's, and the world's, corporate titans. Rony Abovitz, founder, president and CEO of Magic Leap, said: "We are excited to welcome Alibaba as a strategic partner to help introduce Magic Leap's breakthrough products to the over 400 million people on Alibaba's platforms."

As part of the round, Tsai joined Magic Leap's board. Tsai was part of Alibaba's founding team in 1999, along with Simon Xie and Ma, having previously been a private equity investor at Sweden-listed Investor AB. Alibaba's senior team is experienced in venture investing, with CEO Daniel Zhang leading its strategic investments in Haier, Intime Retail, which he chairs, and Singapore Post. Ma also sits on the board of SoftBank, a major shareholder after its earlier corporate venturing deal to back Alibaba's growth. US-listed Yahoo also owns a substantial corporate venturing stake in Alibaba.

They are, therefore, well qualified to judge a good investor and rate Ethan Xie highly, as do his peers. When Xie ran a workshop at the GCV Academy in Shanghai, he scored 4.5 out of 5 for the program presentation and was described as having "very good local knowledge and a well-respected brand in CVC", according to Andrew Gaule, who headed the academy at the time.

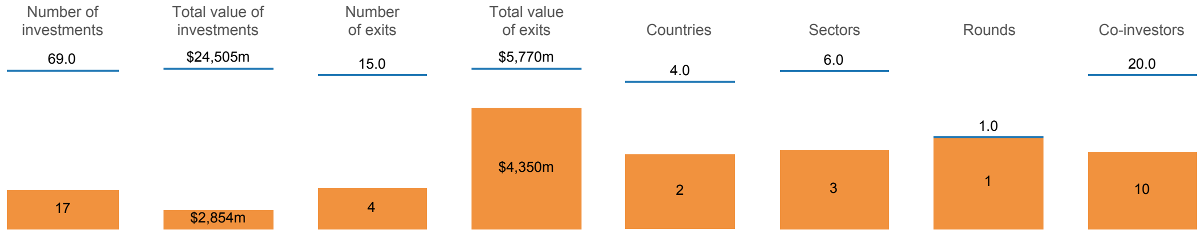
Alibaba's strategic investments fall broadly into three groups – e-commerce, media and online services. E-commerce deals have ranged from department store owner InTime to flash sales company Mei.com and logistics service YTO Express, as well as Lazada and Snapdeal.

The second group consists of both traditional media companies like South China Morning Post, Singapore Post and Shanghai Media, and new technology or online offerings like video-streaming platform Youku, instant messaging companies Sina Weibo and Snapchat, and Magic Leap.

The third group, in which Ele.me and UCar fall, tends to include companies that provide online-to-offline services such as food, transport, mapping (AutoNavi) or domestic services (58 Daojia). These can be connected to Alibaba's e-commerce services, broadening them at the same time as Ant Financial can extend its online payment empire into new realms.

Based on its activity in the past 12 months, Alibaba seems to have no plans to reduce its corporate venturing efforts. If such dealmaking continues, Ethan Xie, a former science graduate from Tongji University and a post-grad from University of Sydney, could feel he has already packed a 100-year history into his short time at Alibaba.

Alibaba's investment activity since the beginning of 2017



7

Larry Illg NASPERS VENTURES

Bob van Dijk, CEO of South Africa-based media and internet group Naspers, said: "Naspers looks to invest in entrepreneurs around the world that are building leading businesses addressing big societal needs. Naspers Ventures, led by Larry [Illg], has invested in several new segments for us doing just that. The new areas of investment include education, food, health and agriculture, and continued investments in some of these segments will help to build the future of Naspers."

Naspers' approach to investing in developed markets changed in late 2015 from avoidance – after some middling deals in Europe in the 1990s – to active investments in the US.

Bloomberg reported Naspers invested $100m in Letgo, a US-based mobile classified advertising application, in September 2015, following up with a $175m in January last year.

Naspers CEO Bob van Dijk said at the time: "We will probably have more focus on the San Francisco Bay area than we have had previously. If we see the right opportunities we could see ourselves put a good amount of capital there."

This led to the opening of Naspers Ventures in San Francisco in May last year under Larry Illg, a former eBay online auction company executive. Illg joined Naspers in 2013 from real estate listings platform Trulia, where he was general manager of new ventures. He was chief operating officer (COO) of Naspers' e-commerce assets prior to taking the reins at Naspers Ventures.

Naspers Ventures is where the majority, 14 worth an aggregate $1.5bn in round totals, of the investing has happened but not all. Charles Searle, who is responsible for managing Naspers' listed assets, including Tencent and Mail.ru, had an active year, too.

In March, Naspers sold HK$76.95bn ($9.8bn) of shares in Tencent, the China-based internet group in which it invested $32m in 2001.

Tencent operates a large-scale online services offering centred on its messaging app, WeChat, which has more than one billion users. As of the fourth quarter of 2017 it was the fifth most valuable company in the world, and it has a market capitalisation of about $505bn at time of agreed sale.

Naspers acquired a 46.5% share of Tencent through its $32m investment, which took place three years before its initial public offering in Hong Kong, and currently holds 33.2% having not sold any shares previously.

The company sold 190 million shares, equating to a 2% stake in Tencent, at HK$405 each. Naspers pledged in a statement not to sell any more shares for a further three years.

The proceeds from the sale will be used to shore up Naspers' balance sheet and fund an investment drive intended to boost its holdings in other sectors. Naspers Ventures invested in four main sectors last year, food, education, mobile and consumer entertainment.

Outside the US, Naspers Ventures has expanded by opening offices in Singapore and India. Ashutosh Sharma has been recruited from venture capital firm Norwest Venture Partners to head the new office and will lead Naspers' VC and M&A deals in India. Sharma was a vice-president for Norwest in India, having previously been an investment manager at Qualcomm Ventures, the corporate venturing arm of mobile chipmaker Qualcomm, between 2010 and 2012.

Although none of its other investments have garnered the same return as Tencent, Naspers invested in Mail.ru, the Russia-based internet company with a $6.6bn market cap today, in 2007, and owns notable stakes in India-based e-commerce firm Flipkart, which has agreed a majority sale at about $20bn valuation to US peer Walmart this month.

Naspers is expected to retain a chunk of its near-15% Flipkart holding worth up to $3bn, which was one of GCV Rising Stars 2018 award winner Russell Dreisenstock's greatest successes after a $71m investment. For his profile he cited the low valuation at Naspers first entry and the "exceptional" returns it has produced.

And Dreisenstock had had good reason to be pleased with its success. "When looking at technology hotspots outside the US, it is difficult to see past India. Home to 1.3 billion people and the world's seventh largest economy, India is also the birthplace of an outsize influence in Silicon Valley, due to a large diaspora of talent spread across both startups and established technology companies – look no further than the top executives of two of the world's top five most valuable companies, Satya Nadella at Microsoft and Sundar Pichai at Google," wrote Dreisenstock in an article for Entrepreneur.com in September 2017.

In his Entrepreneur article, Dreisenstock cites the characteristics present in Indian culture that have a positive influence on the country's startups. They are: bargaining and negotiating, respect for experience, community and jugaad – an Indian concept that he defines as "the most innovative, economical and quality method to accomplish the desired task by unusual or imaginative means and ways".

It is no surprise then to discover that Naspers Ventures has been particularly focused on India. Others were $250m for Ibibo Group, which owns and operates bus ticketing platform redBus.in and hotel booking site Goibibo.com, and providing $60m of an $80m series E round for online food ordering platform Swiggy.

However, India is by no means the only part of the world Naspers is interested in. Food delivery platforms around the globe appear to be one of the areas beyond media and e-commerce that firm is keen to move into, having invested approximately $1.2bn in such companies in 2017.

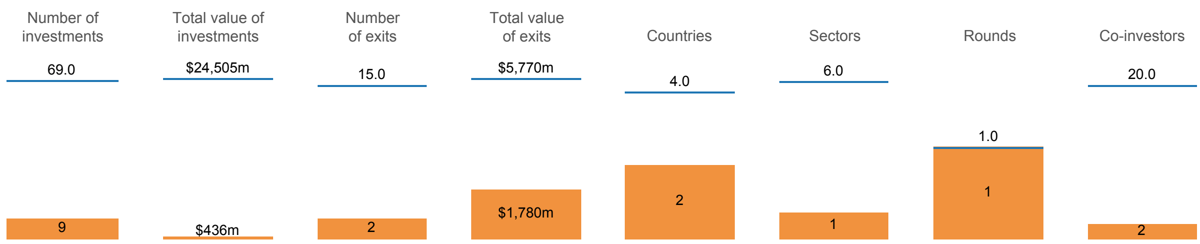
Germany-based Delivery Hero received the majority of that money, approximately $1.1bn. Naspers first provided $423m in May before investing further at its initial public offering and afterwards, buying secondary shares from e-commerce group Rocket Internet. Dreisenstock said Naspers has already seen 1.5-times return in just a few months and it planned to stay in the company for the long term.

Alongside food, one of the new verticals targeted by Naspers Ventures education. The initial deals under Illg and Dreisenstock targeted Codecademy, which is "teaching the world to code", Udemy, a learning and teaching marketplace, and Brainly, the world's largest social learning network with 70 million-plus users.

According to Dreisenstock, one of the reasons Naspers has been so successful is that the firm's philosophy is to invest for the long term and this allows him and others to structure deals that are founder-friendly and offer operational support. He said this was what corporate venture capitalists needed to do to be more competitive against traditional VCs.

"They should also continue to nurture the startups and let them act on their vision without immediately imposing a corporate way of doing things or harnessing them to do just what the corporate ambition may be," he said.

Naspers' investment activity since the beginning of 2017



8

Annabelle Yu Long

BERTELSMANN ASIA INVESTMENTS

Bertelsmann Asia Investments (BAI) had a "fantastic year," according to the Germany-based media company's spokesman, with nearly 30 new investments and four portfolio companies that filled for an initial public offering (IPO).

That this was Bertelsmann's most active region for corporate venturing and highlighted in its full results speaks eloquently to Annabelle Yu Long, head of BAI's, performance and skills.

Germany-based Bertelsmann is one of the world's oldest and largest media, services and education groups with more than 119,000 employees – 2,000 more than the year before – and €17.2bn ($19.1bn) in revenue last year.

In the past year, Bertelsmann, which traces its book publishing back more than 180 years, has bedded down its focus on education as its third main business line alongside media and services, after making corporate venturing through Bertelsmann Investments one of its eight divisions.

Thomas Rabe, CEO of Bertelsmann, for last year's Powerlist award to Shobhna Mohn, executive vice-president for growth regions strategy and Bertelsmann Investments, said: "The work done by Bertelsmann Investments not only facilitates knowledge transfer and innovation scouting across all our lines of business, but is also financially successful."

Mohn for a profile on the company published September 2016, said: "Corporate venture activities are of significant strategic relevance for Bertelsmann. All our key investment platforms have therefore been grouped in a separate division, Bertelsmann Investments.

"In particular, our venture fund activities make an important contribution to the development and expansion of our businesses in Brazil, China, India and the US.

"Through our investments, we gain insights into the trends in a given market, identify strategically relevant businesses at an early stage, build partnerships with local investors and entrepreneurs and benefit financially from the successful development of young startups. In return, we bring valuable business building experience and our existing network to our portfolio companies.

"Moreover, the insights gained through our investments are one of the key drivers of the group's digital transformation."

Through its four funds within, Bertelsmann Asia Investments (BAI), Bertelsmann Brazil Investments (BBI), Bertelsmann India Investments (BII) and Bertelsmann Digital Media Investments (BDMI), Bertelsmann Investments made more than 40 new and various follow-up investments in young companies. Bertelsmann now has more than 160 shareholdings around the world through its funds. Since 2012, Bertelsmann has invested more than €600m through its four investment funds alone, while its other divisions also expanded their activities, such as Arvato increased its stake in financial services provider Intervalor in Brazil from 41.5% to 81.5% and RTL Group acquired a minority stake in the Israel-based virtual reality company Inception.

And while there might be four growth regions, there is clearly one that is dominant: China. With more than 110 investments over the past decade since Long founded BAI in 2008, the group now manages more than $1.5bn

Long, who also sits on the board of listed companies Tapestry, BitAuto, CDEL and iClick, as well as private companies Meili, Bigo Live, 352air and Jike, has built the team from the ground up.

Long is also CEO of the Bertelsmann China corporate centre and on the company's group management committee (GMC), which advises the executive board on corporate strategy and development.

Long reports directly to Rabe, chairman and CEO of the executive board, which effectively runs the company through the GMC. She said: "Bertelsmann Asia Investments is one of the best-known and most successful funds in the Chinese investment scene at this point. We continue to put into practice what we set out to do 10 years ago. And we are pleased that, with such a small team, we are able to make a sizeable contribution to a global media corporation like Bertelsmann.

"There is probably no other company at Bertelsmann that generates such a high profit per capita as the six-member BAI team – and we're proud of that, of course. Every year we have the same expectation and aspiration: to be better than the year before. So far we have always managed that – and I'm very confident that this will continue to be the case, since we invest in growth regions and growth sectors. We are surfing a very positive, sustained trend, so it's not an unrealistic expectation."

Bertelsmann Investments' results are determined mainly on the basis of earnings before interest and taxation (ebit), which at €141m "significantly exceeds the previous year's figure of €35m," Bertelsmann said in its latest results.

Its results added: "Capital gains from divestments once again made a positive contribution to group profit in the past financial year. In China, BAI made 29 new investments during the reporting period, and seven follow-on investments, including in the bike-sharing app Mobike and mobile commerce services provider SEE.

"For the first time, four BAI holdings went public in a single year. In 2017, the premium lifestyle platform Secoo, the fintech company Lexin and the digital marketing platform iClick debuted on the Nasdaq [stock exchange], and the online automobile retail transaction platform Yixin Group on the Hong Kong Stock Exchange."

Secoo raised about $140m in September as the first e-commerce IPO since Alibaba's in 2014. Online lending platform LexinFintech and iClick Interactive Asia Group raised $108m and $30m, respectively, both in December.

However, the big success was Yixin Group, a China-based e-commerce marketplace operator spun out of automotive transaction services provider BitAuto (and on whose board Long sits), which raised HK$6.77bn ($867m) in its IPO last year.

Yixin issued almost 879 million shares on the Hong Kong Stock Exchange priced at the top of the IPO range, giving it a market cap of about $6.54bn.

But while she has made a success of BAI, the groundwork for Long's success was laid beforehand. After her MBA from the Stanford Graduate School of Business and a BSEE from the University of Electronic Science and Technology in China, Long joined Bertelsmann in New York in 2005 and worked as a principal at Bertelsmann Digital Media Investments prior to founding BAI.

Before joining Bertelsmann, Long started her career as a TV anchor and became a producer with a variety of highly rated, award-winning television and radio programs in China, the company said.

And her results have been recognised outside of the company. Long was named a Young Global Leader (YGL) by World Economic Forum. She is the first person to join YGL's Advisory Council from China and also serves as a member of its Global Agenda Council on the Future of Media, Entertainment and Information. Long was named Fortune China's 25 Most Powerful Women in Business of 2017 and 2016 ChinaVenture – Financial Times China Top Investor.

But inside Bertelsmann remain her strongest supporters. Rabe moved from chief financial officer to chairman and CEO of Bertelsmann at the start of 2012 and instigated a strategy based on growth regions and built around supporting its existing business lines, including through digitisation, and finding new "growth platforms", such as education, services, content for television and "other sales channels".

The company said: "These examples show why a significant portion of Bertelsmann's investment funds will be channelled into such new businesses from now on. Activities in these lines of business will help Bertelsmann to become a faster-growing company in the next five to 10 years."

Bertelsmann also puts its focus on transformation, down to its private family-owned structure giving it focus and flexibility to make changes, with its top two core values being partnership and entrepreneurship, taken as the principle of decentralisation.

Bertelsmann is controlled by the Mohn family and the Bertelsmann Foundation after it spent €4.5bn in 2006 on buying back shares traded to Groupe Brussels Lambert for control of entertainment company RTL Group.

And the family might feel Long would be welcome to join them given BAI's success.

Bertelsmann's investment activity since the beginning of 2017

9

Nagraj Kashyap M12

Microsoft Ventures, the corporate venturing subsidiary of software producer Microsoft, rebranded to M12 this month in a bid to set itself further apart from its parent's accelerator initiative.

The new name – M for Microsoft, and 12 because "entrepreneur" is a 12-letter word – comes two years after Microsoft restructured Microsoft Ventures from a global network of accelerators into a full-fledged corporate venture capital unit under Nagraj Kashyap, who reports to Microsoft's dealmaker-in-chief, executive vice-president Peggy Johnson, who made her own move from Qualcomm in 2014.

The two different iterations of Microsoft Ventures proved too confusing, both to portfolio companies from the original and new unit and internally among M12 staff, Kashyap, head of M12, told Business Insider (BI).

The accelerator is now known as Microsoft ScaleUp and is part of Microsoft for Startups, an initiative established in February 2018 that also includes cloud services credit programs BizSpark and BizSpark Plus.

M12, which has already backed more than 50 startups over the past two years, also added another four companies to its portfolio by investing a total of $3.5m in the winners of its startup competition, Innovate.AI. The winners also received credits for cloud platform Microsoft Azure.

In a world where funding is so easy to come by that startups can afford to shop around for the perfect investor, Kashyap told Business Insider M12 stood apart from other corporate VC firms.

M12 is empowered to make fast decisions and offer competitive terms, Kashyap said, but by being backed by the $735bn market capitalisation of Microsoft it can offer tools and technology that no other startup focused on enterprise customers can match.

"We are much more patient. We don't raise a fund every three years," he told BI. "If we can't help them, why are we investing in them?" added Kashyap.

Thanks to M12, Microsoft also became a customer of Livongo, and now its diabetes management tools are available as an employee benefit across the company, BI said.

And from a standing start of just himself two years ago when Kashyap came over from Qualcomm Ventures, M12 is now about 21 people, working out of offices in San Francisco, New York City, London, Seattle, and Tel Aviv.

Kashyap for the Powerlist profile that as well as the fact that M12 had "crossed 50 companies in record time", he was proud over the past year of having "built the most diverse investment and overall team in VC or CVC [with a] unique model: financially driven with dedicated portfolio development team".

Of these deals, there have been more than "15 uprounds showing momentum of portfolio [and M12 was] one of the most active AI [artificial intelligence] investors".

In an interview with Andrew Gaule for Global Corporate Venturing, Kashyap said: "The experience of the team members ranges from somebody like Leo de Luna, who has worked 15 years in the VC industry, in VC firms, secondary firms. It is really a vast amount of knowledge that he brings to the team. He has a track record of many successful exits as well.

"Matt Goldstein came from Trinity Ventures. He has a lot of experience in areas like containers, devops [development and operations], security, fintech. He covers what we call the middle of the stack. Leo would cover the top.

"Rashmi Gopinath, [a GCV Rising Star 2017] comes from experience at Intel Capital, but also, on the operating side, she was in a couple of startups in senior business development roles, including Couchbase. So she covers both the investing side and the operating side, and she has significant experience on the cloud infrastructure side.

"We have Mony Hassid in Israel, who is a veteran of CVC. He has been with many CVCs including Motorola, Qualcomm and now Microsoft. We have Lisa Nelson in Seattle, and she knows Microsoft in and out, and has been working in Microsoft many years.

"The team is a balance, some from the financial VC industry, some who have worked in the corporate venture capital industry and some that have worked in Microsoft. That combination provides the key ingredients for us to be successful, both on the investment side, and then, post-investment, getting the right connections back to Microsoft."

Kashyap built a global corporate venturing platform at Qualcomm Ventures, netting multiple $1bn exits, including Waze, NetQin and InvenSense during his tenure, and with plenty of others in the portfolio, such as China-based phone maker Xiaomi, that have exited or could do since his departure.

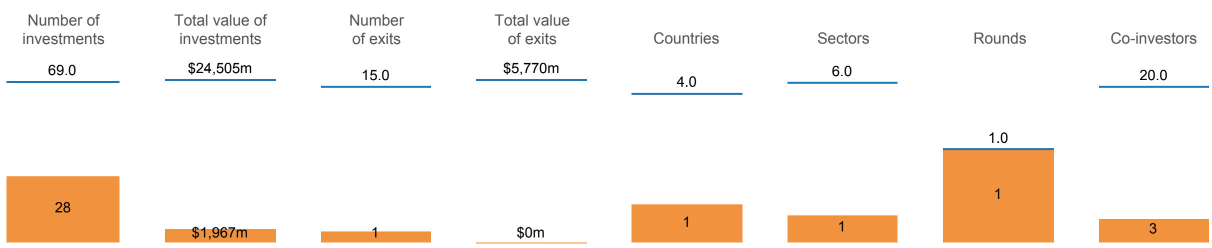
For the Powerlist 2016, Kashyap said: "At Qualcomm, I was lucky enough to be part of a company that led the charge in the smartphone revolution, enabling creation of many of big companies of the past few years, including Waze, Xiaomi and Uber. I believe that the transition to the cloud will result in another wave of new large companies and I joined Microsoft to be part of this next big platform change."

Kashyap joined Qualcomm Ventures in 2003 and oversaw the North America ventures team until 2007 when he was appointed head of global venturing before starting at Microsoft in January last year. He grew the Qualcomm Ventures portfolio to more than 150 investments in 2015 from 10 in 2003 and established a well-regarded early-stage competition, QPrize, which rewards entrepreneurs around the world with prize money.

He began his career as a software engineer at Nortel, Motorola and 3Com/US Robotics before moving to management consulting firm PRTM, now part of PricewaterhouseCoopers. Interviewed by Andrew Gaule, he said: "I started my career as a software engineer, and I am still a sort of recovering software engineer at this point, but I have moved on to a business role at previous companies."

The business world has benefited from the shift.

Microsoft's investment activity since the beginning of 2017



10

Yong-bae Jeon SAMSUNG

In November, Samsung Venture Investment Corporation (SVIC), the corporate venturing unit of South Korea-based chaebol, appointed Yong-bae Jeon, senior vice-president of Samsung Fire & Marine Insurance Company, as its new head, a role he took up from April this year.

Jeon replaced Sungjong Lee, who had been in charge of SVIC as president since 2013, although there has been a distribution in investment oversight of the regions under his reign.

In the shift under Lee, people close to the firm said Samsung had put Young Sohn, US-based president and chief strategy officer (CSO) for Samsung Electronics, in charge of its US and European corporate venturing deals.

However, as one insider said: "President Young Sohn is also involved with investment through Catalyst fund, which is one of fund managed by Samsung Electronics. While Samsung Ventures [now under Jeon] represents and execute group wide CVC investments with strategic relationships, president Sohn has been promoting Samsung's image and has made few key investments."

Founded in 1999, SVIC bases most of its team in Korea, including its investment committee, but it is understood about 80% of its deals by value came from the US. In a keynote presentation at the Global Corporate Venturing and Innovation Summit in January, Young Sohn delivered a key message: "Data will drive opportunities for everyone."

Comparing the explosion of data economy to the oil boom that drove much of the 20th century, Sohn said: "Data is the new oil". The CSO said we were in the middle of "a big change", with a lot of opportunities emerging in the data space. According to him, the top five data companies currently have a combined market value approaching $3 trillion compared to about $1 trillion for the top five oil majors.

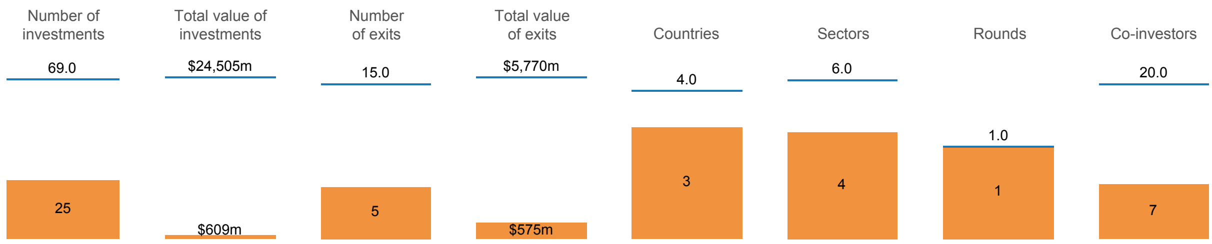
He added: "All the things we do nowadays are happening with connected devices. One of my jobs has been to change Samsung from old to new, and to figure out how to embrace this change."

Last year, Samsung Electronics had $223bn of annual sales, and employs 308,000 employees in 79 countries. The firm's CVC unit focuses at once on extending the competitive edge of its current areas of activity, which includes device solutions, IT and mobile communications, and consumer electronics, as well as on creating new opportunities in line with the new data economy era.

"Data is going to be critical, and it is going to affect all of us," Sohn added, forecasting that data activity would be at 160 zettabytes by 2025 compared to 20 last year with cars a big factor in the growth.

Having graduated from Seoul National University, majored in business administration, Jeon previously worked in Samsung Life Insurance, holding positions in various divisions from financial planning to future strategy.

Samsung's investment activity since the beginning of 2017



11

Amy Banse COMCAST VENTURES

Amy Banse has headed Comcast Ventures, where she is a managing director and head of funds, since mid-2011. This dates back to Comcast's corporate venturing unit merger with NBC's Peacock Fund, creating a $750m vehicle.

It has been an active fund, with mass media company Comcast backing 164 portfolio companies since 2009, split between advertising, consumer, enterprise and infrastructure sectors. The year 2017 seems to have been an active one for Comcast Ventures.

Just in October alone, the unit closed three investments, including a contribution to a $10m series-A round for digital office management platform Eden, to a $25m series-C round for intelligence software developer AtScale alongside UMC Capital, and to a $25m round for hair-colouring brand Madison Reed that it led.

September was just as busy, again with three deals, including two as lead investor – a $25m series-D for digital locksmith KeyMe, and a $20m series-B round for Mealpal.

But the fund has delivered on returns. Last month, US-based digital signature technology provider DocuSign floated in a $629m initial public offering in which internet and technology conglomerate Alphabet and Comcast sold shares.

The shares were priced at $29, above the $24 to $26 range the company set, and gave DocuSign a market capitalisation of more than $4.4bn after some $525m of funding since 2003.

However, Comcast under Banse has been one of the most thoughtful about it diversification strategy. She said 45% (74) of these 164 companies have had diverse founders and co-founders and 20% (32) companies with women founders and co-founders.

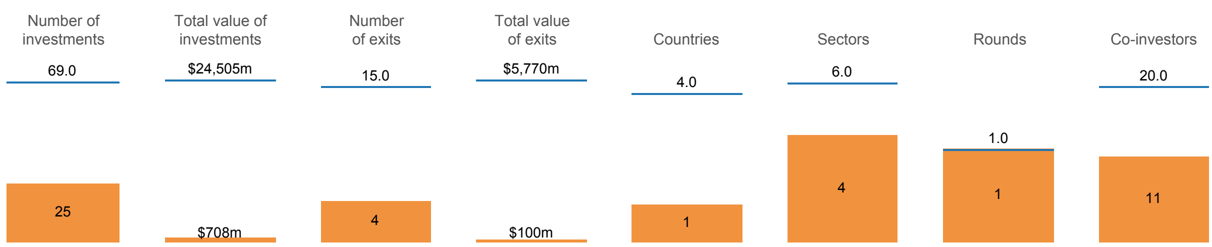
Comcast has the Catalyst fund, a dedicated fund focused on supporting underrepresented founders led by Kai Bond, who joined from Samsung Accelerator. Catalyst has, since 2011, made 22 direct investments active and exited of which 45% (10) had been of companies with women founders and co-founders (all were diverse by default).

Her team of 22 people includes 10 managing directors (MDs), eight principals, two interns, and two other, six are female. At the team level, Comcast also witnessed several moves. In July, early-stage investor Christian Ebersol, who had been part of the firm since 2014, announced his departure for VC-backed healthcare analytics firm Health IQ.

Two months later, the unit announced the nomination of Gil Beyda as managing director, following the promotion of principal Daniel Gulati to partner and they have both been chosen for GCV Rising Stars 2018.

Banse previously founded Comcast Interactive Media in 2005 and led the company's online strategy over the next six years, overseeing various acquisitions and in-house projects, including Comcast.net, Xfinity.com, Fancast and Swirl. She joined Comcast in 1991 as an in-house attorney for programming acquisition. She worked on the development of Comcast's cable network portfolio, including the company's investments in E! Entertainment Television and the Golf Channel. She has a degree from Harvard University and studied at Temple University's James E Beasley School of Law after following in her father's footsteps – he was general counsel for Merck.

Comcast's investment activity since the beginning of 2017



12

John Doherty VERIZON VENTURES

A good gauge for a venture capital investor is amount invested in companies. By that metric, John Doherty, senior vice-president at Verizon, the US-based mobile phone operator, has led one of the country's most successful and active venture firms.

In 2017, Verizon Ventures made 45 investments in 35 companies, which in total raised more than $450m. In 2016, Verizon Ventures (VVZ) invested more than $75m in at least a dozen new deals and more than $50m to 18 follow-on rounds, indicating a step up in activity for the team as it looked earlier for deals.

As well as supporting other accelerators, Verizon Ventures launched its own MediaTech Venture Studio accelerator to co-develop pilots between the company's product teams and startups.

Currently, more than 25 Verizon Ventures portfolio companies are actively working with Verizon's business units through substantial collaboration and trials, commercial agreements, and partnerships. The parent company is increasingly looking to Doherty and VVZ for its growth.

Last year, Verizon acquired one portfolio company (Skyward, for an undisclosed amount,) and two other venture-backed companies (Talligent and Niddel). In total, Verizon Ventures exited six companies in 2017, including Progress Software's purchase of business app development platform Kinvey for $49m, and already this year has seen Robert Bosch acquire a ridesharing startup, SPLT. Last year InMotion Ventures, Jaguar Land Rover's corporate venturing unit provided the rideshare startup's second round of seed funding after the startup had raised $1.2m from Techstars, Verizon Ventures, and Wells Fargo.

But in a signal of how Doherty combines strategy and execution a good example was the opportunity presented when Verizon paid $4.4bn in its acquisition of internet pioneer AOL (and merge it with its existing email subsidiary Yahoo to form Oath) to get its hands on its Israel corporate venturing unit.

It has been a positive form of "acqui-hire" for John Doherty, head of Verizon Ventures (VZV) and a member of the GCV Powerlist 2017.

Doherty nominated Merav Rotem Naaman for the GCV Rising Stars 2018 not long after she had formally given up the managing director of Nautilus, AOL's venture investments unit in Israel, title in June after the parent's takeover had closed.

Rotem Naaman said: "We were incorporated after the acquisition but not as part of the acquisition... meaning it was not a necessity, as AOL/Yahoo was pretty much kept separate for the most part.

"It was more of a strategic decision made by VZ as both John Doherty and myself were aligned in the thinking that there is an incredible value to be made for VZ if it becomes a more active investor in Israel. And to do that I absolutely need a team on the ground."

Now managing director at Verizon Ventures Israel, Rotem Naaman, whose colleagues at Nautilus, Roni Burrell, Anat Tamir and Gal Ringel, also moved over to VZV, said: "I am still the head of Nautilus for anything related to existing investments. We do not make new investment out of that fund but we still have nine active companies in our portfolio, and I am a board observer in a few of them.

"We been engaged with the Verizon Ventures team for a while post the acquisition but officially announced joining the team with the investment of Iguazio in May 2017."

As well as the addition of the Verizon Ventures Israel team, there were seven additions to the firm's investment and venture development teams.

There are now 19 VVZ team members, of which 32% are women and 26% are non-white. At the director level, 50% are women.

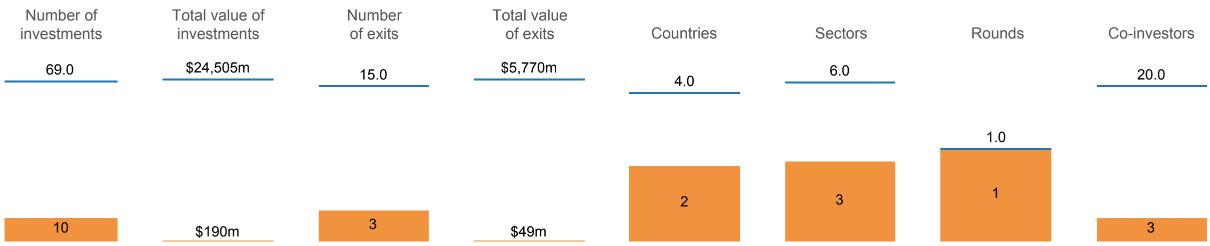
VVZ signed the open letter to the CVC community on the importance of diversity, and Doherty said: "Verizon Ventures is out in front of this one – we already have about a third of our team that are women and about 50% women or minorities. We take diversity seriously and it has been front and centre for years and will continue to be for Verizon."

Doherty has been responsible for all corporate development activities related to the implementation of Verizon's corporate strategy, including joint ventures, strategic investments, acquisitions, divestitures and venture investments, since the start of 2013.

Doherty had joined Verizon a decade earlier in 2003 as chief financial officer and vice-president and led strategic repositioning of Verizon's $10bn global portfolio, including more than 20 transactions valued at over $4bn.

And while numbers only tell part of the story, the data aligned to the qualitative story is impressive.

Verizon's investment activity since the beginning of 2017



13

William Taranto

MERCK GLOBAL HEALTH INNOVATION FUND

William Taranto has been one of the great exponents of ecosystem investing since he moved to US-based pharmaceutical group Merck & Co eight years ago as the group made a push into non-pharmaceutical healthcare.

The Global Health Innovation Fund (GHI) under his leadership grew quickly to a $500m pool and in 2014 added a $700m private equity fund to help support roll-ups and later-stage deals.

Last year for his Powerlist profile, Taranto said more could be expected. "We remain focused in 2017 on using our growth equity firm to consolidate and build ecosystems around patient monitoring, oncology, infectious disease and healthcare information technology infrastructure. In addition, we will continue to invest out of our fund in the spaces listed above as well as in care coordination, population health and clinical trial management."

For example, his nomination of Francesca Wuttke for GCV Rising Stars award 2018 was in part for her development of a thesis around digital clinical trial management, a new one for the fund. She told GCV in an April 2017 interview: "Efficiency in clinical trial management, both from the perspective of cost and time, can be a valuable competitive asset for the pharmaceutical industry. Clinical trial delays can cost pharma companies up to $8m per day. Digital clinical trial management can enable trials that are smaller, shorter, less expensive and more powerful.

"The clinical trial management ecosystem in Europe is undergoing change, resulting from demands for increased relevance and transparency of results, requiring better data quality and study efficiency from contract research organisations.

"Digital technology has the potential to help us meet these demands and create new disruptive opportunities. Clinical trial processes are not yet fully leveraging advances in technology and the increasing democratisation of clinical trials."

Regulatory change also played a role in the choice to focus on this area as the European Medicines Agency has made it a requirement that clinical trials are digitised. Wuttke said this had created an environment ripe for growth.

"Companies that capitalise on these trends and anticipate future changes by improving subject recruitment and retention, and making data capture, integration and analysis more accurate and robust, will present attractive investment opportunities," she said.

Wuttke's first investment for the fund targeted this new area. In September, GHI led an $11m round for UK-based Antidote Technologies, which has created a clinical trial matching platform to reduce the number of trials that are closed or suspended because of a lack of suitable patients.

Overall, Taranto was cautious about some valuations. For the GCV Oultlook survey, he said: "In digital healthcare, it remains to be seen if the IPO and M&A market will open up. My guess is more M&A than IPO. We have seen some inflated values for healthcare IT companies which I think will fail and come down rapidly."

This concern has yet to stop Merck following on to its winners. Last month, Livongo Health, the US-based developer of an assistance platform for chronic health conditions, raised $105m that included software provider Microsoft, pharmaceutical firm Merck and health insurer Blue Cross Blue Shield of Massachusetts.

The round valued Livongo at $800m according to the Wall Street Journal.

Founded in 2014, Livongo has created a data science-equipped platform that helps users cope with conditions such as diabetes and hypertension through a blend of consumer health technology, real-time support and coaching, and personalised recommendations for healthy living.

Merck was also part of Grail's first close of its series B round at $900m. Grail is a US-based oncology diagnostics spinout of genomics technology producer Illumina and reportedly plans to raise up to $1bn in new funding.

Reports in February this year suggested it was preparing for a $500m initial public offering in Hong Kong, and the funding would be raised in advance of the flotation.

But a lot of interest followed its roll-up strategy, with the closure of a partnership involving its MedCPU portfolio company. This was a deal struck by Joel Krikston, a GCV Rising Star 2017. In his profile, Krikston described this large private equity deal for GHI in creating a joint venture with University of Pittsburgh Medical Centre (UPMC) and MedCPU, a company that improves point-of-care delivery to hospitals through technology, along with an internal startup.

Krikston said: "Ilum is focused on combining a suite of solutions – clinical decision support, rapid diagnosis, real-time antibiograms [an antibiotic sensitivity test], predictive analytics – to help hospitals fight the epidemic of hospital-acquired infections. One of my first investments, MedCPU, has become a key foundational component of the Ilum offering and we are already in several pilots at hospitals across the country in a relatively short period of time.

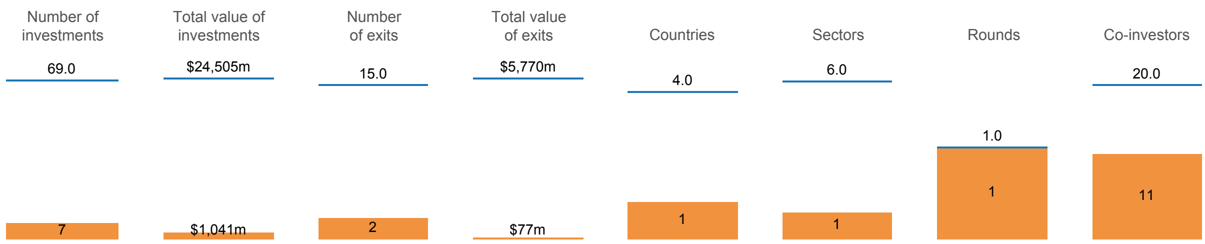
"Moreover, we were able to attract UPMC as a development partner and investor in MedCPU, which really embodies one of my key philosophies in terms of finding highly capable and respected strategic partners to build businesses with."

Taranto came to Merck from a similar role at Johnson & Johnson and quickly applied the insights from the sector's oldest CVC unit, JJDC.

As Taranto said at the 2014 GCV Symposium: "In the context of what I do for a living, if you look at the continuum of healthcare from pre-diagnosis to death, the question for Merck was: How do we participate in that continuum where the pill or the vaccine makes up only one piece of healthcare?

"We then decided that venture capital was the best way for Merck to do that. It allows them to look at the future of healthcare, take bets on a number of different areas and then, if it fits strategically and financially, it becomes an option for them to acquire those companies."

Merck & Co's investment activity since the beginning of 2017



14

Rob Salvagno CISCO INVESTMENTS

Rob Salvagno, head of corporate development and Cisco Investments, discussed in January at the Global Corporate Venturing and Innovation Summit the unit's investment strategy and its progress since Salvagno stepped into his leadership role two years ago.

US-based network equipment company Cisco has so far acquired around 200 companies, while its Cisco Investments corporate venturing unit invests an estimated $150m a year. It has more than $2bn of investments in 100 companies and 40 venture funds.

Salvagno, who runs a team of more than 40, said having the same team working on both investments and acquisitions had been key in driving the unit's success. He added: "Although there is still a long way to go, we have the opportunity to be a top investor. We do a great job at tracking innovation, so what we really need to do now is build our core value proposition."

This, Salvagno said, was crucial for a unit's success. When setting up a unit, CVCs should first determine their investment approach. Was the goal to strengthen existing businesses, or to track innovation outside that? "These are two different philosophies, and you need to be clear about them both internally and externally," he said. "There is a lot of money out there, so you really have to look at what makes you unique. It is about believing in your core value proposition, and how it may benefit your portfolio companies."

The company in October 2015 promoted him after Hilton Romanski, its senior vice-president of corporate development, became chief strategy officer. Salvagno had joined Cisco at the end of the 1990s dot.com boom have been a tech investment banker at storied firms Donaldson, Lufkin & Jenrette and PaineWebber after graduating in economics at Stanford University in 1997.

Together, corporate development and Cisco Investments have a worldwide presence with teams covering the US, Israel, China, Asia-Pacific, Japan and Europe.

Founded in 1993, Cisco has committed to multiple VC funds, notably SoftBank's China fund, which invested in online retailer Alibaba. Most recently, Cisco said it was committing to a new fund being set up by Jon Sakoda, a 12-year veteran at VC firm New Enterprise Associates. Cisco's strategic priorities are in the areas of data centres, cloud, security, big data, internet of things and core network equipment.

Recent commitments in India have shown the country's importance to Cisco. Cisco has long been active in India, having pledged in 2010 to invest $200m in the country over a three-to-five period. It allocated $40m to early-stage startups in the country in 2014 before expanding the initiative to $100m in 2016.

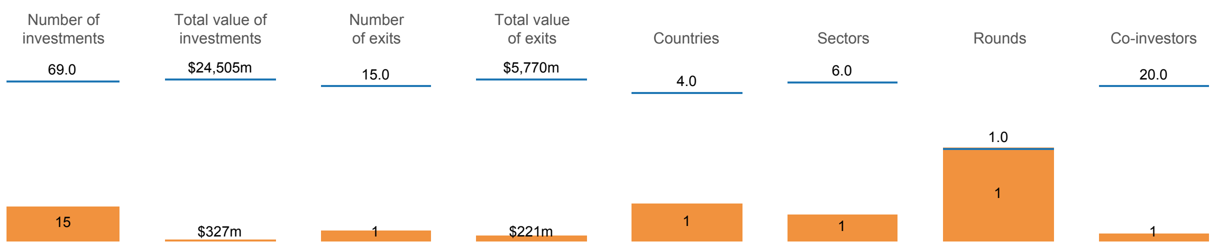
In March, Cisco Investments committed an undisclosed amount to venture capital firm IDG Ventures India's third fund, the Economic Times reported.

In February, Cisco became a limited partner in VC firm Stellaris Venture Partners' first fund, which has a $100m target. The fund has already secured capital from enterprise software producer SAP and IT services firm Infosys.

At the time, Salvagno said: "Cisco has a rich history of participating in India's technology ecosystem and investing directly in local innovation over the past decade."

Its history is equally rich around the rest of the world under Salvagno.

Cisco Systems' investment activity since the beginning of 2017



15

Jaidev Shergill

CAPITAL ONE GROWTH VENTURES

Three years ago, US-based financial services firm Capital One set up a corporate venturing subsidiary to make early-stage investments in financial technology companies.

Jaidev Shergill, then Capital One's head of digital products now managing partner of Capital One Growth Ventures, was to lead the unit.

In a speech at the Global Corporate Venturing & Innovation (GCVI) Summit this year he took an in-depth look at investment strategy and his unit's evolution. Capital One now has 10 team members, including five investments professionals. "We started in a very scrappy manner," said Shergill. "At the two-year mark, we had a good investment process, and so we started looking at the strategic traction our investments could bring."

Capital One currently evaluates companies with three metrics – 40% is based on investor relationship value, 40% on vendor relationship impact; and 20% on learning and culture impact. These evaluations are repeated throughout the investment period, according to Shergill.

He added: "Using these metrics enables us to put the lens of strategic impact pre-investment and opens up the possibilities of seeing how portfolio companies evolve over time. It enables us to figure out the direction we want to go into from an investment perspective. It also helps us in our reporting to the investment committee, which in turn is more involved and able to see where we are in our journey, and can provide a more targeted help on specific issues."

He said by last year the unit had made more than 15 investments across multiple stages in a variety of sectors, including data, security, blockchain, and enterprise technology.

These deals included leading its first seed investment in Cerebro, a data access company, and bringing in several leading institutional venture capital firms as co-investors, making a follow-on investment in next-gen malware detection provider Cylance, and participating alongside a consortium of banks in a series E investment in Transactis, an electronic bill payment company.

Shergill said: "In addition to our investments, we have innovated on the structure and process of corporate venturing. We have optimised our decision-making process, giving the investment team autonomy on certain transactions, while preserving an investment committee structure for larger deals. We have streamlined our diligence process, enabling us to close deals in as little as two weeks. And we've worked closely with our risk and regulatory stewards to ensure proper governance, risk mitigation, and succession planning.

"Our connectivity inside the organisation is also showing strength and several business areas and technology groups routinely collaborate with us to help identify and assess new technologies. In the most recent quarter, our efforts have been recognised both internally and externally, and we have seen our inbound and referred deals increase significantly leading to several new investments."

Capital One previously invested in startups through North Hill Ventures, the venture capital firm with which it was affiliated until North Hill was spun off in 2012. It also operated Capital One Labs, a San Francisco-based research subsidiary that operates as a startup laboratory, while Lauren Connolley, venture partner, manages Capital One's partnership with Plug and Play, one of the largest incubators in Silicon Valley.

Shergill also oversaw digital venture investing and startup business development for Capital One from 2012, and was previously president of Citi Ventures, the corporate venturing arm of financial services firm Citigroup, from 2007 to 2009, when he left to found and run Bundle, a big data consumer-facing digital startup.

Similar to his Capital One experience, Shergill worked at Citi for a number of years – from 2004 in this case – before creating its venture unit.

Previously, he worked in the US and UK across a swathe of top-tier financial services firms, including Credit Suisse, Lansdowne Capital and Deloitte, after gaining an MBA at Insead and an engineering degree at Northwestern University.

Capital One's investment activity since the beginning of 2017

Number of investments	Total value of investments	Number of exits	Total value of exits	Countries	Sectors	Rounds	Co-investors
69.0	$24,505m						
4	$158m						

16

Anna Patterson

ALPHABET'S GRADIENT VENTURES

Given the reorganisations at Alphabet since it was formed in 2015 to act as an umbrella company for search engine Google (its alpha) and its diversified business interests (its bets), 2017 seemed a relatively relaxed year for its corporate venturing units, though they continued to be active.

The 2015 realignment involved the firm's early-stage investment arm, Google Ventures, and its growth-stage unit, Google Capital, being rebranded as GV and CapitalG, respectively.

GCV speculated at the time of the 2015 reorganisation that Google, which still oversees Alphabet's online advertising business as well as entities like Android, Chrome and YouTube, could seek to launch its own corporate venturing arm, and in effect that's what happened when it founded an artificial intelligence-focused unit called Gradient Ventures run by Anna Patterson and another by Ilya Gelfenbeyn as head of Google Assistant Investments at Google. Google took on Gelfenbeyn when it bought his CVC-backed voice assistant startup API.AI (formerly known as Speaktoit) in late 2016.

Though regarded as a way to keep a star at the firm rather than leave to set up a venture unit, Gradient's formation can be seen as part of a trend over the past year that also involved the likes of Microsoft, Salesforce and SenseTime launching their own AI investment funds.

By the end of 2017, Gradient had already made half a dozen investments and all been in relatively

early-stage rounds.

Gradient Ventures actually launched in July with a plan to invest in 10 to 15 startups by the end of last year.

To achieve such an ambitious goal, the fund would need talented investors and so Patterson brought in Shabih Rizvi, a GCV Rising Stars 2018 winner. "He is incredibly responsive, thoughtful and resourceful. He can create a syndicate in an evening and figure out stealth company competitors. We could not have started Gradient without him," Patterson said in her nomination.

Rizvi joined Gradient from venture capital firm Kleiner Perkins Caufield & Byers, (it was an investor in Google before its own initial public offering during the dot.com days so retains strong ties with its former portfolio company), where he spent three years investing in the likes of online phone directory TrueCaller, gamer-oriented livestreaming platform Mobcrush and payment services provider Veem. Prior to that he had a variety of roles at Google, including founding a startup outreach program for Google Play and working in the mobile apps lab team.

Gradient's first investment was made in June when it led a $10.5m series A round for Algorithmia, the operator of an algorithm network for app developers. Since then it has added five further companies to its portfolio: image classification and anomaly detection software developer Cogniac, drone operation platform Cape, multi-sensor deep-learning awareness platform developer Aurima, augmented reality technology developer Ubiquity6 and coding automation technology startup PullRequest.

Gradient is investing directly from Google's balance sheet and can commit up to $8m a time, and it has the flexibility to pursue follow-on investments when it wishes so expect to see it turning up more often in series B and C rounds from next year.

The fund also has an engineering rotational program in place with Google, pairing its top talent with Gradient's portfolio companies. This has been key in helping Rizvi face one of the biggest challenges in launching a new fund.

"As has become increasingly true over the last several years entrepreneurs can turn to a lot of different sources for capital. It has been, and will continue to be, critical for us to help illuminate how we can help above and beyond capital," he said for his Rising Stars profile.

Of her Google colleagues, some who attended the Global Corporate Venturing and Innovation (GCVI) Summit this year specifically to hear her speak and meet her for the first time, last year was also busy.

GV under David Krane was particularly active in 2017. Whereas in 2016, the unit's largest deal was a $95m round for oncology therapy developer Carrick Biosciences, last year it participated in six $100m-plus rounds, including the $120m series C round closed by AI insurance platform Lemonade.

The largest of those deals was the $130m raised by another insurance innovator, Clover Health, in May 2017 at a $1.2bn valuation, but GV also led nine-figure rounds for immunotherapy developer Arcus Biosciences ($107m) and point-of-sale technology developer Toast ($101m), and backed a $101m round for agricultural data provider Farmer's Business Network ($110m).

The largest cumulative investment by GV, which now has $2.4bn under management, over the course of 2017 was likely in 3D printing technology provider Desktop Metal. GV led the company's $45m series C round in February before returning for its $115m series D in July.

The unit's exits included upscale coffee chain Blue Bottle, for which Nestle paid $700m for a majority stake, and dark data platform Lattice, which was bought by Apple for $200m. Big data software provider Cloudera, Gram-negative infection therapy developer Spero Therapeutics and monoclonal antibody developer Arsanis respectively raised $225m, $194m and $136m from their initial public offerings.

CapitalG under David Lawee's largest deal was when it led a $1.5bn round for ride hailing service Lyft that valued it at $11.5bn post-money, though it also took part in the $1bn series F round closed by accommodation booking platform Airbnb in March. Perhaps the biggest event for the unit was the $3.9bn IPO for Snapchat owner and portfolio company Snap the same month, the largest since Alibaba went public in 2014, though Snap's stock has since fallen below the IPO price.

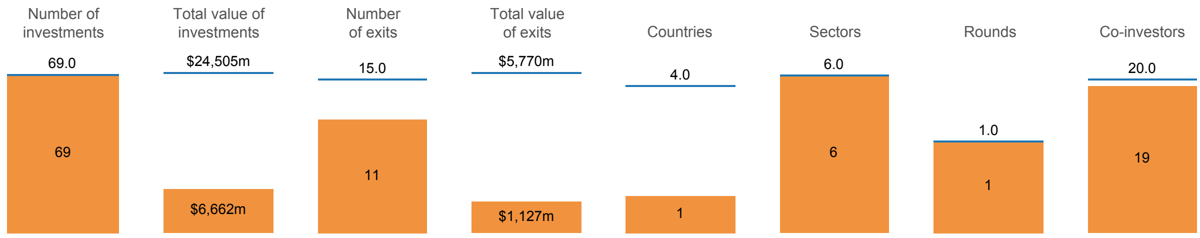
The year was however blighted for CapitalG by health intelligence software provider Outcome Health. It was among the participants in the $600m round Outcome closed in May at a pre-money valuation of $5bn, but by the time November rolled round the company was the subject of a fraud investigation and was being sued by investors including GV claiming it had falsified data and financial reports.

GV founder Bill Maris had a happy ending of sorts too in 2017, having left the unit in August in 2016. After months of speculation he closed the first fund for his new firm, Section 32, at $150m in May, and six months later it had scored its first exit as immunotherapy therapy developer Arsanis, also a GV portfolio company, went public in a $46m IPO.

Interestingly, Section 32 and GV are co-investors in several other companies including Kobalt, the music royalties collection service that raised $89m in series D funding this year, business meeting platform Dialpad and cancer diagnostics technology developer Freenome, and it will be interesting to see if the two seek to put together any kind of formal agreement in 2018.

But while Alphabet might have lost Maris, it still remains a piper able to hold on to others of its star talents in Patterson, Gelfenbeyn, Lawee and Krane.

Alphabet's investment activity since the beginning of 2017



17

Ernest Fung JD.COM

Having stepped up from GCV Rising Stars 2018 to the GCV Powerlist, Ernest Fung, senior director and head of international corporate development at JD.com, has faced a challenge over the past three years.

JD is a Nasdaq-listed company and claims the title of largest e-commerce company in China by revenues but has limited brand recognition globally outside of Asia.

For his Rising Stars profile, Fung said: "While we are well recognised within China and Asia, we are still building up our profile internationally. This has inevitably created some extra hurdles when there is a competitive investment opportunity.

"Investments are also getting increasingly competitive and increasingly global (in terms of bidders), with many of our well-capitalised competitors bidding for the same targets.

"JD has a relatively nascent investment function, having only developed a formal corporate development team around four years ago. We have made a number of investments [more than 30, primarily in China, including electric vehicle maker Nio] but have made very few exits so far."

By last summer, JD.com had five unicorn – businesses worth at least $1bn – portfolio companies, which would be extended by another three if its JD Capital portfolio company's own investments in other unicorns were included. And JD could raise $2bn for its logistics business in a private funding round, as part of a plan to take the logistics unit public outside China, according to newswire Reuters this month.

And this list of unicorns has only grown since the summer. Last month, China-based consumer electronics producer New Leshi Smart Home received RMB3bn ($477m) from investors including real estate developer Sunac China, internet group Tencent, retailer Suning and e-commerce firm JD.com. Formerly known as Leshi Zhixin Electronic Technology, New Leshi Smart Home is a subsidiary of China-based consumer electronics producer LeEco. It manufactures internet-connected smart television sets branded as "LeTV Super TV".

Of its exits, LexinFintech, the China-based operator of the Fenqile e-commerce finance company backed by media group Bertelsmann and e-commerce firm JD.com, raised $108m last month when it floated in the US, while Yixin Group, a China-based online car finance platform also backed by JD.com, completed its initial public offering at the end of last year.

Fung added: "Some of the key successes among our international investments include Traveloka and Go-Jek. Our south-east Asian joint ventures with our local partners have been extremely hard to structure and negotiate, but I believe it sets JD up for long-term success in the region."

In August, JD.com invested about $100m in Indonesia-based on-demand ride service Go-Jek, Reuters reported, as part of a two-tranche round already backed by internet group Tencent set to be sized at about $1bn and that would value the company at $2.5bn.

Go-Jek manages an app-based ride-hailing service that utilises a network of more than 250,000 drivers across Indonesia, and also provides food and package delivery, event ticketing and mobile payment services. It expanded into India in May this year.

Earlier in 2017, JD had been part of a syndicate investing $500m in Indonesia-based travel and accommodation booking platform Traveloka and, in June, investing $397m in UK-based luxury online fashion seller Farfetch as part of a strategic partnership.

JD.com will supply Farfetch with marketing, logistics and technology assistance to help it carve out a stable position in China, where it already partners about 200 luxury brands and more than 500 retailers, and Farfetch will also make use of JD Luxury Express, JD.com's then-recently launched luxury customer service initiative, and BlackDragon, a digital marketing platform that will allow it to put together automated marketing campaigns using JD.com's data.

Such options available to support its portfolio companies reflect the pace of JD's expansion as it competes with peer Alibaba. Alibaba and JD.com collectively have more than 80% market share in China, with the latter regarded as specialising more in fast delivery and fresh goods and owning its logistics chain.

Internally, Fung said one of the biggest challenges was "keeping up with a rapidly growing company with new business initiatives and shifting corporate priorities".

Fung joined JD.com in 2014, and is responsible for its global investments and mergers and acquisitions across a wide range of sectors, including ecommerce, fintech and payments, logistics, retail and consumer and emerging technologies.

Regarding the most important trends last year, Fung said increasing adoption of deep tech, such as datamining, artificial intelligence, augmented reality and autonomous vehicles, across different business functions, including customer relationship management, marketing, and user interfaces and experiences and a focus on customer intelligence technologies were critical.

However, it was also increased global consolidation in e-commerce and retail, with focus on omni-channel expansion, for example Amazon buying Whole Foods and unmanned stores, that also stood out.

In this context, Fung said: "Our partnership and long-term strategic relationship with [US-listed retailer] Walmart through our acquisition of Yihaodian has proven to be very fruitful."

In June, the Walmart said it has sold Yihaodian, its Chinese online commerce marketplace, to JD.com and would become a retailer inside Yihaodian. At the same time, Walmart bought 5% of JD.com, worth $1.5bn.

Fung's role means looking at both the expansion of JD's core platform into overseas markets, as well as overseas investments that are complementary to JD's main operations in China. To help in this, JD.com partnered accelerator operator Plug and Play to launch a startup initiative in Silicon Valley in the US targeting sectors such as retail and logistics startups.

As part of the partnership the companies will jointly launch an accelerator initiative that will incubate companies developing technologies such as artificial intelligence, cloud, big data and the smart supply chain, although Fung admitted to being worried about whether or if cross border acquisition approvals by a Chinese company for sensitive US technology would be allowed.

This is part of Fung's insights that, together, corporate venture capital investors are stronger. He said: "I think CVCs can build stronger relationships among each other to share industry insights, trends and best practices. Each corporate brings something different to the table, and understanding each other would ultimately help both CVCs and investment targets find the best match that fits their strategic requirements and drive long-term value.

"CVC provides an interesting lens for investing, bringing an investment thesis that focuses on both the financial return of an investment, as well as the strategic value of the investment to a corporate's business.

"Looking at potential investments as a corporate has forced me to look not only at the larger trends and direction of an investment target, but given me an appreciation of the more detailed operations, founder dynamics and business synergies. These are angles that may typically be overlooked by pure financial investors.

"My professional goal is to be in a position where I can help the next generation of entrepreneurs, whether through capital support, sharing my industry knowledge or strategic advice and build the next wave of technology success stories. Before that, I think it would be interesting to step into more of an operational role to give me a better perspective of some of the key operational best practices, challenges and pitfalls, which I think would allow me to become a better investor."

This would fit into a pattern of ever-deeper knowledge and insights for Fung.

Prior to joining JD.com, Fung was an investment banker in the Asia technology, media and telecoms team at Citigroup for 12 years, covering internet, new media and IT services sectors, although the bank missed one of the market's biggest opportunities in the initial public offering of JD to raise $1.8bn in May 2014.

Instead, Fung's connection to JD came through its hiring of Sidney Xuande Huang as chief financial officer in 2013 from the same role at Nasdaq-listed Pactera Technology International (formerly VanceInfo Technologies).

As Fung said: "I did the IPO and various other deals for VanceInfo over a span of seven to eight years, and covered the management team there. When their chief finance officer came over the join JD, he got in touch with me when they were building out their corporate development team."

The phenomenal success of JD since then means the company had a market capitalisation of more than $60bn as at 22 December, having seen its share price more than double since its initial public offering at $19 per share. Tencent, which at the same time entered into a strategic partnership with JD.com, invested $1.3bn in a concurrent private placement at the IPO price to own a 20% stake and seeing a near-tenfold return on its money so far.

But while Fung's own role has been important in its success, he has remained humble and concluded: "I am very family oriented and spend time with my kids. It helps me destress, keeps me grounded and helps put everything into a broader perspective."

JD.com's investment activity since the beginning of 2017

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Lak Ananth SIEMENS' NEXT47

In November 2016, Lak Ananth left US-based enterprise IT company Hewlett Packard Enterprise to join Germany-based conglomerate Siemens as managing partner of its €1bn ($1.1bn) Next47 corporate venturing unit.

He has done a thorough reorganisation over the past 18 months. Among recent changes were the departure of Gerd Goette, who left after nearly 20 years as a corporate venture. Ralf Schnell, former head of Siemens Venture Capital before its effective incorporation into Next47 at its launch under Ananth became head of private equity at Siemens Financial Services, while new recruits include Susana Quintera-Plaza and Jack Eadie in Europe.

In the US, Ching-Yu Hu has joined Next47 as a principal based in its Palo Alto, California, office, together with Matthew Cowan, former co-founder of VC firm Bridgescale Partners, and TJ Rylander, who spent a decade as managing partner at In-Q-Tel, as partners.

The changing of the guard at Next47 as it positions itself as more independent of Siemens' business units and an evergreen fund able to reinvest profits from its €1bn ($1.2bn) fund. The fund has a three C's model of providing 'capital', 'creating' intrapreneurs through a partnership with accelerator Techstars and being a 'catalyst' to business units to open markets for startup portfolio companies.

Ananth reports to Joe Kaeser, Siemens' CEO. For last year's Powerlist, Ananth said: "Collaborating with Techstars is an important and exciting step for Next47 and Siemens. We are excited to provide Siemens employees access to the proven Techstars platform globally.

"As a Siemens subsidiary, we have both an external and an internal vision. The external vision is to be the world's premium address for ventures between corporates and startups, as well as a role model for open innovation. The internal vision is to shape Siemens' core businesses of tomorrow.

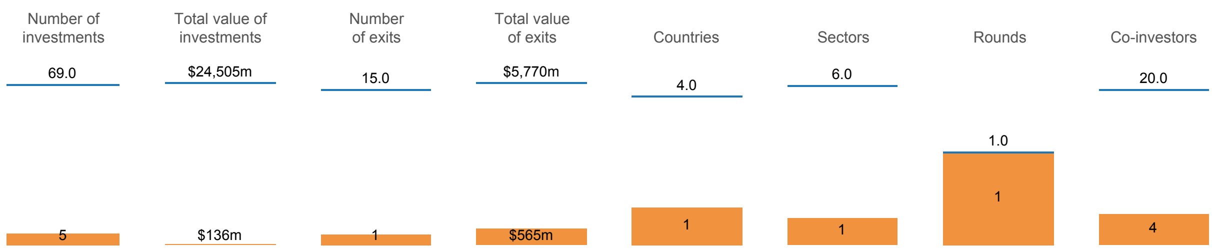
"A decisive factor will be the team's ability to find opportunities and engage with the Siemens ecosystem. We have the ability to form a great business from just an idea in a short time. For instance, we have enabled a robotics business to develop eight generations of hardware within less than a year. We can offer access to some of the world's most sought-after clients, including Siemens."

Before heading Next47, Ananth developed and built the Hewlett Packard Pathfinder organisation, bringing together innovation strategy, venture investments, acquisitions and partnerships.

Earlier, Ananth worked in strategy and corporate development at Cisco Systems and was instrumental in the $2.9bn acquisition of Starent Networks, the $1.2bn acquisition of Meraki, and an investment in Control4.

Next47 – a reference to 1847, the year Siemens was founded – is has remade itself, now for the parent company.

Siemens' investment activity since the beginning of 2017



19

Quinn Li QUALCOMM VENTURES

After the departure of Qualcomm Ventures' head, Nagraj Kashyap, to Microsoft, swiftly followed by Israel-based star investor Mony Hassid, it should have been a challenging time for US-listed chip maker Qualcomm.

But, while Quinn Li's promotion to the top corporate venturing role in 2016 came at an interesting time for the company, he has cemented his reputation as a leader in the venture community with a string of deals and initiatives and stepped up to co-chairman the Global Corporate Venturing and Innovation Summit in Monterey in January.

One exit, Qualcomm's early investment in autonomous driving startup Cruise, was a high-profile win when General Motors bought it for $1bn. Another two portfolio companies, agricultural technology developer Strider and ride hailing service 99, were acquired from Qualcomm Ventures' Latin America portfolio headed by Carlos Kokron.

At the start of the year, Qualcomm Ventures transferred Kokron from head of Latin America to head of North America following these sales.

In an in-house interview last month, Kokron (known as CK) said: "Savvy entrepreneurs in both the US and LatAm are striving to build big businesses which would translate to significant value creation, and with a lot of sweat and some luck this yields to great exits for all involved. If you look at the Qualcomm

Ventures experience, we have a strong track record of seven $1bn-plus exits in the last eight years."

99's sale to China-based Didi Chuxing was Brazil's largest for a VC-backed company, and Qualcomm is anticipating another big exit with the planned flotation of China-based Xiaomi at a valuation of up to $100bn – set to be the largest venture-backed initial public offering since 2014 – later this year.

And while there has been some further turnover in personnel with the departure of Gareth Keane to VC firm Promus Ventures, Qualcomm Ventures also hired Alexandre Villela from fellow corporate venturing unit Intel Capital, where he was an investment director, in February as its managing director for LatAm.

For last year's GCV Powerlist profile, Li effectively summed up its overall strategy. He said: "We invest in companies that are building highly disruptive technologies."

At last year's Global Corporate Venturing & Innovation Summit in California, Li told interviewer Jordan Herman, partner at law firm Baker Botts, these disruptive technologies were often in the internet of things (IoT) and automotive, as well as virtual reality, but not in startups that compete with the parent's business of computing chips.

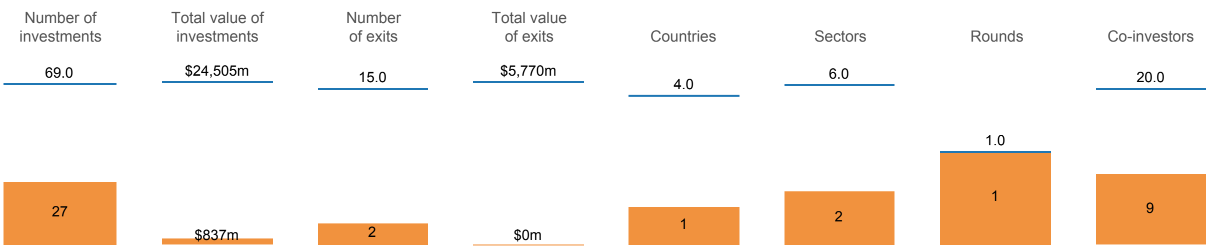
Perhaps one of the most interesting deals has been Qualcomm's reported decision to commit $1bn to SoftBank's planned $100bn Vision Fund. The two know each, with SoftBank having acquired chip designer ARM last year.

And Qualcomm-backed OneWeb is set to merge with its corporate venturing investor Intelsat in a $13bn deal, with SoftBank paying $1.7bn for a 39.9% stake in the combined entity.

Selected as a GCV Rising Star in January 2016, when he was head of North America, before his promotion to overall head of Qualcomm Ventures was announced, Li said the ability to make investments with a strong financial return while helping drive forward Qualcomm's strategic objectives was one of the reasons he was drawn to corporate venturing. He also takes pleasure in helping portfolio firms grow through leveraging Qualcomm's resources.

Li, who joined Qualcomm Ventures in 2005 after roles at IBM, Broadcom and Lucent following completion of his electrical engineering PhD at Washington University in St. Louis, said some of the biggest challenges he has had to overcome along the way have involved finding the balance between strategic and financial objectives, while building the right team with sufficiently diverse experience to expand investments into new areas.

Qualcomm's investment activity since the beginning of 2017



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John Somorjai SALESFORCE VENTURES

Salesforce Ventures, the corporate venturing arm of US-based enterprise software producer Salesforce, launched a $100m vehicle called Canada Trailblazer Fund this month that will focus on cloud services startups.

The news follows a February 2018 commitment by Salesforce, which has more than 1,300 employees in Canada, to invest $2bn in the country over the next five years.

John Somorjai, Salesforce's executive vice-president of corporate development and Salesforce Ventures, said: "There is incredible innovation happening in Canada today and we want to encourage and empower the next generation of enterprise cloud startups in the region.

"Salesforce Ventures' Canada Trailblazer Fund is a commitment to our mission to help startups grow and enable our customers to reach new levels of success."

And Somorjai has been adding to his commitments in other areas since 2005, when he started leading the evaluation, deal execution and integration of M&A and investments at Salesforce.

Its largest acquisition was of a portfolio company. In March, Salesforce agreed to acquire Mulesoft, a US-based, publicly-listed application development software producer that was also one of its portfolio companies, at an enterprise value of $6.5bn.

Founded in 2006, Mulesoft has developed a software platform called Anypoint that enables organisations to build networks that integrate applications, data and devices.

The company went public in March 2017 in a $221m initial public offering that gave it a market capitalisation of about $2.9bn, pricing its shares at $17.00 each.

Mulesoft had raised $259m in funding prior to the offering. Salesforce's corporate venturing unit, Salesforce Ventures, backed its $37m series E round in 2013 and a $50m round in 2014 that valued it at $800m, before returning to lead its $128m series G round the following year.

Somorjai was initially tasked in 2014, when he was promoted to executive vice-president from senior vice-president, with deploying its $100m Salesforce1 Fund. He then brought in Matt Garratt, a GCV Rising Star 2016, to run what became Salesforce Ventures in October that year and it quickly grew.

Salesforce then unveiled a partner program to facilitate the development of intelligent apps that can then be sold on its AppExchange marketplace, as well as a $100m fund to invest in startups "building an ecosystem of partners around us", according to Somorjai. This Salesforce Platform Fund follows the $50m Lightning Fund, formed by the company last June and now fully deployed, as well as the $100m Salesforce1 Fund in 2014 and another $100m fund for Europe.

Last year, Salesforce added a $50m Impact fund last year – overseen by GCV Rising Star Meredith Finn. This was one of four funds it set up with an aggregate $250m committed for the ventures team that also saw three of its unicorn portfolio companies (private companies worth at least $1bn) going public.

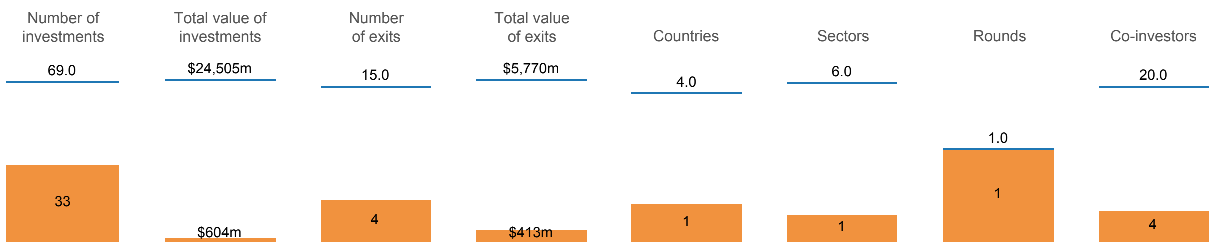
The largest of these four initiatives was the $100m Platform Fund the unit launched in May, followed by the SI Trailblazer Fund, to invest in cloud consulting companies looking to expand their Salesforce services, and the AI Innovation Fund in late September to support developers of Salesforce-compatible artificial intelligence software.

Previously, Salesforce conducted minority equity deals through its corporate development function since 2009. It now has more than 200 investments, and Salesforce Ventures has investment offices in the US, UK and Japan. Its Europe division, run by Alex Kayyal, has a commitment of $100m over the next few years, while Shinji Asada, head of Salesforce Ventures for Japan, is probably the most active CVC at a foreign-headquartered parent in the country.

Most impressively, Salesforce Ventures has also exited more than 40 of its portfolio, according to Garratt, with recent initial public offerings including Dropbox and DocuSign. It is a speed of development that reflects the growth of its parent under founder Marc Benioff.

Somorjai previously worked for pay-per-call company Ingenio, which was acquired by AT&T, as its vice-president, business development, responsible for partnership, sales and strategic corporate activities. He has also worked for Oracle Corporation as a senior director of corporate development working on strategic transactions. Somorjai was originally Oracle's corporate counsel in the corporate legal department.

Salesforce's investment activity since the beginning of 2017



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David Gilmour BP VENTURES

David Gilmour took responsibility for BP's venturing activities at the end of 2016 after running Air BP, the aviation fuel supply business. He now leads the BP Ventures team as vice-president and has developed what he called last year "a new strategy highlighting the importance of technology and venturing in enabling the transition to a lower-carbon economy".

His appointment underlines three significant developments in BP's venturing strategy. First, it has a much larger capital pool for investment. Second, its scope has broadened and now includes digital lower-carbon energy and power, mobility and electric vehicles, bio-products and carbon management. Third, there is a greater emphasis on supporting portfolio companies and on deploying their technologies across BP's asset base.

BP Ventures has invested more than $400m in at least 44 entities with more than 200 co-investors. In 2017 alone, BP committed close to $100m and helped establish commercial partnerships and deployments with 12 of its portfolio companies.

New deals included a £5m round alongside Schlumberger Ventures and GE Ventures for upstream group BisN, two $20m BP-led series B rounds for digital groups Beyond Limits and Victor, a funding round for Drover, which is ride-hailing service Uber's main partner in London, and a contribution to a $60m Omnitracs-led round for automated vehicle technology developer Peloton Technology. In addition to these, the unit also closed around 20 follow-on investments.

Another 2017 milestone for BP was the granting to bio-products portfolio company Fulcrum of a $150m green bond provided by the State of Nevada. The group is increasingly looking to China beyond western markets for technology and innovation.

This month, BP Ventures said it was actively looking at direct investment opportunities in China in BP's five strategic areas – advanced mobility; power and storage; carbon management; bio – and low carbon products and digital transformation – and partnered with local fund manager Nio Capital.

At the time of the memorandum of understanding (MOU) to establish a long-term partnershipto jointly explore opportunities in advanced mobility in China, Gilmour said: "We were impressed by NIO Capital's pioneering spirit, complemented by both their local insights and global presence.

"BP Ventures supports the wider BP Group by identifying and investing in private, high-growth, game-changing technology companies. We believe that by partnering with NIO Capital BP will be able to access innovative business models and technologies, particularly in China's new energy vehicle industry."

Akira Kirton, GCV Rising Stars 2018 award winner, for his profile said: "This is all in service of the wider strategy and framework we announced as BP corporate in February 2016, where we committed to investing around $200m per year across five new sectors: digital, bio-products and low carbon, advanced mobility, carbon management and power storage.

"I guess the message we want to send out is that we are absolutely open for business, including in sectors that we did not necessarily invest in before, and with a broader remit to engage.

"At GCV's London Symposium last year, we said we were looking to create a broader one-stop shop for companies, entrepreneurs and investors to partner BP. Behind the scenes, we have been working very hard to create that concept.

"Another wish we have is to really keep going beyond normal VC deals, and see how CVC units can access scale-up capital and private equity PE structures, just as we did with the PE-backed entities Fulcrum and Tricoya. This ultimately also benefits the startups, as it broadens opportunities in terms of partnerships that can be created.

"Finally, we would like to really broaden our ecosystem. So far, we have enjoyed working with our fellow CVCs and VCs predominantly based in mainland Europe and the US, but lately we have spent a lot of time thinking about how to become more global and access opportunities that are less mainstream."

Meanwhile, under CEO Bob Dudley, BP has committed to the voluntary Oil and Gas Climate Initiative's $1bn OGCI Climate Investments fund, where Kirton is board member. The fund launched in late 2016 aiming to accelerate the commercial deployment of low emissions technologies and made its first three investments at the end of last year.

"We can invest smart and deploy fast," said Gilmour for last year's GCV Powerlist profile. "Our investment in Fulcrum was closed three months after investment committee approval and BP is now very busy with Fulcrum on an operational level."

BP's investment focus can best be described as broad, but focused. "We are not going out of the corporate footprint. We are not trying to create the next Google and Facebook," said Gilmour. "But our footprint certainly includes the re-emergence of bio-energy and cleantech as well as new modes of mobility including vehicle electrification."

In addition to venturing, Gilmour's responsibilities include technology commercialisation, as well as strategy and planning activities for group technology. His emphasis is on venturing as a means of business development. "Venturing is now front and centre from a business perspective," he explained. "My intention is that BP Ventures can lead to the development and growth of long-term businesses within the group."

It has certainly caught senior managers' attention, with business unit leaders, such as Bernard Looney, CEO of BP's powerful upstream division, exploring US-based venture companies managed by Meghan Sharp this year.

For Gilmour, who has a doctorate in inorganic chemistry from Oxford University and has responsibility for technology commercialisation and venturing activities at BP, as well as strategy and planning activities for group technology, these sorts of close connections being formed are helpful.

Prior to joining group technology in October 2016, Gilmour himself held roles as CEO and COO of Air BP, BP's aviation fuel supply business, and a number of different roles as marketing and technology director, strategy director, performance unit leader and global sales director for Castrol Marine.

BP's investment activity since the beginning of 2017

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Saemin Ahn RAKUTEN

There might be relatively few non-Japan-based corporate venturers investing in the world's third-biggest economy, according to analysis by GCV Analytics, but one of the most interesting to do so is Saemin Ahn, managing director of Rakuten Ventures.

Singapore-based Ahn runs the corporate venturing unit of Japan-based Rakuten, a media to financial services internet group, and the distance gives him perspective as well as independence for the structure he has set up.

This distance allows him to ask hard questions. In a questions and answers profile in GCV last month, Ahn said: "One constant way that I look at investment targets is that I try find the right question. Creating the right problem statement takes the most energy. And once that is done, I simply research the industry and the company online.

"One example is when Cloudera got investments for their big data offering and Horton Works was IPO-ing on the stock exchange. This industry was seen by many as the next value goldmine. When I saw that much money being shoved into those pipes, I had a couple of predictions and those predictions came true.

"Number one was that it is not lack of technology output from big data that is going to be the issue, it is going to be that you will not find enough data scientists to build out the outputs that you want. It is because those data scientists are being employed by Cloudera or the likes of Google, or they are actually building out their own startups. That is what market abnormalities create. It creates giant vacuums of talent that go into different black holes or, secondarily, they themselves actually want to dream bigger and build out their own companies. Based on that problem statement, there are not going to be enough data scientists and algorithmic engineers to go inside companies to solve problems that these big corporations need.

"With that I asked how Google solves those problems. Google has one really important thing that they do – they use an algorithm repository, company-wide, for engineering teams that enables them to retrieve code in a consistent manner. I said to myself: 'Why is there no algorithm marketplace that does the same thing?' I literally typed in algorithm marketplace and Algorithmia popped out. We invested in the seed round with Madrona, and their series A was done by Gradient Ventures, which is Google's AI fund. If Google's AI fund is convinced enough to invest in Algorithmia, then my problem statement was material and durable."

But having asked the tough questions, Ahn keeps Rakuten Ventures to a small portfolio. He said: "The reason I would say 17 to 15 companies is because we are not a commercial VC. The way that commercial VCs would activate is to ensure their risks are disbursed, and for them not to deploy capital to their widest extent is doing a disservice. We suffer no penalties for being patient. This is the biggest superpower that a corporate VC has. I do not want to focus on spending too much time investing in many companies but simply make sure that Rakuten Ventures can grow as a brand with good reputation and good exits. You cannot go full sprint from the very start.

"As with anything, you have to take baby steps first. I am very much reticent about large capital deployments. Once we start the flywheel of dealflow, those will opportunistically and organically generate one or two clips that will provide us with opportunities to invest a lot of money in a few companies."

In 2016, Rakuten doubled the size of its Global Investment Fund to $200m and promptly led the

$120m round for Spain-based ride-hailing app Cabify, while also launched a ¥10bn ($85m) Rakuten Ventures Japan Fund to fund invest in startups in its home country.

These new commitments are all built on the original $10m Southeast Asia-focused fund launched by Rakuten Ventures in 2013, when Ahn arrived from search engine provider Google (now Alphabet), and this initiative was joined the following year by the original $100m Global Investment Fund for investments in startups based in the US, Israel and Asia-Pacific region.

A native of Korea, Ahn had joined Google as an online partnership manager in Korea after some marketing work and following degrees at Sogang University. He then moved to Singapore with Google in 2009 and from there stepped up to cover the whole Asia-Pacific region.

This year, Ahn said Rakuten had already closed one deal. "It was a follow-on for an e-book subscription company. We are probably going to do one or two more deals in London in the third quarter. Annually we are trying to do at least four to six investments, whether it is follow-ons or new deals.

"The unit was set up for Southeast Asia, but, to be honest, I did what I wanted to. I was just hoping not to get fired the next day. That has been my modus operandi.

"When you look at a strategic investment department, it has all the bells and whistles of what a perfect Power-Point looks like for a department. It is going to be super-intelligent, and "we are going to invest in the best strategic stuff". It has never worked out historically unless you have absolute control and material freedom of liquidity. When I got in, I said that this is not going to work and I ripped it all out and simply said let us be a true-blue VC firm with a single LP.

"Thankfully, it has been a very good run. If you look at us just by the numbers, we are a statistical anomaly. We have 14 companies and not one has folded. Several of our companies are profitable – they are running at a very nice clip of growth. We are very lucky to have such motivated and high-quality founders to work with.

"We just made sure that, number one, we are the correct umbrella to drown out all the corporate noise, and then look at adding value to the business.

"One of our strongest suits, weirdly enough, has been our insight into the founders' products, the company's products, and that is simply how I fed back to the companies. This is how I feel about your products, this is where I think the problems are, this is where I think the growth is. I like your product but I think if we could pivot it a little bit this way, it will be much more desirable for corporations to take up.

"It depends on the company. Some companies have hiring deficits, so we try to bring in head-hunters that we have known very well from one area to different areas. We try to deploy them and help them on those issues. If there are business planning issues, we have really smart people on our team that can help out. Our goal is to be flexible to their needs but to be pragmatic and sensible as well.

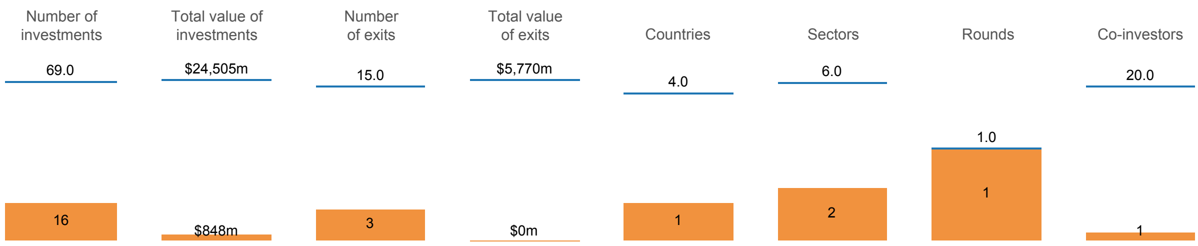
"Being more of a contrarian has made for a lot of exciting verticals to focus on. If many investors head in one direction, I automatically look at what they have left behind. If you look at artificial intelligence (AI), right now a lot of the effort and energy is going into autonomous vehicles and looking to solve generic wider problems. This is the cycle I observe with the startups looking at narrow applications and looking at wider stencils.

"So, the question I would ask myself is: If you want AI that is able to navigate exigent circumstances with many real-life variable elements – like autonomous vehicles – what kind of or how many millions of tests do you actually have to create and run to train those neural networks progressively and make them effective enough to deploy? How much does it cost, in time and actual dollars, to run those tests? Can those tests be replaced with simulations in virtual environments?"

"With the above questioning, I look at simulation startups. That approach is much more interesting to me. What are the niches those sorts of pressures create organically?"

It has led Ahn to back groups as diverse as ride-hailing service Go-Jek, bots developer Run Dexter, invoicing software MakeLeaps, advertising technology providers PocketMath and AdsNative, notifications service OneSignal, children's books service Epic, file sending app ESTmob, payments business Coda Payments, online market Carousell, as well as Algorithmia and Visenze.

Rakuten's investment activity since the beginning of 2017



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Ken Bronfin HEARST VENTURES

Hearst Corporation, founded by fabled businessman William Randolph Hearst more than 125 years ago, has been a stalwart of corporate venturing for at least two decades. Hearst Ventures now has more than $1bn in strategic investments in companies operating at the intersection of media and technology.

As an early adopter of corporate venturing, it can lay claim to starting its investment program as one of five corporate investors in Netscape, the US-based search engine widely credited for kicking off the dot.com boom due to the success of its initial public offering in 1995, the same year as Bronfin's partner, Scott English, joined the team.

Kenneth Bronfin, when he was made senior managing director of Hearst's corporate venturing unit Hearst Ventures in 2013, said: "Our first investment was Netscape, and that was a great place to start. At the time, the founders of Netscape had the insight to reach out to a number of large, progressive media companies to encourage them to publish on the internet. We followed their advice, got started on our web efforts around the company, and also made a strategic investment in the company."

The company has had other notable successes. Bronfin, who was deputy then group head of Hearst Interactive Media for nearly 16 years until he was made senior managing director of ventures, added for 2016's Powerlist: "We invested in video on the internet in the early days. Our first investment in the space was Broadcast.com, with Mark Cuban. This became a valuable company, ultimately acquired by Yahoo. We were an early investor in Brightcove, which has built itself into a terrific company serving the publishing community."

The company is involved with corporate venturing to stay abreast of changes in the sector. Increasingly, this means deals outside the US. Hearst Ventures made Katie Hu general manager of its China investments in 2014, then hired Megumi Ikeda as managing director for Europe and its Israeli venture investment office run by Gil Canaani.

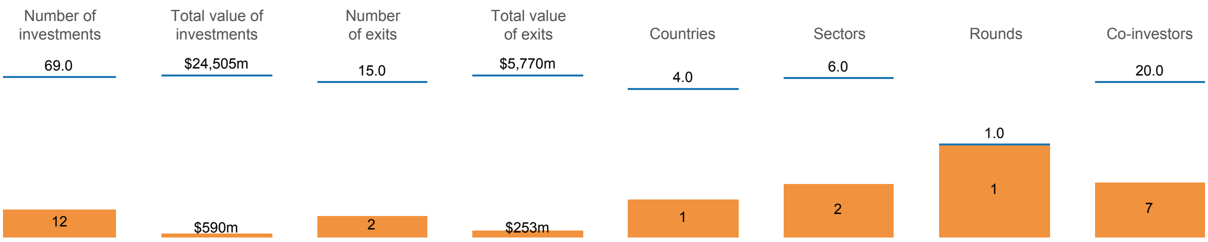
Its investment approach by sector has remained largely consistent. Bronfin said: "Our sectors of interest have essentially remained the same. We are focused on companies with the potential to change the media landscape."

He said the company had been able to invest in fields directly adjacent to its main businesses – such as non-pure media plays like Roku, which had a stellar initial public offering last year – as well as areas where the corporation was less active, such as music, where it had backed companies such as XM Satellite Radio and Pandora.

The company has also maintained a consistent strategy in respect of the size of deals. Bronfin said in 2013: "Part of the secret of our success has been sticking to our knitting. We have maintained and fine-tuned our strategy throughout the years. For example, we have not gone, like some, for seed-stage deals. Our target initial investment is around $5m, although we have a great deal of flexibility depending on the type, size or stage of deal."

For a man who last year completed 20 years at Hearst after earlier spending nearly a decade at NBCUniversal, now part of Comcast, such consistency and excellence reap their own rewards.

Hearst's investment activity since the beginning of 2017



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Kenny Man ANT FINANCIAL

Kai Nin (Kenny) Man, head of international investment at Ant Financial, which runs the AliPay payments platform for former parent Alibaba's e-commerce operation, is preparing for a busy year.

Ant Financial is looking to raise between $8bn and $9bn at a valuation of about $150bn and planning to go public as soon as this year through listings in China and internationally.

Ant Financial was formed by Alibaba in 2014 to oversee financial services products, such as online payment platform Alipay. Its subsidiaries also include asset management fund Yu'e Bao, mobile bank Mybank and Zhima Credit, the credit scoring system also known as Sesame Credit.

Alibaba agreed in February 2018 to acquire a 33% stake in Ant in return for surrendering ownership of certain intellectual properties, under terms originally agreed in 2014.

The company raised an undisclosed amount in 2015 from the state-owned National Council for Social Security Fund and China Development Bank as well as unnamed domestic insurance companies, which jointly took a 12.4% stake at a reported $40bn to $50bn valuation.

China Post Capital, the investment arm of postal services provider China Post Group, added an undisclosed amount the same year before returning for a $4.5bn round in 2016 that valued Ant at $60bn.

Insurance firms including China Life also took part in the 2016 round, as did China Development Bank Capital, sovereign wealth fund China Investment Corp (CIC), private equity firm Primavera Capital Group and CCB Trust, a subsidiary of China Construction Bank.

In January 2016, Man joined the board of One97 Communications, the India-based parent company of Paytm, the subcontinent's main online payments platform, just before the country demonetarised and effectively removed cash from the banking system. Demand for electronic cash has taken off in India and Ant's investments in One97 the year before seems to have been timed well.

Since joining Ant in April 2015, Man has been involved in all the overseas acquisitions and investments, including the KT Consortium for the KBank licence deal, Paytm and Ascend Money in Thailand, while South Korea-based Kakao took in $200m from Ant to spin out its payments platform.

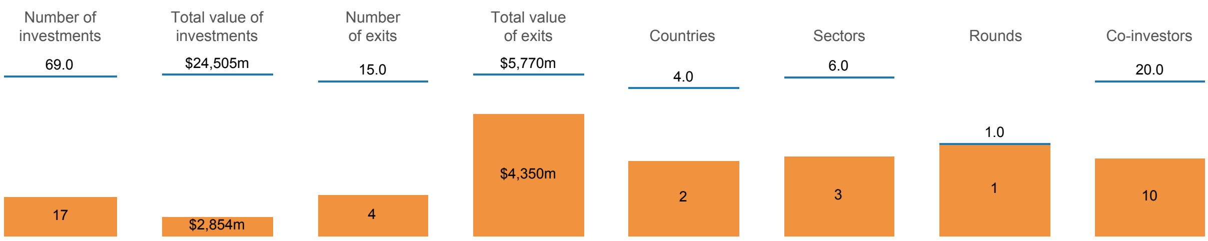
Ant has been an active investor in its homeland, too. Ant has maintained its corporate venturing activity, backing Neisha last month while Alibaba is acquiring all of delivery service Ele.me, in which both it and Ant had invested in 2016.

Before his time at Ant, Man was a senior investment director at Vision Knight Capital, a private equity firm, where he had led the 91.com deal sold to Baidu for $1.9bn and the New York flotation of 500.com. Earlier, he was a director in Alibaba's investment and acquisition team working on the Vendio, Auctiva and Singlefeed deals in the US and Oncard Payments in China.

Alibaba had spun out Ant before its own flotation in 2014 and Man was "deeply involved" in the Alibaba initial public offering, according to his biography.

Before Alibaba, Man was the bottling operations planning manager at Pepsi China and had worked at consultancy McKinsey & Co in the corporate finance and strategy practice. He has an executive MBA from Kellogg School of Management, Hong Kong University of Science and Technology, and a bachelor of commerce degree from Canada's University of British Columbia.

Alibaba's investment activity since the beginning of 2017



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Geert Van de Wouw SHELL VENTURES

What is in a name? For Geert Van de Wouw, vice-president of Shell Ventures, the corporate venturing unit of the Anglo-Dutch oil major, quite a lot.

While Shell Technology Ventures (STV) had existed in one form or another since 1996, making it the longest running energy industry corporate venture organisation in existence, the "Technology" part of the name has been dropped at the end of last month to leave Shell Ventures.

Mark Gainsborough, executive vice-president of new energies at Shell, said: "2017 has been an incredible year for Shell Ventures with investments in 22 unique startups that are developing a wide range of innovations across the energy domain, ranging from renewable energy and connected mobility to digital and oil and gas. Through Shell Ventures, our New Energies business obtains early insights into disruptive trends in our industry and creates options for future business growth. This allows Shell to anticipate the change that is happening as a result of the energy transition.

"Furthermore, to signify its expanded scope, we have changed the name from Shell Technology Ventures to Shell Ventures. Technology will continue to remain one of our focus areas, but the new name reflects an evolving reality in the energy industry, where – besides technologies – innovative and potentially disruptive business models are being introduced by startups that have highly disruptive qualities and are therefore of interest to Shell. Often underpinned by a unique digital capability, these business model innovators are making us rethink the way we, for example, interact with our motorist customers in retail, or develop new solar projects, conduct maintenance at our petrochemical sites or offer more 'connected' energy offerings to our commercial, industrial and residential customers."

As Van de Wouw said at the start of the month, "two weeks ago we just closed another technology investment in HyET Hydrogen, the hydrogen membrane compressor company from the Netherlands.

"However, as the energy transition is progressing in full force, new and innovative business models are being introduced through the startups ecosystem that have highly disruptive qualities which are of interest to Shell. Often underpinned by a unique digital capability, these business model innovators are making us rethink the way we, for example, interact with our motorist customers in retail, or develop new solar projects, conduct maintenance at our petrochemical sites or offer more 'connected' energy offerings to our commercial, industrial and residential customers. To recognise our expanded focus, we have therefore decided to make our name more 'inclusive' and recognise that technology innovation is not the only type of innovation we are looking for."

Besides technology, Shell Ventures has invested in various business model innovators over the last few years, including Sunseap, a clean energy solutions provider from Singapore, Innowatts, an integrated retail energy platform that uses smart meter data and weather data for retail energy providers, and Tiramizoo, a Germany-based startup for same-day, last-mile delivery optimisation.

Beyond the name change, Shell Ventures had an active year. Van de Wouw said: "2017 was been an extremely active [year] for Shell Technology Ventures, closing 20 investments in 12 months, including five follow-ons.

"Meanwhile I doubled the size of our team (from 12 to 24) and we established a new office and hub in San Francisco. With the establishment of a new hub in Shanghai in 2018, we will have a presence at six locations across the globe: Boston, San Francisco, Houston, London, Netherlands and Shanghai.

One of his hires was Steve McGrath, now head of Shell Ventures – Silicon Valley & China since last year having previously been the CEO of emerging technologies group of Spencer Trask, the legacy of the eponymous financier who backed Thomas Edison and invested in the light bulb, the first electric grid, and the phonograph.

He replaced Neal Dikeman, who this year is running for the US Senate.

However, building a diversified team has been a challenge and so Van de Wouw has "herewith wholeheartedly and passionately support Intel Capital's Wendell Brooks call out for more diversity in our corporate venture capital industry".

He added: "In 2017, we have doubled the size of our Shell Ventures team, but found it particularly tough in that process to find female VC talent, as the VC industry is – unfortunately – still very male-dominated.

"I am a firm believer of diversity in teams, as this drives diversity of views and perspectives in our teams, which is key to the decision making quality of any venture firm. It is for this reason that Shell Ventures have embarked on a conscious initiative – as part of our Shell Ventures 2.0 Improvement Plan – to hire more female and underrepresented minorities in our team. I am leading this effort together with Ashley Smith in my team, who is equally passionate about this initiative.

“We have come to the realisation that, besides our continued efforts to hire external female and minority talent into Shell Ventures, for example for our growth plans in China, we also have to be very deliberate in growing our own talent through hiring female and minority talent into more junior positions at Shell Ventures. These roles can be Investment associates or interns.”

But the search for the right people has yet to prevent its ongoing work of increased relevance to Shell.

Shell led the acquisition of venture-backed startup The New Motion, one of the leading charge-point providers for electric mobility in Europe. But Van de Wouw, who is on the board of Airborne Oil and Gas, pointed to Shell Ventures’ “ability to forge strategic partnerships between our portfolio companies and our (Shell) businesses”.

More than 90% of its investments are being deployed within Shell, including data analytics platform Maana, which is being deployed at 12 different occasions in Shell, and concentrated solar for industrial heat and enhanced oil recovery Glasspoint.

He said: “Glasspoint is a perfect example of a very successful startup that wouldn’t be around today without STV’s and Shell help. In parallel with our minority investment in 2012, Shell funded the construction of a 50 tonnes-per-day steam pilot at Jamal in Oman. We subsequently led the next round, $50m, with SGRF (the sovereign wealth fund of Oman), who we got interested to co-invest with us. Glasspoint is now busy completing the largest solar steam project in the world in Oman with through our JV [joint venture] partner PDO: a 1 GigaWatt and 6000 tonnes-per-day steam plant at our heavy oil fields in Miraah (Oman). More recently, Glasspoint was awarded a similar steam delivery contract by the Shell-Exxon joint venture ERA in California!”

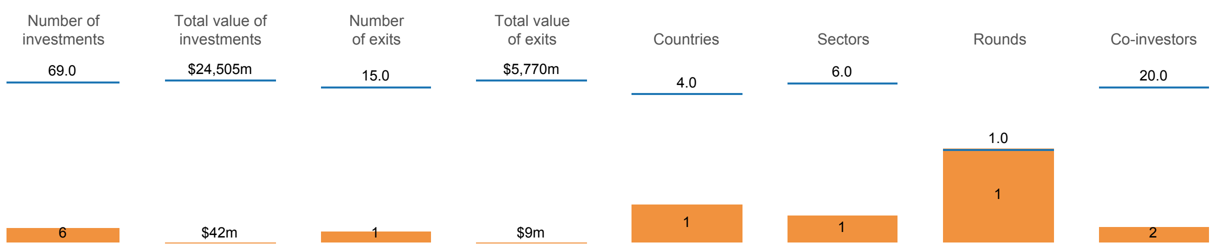
More broadly, Shell Ventures has expanded its focus from oil and gas technologies only to renewable energy (power value chain), connected energy (smart homes and smart businesses), digital (data analytics) to smart or connected mobility and freight.

He said: “Besides our traditional focus to support our upstream and integrated gas businesses, we now cover all Shell businesses, including new energies, retail, global commercial (lubes) and trading.”

Shell Ventures also supports and funds several incubator programs like Greentown Labs in Boston.

And so while chemicals company DuPont was the largest corporate venturing group of the 1960s and before, oil major Exxon was probably the largest CVC in the 1970s, having been founded the decade before. Exxon Enterprises’ subsequent fall and sale for $1m in the 1980s has proved an academic case study of CVC management techniques but its closure has also allowed peer Shell to claim the mantle of long-running corporate venturing unit. It is a title Van de Wouw, who after nine years at Fluor joined Shell in 2004 and held a number of senior roles before taking on Ventures in 2012, is proud of and it making all efforts to build an even longer-term, more sustainable one in more ways than one.

Royal Dutch Shell’s investment activity since the beginning of 2017



The rest of the 100

IN ALPHABETICAL ORDER

Grant Allen ABB TECHNOLOGY VENTURES

Grant Allen became head of ventures at Switzerland-based industrial giant ABB at the beginning of 2017. The passing of the baton from outgoing ABB Technology Ventures (ATV) president Girish Nadkarni (who is on the Powerlist for his new unit at France-based oil major Total) comes after Allen had been with ABB for more than seven years, and over a decade as a venture investor. At ABB, he has led more than a dozen investments, including the exits of Industrial Defender, Validus DC and Persimmon Technologies, all positive returns for ATV.

Before ABB, Allen was a vice-president with Core Capital Partners, a $400m enterprise software-focused venture firm in Washington DC, capital of the US. Among other roles, he had stints at Microsoft in its mobile and embedded devices division, working for the CEO of Jingle Networks – later sold for $63m – and at several startups, including a web services company focused on the mortgage industry he founded when was 19 years old.

Allen has an MBA from Wharton School at University of Pennsylvania and a BSE from Pratt School of Engineering at Duke University. He was recently appointed to US trade body the National Venture Capital Association's corporate venturing advisory group. Outside ABB, he is an angel investor, with positions in more than two dozen companies, including Uber, Avizia, Catawiki, EquityZen, Munchery, AltspaceVR, Earnest and Kanler. Previous investments include LivingSocial, Alibaba and Visually. Allen is on the boards of Soft Robotics, which this month closed a $20m round, Trilliant, Grabit and Atom Power.

Bazmi Husain, chief technology officer of ABB, for last year's Powerlist said: "Grant has the rare mix of deep understanding of the startup ecosystem and the needs of an industry technology pioneer. Participating in and leveraging the startup ecosystem is now an integral part of ABB's technology strategy and we are firmly committed to corporate venturing as a key lever to advance ABB's innovation envelope."

In a GCV interview this year, Allen said: "With the team, we are in growth mode and that is an exciting time. We have been a very lean team for five years and really stuck to our knitting. We have been given the charter to invest $50m a year. Part of that will go into serving the existing portfolio, but we have a fair amount of cash to put into new investments and we aim do eight investments a year. Because of the size of our team, we are very bandwidth constrained.

"The biggest thing to note is that we had a CEO change [to Ulrich Spiesshofer in 2013]. We did drive a lot of value for the company, but after the failure of ATV investment GreenVolts [at the end of 2012], we went into retrenchment mode. We were only investing where it was truly critical. We were working on the existing portfolio and making sure that these companies stayed afloat. Companies like Scotrenewables [Tidal Power], which is in a very tough space – offshore marine power

– are doing quite well. We are raising £20m ($25m) right now and it is one of the world leaders in offshore energy generation.

"If I were to look at the output, we are probably in the top decile among the kind of deal-dollars per investment professional. We are viewed as a Swat team of sorts, to go quickly in to deploy capital and drive value for the company. We look at value extraction very much as a two-way street. So that is why we have hired a vice-president of engagement because the startups going to us want to tap into ABB, whether it is our brand or our technical bench. We need to make sure that they get what they came for.

"I would not be so bold as to say that we provide more strategic value than any competitor. We have become very good at it, because we have been out there for eight years, exposing the startup to our technical bench very early. For companies that we invest in, I think they would say they have more ready access to the technical experts inside ABB. Some other corporates, they are either working with the labs or the technology transfer group.

"We are a bit more bespoke, partially because it is all coming through one house – the group I run. Depending on the situation, we might deploy one of our research managers at the very first meeting. If it is a sensor company, it will have direct access to Barbara Panella, our global research manager for sensors, and that, for a company like Kespry, which is looking to put additional telemetry on drones, was of huge value. I don't want to be a gatekeeper, I want to be a connector.

"I generally think of myself as a bit of a contrarian investor. I like to invest where things are not popular at all – so completely countercyclical. With robotics, I think ABB did a good job of investing in companies like Vicarious [in 2014] and Soft Robotics when they were a bit more out of favour. Just recently I was on a call with a VC who said he really wished he had seen the company two years ago, and I said: "I think you guys are late to the party [Soft Robotics raised $20m at the start of May]." Valuations are out of whack. There are too many firms chasing too few deals.

"That is one of the big reasons that even though we have done seven deals in the robotics and artificial intelligence space, I see us pulling back a little bit, because we are going to look at the next out-of-favour space. It is a great time to hit these emergent areas maybe three years in advance of when they are really going to go primetime. Distributed energy resource management systems is another example, where we are engaged with Enbala. They are just starting to ramp revenues in a serious way and it really helps to have ABB there as a partner, because in some cases we are actually selling alongside them. That is a pretty valuable proposition.

"For 2018, we are likely to be on pace, if not up 10% from last year, which is going to put us on track to do eight or nine investments for the year. If you look at the capital we are being asked to deploy, the cheque size will go up. I think you will see our average cheque, which today is around $3m, increase to $5m.

"You will see us break away from what we have been doing in the past two years, which is a lot of factory intelligence. We are considering two thematic camps. One is later-stage strategic deals that map to what our power grids and electrification product businesses are doing, so two of our four divisions.

"On the other end of the spectrum, we are looking at breakthrough technology for our robotics and motion, and industrial automation businesses. We have been talking about the internet of things as a buzz-word for probably three or four years now. I think the technology is at a point where we are starting to look at it more seriously even though the market traction has not been very impressive.

"The area I am very excited about is what we call automation of automation. This is the ability to deploy robotics – increasingly mobilised robotics – where you put one of our arms on top of automated guided vehicles. Deployable, trainable and testable in a very quick fashion, so that we can do machine tending, flexible manufacturing, short run cycles, and have them be truly adaptive. This has been talked about for a while but I have yet to see any robust solutions that you can drop in and have a three to eight-week testing cycle and automation deployment cycle become a one-week, if not one-day, deployment cycle.

"As we are talking about themes, it is important to go through what are still our four thematic buckets because those generally do not change. We serve three types of customers – factories, utilities and the built environment – which can include a lot of different types of customer. We are looking at technologies that map to the theme of future factory, which is really what you are looking at as industry 4.0. That is robots, other manipulation, training control software, advanced human machine interface, safety systems.

"Other than utilities and the built environment, the fourth bucket is the horizontal layer which sits on top of all of that – the digitisation layer. Just like GE and Siemens are looking at Predix and MindSphere respectively, we are looking at our ABB Ability digital platform, which is really a connective tissue layer, a set of common components that our businesses can point to build value-added solutions for our customers.

"I also have fears as well, that we are not moving fast enough. Our team could easily be three or four times the size it is today. For a company that has a $40bn top line and a $1.5bn R&D budget, I think we should be even more aggressive in investing in breakthrough technologies. That is probably the biggest thing that keeps me up at night, that we are seeing some great things, but every day I am passing on amazing technologies.

"As an example, we are a leader in robust power gear and we have built high-voltage transformation systems that will be sitting at the bottom of the ocean a thousand feet down. In my mind, that sort of expertise is relatively fungible, and you could translate it to doing power transformation equipment and energy storage that would exist in the outer reaches of space. That may sound like a bold statement but I think there is no reason ABB should not be planting seeds today to be a leader in powering next-generation built environments that exist on Mars and other places in space.

"We did end 2017 pretty strong. We invested in a fund called G2VP, which is a spinoff from Kleiner Perkins Caufield & Byers [founded by its green growth fund senior partners Ben Kortlang, Brook Porter, David Mount and Daniel Oros].

"We also invested in Kespry, which is a drone company working in industrial field services [that raised $33m in December's series C round]. We will be helping Kespry expand from insurance applications and mining automation to other areas that are germane for ABB. If you look to 2018, we are taking that mining automation thread and extending it. We are looking at additional sensing and automation technologies which will push mine intelligence to the very edge, to the point that we are collecting ore and understanding what is in that ore with high accuracy, which is really the holy grail to drive efficiency and increase profitability for mines. On that investment, stay tuned.

"As we show that we can provide strategic value and I gain the confidence of the groups I am working with inside ABB, two things will probably happen. For strategic deals, we will see the cheque size go up. You will see us driving much more progressive big bets for the businesses which I think will really break through. With some of those categories I mentioned, such as space tech or advanced transportation, they are going to say: "Yes, you know this is important to ABB even though it is not in our current roadmap. Grant, we trust you, we trust your team."

"They are still high-risk, but they help ABB by getting early insight into some of these emergent areas. Autonomous transportation is clearly one of those, as we are seeing a lot of that sensor tech trickle over into the factory, into drones. There are a lot of progressive bets we can be making and hopefully in the back half of 2018, into 2019, we will be making a lot more of those."

Tony Askew REV VENTURE PARTNERS

RELX Group has committed to a further fund for REV Venture Partners, formerly known as Reed Elsevier Ventures. The new fund will be managed by REV founder partners Tony Askew and Kevin Brown, who together are one of the corporate venture industry's longest-serving partner groups, having both moved to REV at the end of 2000.

Since then, REV has invested hundreds of millions of dollars in big data, digital health, internet and enterprise technology companies. It was an early investor in Palantir, Healthline, Babbel and Netli. A recent deal was the $36m round for MemSQL, a US-based real-time data analytics provider.

Askew said for 2016's Powerlist: "Our focus on data and analytics is much the same, as is our broad geographic waterfront – the US, Europe and Israel. We believe data and analytics is transforming every industry and we will continue to back exceptional, ambitious entrepreneurs that have the drive to disrupt and build new category leaders."

However, Askew has his concerns. At the start of the year he said: "The single biggest factor propelling the investment landscape is the volume of capital now being deployed – $240bn in the past three years, of which more than a third came from non-traditional VC sources – sovereign wealth, mutual and pension funds and an expansion of corporate investment activity. This has led to expanded valuation expectations, particularly at early rounds from more intensive competition for deals."

For his 2014 Powerlist profile, Askew said: "We found a welcoming home here, as RELX Group, formerly Reed Elsevier Group, wanted us to create a successful, long-term corporate venturing capability. We designed the fund as a financial VC but with a meaningful strategic angle. The financial focus means we take board seats and our compensation includes carried interest [a share of investment profit] like traditional VCs, which aligns us well with entrepreneurs and other investors. Our strategic angle comes from bringing to bear RELX Group's superior access to domain knowledge and a highly relevant referral network".

Askew first became a venture capitalist at SoftBank, a Japan-based internet company, after working as an entrepreneur. He said: "Back in the early days of the cauldron of the internet bubble, I was persuaded it would be far more interesting to apply what I had learnt in building digital businesses by becoming a VC and so I joined SoftBank.

I graduated as a physicist, so I did what all physicists do in the UK and joined a management consultancy."

Other past activities included running electronic publishing for Random House, which included co-investing in a Los Angeles-based new media company alongside filmmaker Stephen Spielberg. Later, at mobile operator Cellnet, now O2, he co-developed and launched the world's first wireless internet service provider, Genie, which grew quickly to 4 million users across Europe. He was the first chairman of the corporate venturing group of UK trade body the British Private Equity and Venture Capital Association, and now heads its VC committee.

John Banta BLUECROSS BLUESHIELD VENTURE PARTNERS

Since June 2014, John Banta has been executive director of BlueCross BlueShield Venture Partners, a $550m corporate venture fund sponsored by the Blue Cross Blue Shield Association, a federation of 36 US health insurance organisations. Since then, he has been on "the continued quest for value-based – or at least more effective and efficient – clinical approaches" in a world of "US federal health policy instability," as he described in the GCV year-end survey.

He is responsible for maintaining relationships with all stakeholders to ensure the operational success of the fund, and for the generation of an appropriate rate of strategic and financial return.

BlueCross BlueShield Venture Partners has been going for nine years and manages its third fund, including participation of the overwhelming majority of the 36 Blue Cross and Blue Shield health insurance plans, and nearly doubling the size of the program.

For last year's Powerlist he said: "With the healthcare industry continuing to experience unprecedented change, we will continue to focus on supporting leading entrepreneurs driving innovation within a dynamic marketplace."

It is success supported from the very top. Scott Serota, president and chief executive of the Blue Cross Blue Shield Association, for last year's award said: "Blue Cross Blue Shield Venture Partners have played a key role in advancing healthcare innovation while providing invaluable competitive advantages. Thanks to John's terrific leadership, the funds not only have delivered healthy returns on strategic investments, they have established Blue Cross Blue Shield as a highly desirable partner for leading venture firms and entrepreneurs."

From 2002 to 2014, Banta was CEO and managing director of IllinoisVentures, an early-stage technology investment firm launched by University of Illinois and focused on companies deriving from Midwest universities and labs. Banta built and led the founding team, and continues to serve as the managing principal of the Illinois Emerging Technologies Fund managed by the firm, and of IllinoisVentures Capital Holdings.

Before joining IllinoisVentures, he was the president and chief operating officer of DigitalWork, a Draper Fisher Jurvetson and Dell Ventures portfolio company, having served as head of corporate and business development.

Previously, Banta was a vice-president of corporate services at investment banks UBS and Bear Stearns, and a director of the Investment Management Consultants Association. He earned an MBA in finance and statistics with high honours from

University of Chicago Graduate School of Business where he has guest lectured, and a bachelor's degree in finance from University of Illinois.

Roy Bahat BLOOMBERG BETA

Roy Bahat, head of Bloomberg Beta, said when it closed its second $75m fund in July 2016: "Bloomberg was one of the original technology startups when Michael Bloomberg founded the company in 1981, and we try to carry that spirit in Bloomberg Beta.

"In our first fund, Bloomberg supported us in creating a different kind of venture fund. We built Bloomberg Beta to treat our founders like we treat Bloomberg's customers, with great care, trust, transparency and a service driven by data. The revolutionary plan for our second fund is to just keep on doing exactly what we have been doing."

Bahat said he hoped to convert these two $75m funds into $450m of returns. "We need to at least triple them to be great."

Bahat became head of media business Bloomberg's corporate venturing unit in 2013 and is a self-professed man obsessed. His first obsession is as a husband and father of two, but after that it is being "obsessed with how we make work – the thing we do with more waking hours than any other – better".

Bahat said at the time of its Knotel deal: "Fast-growing companies need an entirely new kind of workplace experience than plain offices provide."

He said for 2016's Powerlist profile: "In 2013, Bloomberg gave me the opportunity to turn my obsession into my job when we created Bloomberg Beta. I believe the fastest way to make change is to build extraordinary technology companies, and, these days, machine intelligence companies in particular.

"There was a time when tech was the outsider, the underdog. Now it is the industry, and it is time to act like it, which means taking responsibility for the things [we introduce into the world]. Take self-driving cars. One of the top professions for US men is truck driver. I think the top job across both genders is cashier [another role being disrupted by technology]."

While many venture investors are only beginning to realise the importance of branding and positioning in respect of entrepreneurs so as to tap the best dealflow, Bahat has gone further than most in optimising his own work.

As Bloomberg Beta says on its Github page: "Founders are our customers." With a team in New York, including GCV Rising Star 2016 Karin Klein, and San Francisco, where Bahat is based alongside GCV Rising Star 2017 Shivon Zilis, completing at least a deal each month, it seems the customers like what they are hearing.

In an interview with TechCrunch in 2016, Bahat said: "We open-sourced the model for our fund and it has all been updated continuously over the years on GitHub. We [separately] realised that as a small fund focused on the early-stage market you cannot see all the deals in your space, even in a narrow domain.

"There are people we love working with, so we started backing them through what we call our Open Scouts Program. We run it through AngelList [a website connecting entrepreneurs with investors] and instead of making soft commitments, as many do on the platform, we have committed to giving these three angels – Max Simkoff, Shruti

Gandhi and Parker Thompson – a certain amount to invest behind every deal they fund."

Bahat was founder and chairman of gaming console company Ouya, which was sold to Razer in 2015. He was previously president of IGN Entertainment and a vice-president at media group News Corporation. He was also director of strategy for NYC2012, the bid by New York to run the Olympic games. He was a senior policy director at the New York mayor's office between February 2002 and November 2003, when Bloomberg's founder Michael Bloomberg took over as mayor. He was previously an associate at consulting firm McKinsey & Co. He has an MPhil in economics from Oxford University and read social studies at Harvard University.

Paolo Bavaj HENKEL

Another of the handful to have shifted from GCV Rising Stars to the main Powerlist this year, Paolo Bavaj is head of corporate venturing for Henkel Adhesive Technologies, a business unit of Germany-based industrials group Henkel, which he joined as corporate director of strategy and business development in December 2010. It is a role where it seems like he has found what he is looking for.

In April 2013, he became head of new business development, with responsibility for identifying and evaluating innovation opportunities through strategic foresight management, scouting, startup screening, venturing and incubation.

Although Henkel made its first startup investment in March 2014, it only publicly communicated in November 2016 that Henkel was committed to invest €150m until the end of 2020 into startups and VC funds.

Bavaj said: "We did fantastic investments in Copprint and NBD Nanotechnologies, where we could link the investment strongly with the operating business. This will end up in two excellent success stories revolutionising markets. with the brilliant technology of a startup and the strong power of a large corporate."

The investment in US-based advanced materials startup NBD Nano's series B round closed in November and at the time Bavaj said: "Based on its robust technology platform, NBD Nano has demonstrated the ability to provide cost-effective surface solutions with unique and durable performances for a large variety of applications and on many different substrates."

And the closing at the end of last year of the investment in Israel-based Copprint, which produces conductive copper inks for a variety of printed electronics applications, could replace silver-based ink methods and to enable new cost sensitive applications, according to Bavaj, who is on the board of the portfolio company.

For all its deals he makes sure it is not a case of being with or without the entrepreneur. He added for his Rising Stars profile: "We are not investing into startups for the sake of investing into startups. Our investments always support our new business development approach. During the build-up of our 3D printing business, we are working with several startups, but with all of them differently.

"We started that with an intern in March 2013 and today we have 100 dedicated people working on 3D printing. We are building here a more than €100m ($120m) new business for Henkel and startups play an important role. While working with them, this collaboration certainly also helps them to scale faster and bigger."

And Bavaj, while admitting people can move in mysterious ways, is looking for more of these types of opportunities as his aims are "building several new €100m businesses like our 3D printing business as a true serial intrapreneur.

"Another ambition is to drive digitisation in a materials business by having people understand that there are several digital business models, which need advanced materials as enablers."

And the collaborations thrown up is interesting for the self-declared people lover, who said: "I really like to meet, talk and mentor the huge amount of fascinating, great and highly-skilled people working in the top startups. I also like a lot the technologies they are working on and having a peek into the future through our venturing activities.

"I am convinced that the combination of a company like Henkel and a startup is extremely powerful if we get this right."

And the benefits extend beyond the immediate financial and business gains. Bavaj said: "For Henkel the setup of the CVC unit is already a significant success as this is a major cultural shift for a 141-year-old company. I am extremely happy about that shift and that the shift happened without (mentally) losing people."

However, he admitted the biggest challenge was the mindset change in Henkel. He said: "We had to overcome the mindset of 'we develop everything ourselves'. It took nine months to overcome that and we are still not finished. We work every day on measures to accelerate that mindset shift by letting Henkel people meeting real startups and getting impressed by their focus, skills and energy."

It is a mindset Bavaj well understands. After his PhD in chemical engineering at RWTH Aachen, Germany, he joined Celanese Chemicals in 1996, where he worked in operations, new business development and led then a global research and development (R&D) and new business development team, gained experience as area sales manager in the US, and ran the Celanese emulsions textile and engineered fabrics business in Europe as well as its global glass fibre business.

For someone who loves "travelling to sunny spots with people I like and love" and a "fanatic" of band U2, therefore, it can seem as if every day is a Beautiful Day.

Apologies to readers for the sometimes forced references to other U2 song titles in this profile – do let me know which ones you caught at jmawson@mawsonia.com

Julie Bercovy LVMH

France-based luxury goods producer LVMH last year established a corporate venturing fund called LVMH Luxury Ventures that will invest in early-stage luxury consumer startups.

The firm has provided LVMH Luxury Ventures with €50m ($54m) of capital, and it will be led by Julie Bercovy, LVMH's deputy head of mergers and acquisitions for the past dozen years after nearly two as an analyst at Lazard. Her deals included acquisition of brands like Hublot or Bulgari for LVMH.

Bercovy describes her unit thus: "With a view to creating value, LVMH Luxury Ventures will provide equity financing to promising brands across the full spectrum of the luxury universe (leather goods, watch and jewelry, other accessories, fashion, perfumes and cosmetics, fine food, design).

"Beyond financial support, LVMH Luxury Ventures will assist (through board representation) the talented management team of these up-and-coming brands in defining their strategic vision and development plans thanks to the sum of experiences and economic intelligence of the Group."

She told Decideurs magazine: "I wanted to be able to offer my experience in the service of promising new brands and business models still unexplored by the group. It is in this perspective that I presented, first to Jean-Jacques Guiony (CFO of the group), then to [chairman and CEO] Bernard Arnault, this project of minority investments in small companies (from €3m to €20m of turnover) with high potential.

"We can say that our activity remains marginal for a group that represents more than €100bn in market capitalisation and generates nearly €40bn in sales, but that would only see part of the picture. We must not systematically reason within the bounds of the group, otherwise every individual initiative seems derisory and not very contributive. The ambition of this new investment activity is to create several tens of millions of euros of value for the group, reported on the scale of a micro-team.

"We must therefore speak of a product of which we are proud and whose differentiation leaves no room for doubt. For example, some people might object that streetwear has nothing to do with the world of luxury, but for LVMH, if streetwear has a strong personality and seeks a form of excellence (quality and creativity for example), that interests us. Another example, a startup that breaks the value chain in the world of beauty, perfumes or accessories is also interesting for its innovative business model."

The fund will invest €2m and €10m in each one. Its first deals include a "partnership" (financial details of the transaction were not disclosed) with US-based trainers store Stadium Goods.

For the uninitiated, WWD describes Stadium Goods as being founded in 2015 by Jed Stiller and John McPheters as "a premium sneaker plus streetwear marketplace selling only the most sought after footwear, apparel and other hard-to-find items on behalf of our sellers". Stadium Goods had raised $5.6m before LVMH Luxury Ventures entered.

The move comes roughly a year after LVMH joined private equity firm Catterton and Groupe Arnault, the family holding company of LVMH chief executive Bernard Arnault, to combine their private equity holdings into a single entity dubbed L Catterton.

LVMH has not so far been a major investor in early-stage companies but it does hold stakes in US-based luxury fashion retailer Moda Operandi and online fashion industry news portal The Business of Fashion.

Scott Brun ABBVIE VENTURES

Following the creation of pharmaceutical company AbbVie's corporate strategy office in late 2015, executive management decided to refocus AbbVie Ventures with a mission to pursue early-stage investments closely aligned with AbbVie's research and development strategy and core areas of drug discovery and development.

It was natural this effort should be managed by a senior leader from R&D, one with significant experience implementing and leading the company's research strategy. In April 2016, therefore, Scott Brun was appointed head of AbbVie Ventures as well as vice-president in the company's corporate strategy office.

Henry Gosebruch, chief strategy officer at AbbVie, for last year's Powerlist award said: "Abbvie Ventures is an important component of our overall external innovation strategy. Developing relationships with and investing in the next generation of scientific advancement is a critical complement to AbbVie's existing research strategy.

"Scott Brun, with his two decades of leadership in our world-class research organisation, is the perfect leader to advance our mission to partner researchers and entrepreneurs at the forefront of scientific exploration and to provide valuable expertise and guidance to emerging companies."

Consequently, the team said it had prioritised opportunities with early-stage companies developing innovations with the potential to address significant unmet needs in immunological, oncological and neurodegenerative diseases.

The company said: "By investing in areas in which AbbVie has deep R&D, regulatory and commercialisation expertise, we believe we can play an important role in advancing early-stage innovation through our venture activities.

"AbbVie views these endeavours as complementary to our internally-driven drug discovery work and our business development efforts. Extending our R&D reach and scientific interchange with the external community, including academic institutions, provides significant value both to AbbVie and to emerging companies that can leverage our experience to help them achieve their corporate development and program objectives."

AbbVie's main investments this past year include Jnana Therapeutics, which raised a $50m round series A round in December to develop drugs targeting solute carrier transporters, proteins that move substances across cellular membranes, for immune-oncology therapies and Palleon Pharmaceuticals, which raised $47.6m in October for its mission to discover cancer therapies related to the glyco-immunosuppression axis.

The firm also contributed to a $30m series A round for Disarm Therapeutics, a company that aims to inhibit a protein called Sarm1, identified as a driver of axonal degeneration, responsible for disability and disease progression conditions affecting the central, ocular and peripheral nervous system; as well as a $31.3m round for Exicure, which is using nanotechnology to build spherical nucleic acids that can enter cells without producing an immune response as a treatment for inflammatory diseases, genetic disorders and cancer.

Through these investments, AbbVie said it had strengthened relationships with top-tier institutional and corporate venturing firms via co-participation on portfolio company boards but it has concerns about the longer-term.

Brun said in the GCV outlook survey its areas of portfolio focus by technical area or platform will become important. "As new funds begin investing, how many more bets on immuno-oncology will VCs be willing to make? Will VCs be willing to invest in immunoscience and neurodegenerative disease even though translational uncertainty exists in these areas?"

AbbVie Ventures said last year it was focusing on building its presence in the San Francisco Bay area, having expanded its team with the hire of Priyanka Rohatgi, a GCV Rising Star 2016, and John Gustofson.

AbbVie Ventures also said it was becoming engaged even earlier in the company startup environment by leveraging the company's network of academic collaborations and relationships to target investments in emerging innovation from top-tier institutions and partnering other venture capital firms on these seed-stage opportunities.

Brun has had plenty of experience in these areas, having previously been a vice-president in drugs development at AbbVie since 2012. A year later, in 2013, AbbVie was formed as a spinoff from Abbott Laboratories. Brun had worked at Abbott since 2002, a few years after completing his education at Harvard Medical School, Johns Hopkins University and University of Illinois.

Laurel Buckner ATN VENTURES

Laurel Buckner, formerly vice-president of corporate venture investments and mergers and acquisitions at US-based telecoms operator GCI Communications, was hired by peer ATN International earlier in October.

As senior vice-president at ATN, Buckner is now managing director of its new corporate venturing unit, ATN Ventures, and is helping it expands its frontiers. For the GCV 2018 outlook survey, she said: "We will continue to see investment in AI [artificial intelligence] grow, but now it will be in even more bespoke solutions for verticals. There will be more investment in this area. The tough decision for investors will be what exactly is the value of AI in this instance and how is this AI company or technology doing something different from others. The trick is, as always, separating the wheat from the chaff."

ATN operates telecoms services in remote areas of the US and Caribbean as well as solar energy units for municipalities in the US and India. Buckner said ATN Ventures would be looking for deals in these areas, particular around software and renewable energy storage.

Buckner had previously set up the corporate venture department group at GCI, Alaska's largest telecoms provider, at the beginning of 2014. Her move from GCI followed its acquisition by Liberty Interactive for $1.1bn earlier this year.

Before that she was in M&A at Dell and had come to Dell actually through an acquisition. "Before Dell, I was the general counsel and corporate secretary of a company in San Jose called SonicWall, an IT security company. Before that I was with a large law firm in Seattle called Davis Wright Tremaine.

"So I, traditionally or historically, was a corporate lawyer and tax lawyer. That is where I started my career," Buckner told Andrew Gaule in an interview for GCV in 2016.

She added her background into CVC was unusual: "When I left the law firm I was not very interested in technology, so I thought the best way to get close to technology as a lawyer would be to be a lawyer in a startup. And that is absolutely true. I learnt so much about the way that startups work. How do you build a product? How do you work with engineers? How do you go to market? How do you deal with investors? How do you raise the money? And then eventually, how do you sell that company? Which is what we did. And then I just happened to do that three more times and stay with the acquirer."

For someone who loves to ski as much as Buckner, her route down the CVC career slopes has been impressive.

Roel Bulthuis MERCK'S M VENTURES

There's a reason some companies continue expanding for 350 years – yes, that's 4,200 months – continuous investment in change and learning but, most importantly, hiring and supporting the top people.

It has been, therefore, interesting to see the support from Germany-based drugs company Merck KGaA's chairman and CEO for Roel Bulthuis, senior vice-president and managing director at M Ventures', nomination to the GCV Powerlist 100.

Stefan Oschmann, chairman of the executive board and CEO at Merck, said: "As a leading science and technology company, innovation is vital for Merck. With four sector dedicated funds in healthcare, life sciences, performance materials and new businesses, Roel and his team have created a unique investment platform that strengthens Merck's access to innovation and, at the same time, generates a venture return.

"Roel and I share a great admiration for entrepreneurs and their ability to turn science, technology and groundbreaking ideas into a product vision that could improve patient's lives, disrupt industries or transform the way we live. We want to play our part in changing the world by providing startups the exceptional support they need to make their vision a commercial success."

Bulthuis set up what was then called MS Ventures in 2009 and in 2016 saw the evergreen strategic venture fund double to €300m ($320m) and broaden from a focus as one of the leading early-stage investors in the healthcare field to all areas of interest for the parent company.

Each of the business sectors in Merck have dedicated funds. These funds have a starting capital of €50m and a target size of €100m evergreen, which, along with an existing fund, would take the total under management to €450m. Part of M Ventures is the Bioaccelerator Fund in Israel and the €30m Entrepreneur Partnership Program to fund spinouts from the parent company.

Bulthuis said: "We have made the spinoff efforts a fundamental part of all four funds, with the ability to commit up to 20% of our capital to these ideas."

Bulthuis added: "We had a strong year in 2017, with a significant number of new investments and follow-on investments."

Bulthuis added it had been "a great start for our three new funds with key hires made" with Joey Mason and Owen Lozman joining M Ventures this year and Noga Yerushalmi in January 2017 as the head of the BioIncubator in Israel.

Bulthuis has celebrated more than a decade at Merck, as prior to establishing its venture fund he was responsible for negotiating a range of licensing deals for subsidiary Merck Serono. Previously, he was director in the biotech investment banking team at Fortis Bank. Before joining Fortis, Bulthuis worked at Devgen in Belgium as a business analyst.

He has an MSc in biopharmaceutical sciences from Leiden University, and an MBA in finance from Helsinki School of Economics.

Barbara Burger CHEVRON TECHNOLOGY VENTURES

No sector has been roiled as much by economic and political turbulence over the past few years than the oil and gas industry with prices initially over $100 per barrel then down into the 40s before springing back to $70 this month.

But while a number of large corporate venturing units, such as that of ConocoPhillips, have seen significant changes in personnel, Kemal Anbarci, managing executive of Chevron Technology Ventures (CTV), the corporate venturing and innovation unit of the US-based oil major, and his boss, Barbara Burger, president of CTV, have built a strong reputation for consistency.

Both became leaders of CTV's corporate venturing arm in 2013, a year before oil prices fell by about two-thirds over 18 months before recovering just as Saudi Arabia is seeking to privatise its $2 trillion state oil company, Aramco.

Anbarci, who in 2016 celebrated his 25th year with Chevron, replaced Trond Unneland, who led the unit for nearly six years, while Burger replaced Des King in 2013 as president of CTV a few months before.

For 2014's Powerlist, Anbarci said Chevron Technology Ventures had developed a strong position in corporate venturing because it had "stayed the course" since its foundation in 1999. He said: "What makes Chevron Technology Ventures function extremely well is the continuity of the venture executives. We got in people already in Chevron for 15-plus years, so they have credibility within the company, creating a stable venture investment culture."

The city was then roiled by hurricane Harvey and Chevron has been at the heart to attract more capital to the city, the financial and industrial centre of the US's "third coast". In an interview with GCV before the Venture Houston conference, Anbarci said: "From our point of view, what has enabled Chevron Technology Ventures (CTV) to be a successful venturing group and the longest-lasting continuously operating oil and gas venturing arm is our focus on resilient infrastructure.

"This unfortunate event confirms the validity of our long-term strategy and what we have to focus on as a company and as a venturing group. In the short term, we have a slightly different focus revolving around helping the local entrepreneur ecosystem. The conference we are organising with Shell and Global Corporate Venturing on November 1 is one of our initiatives to energise local entrepreneurs and accelerate their business activities into growth.

"Our strategy of supplying technology solutions to Chevron has not changed, neither during my term nor before. We try to help solve Chevron's technology needs. However, we recently added a new program to help companies at seed stage to move to round A. We call it the Chevron Technology Ventures Catalyst program.

"The program's goal is to help entrepreneurs who are already past seed-stage but have not yet raised sizeable round A capital. We target companies that have developed products or prototypes ready for field trial and are looking to attract venture funding to make it happen, but do not have the required structure yet.

"The idea started when I was having a discussion with Cory Steffek, head of Saudi Aramco Energy Ventures in Houston. We both noted a need for more local companies ready for series A investment. We established the CTV Catalyst program to help guide the selected companies via established business milestones and help them develop in a direction that will enable them to attract and secure venture funding. Two Catalyst companies have been announced to date – Rheidiant, a Houston-based company that applies industrial internet-of-things and machine-learning technologies to help identify small leaks on pipelines, and Ingu Solutions, which develops miniaturised inline sensors to detect leaks, geometric defects and deposits that impact pipeline performance."

Its most recent investments – Lux Assure, which raised $2.4m; Airborne Oil & Gas, which added Chevron to Shell and Evonik in mid-2016; Panzura in a $32m round last year; and Maana's $26m after leaving stealth in 2016 – reflect the convergence of digital technology, data science and other impactful innovation in oil and gas, according to Anbarci. "In our quest to reduce costs, they are able to provide creative solutions. Some enhance our ability to extend the lifetime of our facilities and assets, while others focus on reducing the cost of new development. Others move our massive amounts of data effectively, or extract intelligence from it.

"In addition to funding, we bring insights about the industry. We help facilitate field trials and introductions to our supply chain. Among all the companies we have invested in across our venture portfolio, over 80% have done field trials with Chevron and over 60% have become suppliers to Chevron. Ultimately this business model has been a great success story for them and for us.

"Our fundamental strategy has not changed over the years. We are looking at companies that can be suppliers to Chevron and technologies that will improve our business. All of this supports the transition into the emerging industry 4.0."

Anbarci has a master's degree in operations research and a PhD in petroleum and natural gas engineering from Pennsylvania State University, and an MBA from University of California Irvine. He also has a degree in petroleum engineering from Middle East Technical University, Ankara, Turkey.

Burger started as a research chemist in Chevron's Richmond Laboratory. She went on to a number of management positions, including in lubricants, where she was vice-president for the global supply chain and base oils.

She is on the board of the Houston Technology Centre, a technology and business incubator, and also on the US Department of Energy National Renewable Laboratory External Advisory Council and the governing board of the MIT Energy Initiative.

Busy Burr HUMANA HEALTH VENTURES

Busy Burr, now chief innovation officer and head of Humana Health Ventures, has responsibility for one of the most important challenges in society – improving health.

It is a role she has leapt at. Bruce Broussard, CEO of US-based Humana, in support of Burr's nomination for the GCV Powerlist last year said: "Busy Burr joined Humana at an important time in our company's history as we focus on delivering on our bold goal of improving our members' health 20% by 2020.

"To accelerate our progress toward that goal, it's critical that we seek out, attract, partner with and invest in the most innovative startups in health care.

"In a remarkably short time, Busy has built a world-class venture team and made

Humana a prominent and respected partner in the health industry. Our members are already reaping the rewards of the investments and collaborations Busy and her team have identified, established and continue to grow."

Based in California and reporting to chief innovation officer Chris Kay until his departure last year to set up CEK Ventures when she stepped up as CIO, she was previously a managing director of Citi Ventures and led large-scale innovation efforts as the global head of US-listed bank Citigroup's DesignWorks before joining Humana in 2015.

At Humana, Burr has founded the company's Silicon Valley office and built a world-class team and reputation in healthcare venturing and innovation in the space of a year – a remarkably short time.

In her profile, Burr said: "Humana pays approximately $40bn in medical benefits annually. Leading the Healthcare Cost Trend organisation, I am accountable for driving the strategy, operations, digital products and programs that bend the trend on medical costs. In just two years at Humana, my team has transformed existing operations and built new programs, products, and processes to deliver over $500m in medical cost savings over the next five years by focusing on member health – at a time when medical costs are rising rapidly.

"As chief innovation officer, I lead the enterprise-wide innovation strategy and efforts to build new platforms, assets and technologies to enable new business models for Humana. I am also the founding partner of Humana's Health Ventures group, charged with identifying, partnering and investing in the most-promising emerging companies in the health care space."

She and her team have met with hundreds of startups and other leaders in the venture community and she recently closed investments in Omada, Livongo, and Aspire Health. Livongo Health, the US-based developer of an assistance platform for chronic health conditions, raised a further $105m at an $800m valuation last month, while Omada closed on another $50m round last year.

She said for last year's award: "I am inspired by and proud of the team we have built... from amazing investor leaders (Saurabh Bhansali was recognised as a GCV Rising Star [2017]!), to a team of outstanding researchers, product developers, designers and other innovators who are champions and advocates for our startup partners, guiding them through the complexity of working with a large Fortune [75] company. We have worked tirelessly to change internal processes like onboarding in order to move at Silicon Valley speed. We have also created an enterprise wide 'Discovery Network' connecting people across Humana who are engaging with startups in order to provide more seamless connectivity for our startup partners.

"While we are proud of our investments and the work we do with our startup partners, my proudest moments this year have come from the time my team has spent with our members.

"We have long believed that despite being the primary consumers of health care in this country, Medicare members rarely, if ever, have a seat at the table when technologies and services are designed for them. Our intergenerational code-a-thon, which put seniors together with coders and developers enabled us to bring insights back to folks developing for Amazon Echo, as we placed Alexa in the homes of seniors —some cognitive impairment — to learn how the technology can work for them. We also partnered with Omada to bring their Prevent program to Medicare members, learning a great deal about how they adopt virtual solutions.

"It has been those face-to-face moments, talking with our members to learn how to bring the right kind of changes... that's what keeps me fired up."

In addition, she established and directs the work of a new products foundry including research, design, development and commercialisation functions. This has built on her cutting-edge work before entering healthcare.

Among her accomplishments at Citibank was leadership of the transformational redesign of Citi's Global Private Bank, an initiative which received innovation awards as Spear's Private Bank of the Year and Euromoney's Best Overall Bank.

Burr is the author of From Ideas to Impact, a playbook for driving innovation in a global enterprise and said her innovation bug started early. When she was in the third grade 9aged about eight or nine), she built a time machine out of a refrigerator box. It was a disappointing failure, but it marked the first of her many adventures into disrupting the status quo, she said. Since then, her inspirational leadership and passion for customer experience has resulted in several groundbreaking businesses and products, and she holds patents (some pending) in mass – customisation, alternative currency and social payments.

After school she spent seven years in investment banking at Morgan Stanley and Credit Suisse First Boston executing initial public offerings and mergers and acquisitions for some of the best companies in the technology space.

As vice-president of Global Brand Management at Gap, she was responsible for creating global branding consistency across merchandising, print, TV, stores and online for four brands in six countries. As entrepreneur-in-residence at eBay, she led the creation of an innovative social e-commerce platform.

Burr holds an MBA from Stanford and a BA in Economics from Smith College. She was named one of Silicon Valley's Women of Influence in 2016 and has been honoured as Frost & Sullivan's Innovator of the Year. A sought-after speaker and collaborator, she is also a long-time performing member of the Bay Area improv troupe Subject to Change.

Tony Cannestra DENSO

Tony Cannestra, director of corporate ventures at car parts maker Denso International America, is preparing for a busy summer.

He said: "We are at 12 [portfolio companies] now, and looking to close another three to four more before the end of the summer."

These are likely to be in its target areas of advanced robotics, mobility, manufacturing, internet of things, judging by its response to the 2018 outlook survey by GCV.

At this year's Global Corporate Venturing and Innovation Summit, Cannestra touched on developments in the autonomous vehicles space and noted that there is a "rush of entrepreneurship" in this space, pointing as an example Israel– a country without a native automobile industry, where thousands of startups are currently working on autonomous vehicle technologies. He also said that most of the technology for fully autonomous vehicle will likely be developed in the next three to five years.

The rapid expansion for Denso came after Cannestra took on a new role as director of corporate ventures in 2014.

His first job was to establish a venture investment strategy for Denso, building relationships with entrepreneurs, universities, accelerators, incubators, angel investor groups and venture capital funds. The strategy is to identify early-stage startup companies that are a good match to Denso's strategic growth plan, "and then create a means to support those companies through both equity investments and non-equity funding", as well as mergers and acquisitions.

It is a project he has accomplished with aplomb. In an interview for GCV's mobility sector report published in January last year, Cannestra said: "The startups are typically of strategic interest to Denso [in three areas – connectivity, autonomous vehicles and cybersecurity]. We invest in the stages from seed to series B. Most of the opportunities we look at are mission-critical to the automobile. Because of the importance of those systems, we tend to take a longer-term perspective on when those technologies can be implemented in an automobile. You cannot do what we do in a one or two-year window. And we are investing for strategic rather than financial returns.

"We invest off the balance sheet. This means that we are not limited by the number of investments we can make annually, and it keeps everyone engaged at the R&D level and at the upper management level, since they have to be informed and sign off on every investment.

"In my previous work in venturing, I observed that corporate venturing is not successful unless you really add value to the whole ecosystem. So when I helped create the Denso CVC group in Silicon Valley [California] several years ago, we made a conscious decision to support entrepreneurs at the earliest stages, to work with other venture funds as a limited partner and as a co-investor, as well as leading direct investments.

"So as part of that investment strategy, we sponsor the incubators Prospect Silicon Valley in San Jose, Lemnos Labs in San Francisco and NextEnergy in Detroit. We were the anchor investor in Autotech Ventures and we have made five direct investments in startup companies."

Before taking the role at Denso, Cannestra spent five years as managing partner of venture capital firm Strategic Venture Partners, where he focused on corporate investors as limited partners. Before that, he was a principal and later an executive vice-president of fund manager Ignite and a board member of energy storage company Cymbet Corporation.

Simon Cant and Danny Gilligan REINVENTURE

Australia-based venture capital firm Reinventure is attempting to apply the "most functional" corporate venturing model to its relationship with its sponsor, financial services firm Westpac, according to co-founders Simon Cant and Danny Gilligan for last year's GCV Powerlist profile.

Reinventure was founded in 2013 using a model in which it works with a single corporate limited partner with a view to investing independently in startups operating in adjacent or potentially disruptive sectors, and it found a suitable backer in Westpac, a top 25 global bank with an about $100bn market capitalisation.

Gilligan said last year: "Simon and I have both worked in industries, both with venture capital and corporates, around innovation and navigating disruption, and also with startups.

"We have basically seen every kind of sin a corporate VC has committed, and we felt slightly frustrated that corporate VC was not more functional. We felt there was a very big opportunity, particularly in markets outside the US, for corporate VC to take more of a leadership position in developing new business models in those markets. So we sat down and designed what we thought would be the most functional corporate venture mode, structure and strategy based on all that experience, and then we proposed that model to a handful of companies, one of which was Westpac.

"They had a visionary CEO [Gail Kelly who retired in 2015 with Brian Hartzer

taking over] who got the proposition we were talking about, which was quite a challenging proposition to pitch at the time, in 2013 before fintech was really a word, to say: 'You are going to be disrupted and all your natural instincts for how you want to respond to that will not work. And as part of a portfolio of responses to disruption you should have an arm's-length venture capital fund that invests in minority stakes in the companies trying to disrupt you – and you should actively help those companies.'"

Reinventure was structured as an independent firm because, as Gilligan and Cant explained, corporates often find it difficult to bring themselves to fund and encourage technologies that would disrupt their core business, and an independent fund removes that obstacle. Westpac provided Reinventure with an initial A$50m ($38m) before the firm closed a A$50m second fund in August 2016 that Gilligan and Cant said was 99% funded by the bank. Westpac this month has committed another A$50m to a third fund for Reinventure.

For all funds, a specific amount was required to place Westpac's venturing money firmly in the patient capital bracket, as opposed to the yield capital that banks generally deal in, allowing it to be allocated without the need for direct returns and without the risk that investments could be affected by unforeseen difficulties in the parent.

Cant said: "We have established something that is a hybrid between Norwest Venture Partners – that is we own the management company and we are on a pure 2 and 20 remuneration model [2% annual management fee and 20% carried interest – a share of investment profit] and cannot access our carry for seven years, consistent with the long-term nature of disruption – and Salesforce, because we have deep sponsorship, from the CEO down."

Cant said: "It also meant that, by being established as an entirely independent fund, we could pursue things that were well outside Westpac's current thinking about what was and was not strategic. There are a whole lot of things about the fund's structure that were specifically designed for us to invest in what would either be disruptive to banking or to adjacencies and therefore may prove to be useful options to the bank in a five to 10-year timeframe."

The adjacencies in question include data, which Cant and Gilligan pointed out had many of the same properties as money, and real-estate technology.

Fintech has so far been seen as a technology restricted to two or three major centres, particularly in Western Europe, but Reinventure believes Australia also has the potential to be a player, not least because of the position of banks such as Westpac, which were not only better positioned than US and European banks to recover from the 2008 crash, but also have access to the fifth-largest retirement savings pool in the world due to Australia's mandatory superannuation scheme.

Australian financial services is the single largest part of the economy – more than 14% of gross domestic product.

And the potential is shown by Reinventure's recent deal with Basiq, a middle-man providing fintechs with access to banks' consumer data.

In June, Reinventure invested an undisclosed amount in Basiq for its seed round, pre-empting a regulatory environment that could provide a boon. With the Australian Treasury looking to review its policy on open banking in favour of openness, Basiq could take advantage of greater regulatory freedom.

Other early success include its investments in Coinbase (series C), Hyper Anna (seed investor with series A follow-on by Sequoia), and noticeable traction by early stage investments like online debt solution InDebted.

Reinventure led InDebted's $1m seed round in May, and Hyper Anna's series A round closed at $12.7m in August, following on from October 2016, where Reinventure led the $960,000 seed round for the Australia-based data analysis software provider.

Reinventure has made another three deals in the past year. In January last year, it led Australia-based Doshii's seed round, worth $1m to the financial services amiddleware' software company.

In August, Reinventure led Flare HR's $7m funding round for the all-in-one online HR platform. They then closed out the year by leading Brickx's funding round for an undisclosed amount in November.

Cant said in a keynote at the GCV Asia Congress in September: "To reinforce our independence while raising the tide of Australian fintech we set about creating a fintech ecosystem in Australia – connecting startups to capital, government, corporates and mentors."

As well as the three A$50m ($40m) Reinventure funds, they set up co-working spaces, Stone & Chalk and the Sydney Startup Hub, for corporate and government support, the Fuel-D Accelerator for skill-sharing and mentoring, and Fintech Australia to campaign for government cooperation and a favourable regulatory environment.

All of which has led to more meetings and fintech startups, going from fewer than 100 in 2014 to 579 by this year, Cant concluded, which is a job well done so far.

He was previously an innovation specialist at Cantt Associates and before that WhatIf Innovation, with a focus on disruptive innovation, he advised clients such Tennis Australia, UBS, NAB, Suncorp, AMP, Fairfax, News Limited and APN News & Media and Transport for NSW. Prior to that he worked with entrepreneurs, in both commercial startups, at Tinshed Angel Group and social ventures at Social Ventures Australia.

Before reinventure, Gilligan was co-founder of Gizmo Corporation and a co-founder of Data Republic, a startup for big data.

Leo Castellanos SAATCHINVEST

Leo Castellanos is an investment director and equity partner at Saatchinvest, a seed venture capital vehicle established by advertising agency M&C Saatchi, which is the most active corporate venturer in its home market, the UK.

He is on the board after investing in ThingThing and Gluru and reports his other investments as including Dojo App, Picasso Labs, Ometria, Endource, Evrything, CityMapper and Technology Will Save Us.

Castellanos is also co-founder and director of ComparaBien.com, an online business comparing financial products, insurance and utilities in Latin America, a region he also supports through the British Venezuelan Society.

His network as a corporate venturer was supported by the five years he spent as an incubation and new ventures manager at City University London and chairman of the Cass Entrepreneurs Network, connected to the business school.

However, this international outlook gives him cause for concern over the years ahead in just one word for the GCV outlook survey 2018: "Brexit [Britain leaving the EU]."

Nazim Cetin ALLIANZ

Nazim Cetin joined Allianz X as CEO in August 2017 and initiated the company's strategy shift from being a company builder to becoming a digital investment unit of the Allianz Group, one of the world's largest insurers and asset managers.

Since taking the helm, Nazim deployed more than €200m ($236m), made five new investments in digital growth companies around the world, hired a growing team of investment professionals and repositioned Allianz X as a competitive investor in the venture capital space.

Allianz X invests in growth companies of strategic relevance for the Allianz Group across five sectors: mobility, connected property, connected health, wealth management and retirement, and data intelligence and cybersecurity. Allianz's previous venture unit, led by Jörg Richtsfeld, invested in companies such as DRL, Simplesurance and MoneyFarm, and Allianz X is working with them to unlock strategic value alongside Allianz's operating entities.

Since Nazim's arrival, Allianz X co-led N26's $160m series C round alongside Tencent Holdings in March this year. N26 is Europe's first mobile bank and is backed by premium investors. Additionally, Allianz X invested in BIMA, a mobile technology company that delivers affordable health insurance and health products to 30 million underserved consumers in 14 emerging markets across Africa, Asia and Latin America.

Furthermore, Allianz X invested in its first Asian-headquartered company, Go-Jek, a leading Indonesian on-demand service provider that provides a variety of complete services starting from transportation, logistics, payment, food delivery, and other on-demand services. Go-Jek has more than a million driver partners and 150,000 food vendors, and is backed by JD, Google, Sequoia Capital, KKR and Rakuten. Allianz X also participated in the latest funding rounds for Boston-based telehealth platform American Well and C2FO, the world's first working capital marketplace.

"It has been a very exciting and rewarding time to lead Allianz X," said Nazim Cetin.

"Our business is a critical component of the group's renewal agenda and we are looking forward to enable Allianz to become more customer-centric and tech-focused via our digital growth investments."

Nazim joined Allianz X from media conglomerate Bertelsmann, where he was a vice-president of corporate development and new businesses, as well as head of business development. Previously, he founded the first German magazine focusing on philosophy and economics, internationalised the commercial finance division of Maple Bank, served as a venture partner for Target Global, and advised many international VC funds and startups.

Nazim currently sits on the boards of American Well, BIMA, C2FO and N26.

Suzanna Chiu AMADEUS IT GROUP

After two consecutive years being singled out as GCV Rising Star, it is perhaps little surprise Suzanna Chiu has become head of ventures at Amadeus Ventures, corporate venture capital (CVC) unit of Spain-based travel software and technology services provider Amadeus IT Group.

Her promotion comes following the departure last month of Katherine Grass, last year's GCV Powerlist award winner, to travel and transport venture capital specialist Thayer Ventures, to help it expand into Europe and Asia from the US. Grass has also set up Sharp Wire Partners as the consultancy's managing partner.

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

Prior to joining Amadeus, she was senior manager at Macquarie Capital Advisers, where she led several mergers and acquisitions transactions in the telecoms and media sectors, based between London and Hong Kong. In Hong Kong, she also served as lead consultant for business-to-business e-commerce services provider Sesami, and as consultant for Accenture.

At Amadeus, Chiu has significantly helped develop the group's corporate venturing activity, as the unit has so far supported 10 companies, altogether representing a valuation of about $1bn, and completed three exits. The latter included the secondary sale of its stake in Spain-based taxi app Cabify, which subsequently reaped $120m in funding through a series-C round led by Rakuten in 2016, and is currently reportedly aiming to raise up to $500m for its series D to fund a Brazilian expansion.

In 2017, Amadeus further expanded its portfolio with three new companies, strengthening its focus on bringing new technology into the travel industry. These included Canada-based reservations and ticketing management company Betterez; Spanish startup Situm Technologies, which develops multi-sensor indoor localisation technology for smartphones; and UK-based Avuxi, described as "the startup that ranks the popularity of every place on earth," providing data to travellers to help them plan their trip.

According to Chiu for her Rising Stars profile, the unit is also seeing great results from some of its existing investments, which are growing strong operationally and have attracted significant follow-on interest.

Grass, then head of innovation and ventures at Amadeus IT Group featured on the

2017 GCV Powerlist, in her nomination of Chiu said: "Suzanna has been the main driving force in the overall investment direction and processes for Amadeus Ventures.

"In 2017, we were aiming to close the highest number of deals by year-end, and with strategic value creation very close to our heart, we jointly identified and executed investments with our business units with clear strategic values and commercial plans.

"The year 2017 has been great for Amadeus Ventures, and she has led a large part of that success."

Aside from its investments, Amadeus has also expanded its innovation approach by adding an open applications programming interface (API) and partnerships, helping businesses that do not make it to "the top of the list" identify commercialisation opportunities with the corporation without receiving funding.

"As we think about the combination of venture-partnerships-open API, this completes a range of programs to interact with external players and drive value," added Grass. "Venture however continues to be a key component to this, and we continue to add deals to the program."

A graduate of the Chinese University of Hong Kong, where she graduated with a statistics-focused bachelor of science, Chiu completed a finance concentration MBA at the London Business School. She is also a keen photographer and traveller.

Tony Chao APPLIED VENTURES

Under Tony Chao, senior investment director and general manager, Applied Ventures, the corporate venturing subsidiary of semiconductor technology provider Applied Materials, has moved closer to Asia, the source of much chip demand and technology.

Omkaram (Om) Nalamasu, senior vice-president and chief technology officer for Applied Materials, for last year's award said: "Applied Materials is a leader in materials engineering, committed to solving high-value problems across multiple industries in addressing market and technology disruptions.

"Tony Chao and his Applied Ventures team lead the charge for the company in brave new industries like augmented and virtual reality, artificial intelligence, robotics, personalised medicine and digital manufacturing. Tony's career has grown in tandem with the portfolio, which has grown roughly 10-fold over the past decade. Among CVCs, Tony has also pushed the envelope in corporate-government partnerships, most recently a Korea-based fund that is the first of its kind. We are very proud of his team's progress and synergistic collaboration with portfolio startups, and look forward to further accomplishments."

Last June, Korea's Small & Medium Business Administration and the Korea Venture Investment Corporation agreed with Applied Materials to raise a W30bn ($26m) fund for investment in South Korean venture firms and small and medium-sized enterprises.

State-backed fund-of-funds Korea Venture Investment Corporation (KVIC) committed as a limited partner (LP) in the fund in order to aid South Korean startups. The stakeholders have not disclosed the size of the fund, but a regulatory filing indicates they wanted to raise $40m.

Chao credited Joseph Jeong, a principal and GCV Rising Stars 2018 winner, for leading "our efforts in launching a new Innovation Fund focused on Korean investments and helped secure external LP investors, enabling our transition for a single LP CVC to a broader approach that focuses on synergy value creation across entity and geographic boundaries."

As well as the Korea fund, which has already had its first deal list on a stock exchange, according to Chao, Applied Ventures is opening an office in Singapore to identify opportunities across the region.

The unit, which invests up to $50m a year, is particularly keen on collaborating with other investors in Asia.

Applied Ventures' portfolio includes Tera-Barrier, a Singapore-based producer of flexible barrier films used in flexible electronics to protect them from damage by moisture and oxygen. It invested an undisclosed amount in the company in 2009.

However, many of its deals are still in the US. Applied Ventures took part in US-based semiconductor manufacturing technology producer Inpria's $23.5m series B round in July, led by Samsung Ventures.

Chao joined Applied Ventures in 2007 before taking over a year ago from Chris Moran, who now runs aerospace company Lockheed Martin's corporate venturing unit.

Chao's interest and insight in Asia is understandable given his previous work at China-based Mustang Ventures and as the technical lead for the engineering team at Cymfony among other roles since the millennium. His MBA at Harvard and earlier undergraduate and master's in electrical engineering and computer science from Massachusetts Institute of Technology gave him a premier education he has translated into a material career.

Boon Ping Chua SINGAPORE PRESS

SPH Media Fund, the corporate venturing arm of Singapore-based media conglomerate Singapore Press Holdings (SPH), last year wound up its SPH Plug and Play accelerator initiative but instead has focused on its direct investments under its CEO, Boon Ping Chua.

The media and technology-focused accelerator was launched in April 2015 as a joint venture between SPH, accelerator Plug and Play, and Infocomm Investments, a division of the Singapore government's Infocomm Development Authority.

SPH Media Fund will instead focus on a direct investment strategy after results paid off. In 2016, US-based mobile advertising company Smaato said China-based Spearhead Integrated Marketing Communication Group, an offline marketeer, had agreed to buy it for $148m. Smaato had raised $47m from investors to date, including its most recent $25m series E round led by Singapore Press Holdings in August 2014 and including state-backed EDB Investments. Chua had been on Smaato's board since 2010 having been a senior vice-president at EDB Investments, for five years until

August 2014 when he joined SPH.

Other deals include social video creation platform Wochit, which raised $13m in strategic investment from media conglomerates ProSiebenSat.1, SPH Media Fund and Carlo de Benedetti, Chope, Glints Intern, Peatix, Moneysmart.sg, Kudo–PT Kudo Teknologi Indonesia, Burpple, Snapcart, ViSenze and Jukin Media.

Earlier, Chua had started his corporate venturing career at phone operator SingTel Ventures for four years after the millennium before becoming director of corporate finance and strategic planning at ST Electronics for four years and a year at MediaCorp.

Vanessa Colella CITI VENTURES

At the Global Corporate Venturing and Innovation Summit in January last year, Scott Joachim, chairman of private equity group at Fenwick & West, welcomed Vanessa Colella, the then-recently-promoted chief innovation officer at financial services firm Citi who is also head of Citi Ventures.

Fintech, Colella noted, was a particularly exciting space for her sector – until a few years earlier it did not exist because entrepreneurs on the US west coast did not understand the financial services industry and did not realise it was ripe for disruption. Bankers, she observed, are traditionally based on the east coast, far from Silicon Valley.

But fintech is not the only area of interest to Colella, who also pointed to sectors such as healthcare as offering opportunities. "We do not invest in entrepreneurs who we think can help Citi," Colella said. "We invest in entrepreneurs who Citi can help."

She has been active in finding these entrepreneurs. Citi's ventures portfolio includes DataRobot, Homelight, Plaid, Bluevine, Appboy, C2FO, Chain, LiveNinja, FastPay, Optimizely, Persado, Feedzai, DocuSign, Square, Ayasdi, Betterment, TradeIt, Chef, Datameer, MDaq, Tanium, Platfora, Pepperdata, Pindrop, VArmour, Cylance, Joist, Clarity Money and Tealium.

In terms of commercial success, DocuSign is used by Citi's consumer business to better engage with its clients and had a successful flotation this year raising $629m and valuing the business at $6bn after the first day's trading last month and a previous portfolio company, ecommerce provider Jet, was acquired by Walmart for $3bn in mid-2016.

It also launched a blockchain product in partnership with Chain, a Citi Ventures investment, and Nasdaq for a private company stock exchange. This was launched through Citi Ventures' D10X, an internal strategic growth model that enables employees to take new business ideas from concept to launch. These employees are coached through a rigorous validation process led by Citi Ventures and supported by Citi's global innovation labs.

Colella, ranked third as a GCV Rising Star 2016, was Citi Ventures' global head of venture investing and strategic growth initiatives from 2013.

A Massachusetts Institute of Technology and Columbia University graduate, she wore a number of hats before coming to Citi. She said for her Rising Star profile: "Over the course of my career, I have been a partner at McKinsey, entrepreneur-in-residence at US Venture Partners, senior vice-president of insights at Yahoo, a seventh and eighth grade science teacher and author of a book on agent-based modelling.

"In hindsight, not having a typical corporate venture capital background has been an advantage in leading the teams I do now. I have always said that one of the major perks of my job is its panoramic scope and breadth – which means keeping an eye on the big picture while having my finger on the pulse of hot trends and driving new ideas forward."

This pioneering combination of chief innovation officer and head of ventures, first introduced by Colella's predecessor, Deborah Hopkins, in the late 2000s, has become a model for peers across industry sectors and beyond the US, including General Electric, which promoted Sue Siegel to CIO in addition to her role as CEO of GE Ventures and Humana, which promoted Busy Burr, a Citi Ventures alumna, to CIO.

Colella said for last year's profile that CVC was a fascinating place to be because its maturity came at a time of change for the broader venturing industry, as crowdfunding and angel funding made more of a mark. She said: "Traditional VCs are now devoting energy to bringing operational expertise to their firms. In CVC, we have the advantage that this expertise is already resident in-house and ready to go to work to help our portfolio companies."

This is pushing CVC into the spotlight. Colella said that with CVC "you have a pre-established set of assets, people and experience that can help our portfolio companies scale effectively and efficiently".

She said the rules of the game were changing. Historically, corporates may not have partnered small firms. Now, however, large companies need to explore new and different partnerships. She said: "Add to this the disruption and dynamism of today's financial services landscape and you will find a very different playing field now – and that includes firms such as Citi partnering entrepreneurs who are looking to change the game in financial services.

"The greatest success that we have had at Citi Ventures is our ability to figure out a method for working with our business leaders and entrepreneurs to bring together two very different kinds of minds and two very different forms of problem-solving, all with the objective of better serving our customers. Having commercialised the majority of our portfolio, we have deep experience guiding our startups in how to engage and interact inside a multinational enterprise – something they might otherwise have been hard-pressed to navigate – and pinpointing for them the areas in which they can potentially add value.

"We have a proven track record of success, not just in fintech. We have done a lot of work with startups in very different sectors that touch totally different constituents within Citi, such as data and analytics with Ayasdi, Datameer and Platfora, security with Silver Tail [acquired by EMC at the end of 2012] and Pindrop, commerce and payments with Square and Jet.com, fintech with Betterment and marketing with Optimizely. We are very proud of our ability to work across these sectors and successfully help our companies work with Citi to advance their businesses – and help us advance our customer offerings."

Colella said one big question for Citi was how to bring the innovation and opportunities in from outside the firm and inculcate those into a 203-year-old bank. She said this involved "figuring out how you work with the various existing businesses within Citi with full knowledge and full empathy about what they are trying to accomplish in the next five to 10 years, while getting them just as excited and passionate as you are about the change you are introducing.

"As a corporate venture capitalist, it is important to articulate what we are trying to do to help startups so that they can quickly and effectively identify whether or not Citi is a good match to fund them or whether someone else might be a better match. Of course, we look at an investment from an equity point of view, and we also consider how we can help make a startup successful in the long run. Accomplishing this involves having an open dialogue with every entrepreneur and being transparent about the support we can offer."

Iain Cooper SCHLUMBERGER

Iain Cooper, manager of technology investments, moved to head oil services company Schlumberger's corporate venturing deals in 2007 after his first 15 years with the company. A decade on and he looks after early-stage technology scouting and corporate venturing for Schlumberger Worldwide and regarded as an ideal boss to Andrea Course and Tyler Durham as venture principals for his levels of support to colleagues, insights and freedom for them to achieve their goals. His persistence and ability in venturing has also paid off with the company committing to a larger initiative.

Last year, Imran Kizilbash, vice-president of the expanded Schlumberger Venture Fund, who announced his retirement this month, said: "At the end of 2016, Schlumberger decided to significantly increase its activity in the corporate venture capital space, and will consider investment opportunities from a broader spectrum of industries, ranging from energy and mobility, to transformative software.

"Technology is one of three core values at Schlumberger, which created its corporate venture capital unit nearly a decade ago. Iain has been instrumental in directing our efforts to gain access to technologies outside our industry vertical and partnering venture companies, which has proven to be a successful source of innovation for Schlumberger.

"STI had expanded into categories like renewables, software and the internet of things under Kizilbash's leadership and its function essentially comes down to "being ready to transform if and when required," he added at the GCV Symposium.

Cooper added for last year's profile: "In terms of achievements we had a nice exit with Liquid Robotics – with a pretty good multiple [in the sale to Boeing] – and with an eye to the future, we undertook the first investments for Schlumberger in the renewable energy and oil and gas decarbonisation spaces with Kite Power Solutions [raising £5m], Alphabet Energy [raising $23.5m] and GHGSat [for its satellite-aircraft hybrid detection of methane emissions]."

Cooper himself gained a PhD in meteorology from Reading University in 1992, before which he studied mathematics and physics at Bristol University. He joined Schlumberger as a research scientist in 1992 before working his way up to product development manager by 2007, when he founded the corporate venturing group. He keeps active on the creative side, with at least 26 granted US patents and a few more pending.

Barbara Dalton PFIZER VENTURE INVESTMENTS

Barbara Dalton has run US-listed drugs company Pfizer's corporate venturing unit since she joined in 2007 as vice-president. But her knowledge of the industry stretches back a quarter of a century to when she started out as president of UK-based pharmaceutical company GlaxoSmithKline's CVC unit, SR One, in 1993.

She joined corporate venturing unit Pfizer Venture Investments from EuclidSR Partners, a venture firm backed by GlaxoSmithKline, where she worked from 2000 to 2007 after a seven-year stint at SR One. At EuclidSR she worked with Elaine Jones, who also joined her at Pfizer Venture Investments, while the third member of the team is Bill Burkoth,.

Her small team at Pfizer puts out about $50m a year in cheque sizes of up to $10m a round and is both active and successful. Her Pfizer profile says she has managed more than 30 fund investments and 80 diverse company investments in the US and Europe and has had direct investing responsibility for biotechnology therapeutic and platform companies, as well as some healthcare IT and service businesses, including Alere, Ciphergen, Corixa, Genset, Gliatech, Gryphon, iJet, Lexicon, OGS, Third Wave, Rib-X Pharmaceuticals.

Her latest deal was joining the board of US-based biopharmaceutical firm Complexa after a $62m series C round in July.

Founded in 2012, Complexa is working on a therapy called CXA-10 for focal segmental glomerulosclerosis, an orphan disease affecting the kidney, as well as for a rare pulmonary disease known as pulmonary arterial hypertension.

The funding will be used to advance CXA-10 into two phase 2 clinical trials, each aimed at one of the aforementioned conditions. The trials are expected to begin in early 2018.

The money will also support the progression of a third treatment that will target an undisclosed condition, advancing it towards an investigational new drug filing with US regulator the Food and Drug Administration.

Daltonm who has a PhD in microbiology and immunology from Medical College of Pennsylvania, shows no signs of changing.

Scott Darling DELL TECHNOLOGIES CAPITAL

It is an overstatement to call the $67bn merger of data storage company EMC into computer maker Dell an acquihire, but one result was that Scott Darling emerged as president of Dell Technologies Capital.

Since September 2016 when the merger officially closed, Darling has led Dell Technologies Capital, the corporate development and venture unit of Dell Technologies, a family of businesses with $75bn of revenue consisting of Dell, Dell EMC, Pivotal Software, RSA, SecureWorks, Virtustream and VMware.

Jim Lussier, managing director and head of corporate venturing unit Dell Ventures, had left to run his own advisory and venture capital firm, Coast Ridge Group, just ahead of computer maker Dell's merger with EMC.

Under Lussier, Dell Ventures managed the $300m Strategic Innovation Venture Fund, investing in areas including storage, data centre technology, cloud computing, big data and analytics, security, mobile and the internet of things.

Under Darling, Dell Technologies Capital has increased the pace with "$100m per year investment in venture capital" and an expected $2bn in mergers and acquisitions of some venture-backed companies in its "aggressive" pursuit of technology.

And results have come in. Zscaler, a US-based cybersecurity technology provider that counts as internet technology group Alphabet and computing company Dell as investors, priced its flotation in March at $16 per share, above an already elevated range and valuing the company at nearly $1.9bn.

Darling was president of EMC corporate development and ventures from March 2012, having joined the company after a five-year stint at venture capital firm Frazier Technology Ventures.

His successes at EMC Ventures included ServiceNow's BrightPoint (originally Vorstack) acquisition and shaping the Pivotal creation. Parent company EMC converted $400m of debt to equity as part of the Ford, General Electric and Microsoft-backed $653m series C round closed by Pivotal in May 2016. Last month, Pivotal raised $555m in its flotation with a market capitalisation of more than $3bn.

But his corporate venturing and technology roots stretch back further, having originally joined chip maker Intel, which primarily powered Dell's personal computers, in 1990. Darling switched from marketing to Intel Capital in 2000 before leaving for Frazier in 2007.

François Dossa ALLIANCE VENTURES

One definition of a Powerlist leaders is the their ability to attract star talent. François Dossa, head of Alliance Ventures, with its deputy head, Matthieu de Chanville, formerly a senior executive at consulting firm Boston Consulting Group, has shown just that.

At the start of the year they hired Christian Noske who joined the $1bn corporate venturing fund then recently formed by automotive alliance Renault-Nissan-Mitsubishi.

Noske has been appointed managing director of Alliance Ventures, which will get 40% of its capitalisation from each of Renault and Nissan, while Mitsubishi will supply the other 20%.

Alliance Ventures hired Noske from BMW i Ventures, the corporate venture capital unit of the eponymous Germany-based car maker, where he was a partner.

Noske was a GCV Rising Stars winner in 2016 and 2017 following a promotion in 2015 to investment principal at BMW i Ventures and a further promotion to partner. His deals at the unit included investments in carpooling service Scoop and automotive media platform Rever.

Alliance's first deals include US-based solid-state battery technology developer Ionic Materials, which in February raised $65m in a series C round.

Dossa has had a long history of leadership and is the holder of France's prestigious award, the Légion d'Honneur. He was chief executive of Nissan Brazil from 2012 until last year. Under his stewardship, he said Nissan do Brazil experienced significant growth in market share, introduced eight new models, including the critically acclaimed Kicks model, and opened a new manufacturing plant in Resende, Rio.

Prior to joining Nissan, Dossa held various leadership positions over 24 years in the investment banking industry, split between Europe and Latin America. He served for 11 years as CEO of Société Générale Brazil where he was responsible for the development of its investment and retail bank activities in the Brazilian and Latin American markets. Before moving to Brazil, he served for two years as director at Société Générale in Paris.

Jens Eckstein SR ONE

There are few venture groups that cross the threshold of investing more than $1bn, but GlaxoSmithKline's independent corporate venturing unit, SR One, is, well, one.

Jens Eckstein took over as president of SR One in 2012. Celebrating its 30th year of existence in 2015, SR One had invested $1bn in more than 170 companies as of then, and had a portfolio of 40 private and public companies.

Last year, the firm's investment pace did not seem to slow down either, with at least eight new investments as of November. Those included a $47.6m A round for Palleon Pharmaceuticals alongside Vertex Ventures, Takeda, Pfizer and AbbVie Biotech Ventures; a $38.6m C round for Effector Therapeutics in July; a $52m B round for Bicylce Therapeutics in June; and two more rounds in May.

Jill Carroll at SR One and GCV Rising Stars 2018 winner said: "A lot of the deals we have been doing lately have been in a company-building format, which means that we invest a lot of time, effort and money in developing the group.

"We screen around 500 new deals a year that we constantly monitor, so one of the most difficult steps for us is to decide where to place our bets. The fact that we are an early-stage investor adds a layer of difficulty, as there's always a tremendous amount of technical risk to manage around early-stage companies."

SR One operates independently of GlaxoSmithKline and is not a strategic investor, with the pharma group doing some strategic venture investing on its own, as both fund commitments and direct equity investments.

Eckstein joined SR One after working at venture firm TVM Capital as a general partner since 2007. He joined TVM as a principal in 2004. At TVM he became chief executive of SelectX Pharmaceuticals, and was also an entrepreneur-in-residence at the company.

He gained a PhD in biological chemistry from University of Konstanz and Harvard University, and became a post-doctoral fellow at University of California San Francisco. Between 1993 and 1999 he worked at healthcare startup Mitotix, which was acquired in 2000 by German biotech company GPC. He was then at Enanta Pharmaceuticals as director of lead discovery and research from 1999 to 2003, before founding Akikoa Pharmaceuticals, where he worked from 2003 to 2005.

He is an adviser to the Alzheimer Research Forum, a founding member of the Cure Dystonia Initiative Advisory Council and a Kauffman fellow.

Kay Enjoji TOKYO ELECTRON

TEL Venture Capital (TVC), the corporate venturing unit of Japan-based semiconductor and display equipment maker Tokyo Electron (TEL), appointed Keiichi "Kay" Enjoji, as president in July 2011 and last year promoted him to vice-president of corporate technology strategy.

With strong demand for chips, TEL has been seeing record results while TVC made three new investments in 2017, including Light Polymers and two undisclosed ones.

Enjoji said more would be coming: "Recently we raised our funds to be double, to expand strategic investments."

Enjoji manages a team of 13 in the US, Japan, France and Israel making strategic investments for TEL to impact its core semiconductor and advanced display, to photonics and optics, sensors, and life sciences, healthcare and medical electronics. TVC has had seven exits out of those 22 deals, while Enjoji is on the boards of Tsukuba-Seiko, ANMS, PML, Opt Creation, Liola, Crystal Solar, SBA, Q14 and an unnamed company.

Enjoji has a wider remit as a head of the innovative technology planning group to manage collaborations with startups. All its investments are expected to lead to joint business development projects.

He was previously a director of TEL's microelectromechanical systems division, and has worked within the Japanese corporation for more than 25 years. Enjoji received an economics degree from Keio University.

Olivier Garel UNILEVER VENTURES

Olivier Garel, vice-president of mergers and acquisitions, replaced Martin Grieve as head of fast-moving consumer goods company Unilever's corporate venturing and private equity unit in 2013 and five years on has delivered strong results, including December's flotation of Mirriad, a UK-based video technology developer.

Garel, a long-term Unilever executive, took over after Unilever committed a further $450m to its corporate venturing unit's third fund to help the now-Netherlands-based conglomerate expand from Europe into Asia.

In the past year, Unilever and Amazon partnered venture capital firm IDG Ventures India for an accelerator scheme. The IDG Ventures India 2017 Innovation Program will target startups in consumer technology, software, healthcare technology and fintech that are looking to raise between $500,000 and $5m in seed or series A funding.

It also revealed the 30 startups that will participate in the Southeast Asia edition of its Unilever Foundry hub in 2017.

Garel was a student at Université Paris Dauphine and Université Paris Nord.

Srinivas Gattamneni AXIATA

Five years ago, Srinivas Gattamneni, formerly managing director of consultancy Venture Pursuit and once a corporate venturer at UK-based chipmaker ARM, joined Asian telecoms company Axiata in Kuala Lumpur, Malaysia.

In this role, Gattamneni looks after corporate venturing activities for Axiata, whose operations including Malaysia, Indonesia, Sri Lanka, Bangladesh, Cambodia, Nepal, Singapore and India. It has quietly been the most active corporate venture capitalist across Malaysia and probably within Southeast Asia, with dozens of investments and hundreds of millions of dollars invested.

Overall, these deals cover commerce, payments, entertainment and advertising. For last year's GCV Powerlist, Gattamneni, who has also become CEO of advertising company Ada in March, said: "Our direct investments have progressed well."

Last year Axiata led a $16.8m round for Swedish insurtech group Bima, which provides micro-insurance to underserved families in emerging markets and has 320 million customers across 10 countries, and a $23m series B round for Australian mobile advertising company Unlockd, with Alium Capital as co-investor.

Axiata had set up the Rg70m ($17.5m) Axiata Digital Innovation Fund – in collaboration with state-backed Malaysia Venture Capital Management and managed by Intres Capital Partners – to find deals for Axiata. It also set-up of a $15m Sri Lanka-focused fund, which would operate similarly to the $5m micro-VC fund set up in Cambodia in March 2017. The fund would invest in digital startups and local service providers.

Last year, Gattamneni said: "On the success of the Malaysia fund, we have launched two additional funds in Cambodia and Sri Lanka – Smart Axiata Digital Fund and Dialog Axiata Digital Fund. They are the largest VC funds in these respective markets to create and bolster a digital ecosystem.

"We will be working towards consolidating our position and investments across two major verticals, digital financial services and digital media and advertising."

Before joining Axiata, Gattamneni was a founding director of PayZazz in 2011 after leaving ARM. He worked at the chip maker for three years, having previously been head of China development for Motorola, and in software for TTPCom.

Lana Ghanem HIKMA VENTURES

Lana Ghanem has been managing director of Hikma Ventures since August 2015 having officially joined the Lebanon-based generic drugs company three years earlier within the office of the CEO covering corporate strategy and development. She was a summer associate in 2011 while completing her MBA from Harvard and she said as part of the GCV diversity challenge: "I am pleased to tell you that we are hiring two interns this summer one of them is a woman from MIT".

Going from that to "establishing Hikma Ventures has been an eye-opening experience with a steep learning curve", she said for last year's Powerlist award.

"It enabled various Hikma teams, including sales and marketing, business development, legal and operations, to gain exposure to emerging innovative technologies that will change healthcare. Digital health is becoming more of a necessity than a nice-to-have."

She said her highlights from the past year included building the Hikma Ventures team and investing in four digital health ventures including Pillo Health, which in February raised $4m in consortium also including Stanley Ventures (the corporate venture capital unit of Stanley Black & Decker); Lemonaid Health, which raised $11m in May last year; Biolinq's $10m round; and Prognos' $20.5m C round in December. In addition, she mentioned that Hikma Ventures is helping create an innovative culture within the company that is changing employees mindsets to think of solutions beyond the pill.

She is a board member at Lemonaid Health and Biolinq and she is a board observer at Chrono Therapeutics, Propeller Health, Pillo Health and Prognos. One of her objectives is to create partnerships between Hikma Pharmaceuticals and some of Hikma Ventures' portfolio companies.

Allison Goldberg TIME WARNER

Allison Goldberg, managing director and vice-president at Time Warner Investments, the corporate venturing unit of the US-listed media group, has done more than many to support New York City's burgeoning venture ecosystem. This has been recognised by the media company in her promotion to lead Time Warner Investments after the retirement of Rachel Lam last year.

She has maintained Lam's policy of actively supporting companies and promoting her team. At the GCV Synergize conference in NYC last autumn, Goldberg explained its investment strategy, which has both strategic and financial goals and with the majority of deals being B or C rounds with an average investment of $10m.

Goldberg said: "We lead about half the deals we participate in and we either take a board seat or an observer role otherwise we would not get strategic value." Its focus is on areas of interest to the three divisions of Time Warner: HBO, Warner Brothers and Turner, while the sector focus includes content, games, adtech, eSports, virtual reality and augmented reality.

Time Warner's investment in data management platform Krux, recently sold to Salesforce for $800m, was led by Scott Levine, this year's GCV Rising Stars award winner.

In 2017, Time Warner closed two investments as lead investor: one was a $27m series-B round for augmented reality technology developer 8i, and the other a $6m series-A round for Vemba – a player-agnostic video distribution platform.

The unit also took parts in several rounds as non-lead investor, including a $12m series-D round for Bustle Digital Group, a $21m series-C round for Mic Network, a $40m round for over-the-top (OTT) video analytics group Conviva (in which Levine was involved), and a series-B $30m round for Samba TV.

Goldberg's previous investments include Visible World, acquired by Comcast, Adify, later sold to Cox, AdMeld, later sold to Google, Bluefin Labs, later sold to Twitter, Everyday Health, now listed publicly, MediaVast, later sold to Getty Images and Tremor Video, which is also public.

Goldberg joined Time Warner in 2001 after a year as a venture capital associate at Groupe Arnault, having jumped from media investment banking at Morgan Stanley during the dot.com years after graduating in economics and finance at Wharton School.

Phil Graves PATAGONIA'S TIN SHED VENTURES

After launching originally as US-based clothing company Patagonia's corporate impact venturing fund $20m and Change in 2013, Phil Graves, recently promoted to senior director of corporate development, changed the fund's name to Tin Shed Ventures.

He said for last year's GCV Powerlist award: "We have far surpassed the original $20m Patagonia committed to spending on investments in outside businesses and so we changed the name to reflect Patagonia's roots and founder Yvon Chouinard's early days working out of a tin shed, which he still works out of from time to time today."

The fund was GCV's Launch of the Year when it started and its continued success has helped spawn a number of imitators, including Centrica's Ignite Fund. It is a success built by Graves.

Rose Marcario, Patagonia's CEO, for last year's award said: "Phil Graves, who has run Tin Shed Ventures from the beginning, came to us from Deloitte, where he was a senior manager of business valuation.

"He is an astute judge of responsible entrepreneurs with talent and experience who have a good shot at success. So far, all the fledgling businesses we have invested in are healthy and on their way to flying solo. As for Patagonia, we are making a decent return in all ways. We are a more patient capitalist. New ideas take time to germinate. We do not go in with an exit strategy or insist beforehand on what the investment biz calls – you have to love the term – a 'liquidity event'. We do not micromanage, nor do we seek a seat on the board of the businesses we invest in. We want these like-minded business to have the time and the freedom, as well as the wherewithal, to build in a healthy way – environmentally and socially as well as financially."

Patagonia prides itself on its ethics and its social and environmental responsibility, and demonstrates this commitment in its investments. From the original investment date though to the end of last year, Tin Shed Ventures portfolio companies have averted about 27.7 million pounds of carbon dioxide emissions, 5 million pounds of waste, 2 million pounds of chemicals, and saved more than 100,000 gallons of water, according to Graves last year.

By having an evergreen fund structure, Patagonia has no set hold period for portfolio companies, and, as a B Corp – a company certified to be pursuing a mission involving standards of social and environmental performance, accountability and transparency – it encourages entrepreneurs to use the corporate structure as a way of combining financial and environmental goals in their mandate.

These deals include speciality flour mill Watershed Mills, California Safe Soil, which is creating organic fertiliser from unsold produce, NuMat Technologies, a materials technology company developing a nanoporous material that can change how gases are stored, transported and separated, Wild Idea Buffalo, a provider of grass-fed, naturally-raised buffalo in the US, Yerdle, a "stuff-sharing" app, Beyond Surface Technologies, a Switzerland-based chemicals company developing natural textile treatments, CO2 Nexus, which cleans and coats textiles with liquid carbon dioxide, and Bureo Skateboards, which recycles defunct fishing gear to produce skateboards and help keep oceans free from dangerous plastics.

As Alex Kramer, GCV Rising Stars 2018 award winner, said: "Tin Shed Ventures is our unique, long-term investment approach and our decision to share the innovations in which we invest with other businesses, including our competitors. Because we are the investment arm of a private, family-owned business, we have the ability to be patient with our investments and not be tied to a predetermined timeline.

"Second, while Patagonia wants to help develop an innovation and pull it through our supply chain into a final consumer product, whether it be a Patagonia Jacket or a food product as part of Patagonia Provisions, we realise that we are doing our portfolio company (and our investment) a disservice if we are the only customer. Therefore, once an innovation is commercialised, we actively approach others in the industry, even our competitors, and give them a roadmap for adoption.

"With increased adoption beyond Patagonia, not only are we benefitting as an investor, but because we focus on investments that generate an environmental and social return, this benefits the planet as well."

And Graves is encouraging portfolio companies to work together. He said last year: "Our portfolio company, Yerdle, teamed up with Patagonia's Worn Wear initiative to help launch a 'recommerce' platform, through which Patagonia will buy back used Patagonia garments and sell them on a new web platform.

"The garments that customers trade in will also be cleaned using another technology in which Tin Shed Ventures has invested. Tersus Solutions is a waterless textile processing company that cleans garments using liquid CO_2 rather than water. The closed-loop nature of Tersus's technology also allows microfibres to be captured within the system rather than flushing them into our waterways."

Beyond Tin Shed Ventures, Patagonia has a fund to help install solar panels on 1,500 residential homes in eight US states. Patagonia is working with Kina'ole Capital Partners, a solar finance company,

Graves said Patagonia first partnered Kina'ole Capital Partners, another B Corp, three years ago in a $27m program to install residential rooftop solar panels in Hawaii and California. Last year, both launched another $40m solar fund in partnership with three other certified B Corps. Patagonia is the investor in the $40m fund, Kina'ole manages the fund, and New Resource Bank and Beneficial State Bank provided additional capital, while recently bankrupted Sungevity provided the solar technology, he added.

Graves said Tin Shed Ventures would continue to explore ways to leverage Patagonia's tax equity dollars to fund renewable energy projects, such as wind and solar power.

Alvin Wang Graylin HTC

At the GCV Asia Congress in Hong Kong last September, Alvin Wang Graylin, China president of Vive at Taiwan-based HTC, gave virtual reality (VR) and AI as an example of how China's five-year plans focused attention on a topic.

In a presentation on the topic and the excitement around it, he said China was willing to adapt and VR was being used as a tool to drive its fifth-generation (5G) communications infrastructure, as well as AI work. China was also setting the standards globally and Vive's cloud VR business launched just before the congress required partnerships to enable 60 megabits per second download speeds to avoid latency issues.

HTC launched Vive X as a $100m VR accelerator in April 2016 with Kevin Leung, GCV Rising Stars 2018 award winner, coming on board as director in July that year to run its operations in Beijing and Shenzhen in China and now its newly opened location in Tel Aviv, Israel. It was set up as a series of accelerator programs in different cities to foster innovation in the VR sector and create an ecosystem around HTC's Vive VR product.

Vive X has invested in more than 80 companies since it started, with Leung having managed more than 30 deals, according to Graylin.

For Leung award nomination, Graylin said: "It is an exciting time of rapid innovation for the VR industry now and Kevin has made a big contribution to the VR startup ecosystem with his efforts."

Vive X recently announced its third batch of startups that would go through the program. Of the 26 companies that will participate across five locations, 14 will be located in Beijing (Future Tech, Genhaosan, JuDaoEdu, Lenqiy, PanguVR, Pillow's Willow VR Studios, Yue Cheng Tech), Shenzhen (Antilatency, Configreality, Super Node, VRWaibao, Wewod) and Tel Aviv (Astral Vision, Remmersive), under Leung.

This continued growth is one of the biggest challenges that Leung said he faced. He said for his awards profile to keep up with the growing size and diversity of the accelerator's community, his team also needed to keep growing in pace.

Perhaps the biggest success of Vive X so far was a company in its first batch, TPCast, which has developed a wireless adapter for VR headsets, removing the need for cables to connect to the PC that is doing the graphics processing.

"It is a team that I incubated last year [2016], helping them to transform a proof of concept to a mass consumer product in just months," Leung said.

The TPCast adapter is the first wireless solution for VR, which competitors in the market had previously said is a problem that they did not expect to be solved for another two years. The RMB1,400 ($220) device was offered for pre-order in November 2016 through Vive's Chinese site and reportedly sold out within minutes.

Leung said the company had brought in a massive return on investment, however as it is in the process of raising a new round he asked that we not disclose figures. He added: "In general, over one and a half years of running the accelerator we are seeing three to five times returns on most investments despite it being the so-called VR investment winter."

Building a team and such deals help explain why Graylin last year graduated so quickly from GCV Rising Star to Powerlist so quickly.

Few people cram as much in to their years as he manages in a quarter. He said: for last year's profile "Key items I am especially proud of beyond what was in the Rising Stars summary is we have closed our batch two of the Vive X accelerator and invested in 36 more companies – in total, over 70 startups invested by Vive X within its first year, making us the most active virtual and augmented reality investor in the world. That does not even include our non-Vive X investments."

The second batch came from San Francisco (CognitiveVR, Construct Studio, Forbidden Mechanism, HyperfairVR, Limitless, Mindesk, Realiteer, the Rogue Initiative, Subdream and Vertebrae), Beijing (Mint Muse, Hexa, Vito, Invrse Reality, PlusOne, Multiverse, Red Accent, Byond and OVA), Shenzhen (Transmind, Aurora AR, Kiwi Technology, Shengda, Brokencolors, bHaptics and SoccerDream) and Taipei (Opaque

Space, Snobal, Memora, Xikaku, Appnori, Vrani and Tegway) with applications from a new Vive X in Israel.

Graylin also helped close a deal between Warner Brothers to make it the exclusive virtual reality (VR) content and distribution partner for Ready Player One, a $450m budget VR movie directed by Steven Spielberg which released in March.

In November 2016, HTC signed a strategic cooperation pact with the government of Shenzhen, a southern China city and special economic zone (SEZ), to set up a VR research institute as well as a RMB10bn ($1.5bn) venture fund.

Part of Shenzhen's interest in HTC lay in the groundwork Graylin had done in building the industry through alliances.

In August, HTC also signed a strategic cooperation agreement with China-based Alibaba jointly to develop VR technology based on the online retailer's cloud platform, Aliyun. Three months later and Alibaba and HTC together demonstrated Alibaba's Buy-plus mobile VR channel on HTC-powered VR-ready smartphones.

In June, Graylin became president the VR Venture Capital Alliance with 28 initial members managing a combined $10bn. Another eight members joined in November to take the total to $12bn.

Alliance backers include Colopl VR Fund, a $50m specialist fund launched by mobile game publisher Colopl in December 2015, the Virtual Reality Fund, backed by Colopl and game developer Gumi, and Legend Capital, the corporate venturing arm of conglomerate Legend Holdings.

The corporates are augmented by institutional investors such as venture capital firms Sequoia Capital, GGV Capital, Qiming Venture Partners, Matrix Partners and Redpoint Ventures.

Graylin is also chairman of the Industry of Virtual Reality Alliance, launched in September 2016 as the only government-endorsed VR organisation in China.

These connections helped drive entrepreneurs to HTC and create the dealflow for the VR fund along with HTC's own Vive X VR Accelerator.

Such speed and scale creates both opportunities and challenges. Graylin said for his Rising Stars profile: "Our biggest challenge with the investment arm has been speed of deal execution and legal complexity. The companies we are looking at come from all over the world and with differing company structures. Our internal legal and deal teams are not used to working with companies at this stage and with so many at the same time. We did 33 deals in batch one, and likely will do 30 to 40 more in January 2017. It will hopefully get better over time as we standardise our processes and documents."

Perhaps unsurprisingly, given such an immediate impact as regional president, Graylin said: "I am very happy with what I am doing today and the impact I am making. VR will be changing all our lives in a significant way and I am excited to play a role in helping direct where that is headed."

Looking more broadly, he said making a stronger venture and entrepreneurial industry required other corporations to "hire more entrepreneurs into the company and take more risk on high-potential people and deals – do not let the lawyers and accountants drive or inhibit decision-making."

Graylin said before entering CVC he had been an entrepreneur for the previous 15 years, founding four venture-backed startups in the US and China and also working for several public companies. He said: "Having that background make me understand the mindset of both the investor and the entrepreneur, which lets me better communicate and collaborate with both sides."

Edgar Hardless SINGTEL INNOV8

In 2012, Edgar Hardless took over as chief executive of SingTel Innov8, the corporate venturing unit of the Singapore-based telecoms company, from Yvonne Kwek but since then he has made the role his own.

Kwek was the first chief executive of the unit after it was set up with an S$200m fund ($150m) in 2010, subsequently increased to S$250m. Hardless stepped up to the role from his position as vice-president of strategic investments, held since 2008, and an earlier role held for two years as head of Singtel's first open innovation unit, focused on identifying emerging technologies.

Last year, Innov8 made investments in Silverfort, an Israel-based cybersecurity company raised $2.5m in its seed round, Zeotap, a Germany-based advertising supplier raised $12.5m in its series B round, and the rest in the US: Synack ($21m), Cardlytics ($20m D round), CounterTack ($20m D round), Qubole ($25m), Area17 and Balbix. These deals were primarily in cybersecurity, with Attivo raising an undisclosed amount and Airspace announcing its $20m A round, both this year, but its four exits were more diversified.

Last year, Cardlytics, a US-based card-linked purchase-based intelligence platform, floated on the Nasdaq stock exchange; Guavus, a US-based real-time big data processing and analytics, was acquired by Thales for up to $215m; Fireglass, an Israel-based agentless isolation solution, was acquired by Symantec for a reported $250m; and Kai Square, a Singapore-based video analytics provider, was acquired by Singtel.

Another of the investors in Kai Square, which had closed a S$4m B round in 2014 had been the local university's student startups group, NUS Enterprise.

Last year Singtel Innov8 and National University of Singapore's entrepreneurial arm NUS Enterprise, launched Singapore's first integrated regional cyber security hub to spawn and support early stage and growing startups, entrepreneurs and academics from around the world.

Previously, Innov8 was part of a consortium of peers – Deutsche Telekom's Hubraum, Orange Fab and Telefónica Open Future – that formed an alliance, subsequently called Go Ignite, to connect startup ecosystems across Asia, Africa, Europe, Latin America and the Middle East by inviting participation in five categories – internet of things, cybersecurity, big data analytics, content delivery and customer experience enhancement.

Collaboration can be a hard thing to do well but Singtel Innov8 has proved adept at all areas of corporate venturing under Hardless, who studied at University of Bath in the UK.

Michael Hensinger SYNCHRONY VENTURES

Michael Hensinger, senior vice-president and senior managing director at Synchrony Ventures, the corporate venturing unit of the US-based financial services group Synchrony Financial's, focus on equity investments in early stage companies in the financial technology (fintech), ecommerce and emerging technology sectors, including artificial intelligence (AI), data and analytics, consumer finance, and blockchain technologies has helped him move up from GCV Rising Stars 2018 to the Powerlist.

But his primary focus has been building a strong partnership internally. At the start of the year, Hensinger said: "Building the team and the investment process, making several early stage fintech investments, and seeing the impact those investments can have on innovation have all been very rewarding experiences as we build Synchrony Ventures.

"Having a strong team is critical to the success of CVC units. At Synchrony Ventures, we built a team that includes experienced and talented CVC professionals like Mel Gaceta, managing director at Synchrony Ventures, along with strong up and coming talent like vice-president Kelly Shaw and assistant vice-president Kevin Weber.

"The team has done a great job establishing the Synchrony presence in the venture and startup communities."

As an organisation with more than 84 years of experience financing major consumer purchases and elective healthcare and as the largest provider of private label credit cards in the US, it is perhaps no surprise that Synchrony Ventures' early deals have included payment card management platform First Performance's $17.5m round and an undisclosed amount in FlexReceipts, a provider of digital receipts in 2016, with Lisnr and First Performance joining the portfolio last year.

Its deals this year have already included US-based identity authentication system developer Payfone, which raised $23m in a round also featuring Massachusetts Mutual Life Insurance.

Synchrony also acquired portfolio company GPShopper in March having initially made a strategic investment in the developer of mobile apps for retailers and brands in January 2015.

Hensinger said GPShopper had been one of its "more rewarding outcomes" as the deal started as a strategic investment in 2015, the year he joined the company, and led to the development of new Synchrony technology called Synchrony Plug-in, or SY-PI.

And he added: "Corporate venture capital is an exciting way to drive innovation within corporate environments. Leveraging the resources and expertise within Synchrony with cutting edge technologies and innovations in the startup community is a great way to develop innovative solutions for our merchant partners and our customers.

"I find CVC to be an energising way to leverage my experience in complex commercial transactions and equity investing, along my interest in cutting-edge technology. I have always enjoyed working directly with the founders of early-stage companies as they look to take their ideas and companies to the next level."

Hensinger joined Synchrony three years ago after a four-year stint at General Electric (GE), initially for strategic investments relating to its leveraged loans and latterly as chief commercial officer for GE Capital, Global Financial Solutions, which provided cross-border and customised financing to multinational corporations.

After his MBA at Fordham Gabelli School of Business, Hensinger had earlier spent more than a decade at GE before leaving to develop lending businesses at FirstLight Financial, CIT Group and TD Bank.

But while he has travelled far in his career he said he enjoyed music, baseball, tennis, and skiing with his family.

Christian Herrmann DAIMLER

Christian Herrmann, director of mergers and acquisitions (M&A) technology and venture at Germany-based car maker Daimler, has spent the past 18 months leading its worldwide innovation investment activities and covering all investments in startups, mobility and tech as well as venture fund commitments. His deals in this time have already included more than half a dozen acquisitions and 32 investments with aggregate rounds of more than $1bn.

Daimler's divisions cover Mercedes-Benz, Daimler Trucks, Mercedes Benz Vans, Daimler Buses and Financial Services (DFS) strategies and the sweep of Herrmann's activities is suitably broad given he had already spent 13 years at the group before becoming director in November 2016.

His deals last year included this year leading a $30m round for Germany-based startup Volocopter, which is developing a small electric helicopter with multiple rotors. Daimler's innovation unit, now called Lab1886, will work with Volocopter to develop a urban air taxi service, according to Daimler, while Florian Reuter, CEO of the portfolio company, in an interview this month described how the car maker's manufacturing skills could help it scale up as it passes regulatory hurdles.

In January last year Mercedes-Benz Vans invested in autonomous delivery robots developer Starship Technologies' €16.5m convertible note. The two companies had already introduced the so-called mothership concept back in September 2016 of a van with those of an autonomous delivery robot.

In February, Daimler Financial Services invested an undisclosed amount in AutoGravity, a US-based comparison app for buying and financing vehicles founded in late 2015 as part of a national rollout across 46 states in the US.

In March, ChargePoint, a US-based electric vehicle (EV) charging network already backed by BMW's corporate venturing unit, raised an initial $82m led by Daimler to fund its expansion into Europe. And Tiramizoo, a Germany-based delivery optimisation startup, raised an undisclosed amount in a round led by oil major Shell's ventures unit with co-investment from Daimler.

In July, China-based self-driving car software developer Momenta raised a $46m series B round led by NIO Capital and including Shunwei Capital, Sinovation Ventures, Unity Ventures and Daimler. The same month, CleverShuttle, a Germany-based on-demand ridesharing startup, raised an undisclosed amount from Daimler Buses and its subsidiary, EvoBus.

Similarly, in the US, Daimler invested $50m as part of a joint venture with Via to help it expand its app into Europe so passengers headed in the same direction are matched with a single van, The investment is part of the Daimler strategy "CASE" covered connectivity (Connected), autonomous driving (Autonomous), flexible use and services (Shared and Services) and electric drive systems (Electric).

In September, Daimler Trucks led a $60m round for Israel-based fast-charging battery technology provider StoreDot.

Its biggest deal of the year in aggregate round size was Careem, a transportation startup currently in 80 cities across the Middle East, which raised another $150m in June to close a $500m series E round led by Saudi-based Kingdom Holding and Daimler.

On acquisitions, Daimler Financial Services continued to expand its digital portfolio by buying Luxembourg-based PayCash Europe to become the new 'Mercedes pay' brand name.

One example of its roll-up strategy is in ride-hailing. Mytaxi was founded in the summer of 2009 by the Hamburg, Germany-based startup Intelligent Apps. At the beginning of 2012, Daimler joined as an investor and completely took over the operator of Mytaxi in the autumn of 2014. It then merged Mytaxi and Hailo in 2016, before Mytaxi acquired the Greece-based provider Taxibeat in February 2017 for a reported €43m and then Romania-based ride hailing app Clever Taxi in the summer. Daimler also acquired dynamic ridesharing pioneer Flinc, while Daimler Mobility Services acquired a majority stake in France-based Chauffeur Privé at the end of the year.

Daimler Mobility Services also co-led US-based peer-to-peer (P2P) carsharing company Turo's $92m round and combined its own Daimler peer-to-peer carsharing platform, Croove, with the US company to serve as the basis for Turo to enter the German market this year.

At the back end, in August, Moovel Group, a subsidiary of Daimler providing the operating system giving access to various mobility services such as MyTaxi, acquired all of peer Familonet based in Hamburg.

Even with such activity, Herrmann said it spent time on business unit partnerships and development with portfolio companies. Beyond the above examples, he mentioned the integration of What3words technology in the Mercedes-Benz A Class cars, the development of personal mobility behaviour service EQ Ready App with Anagog and joint ventures with several original equipment manufacturers (OEMs) on a connectivity solution to electric charging infrastructure called Hubject.

George Hoyem IN-Q-TEL

George Hoyem, managing partner at In-Q-Tel (IQT), the venture investment unit of the US intelligence community, is probably the largest strategic dealmaker in the US with more than 50 primarily early-stage deals each year.

That the Central Intelligence Agency (CIA) is one of IQT's clients as a non-profit strategic investment unit means many of these deals are kept private.

For example, in nominating Katie Gray for the GCV Rising Stars 2018 award, only three of the 13 she had worled on were disclosed. The first was a 2015 investment in Sila Nanotechnologies, a company using engineered materials to improve energy storage. This was followed in 2016 by a strategic partnership with Algorithmia, the operator of an algorithm network for app developers, and the third investment was another strategic partnership in March 2017, this time with a developer of composite additive manufacturing technology called Arevo.

But Hoyem, who has more than 25 years of entrepreneurial, operations, and venture capital investing experience in high technology companies, remains active himself and has led close to 20 investments at IQT since he joined in 2010.

Hoyem is the managing partner for the IQT, West Coast Investment team, and heads the enterprise IT investment practice area. This investment area includes companies targeting solutions in advanced analytics, cyber security, data centre infrastructure, cloud and mobile focused technologies.

Earlier in his career, Hoyem has also backed, supported, and served on the boards of several dozen emerging technology companies as managing partner at Blueprint Ventures and at Redleaf Group and El Dorado Ventures before and after the millennium, including Good Technology, which was acquired by Blackberry in November 2015, Solera Networks, which was acquired by Blue Coat in May 2013 and SpectraSensors, which was acquired by Endress & Hauser in 2012.

But Hoyem's challenges at IQT are the same as many corporate venturing units, at least judging by his concerns for the year ahead.

In the GCV outlook survey, Hoyem said his biggest concerns were about the talent and other costs to build a startup and where we are in the economic cycle and its impact on valuations.

On the latter, he said: "When will the music stop? VCs will continue to worry about valuations and the simple fact that we are at the top of the business cycle, which could continue for a few years or just as easily correct."

And many of its deals focus on similar pain points, albeit with different end-customers than the corporate venturing units. An anecdote was relayed by Hoyem on a panel at the GCV Synergize conference in New York in the autumn with Miles Reidy, a partner at VC firm QED, and Travis Skelly, a senior vice-president at the venture unit of Citi Bank.

Skelly kicked off the story: "We had a problem that we weren't getting the data feedback we needed from the intelligence agencies in order to combat money laundering. So we gave George Hoyem a call to see if he could help."

Hoyem, who also serves on the board of directors of the US trade body National Venture Capital Association, continued the story: "With our connections we were able to convene a group of interested stakeholders to try to nail the problem – the Federal Bureau of Investigation (FBI), the Central Intelligence Agency (CIA) and the National Security Agency (NSA) plus Citi and QED."

The discussion provided a rare example of corporates, VCs and government agencies working together.

But its role has long been recognised. Writing in June 2014's Harvard Business Review about corporate venturing but following up on a 2005 research paper he co-authored, academic Josh Lerner gave the example In-Q-Tel for how to both invest and reap value from government or corporate venturing.

There is an "essential lesson" once a venture investor, such as a corporation or government, looks for more than just financial returns: they "need to invest as much in learning from their startups as they do in making and overseeing deals".

In its annual tax filings, IQT said it was founded in 1999 as a "private, not-for-profit company to help the CIA [Central Intelligence Agency] and broader US intelligence community identify, adapt and deliver cutting-edge technologies that address national security needs. IQT's strategic investment model … [means,] on average, for every dollar that IQT invests in a company the venture capital [VC] community has invested over $10, helping to deliver crucial new capabilities at lower cost to the government."

As one of the executives behind IQT's formation and who remains closely involved put it: "IQT was originally modelled as a technology VC because technology and entrepreneurship was the area of interest for us."

The government's traditional contracting approaches to established systems integrators were deemed lacking in "agility" to find and nurture entrepreneurs and companies developing commercial technologies that could be relevant for the intelligence community, which stretches beyond the CIA to now include the Defense Intelligence Agency, Department of Homeland Security's Science and Technology Directorate, National Security Agency, National Geospatial-Intelligence Agency and others.

By the late 1990s this need to reach out to entrepreneurs for technology had reached a point requiring a IQT-approach because government contracts were no longer the primary source of defense technology, especially as part of the national security agenda increasingly involved understanding the security opportunity and threats brought about by the internet and computing power.

Military contracts after the Second World War were critical in providing resources to fund the development of internet, personal computer and information technology.

But by the late 1990s, as one source close to IQT's formation put it in a profile by Global Government Venturing, a sister paper in mid-2014, the government went from contracting about 80% of technology it could use for national security to about 20%, with 80% by third-parties. The historical pattern of technology transfer, from federally financed laboratories to the military and eventually to civilian use, had reversed after the ending of the Cold War and the collapse of the Soviet Union.

The government was also looking for ways to tap into private research and development for companies not willing or able to go through its established non-equity funding programs, such as the US government's Small Business Innovation Research (SBIR) grants. Analysis by Global University Venturing, another sister paper to GCV, to end-October 2013 of more than 170 portfolio companies back by IQT showed 39 have gained $70.5m in SBIR funding, according to public sources.

While these grants are often overshadowed by the equity investments from venture capital funds, SBIR grants have been often important, especially at a startup's earliest days when the technology is being developed for commercialisation.

IQT's need for cutting edge technology means it maintains links with multiple corporations, such as bank Citi, and universities, including ASU, MIT, Harvard and University of California.

One corporate venturing head of investments said: "There is a different level of relationship in private–public in this security space and we [and IQT] both approach entrepreneurs with the same needs. We do portfolio swaps as a benefit from dealing with the same currency, for example denial-of-service attacks, so we have a level of expertise for portfolio companies."

This special relationship in security is shown by how often IQT co-invests in companies alongside corporate venturing units to effectively reverse-engineer commercial development for government use. Analysis by Global Corporate Venturing, of the syndicates in IQT's public deals to end-October 2013 show nearly half (77 of 172) contained corporate venturing units.

For universities, the links are also extensive, especially as Michael Crow, president of Arizona State University (ASU), had been non-executive chairman of IQT.

About the millennium, ASU had formed a partnership between its tech transfer unit, Arizona Technology Enterprises (AZTE), and IQT to help develop a Partnership for Research in Spatial Modelling (Prism). IQT agreed to support the development of Prism's handwriting recognition and document segmentation technology.

Gilman Louie, then-In-Q-Tel's president and CEO, said: "ASU's 3-D handwriting technology offers unique capabilities for recognising handwriting and segmenting documents.

"In-Q-Tel is very pleased with its partnership with ASU's Prism. They have made significant progress toward a solution that will not only have broad utility for the intelligence community but potentially attractive commercial applications as well."

IQT's list of university spinouts a few years ago includes:

Language Weaver, which was acquired by SDL in July 2010 for $42.5m and was founded in 2002 by the University of Southern California's Kevin Knight and Daniel Marcu, to commercialise a statistical approach to automatic language translation and natural language processing – now known as statistical machine translation software.

Qynergy, which was founded in 2001 by Paul Shirley for the purpose of developing a beta-voltaic QynCell technology based upon a licensed technology from Sandia National Laboratories and the University of New Mexico.

Decru, a networked storage provider sold for Network Appliance for $272m in 2005 after co-founded four years earlier by Serge Plotkin, an associate professor of computer science at Stanford University who formerly worked on network security for the Israeli military.

Cambrios, which makes transparent electrodes based on silver nanowires to simplify electronics manufacturing processes and was founded in 2002 by Drs Angela Belcher of MIT and Evelyn Hu of the University of California, Santa Barbara.

SiOnyx, which has exclusive rights to license a Harvard-owned portfolio of patents related to black silicon, which involves a laser implant technique that alters the photonic properties of semiconductor devices after its formation in 2006 by Harvard University professors Eric Mazur and James Carey.

SpectraFluidics, which uses technology invented by professors and researchers from the mechanical engineering and chemistry departments of the University of California, Santa Barbara, and since IQT's investment in 2010 has won two US Army development and engineering contracts and a $1.3m contract from the US Department of Homeland Security, Transportation Security Administration.

Fetch Technologies, which was founded in 1999 by two faculty members at the University of Southern California Information Sciences Institute to make web data accessible and useful for the enterprise by using customised software agents (and was acquired by Connotate in March 2012).

Geosemble, a 2004 spinoff from the University of Southern California whose GeoXray product automates the process of discovering, geospatially visualising, monitoring and sharing relevant unstructured information from any source before its acquisition by IQT-backed TerraGo.

Overall, however, university spinouts seem to have been a minority source of dealflow.

In its regulatory filing, IQT said by end-March 2012 it had invested in more than 180 portfolio companies, "many of which have produced technologies that have contributed directly to intelligence community missions".

"Technology delivered by IQT, for example, makes it possible to fuse data from maps, images, text and other sources; visualise information in ways not previously possible; rapidly process vast amounts of information in multiple languages; and identify the critical intelligence faster and more effectively."

George Tenet, former director of the CIA who was in charge of IQT's creation, in his book, The Storm: My Years at the CIA, put it more succinctly: "The In-Q-Tel alliance has put the Agency back at the leading edge of technology."

This was some achievement given skepticism that government could effectively fund a VC firm run independently and reap both financial and strategic returns, according to sources working on its launch. A 2001 report for the US Congress and the CIA by consultancy Business Executives for National Security (Bens) called Accelerating the Acquisition and Implementation of New Technologies for Intelligence, Report of the Independent Panel on the Central Intelligence Agency In-Q-Tel Venture found IQT had made a good start.

Lawrence Meador, chairman of the independent, 30-strong panel, wrote in a preface to the Bens report, published by news provider FCW: "I would note for the record that several members of this panel from a variety of industry sectors approached this assessment process with what I would describe as an initial reaction of skepticism and concern about the basic In-Q-Tel business model from a policy, legal and competitive perspective."

The panel concluded, however, "the In-Q-Tel business model makes sense, and its progress to date is impressive for a two-year-old venture".

Insiders credited IQT's relative success and longevity to its focus on getting the startups' technology through the In-Q-Tel Interface Centre (QIC) and into use by the intelligence community. IQT's peers, such as DaVenci, OnPoint and Chart Venture Partners, have struggled to maintain the levels of funding IQT has collected.

The decision to set up IQT as an independent firm with staff initially sharing part of any profits – called carried interest – through an In-Q-Tel Employee Fund attracted talented people, such as its first chief executive, Gilman Louie, a former video-game entrepreneur who headed Hasbro Interactive's Games.com group, able to find and back entrepreneurial companies. But the timing of its launch was also opportune as the intelligence community received a shock with the 11 September 2001 Al Qaeda attacks on the US mainland and subsequently received greater attention and resources to both prevent another such assault and guide the invasions of Afghanistan and Iraq.

For example, IQT had in 2001 invested about $2m in the series A round of mapping service Keyhole, co-founded by ex-foreign affairs operative John Hanke and named after the KH reconnaissance satellites, the original satellite military reconnaissance system. Keyhole proved invaluable tracking missiles in Iraq and was in 2004 acquired by US-listed search engine provider Google to form part of its Google Earth service. IQT received shares in Google as part of the sale and later reportedly sold 5,636 of them after Google's flotation in 2005 reaping more than $2.2m.

IQT also invested in US-based data analytics firm Palantir's A round after working with its founders to help their form company, online money exchange PayPal, fight off Russian fraudsters, according to co-investors and IQT's staff.

However, Louie's departure in 2006 to set up a VC firm, Alsop Louie, with a former journalist led to two short-term CEOs, Amit Yoran and Scott Yancey, before its incumbent, Chris Darby, joined. Regulatory filings show Darby's contract has been renewed until January 2016 and then again after he settled the organisation and helped its evolution to what one insider called a more "mature" organisation.

Darby had been an effective CEO at tech firm Sarvega before its sale to chip maker Intel.

David Cowan, partner at VC firm Bessemer Venture Partners, the startup investment group founded by steel magnate Henry Phipps in 1911, at the time of Darby's appointment told news provider SiliconBeat: "We at Bessemer were invested in Sarvega, and so we saw him in action. Through strong recruiting, good strategic moves, and effective business development, Darby turned the company around and saved our investment."

But the effect on IQT as an organisation of a period of management succession allowed what insiders called "political factors" to force substantial changes in its approach and operation. The Employee Incentive Plan (EIP) giving staff carried interest in return for investing 10% of their salary in a fund was closed in 2007, according to its regulatory filing.

In effect, there was concern that IQT was too good at doing deals – its regulatory filing for 2005 reported by newswire Bloomberg showed IQT sold for $12m investments that had cost it $1.96m.

As well as closing its EIP, IQT also moved towards an approach of offering more cash for companies' technology development or conversion to intelligence community needs rather than taking equity and following on in deals. One co-investor alongside IQT in multiple deals said it has taken years for the organisation to recover its cultural connection to entrepreneurs and reengage with them through a series of hires, including both George Hoyem and Peter Kuper in 2010.

IQT's focus on what it calls paying for work programs and non-recurring engineering and sometimes receiving warrants in return rather than necessarily investing directly for equity means it acts as a conduit for startups' technology to be seen and become ready for use by the intelligence community – its primary purpose – without necessarily diluting other investors' equity.

As one outside analyst noted, VC's now "love them because if you pass IQT diligence they can safely assume that the technology or product has value and is technically sound".

But while dozens of VCs have done multiple deals in IQT-backed companies, its reputation can be mixed for some. One VC, who discovered IQT had backed database company Palantir only while conducting due diligence on it as a potential investment, said: "I've not bumped into IQT much despite having done 50 deals from Stanford as they are not needed and if all else is equal we'd rather not with IQT as government backing a negative not a positive because they have different incentives and a pain in the butt."

A co-investor said by IQT now trying to avoid diluting outside investors on deals meant the government was effectively underpinning the broader venture industry. The analyst concurred that its data showed "security plays are predictably acquired by bigger players for nice multiple," with IQT-backed ArcSight acquired by Hewlett-Packard for $1.5bn in 2013 after its initial public offering in 2008 and IBM buying Initiate in 2010.

In turn, by accessing venture capital-backed technologies, IQT said in its regulatory filing it had "leveraged more than $3.9bn in private-sector funds to support technology for the CIA and the intelligence community".

Effectively, therefore, IQT has evolved to a more sophisticated open innovation program with venture capital investments of up to $3m as just one tool.

However, IQT has actively examined the ethics of the technologies it can help develop through its portfolio, commissioning noted academic Patrick Lin to review the applications for drones, or unmanned aircraft. It has also been active to make sure the technologies stay available even if a startup is struggling.

In December 2003, news provider Institutional Investor gave an example of US¬-based software company Graviton that ran into financial trouble earlier that year and laid off its engineering team when its wireless sensor system for detecting chemical and radiological exposures was only two-thirds complete. In-Q-Tel helped arrange a transfer of Graviton's technology to a new company, Soflinx, which rehired the engineers.

More recently, Geosemble, a 2004 spinoff from the University of Southern California (USC) whose GeoXray product automates the process of discovering, geospatially visualising, monitoring and sharing relevant unstructured information from any source, was acquired by IQT portfolio company TerraGo in July 2012. Geosemble had been a partially-owned subsidary of IQT-backed Fetch Technologies, a data services company that also grew out of collaborations between USC researchers and the government.

Under Darby, IQT has added an open source "laboratory", called Lab41, on the opposite side of the hallway to its investment team.

Overall, IQT divides its "focus areas" into information and communication technology, such as advanced analytics, cloud and infrastructure, digital identity, tools for field missions and mobility, and physical and biological, including DNA fingerprinting, genome analysis, energy harvesting and batteries, lasers and threat detection.

The 'Q" in its name, while only added to "intelligence" to bring some marketing pizzazz by referencing the gadgets man in the James Bond media franchise, remains apt. IQT's portfolio companies develop tools suitable for a spy book, including Sonitus Medical, which told news provider NPR in 2012 it had received IQT funding to turn its hearing aid into a two-way radio that allows users to attach the device to their teeth rather than their ear to hear sound.

Natalie Hwang SIMON PROPERTY GROUP

Natalie Hwang is the managing director of Simon Ventures, a multi-stage corporate venturing unit oriented towards innovation for "the future of retail and commerce" on behalf of parent corporation Simon, a Standard & Poor's 100 company and one of the largest real estate enterprises in the world.

Currently a one-person investment team following the departure of founder Skyler Fernandez last year, brings its share of frustrations as well as positive moments. Hwang described missing out on smart home system Ring because it was sold to Amazon before closing the second tranche of a round earlier this year.

But the opportunities of running the corporate venturing unit of a Fortune 500 company while in her 30s has been good and impressed her peers. In a keynote debate at the GCV Synergize conference in New York City in the autumn, Nicole Quinn a partner at VC firm Lightspeed Ventures, said: "I totally respect Natalie's vision when we've been looking at opportunities. She really understands the increasing speed of retail, such as the use of SMS [short messaging services] to order product."

Hwang graduated with honours from Duke University – awarded Best Honours Thesis in her class for public policy studies. She went on to study at University of Virginia Law.

She started her professional career at law firm Simpson Thacher & Bartlett, which later helped her dive into the world of venture investing. At the time she was involved in "a lot of deals, including private equity and hedge funds investments as well as M&A side work, many of which were highly-publicised transactions".

Subsequently, she joined alternative investments manager Blackstone Group. She said for last year's GCV Powerlist profile: "I had the good fortune to study the art of business building with some of the best professionals at Blackstone."

She also ran, "on her own time", a personal early-stage fund focused on retail and commerce, "leveraging a lot of the insights from my experience there to making early-stage investments in the next-generation commerce and retail tech space, and participating alongside top-tier VCs like Thrive Capital."

Today she directs a corporate venturing unit with a clear preference for enterprises from those fields, albeit at a later stage of development. Simon Ventures' investment philosophy places a substantial weight on the financial side.

Hwang says that "the capitalisation needs, growth horizons and liquidity profiles of companies that are building businesses across various verticals within the world of commerce differ from traditional technology companies. We believe that each company and funding situation requires a fresh perspective and approach." Simon Ventures is committed to supporting a range of capitalisation strategies that are personalised to the needs of a company, including alternative financing solutions that apply across the capital structure for proven growth companies that are looking for less dilutive options.

The role of financial returns is, undoubtedly, pivotal for Simon Ventures. The fund's risk-adjusted approach to venture capital investing inclines them to target companies that share certain attributes. Hwang says that "our companies are driven by forward thinking and dynamic founders who are disciplined in their approach to efficient entrepreneurship. Our management teams have focused on driving accelerated growth while also applying equal focus to achieving sustainability."

To date, Hwang has scaled the portfolio to seven companies. She notes that these companies are unique in their ability to either cultivate a unique brand proposition, operate a specialised distribution, experiential or relationship driven business model or build technology that carries with it the potential to impact the quality of consumer experiences. These companies include Grailed (a peer-to-peer curated community marketplace for the resale of designer men's clothing), Dirty Lemon Beverages (a next-generation beverage platform that distributes exclusively through SMS text), FabFitFun (a women's lifestyle media brand and product discovery platform), MeUndies (a direct to consumer ecommerce company), Bird (an electric scooter ride-sharing company) and Appear Here (a marketplace connecting businesses with retail real estate).

Simon Ventures' ability to motivate investments in such competitive companies is due in part to their ability to provide strategic value. As the venture industry continues to grow increasingly competitive, capital alone is insufficient to the effort of navigating towards successful outcomes. Hwang is investing time and resources to working with founders to identity opportunities for leveraging Simon's extensive resources to build a community and ecosystem around their businesses. She remarks: "Our roots as a venture capital fund are richly steeped in retail given Simon's sponsorship and role as a market leader in establishing the backbone infrastructure of physical commerce. As a capital partner, we believe that we

are uniquely situated to provide our founders with resources that can provide them with a distinct edge in creating impactful change. We do this while offering the best possible incentive alignment structure for partnership."

She adds that "there are a number of levers we can pull to provide value added services, all of which can be considered a form of non-dilutive capital that comes at no additional cost to founders' equity and require no incremental tradeoff in terms of incentive alignment." These levers include access to the most extensive footprint of retail real estate in the world, relationships with brands and Simon Ventures' broader network of connections in real estate, technology, finance, media and entertainment, which can provide significant advantages to founders in their path to scale.

Looking ahead, Hwang is optimistic that the value exchange being offered in the context of the relationships that are forged between corporate ventures and emerging companies will positively impact the perception of CVCs. "As corporate venture capital activity becomes increasingly widespread and as new fund models like ours emerge to challenge the notion of how a CVC typically operates, traditional viewpoints will evolve to reflect the realities of this dynamically evolving industry. Simon Ventures, for instance is operating a model that combines the disciplined approach of an institutional investor with the differentiated insights, access and operational support of a strategic partner."

Ram Jambunathan SAP

Ram Jambunathan is senior vice-president and managing director of SAP.IO, the Germany-based technology company's business unit focused on incubating innovation both internal and external and driving new business models.

SAP.IO complements SAP's commitment to Sapphire, a now-independent corporate venture capital (CVC) unit investing $2.5bn from the German parent in later-stage deals and VC funds.

Jambunathan said: "I have been in this role for the last 18 months, since we established SAP.IO. Prior to this, I led cloud and platform strategy as a member of SAP corporate strategy.

"It was at this time we realised that SAP needed a different way to incubate early-stage innovation, outside of the normal investment and development constructs of a big company."

The fund has also been investing directly as well as incubating. In February, after his GCV Rising Stars 2018 award, SAP.iO Fund backed US-based data protection compliance software developer BigID's $14m series A round.

Jambunathan said at the start of the year: "We also realised we needed to drive a build with an application programming interface first approach to establish this ecosystem and accelerate the pace of innovation around SAP application programming interfaces (APIs), data, and technologies, to ensure our customers could fully capture the value from their investments in digitisation.

"Three key things attracted me to CVC, at SAP particularly:

1. The potential to thoughtfully incubate innovation at SAP scale around APIs, business content, and technologies. Innovation continues to be what is long-term rewarded by the market in software. Like many other established companies with successful legacy-class presence in market, we saw that a renewal of how SAP incubates new value and drives innovation is required to capitalise on the industry-scale changes upon it. SAP has been incredibly successful for 45 years, and we believe this is a foundational approach to help drive success for the next 45 years. And few companies have the breadth and depth to do this in enterprise like SAP.
2. The power of SAP data. Whether you call data the new oil or data the new gold, that value of digitisation has become incredibly clear. And the ability to fully realise the value of new technologies such as machine learning and artificial intelligence, is dependent on the quality and availability of the right business data. I would assert that some of the most, if not the most, valuable enterprise data sits in an SAP customer's business systems. The opportunity to drive CVC at SAP was then the opportunity to catalyse an ecosystem of innovation that SAP is uniquely positioned to drive
3. The opportunity to work in the early-stage ecosystem, again. Earlier in my career, I co-founded a fibre-optic infrastructure startup, T-Networks, now part of Broadcom [which was acquired by Avago for $37bn in early 2016] backed by Sequoia, Greylock, and USVP. Since then, I have waited for the right time to get engaged in a meaningful way again. I saw this as that opportunity – to be able to drive impact in a meaningful way."

After leaving T-Networks after 5.5 years at the end of 2005, Jambunathan became a McKinsey consultant before joining SAP in mid-2009 and working his way up from a value engineering principal to senior vice-president and now MD of SAP.IO.

Jambunathan said over the past year it had set up the $35m SAP.IO Fund, SAP.IO Foundries and the SAP.IO Venture Studio and added: "It is important to emphasise these successes are all the more notable given that we started from zero a year ago."

The SAP.IO Fund was established in the beginning of 2017 and has made at least seven investments, including in ClearMetal's $9m, Niki.ai's $2m and Paradata's $10m respective A rounds.

The fund is expected to double its investment pace from Silicon Valley and Israel this year, Jambunathan said in an interview with Mint.

Jambunathan added: "We have been able to invest alongside the best independent VCs because, when the SAP.IO Fund makes an investment, we also get a business unit involved and formally commit to support that investment.

"The consistent feedback that I have received from the ecosystem – independent VCs, founders, and even other CVCs, is that we need to do a better job of delivering on the promise and demonstrating value.

"First, CVCs are unnaturally advantaged in helping startups succeed, because of the corporate parent – so why not take advantage of this, versus trying to position ourselves as independent of the business? Startups and entrepreneurs are attracted to CVCs by that business potential.

"Second, we need to ensure this is not a marketing or branding exercise. This is about creating valuable ecosystems that are in service of creating new and maintaining existing customers for both the startup and the corporate."

The SAP.IO Foundries is its global network of accelerators for startups running in Tel Aviv, New York City and Berlin and San Francisco.

Jambunathan said its "notable successes include, in SF, we accelerated a cohort of women founded or led software-as-a-service companies this past summer in areas spanning internet of things, human resources, payments and healthcare.

"In fact, we see a big opportunity in investing and supporting women's entrepreneurship. Not from a social responsibility angle, but it makes fundamental business sense.

"In Berlin, where we just had our demo day and completely changed the game for SAP, and corporate innovation, in Berlin. We accelerated 10 startups around the theme of machine learning-enabled business to business software-as-a-service applications."

The SAP.IO Venture Studio was set up to enable SAP's internal innovators – so-called intrapreneurs – to also build products, find customers and change industries.

Jambunathan said: "Its mission is to build the next growth businesses for SAP using a classic, VC-based testable investment model. To do this requires establishing a new function and a commensurate set of processes that are outside the normal portfolio processes and development rhythms that govern mature products at scale and sustaining innovations. We have four Venture Studio incubations, including Atlas, Cygnuz, Apparent Financing and Free2Work Labs

"We believe this model of open incubation – bringing internal and external incubations together under one function (and sometimes under one roof) – is unique and helps drive our success both internally and externally."

When asked about his challenges, Jambunathan's time as an entrepreneur and management consultant shines through as he said: "I would reframe these not as challenges, but as high value opportunities."

These include:

- Ensuring we as SAP have a single face and single message to startups. It is

imperative that we reduce complexity for startups to work with SAP, and SAP.IO is playing a key role in this.
- Building new pathways for SAP to work with early-stage startups. These include new go-to market motions, such as original equipment manufacturer models and referral models that traditionally have not been accessible to small startups.
- Continuing to drive a build-with-SAP approach. This means not only the opportunity to build solutions on SAP platforms, but create value with SAP APIs.

"So even if your primary run-time is [peers] AWS, GCP, Azure, or SAP Cloud Platform, we want to ensure that you can deliver value to SAP customers with as little friction as possible."

For an active member of the university cycling team at University of Michigan during his master's and PhD in electrical engineering before the technical research and development department at Lucent Technologies, Jambunathan well understands the winning strategy for a rider comes from the team tactics employed.

Ilonka Jankovich and Paul Jacquin RANDSTAD INNOVATION FUND

Ilonka Jankovich and Paul Jacquin have been co-managing the Randstad Innovation Fund, the corporate venturing arm of the eponymous staffing firm, since its inception in 2014.

With a background in corporate law, Ilonka Jankovich founded two recruitment firms that she subsequently sold to Monster in 2001, and to Randstad in 2012. Following the acquisition by Randstad, discussions led a to partnership that would see Jankovich found and manage a corporate venture arm funded by Randstad.

Paul Jacquin, who was head of business corporate development for Randstad at the time, had several years of experience in technology M&A and venture capital. He had closed many deals across several continents and was tightly involved in Randstad corporate development. He was chosen as partner to co-fund and co-manage the Randstad Innovation Fund.

Since its inception and with €50m in earmarked capital, the Randstad Innovation Fund has made 17 investments across six countries in the US and Europe, primarily in talent acquisition and workforce management startups. As the investments are early-stage, the strategic value to the startups comes from a deep understanding of the market and the ability to test large-scale deployments in a global staffing firm, they said.

Its deals so far this year have included Gr8 People's $8m round, US-based skills assessment technology provider HackerRank securing $30m in a series C round and $14m for US-based automated recruitment software developer AllyO's round.

The fund has also been paramount in conducting research focusing on trends in HR technology and in helping Randstad realign its digital strategy to be considered more innovative than competition, they added. The early-stage nature of the investments implies a longer investment horizon, yet some early success includes a global partnership with Checkster to supply reference checks for Randstad as well as the acquisition and integration of Twago by the Randstad Group. Global partnerships were also put in place for Montage and Shiftboard.

Yann Kandelman ORANGE DIGITAL VENTURES

There are few areas of venture finance as exciting as financial services – fintech – and Africa and France-based phone operator Orange has tackled both under Yann Kandelman, head of Orange's digital investments and development teams.

He said: "2017 has been our third year as a CVC and we have experienced a major take off of our initiative: in addition to launching a new fund dedicated to Africa, where we believe Orange has substantial assets to help startups become pan-African champions, we invested in three new startups [Android transactions service Famoco, UK online bank Monzo's $93m round and mobile service provider FollowAnalytics' $11m round] in three different countries and participated in four new funding rounds of our portfolio companies [Actility, BandwidthX, Datami and Monzo].

"Over these three years, we have proven that investing in startups with a CVC arm brings the right balance between flexibility, engagement and strategic matters in order to give the ability to both corporate and startups to create more value together. Obviously, all this requires a lot of work to bridge the two worlds of startups ecosystem and our corporate teams, which is something we are striving to improve everyday at Orange Digital Ventures."

Orange Digital Ventures has also exited one of its portfolio company in this short time. La Banque Postale acquired KissKissBankBank in June 2017.

But Orange's main activity has been in supporting its portfolio companies with the parent business. Actility is working with Orange's business-to-business services in order to provide internet of things (IOT) connectivity and services. Afrimarket works with Orange Cote d'Ivoire in order to sell Orange products on its platform. Famoco provides thousands of devices and mobile device management through its platform to Orange affiliates in Europe and Africa mainly for mobile money and know your customer (KYC) use cases.

With such expansion has come growth in the team, with Laetitia de Panafieu and Marième Diop hired as associates in France and Senegal and Manon Caussade as a senior analyst.

Kandelman's own career at Orange started in 2008 initially in audience partnerships then as head of digital development from 2012. Earlier, he had spent a decade working for other corporations, including Warner Music Group, EMI and Philips.

Rimas Kapeskas UPS

Rimas Kapeskas joined postal delivery company UPS's corporate venturing unit, UPS Strategic Enterprise Fund, as managing director in 2011, 14 years after its launch in 1997 but with a wealth of experience.

This tends to show in a few ways – knowing when to put forward startups to senior management even if it takes a decade for the business units to be ready or when to leave the credit to the portfolio companies.

On the second, an example shows Kapeskas' worth. This month UPS made its first investment in Brazil, backing logistics company Mandae's $7.1m series B round. Kapeskas had made a number of scouting trips to the country for the Corporate Venture in Brasil conference organised by inward investment agency Apex-Brasil in partnership with GCV and seen the company pitch there. Kapeskas said: "The progress Mandae made from the first [Corporate Venture in Brasil] event to the second was what really impressed me and made the investment come together."

And he has been sharing his experience building up the investments team based on exits, such as radio-frequency identification company Impinj, which listed on the Nasdaq stock exchange.

Impinj raised $67.2m when it priced its initial public offering at $14 a share, which was at the top of its $12 to $14 range. Founded in 2000, Impinj produces technology that uses integrated-circuit tags to identify, track and locate items such as clothing, medical supplies, auto parts, driving licences, food and luggage, and then to send the data to businesses that manage, sell or transport them.

Although he leads a small team, having expanded into Europe last year, he has spent time working inside the company, with advanced testing with portfolio companies, including CyPhy Works for drone deliveries and Peloton Technologies in connected vehicles. Last year, Peloton raised $60m.

In an interview for 2012's GCV Powerlist, Kapeskas said: "I have been with UPS for a number of years [since 1984]. I previously served as director of our product research and development group, where we develop new products in-house. It has been an interesting transition moving over to the corporate venturing side. You go through many of the same steps trying to launch a new product internally as startups go through. You need to go shopping for internal support, resources and funding. There are a lot of parallels."

Kapeskas gained his MBA from Emory University and his BSc from University of Connecticut.

Anja König NOVARTIS VENTURE FUND

Anja König was last year promoted to global head of Novartis Venture Fund (NVF), the corporate venturing unit of Switzerland-based pharmaceutical company Novartis, following the retirement of Reinhard Ambros.

Ambros had spent the 12 years as global head of NVF and was part of 2017's GCV Powerlist. König had, as managing director of NVF, been named as part of Global Corporate Venturing's Rising Stars list for 2017 before stepping into the top role.

A graduate of Oxford, Ludwig Maximilian University of Munich and Cornell, König was an associate partner at management consultancy firm McKinsey for six years from 2000, where she worked with healthcare, pharmaceutical and biotech firms on both sides of the Atlantic, before joining NVF in 2006.

König's current portfolio features biotech Bicycle Therapeutics, which raised $32m in a 2014 round that included corporate venturing peer SR One; UK-based anti-fungal drug developer F2G, which received $60m in June 2016; and Forendo Pharma, which secured $12.8m in 2014.

König has also overseen several successful exits for Novartis, including flotations this year for Surface Oncology, a cancer drug developer that raised $108m in its initial public offering at a $365m market capitalisation, Homology Medicines, a US-based rare disease treatment developer that raised $165.6m at about a $625m market cap, US-based cancer treatment developer Arcus Biosciences that raised $138m at more than $700m valuation and Restorbio, a US-based developer of treatments for ageing-related diseases that raised nearly $100m at a $436m value.

But outside of maintaining its strong investments and exit pipeline, König's focus has been on the team and hired Michal Silverberg in November 2017.

For her GCV Rising Stars award this year, Silverberg, who had previously been senior director for external innovation at peer Takeda Ventures in Israel, said: "My introduction to Novartis was completely random. I met Novartis' global head Anja König at a conference in the UK, after which we kept in touch, and everything sort of developed from there."

König in her nomination had said: "I was impressed with Michal's pragmatism and enthusiasm, and by the solid portfolio and strong presence she built across Israel and Europe during her time at Takeda. I expect her to contribute her personal drive and enthusiasm to Novartis."

Matthew Koertge TELSTRA VENTURES

Telstra Ventures, the corporate venturing unit of the Australia-based telecoms company, deploys a two-pronged global strategy.

At the GCV Symposium in London in 2015, Matthew Koertge, managing director of Telstra Ventures, said: "We are looking for opportunities to expand Telstra's core business, predominantly into Asia. And we are trying to find the world's best solutions to apply in Australia."

This work has been going well. For last year's GCV Powerlist award, Koertge said: "Telstra Ventures continues to make solid progress. We have recently closed our 38th investment since we started five [now six] years ago. We have now achieved seven liquidity events, and we have expanded our team to 20."

At the end of 2016, Telstra Ventures provided its vision for the future of the corporate venturing in a report – Strategic Growth Investing: The Next Evolution of Corporate Venture Capital.

GCV's Leadership Society tracks about 1,000 active CVC units, and Telstra Ventures' report predicts that by 2025 corporate investors will be responsible for around 35% of the total venture capital provided globally, up from 28% today.

The report suggests that corporate venturers will increasingly become segmented into three distinct types – small teams that take part in two to five deals a year, investing up to $2m each time, more established units that put more financial and human resources into the process, and strategic investment groups that make up part of their parent company's long-term strategic plans.

The third group, identified by the report as "strategic growth investors", typically invest at least $50m a year in deals aligned to their parent's core business as part of a long-term commitment, and seek to provide commercial value as well as a return on investment. Strategic growth investors have the potential to be extremely beneficial for corporates and portfolio companies as long as they maintain access to the capital required for lengthy commitments to companies, and are given ample space and incentives to add commercial value to their deals.

It is in this category that Telstra, which has also been exploring how artificial intelligence can help its own dealflow, has increasingly focused. This year alone, China-based robotics technology producer UBtech Robotics raised $820m in a series C round led by internet company Tencent and including Telstra, as well as consumer electronics maker Haier Group, furniture rental service Easyhome Furnishings, conglomerate Chia Tai Group, power producer China General Nuclear and online lending platform CreditEase.

Other deals included BigCommerce, a US-based e-commerce software provider that completed a $64m round led by investment banking firm Goldman Sachs' Private Capital Investing unit after Telstra Ventures had backed the series D round, US-based cyber threat detection software producer Anomali's $40m series D round and Cumulus Networks' $43m D round.

On exits, Telstra was a shareholder in US-based digital signature technology provider DocuSign, which posted a $629m initial public offering at a market capitalisation of more than $4.4bn.

Koertge was formerly a general partner at Accede Capital Venture Partners, having previously spent more than eight years in banks' investment teams, at Macquarie and Deutsche Bank, and earlier as a project manager at Fujitsu's telecoms products group.

Lisa Lambert NATIONAL GRID

Lisa Lambert, former managing partner at venture capital firm Westly Group, this year rejoined the corporate venturing community as senior vice-president and chief technology and innovation officer at UK and US-listed energy utility National Grid.

Before joining Westly two years ago, Lambert had worked at Intel Corporation for 19 years as vice-president and managing director of corporate venturing unit Intel Capital's software and services group.

Lambert was also founder and MD of Intel Capital's Diversity Fund, and she led global investments in more than 100 companies and produced top decile returns, including seven flotations and over 30 trade sales.

At National Grid Ventures (NGV), Lambert is in charge of venture and growth capital investing, internal and external innovation projects such as technology scouting, incubations and accelerations, and technology commercialisation and understood to be busy expanding its team to about 40.

NGV's focus is on three areas: new energy technology, large-scale transmission projects across North America and the UK, and commercial projects outside of traditional regulated utility frameworks, such as utility-scale renewables (solar and wind) and liquefied natural gas.

National Grid had previously explored venture investing under Daniel Hullah, who subsequently joined GE Ventures in 2016.

NGV's portfolio includes a $100m investment in Sunrun, a provider of solar energy to residential markets, and Enbala, which develops and deploys software that aggregates customer electricity demand, along with energy storage and renewable energy sources, to create a network of continuously optimised distributed energy sources.

National Grid was also a founding member of Energy Impact Partners, a venture capital firm launched in 2015 to fund companies developing emerging energy technologies competing for large-scale transmission projects across North America and the UK.

For its transmission and commercial projects, National Grid has backed Viking Link, a 700 kilometre subsea cable that will enable the trade of renewable energy between Denmark and the UK and expected to be operational by 2023; Granite State and Northeast Renewable Link, transmission projects that will deliver almost nine terawatt hours of energy for customers across New England; and Vermont Greenline, a proposed 400 megawatt transmission cable that will run from northern New York, under Lake Champlain, to Vermont and will deliver renewable energy to New England to help meet regional clean energy goals.

Lambert, who had been ranked first in the inaugural Global Corporate Venturing rising Stars 2016 awards, said: "National Grid is already leading the way in building a clean energy future, and it's just scratching the surface on what is possible. I look forward to helping advance this ambition for its customers."

Lambert has sat on the board of directors of several portfolio companies, including most recently Silkroad Technology, Brit & Co, and X Plus 1 (acquired by Rocket Fuel). She is also on the board of directors for the National Venture Capital Association, co-chairwoman of the Venture Forward initiative and the founder, CEO and chairwoman of Upward, a global network of executive women designed to accelerate career advancement.

Jonathan Larsen PING AN

Jonathan Larsen is chief innovation officer of China-based insurer Ping An Group and chairman and CEO of its corporate venturing Ping An Global Voyager Fund.

Ping An Capital's Global Voyager Fund was launched in May 2017 when Larsen joined with a $1bn commitment to invest in healthcare and financial technology developers internationally and mainly based outside of China.

Larsen said at the WSJ D.Live Asia 2017 conference in Hong Kong in the summer the unit would seek out companies its parent company "can learn from".

In an 11FS interview, Larsen added: "In many ways, the primary rationale for the fund is strategic, and I think there are three forms that that can take.

"One is us accessing ideas, technologies, business models, and that can be through licensing agreements, it can be through cooperation agreements, it can be through partnerships or joint ventures in China.

"Equally, we have very significant development capabilities ourselves. We have 20,000 developers, we have world class facial recognition technology, we have world class voice technology, we have platforms that run on blockchain, at scale, every day already, so we have got a lot of technology resources, and we can co-create, in specific situations, with partners, where that's warranted. So, we are very interested and keen to see whether that's something we can bring to bear as a capability. I think that could yield some extremely interesting partnership opportunities and results.

"Lastly, I think the group, while it is overwhelmingly a China-based enterprise, it has some global portfolio management activities, and has historically had venture capital activates on a global basis. But overwhelmingly its client franchise is in China.

"We are now at a point where we can be looking, in a very disciplined and thoughtful way, about international opportunities, and some of those opportunities might come through partnerships in the fund."

Ping An has 138 million customers, 1.2 million agents, 6,000 branches and extensive digital distribution assets in mainland China.

Ping An is providing all of its capital, and Larsen, who was earlier on the GCV rising Stars 2018 awards, said the firm's eventual aim is to become a "data business," with Voyager Fund part of several open innovation ventures.

The ventures in question include an established CVC fund called Ping An Ventures and high-profile investments in domestic companies such as Didi Chuxing, the ride-hailing service then known as Didi Kuaidi, e-commerce platform Mogujie and livestreaming platform Huya.

As the world's third-largest insurer with more than $100bn in annual revenues, Ping An said it had already built digital service ecosystems in four areas: financial service, real estate finance, healthcare and automobile sales and servicing. Lufax and Ping An Good Doctor are fin-tech and health-tech innovators with $18.5bn and $3bn valuations, respectively, as at the end of 2016.

From his 11FS interview, Larsen said: "On the healthtech side, you know, health is a really interesting space for us. There is a thesis where it is arguable that health is actually an even bigger opportunity, over the longer term, than financial services, in China.

"What we are interested in, in health, is really information-based businesses. Our interest in the health space arose out of our own health insurance business. Private health insurance is only 5% of the market today, for health spending, 50% is government, the rest is out of pocket. We have a very large position within that 5%. There's basically no scenario we can see where that cannot grow at above 30%, almost forever, just given where we are right now."

The Voyager fund's deals since then have included investing in Singapore-based corporate healthcare services provider Fullerton Healthcare's $121m round.

Fullerton will also benefit from resources made available through various Ping An businesses, including clinic provider Ping An Wanjia Healthcare and Ping An Good Doctor, an online healthcare platform itself preparing a $1bn initial public offering, to help the portfolio company expand into China.

Earlier, in September, the Voyager had made its first deal when financial services portal developer 10x Future Technologies raised $46m and said it might partner Ping An to enter the Asian market.

Founded by former Barclays CEO Antony Jenkins, 10x launched in October 2016 targeting back-office technology used by banks and its A round shareholders included strategy consultancy Oliver Wyman.

At the time of the deal, Larsen said: said: "10x Future Technologies and Ping An share a vision that technology is the key driver in the financial sector to offer customers drastically improved services at a drastically lower cost of delivery.

"10x represents a breakthrough in banking technology and is a wake-up call to banks everywhere. We are looking forward to working with 10x Future Technologies to bring the company›s capabilities to Asia, given the vast local demand for innovative technologies that will transform the finance industry."

To help its transformation of financial services, Larsen in October hired his former Citigroup's Asia head of insurance investment banking Donald Lacey as Voyager's chief operating officer.

Before joining Ping An, Larsen spent 18 years at Citigroup where he was most recently the Hong Kong-based, global head of the firm's retail banking and mortgages businesses, that had about $12bn in revenues and spanning 19 countries.

He has been at the leading edge of the financial services industry for the last 29 years across the Asia Pacific region and globally.

Prior to Citi, Larsen was a principal in the financial services practice of global management consulting firm Booz Allen & Hamilton where he spent eight years advising large banks and other financial institutions across Asia, Australia and New Zealand and in the US and Europe.

He is a Distinguished Fellow of the Institute of Banking and Finance, Singapore, and was named Retail Banker of the Year in 2011 by Asian Banker magazine, after gaining a Bachelor of Arts (Hons) from University of Melbourne.

Jon Lauckner GM VENTURES

As car maker General Motors' chief technology officer, vice-president of research and development and president of GM Ventures, it is Jon Lauckner's mission to drive the development of innovative automotive technologies, help bring them to market and try to ensure the next generation of GM cars, crossovers and trucks are the safest and the most efficient user-friendly cost-effective and technologically advanced vehicles in the industry.

"The overall intent of GM Ventures is to create a competitive advantage for the company," he said for last year's GCV Powerlist awards profile. "The automotive industry is facing an unprecedented period of disruption, much of it in non-traditional technical areas. So there are two choices, avoid the consequences or become an active participant and drive it."

GM Ventures said it had remained committed to the key elements of its operating model. First, make profitable equity investments in startups that are developing advanced automotive-related technology. Second, focus on five key technology areas, including advanced propulsion, connected vehicles, advanced materials, sensors, processors, memory and advanced manufacturing. Third, negotiate commercial agreements to get first-to-market advantage.

Since its launch in mid-2010, GM Ventures has evaluated more than 1,900 companies, invested in nearly 100 deals (97 as at the end of 2017 and two more this year), and has had at least a dozen positive exits, half of which came last year, such as the sale of Flinc to Daimler and a handful of other liquidations in especially in cleantech, such Bright and Coskata.

Excluding US-based ride hailing platform Lyft's $600m series G round featuring e-commerce firm Rakuten that valued it at $7.5bn, after GM had led the series F at the start of last year with a $500m investment, GM Ventures has invested more than $250m in its ventures portfolio since 2010.

In February, GM Ventures had led a funding round for US-based nanostructured steel materials producer NanoSteel that was sized at $15m, according to a securities filing seen at the time.

GM is not only a corporate venturer but also a customer that can offer a technology support platform for startups.

"We are a little different from other CVCs because we combine venture investing with the intent to be the first automotive customer of our portfolio companies by using GM resources to support them," Lauckner said last year. "If we decide to invest in a startup, it is an indication there is a significant probability that we will use the company's technology."

For example, GM Ventures invested in Tula Technology, a startup with a variable cylinder deactivation software technology that can improve fuel efficiency on select GM vehicles by as much as 15% without degrading power capability. This joint effort combines software expertise from Silicon Valley with propulsion system expertise from General Motors.

GM chairman and CEO Mary Barra said: "The strategic investments GM Ventures is making in breakthrough technologies is helping us build the most valued automotive company."

GM Ventures' simple measure of success is whether technologies in which it invests today are used in GM's vehicles of tomorrow, driving greater sales and better business results. "I am impressed by the depth and breadth of technology being developed by startups and the impact it can have on vehicles of the future and personal mobility," said Lauckner. For this year's GCV Outlook survey, Lauckner said the tech to watch out for included autonomous technology, augmented reality, 3D printing, artificial intelligence AI and fintech.

GM acquired a bank in 2010 as it emerged from bankruptcy to provided vehicle finance but Lauckner this month said it preferred to partner fintechs for consumer or retail finance around mobility services, such as ride-hailing, because of the relatively greater volume and risks.

He began his career with General Motors in 1979, working in several assignments in powertrain and vehicle engineering. Later, he worked in the marketing and product planning staff. From 1992 to 2005, he pursued various product development assignments in South America and Europe, and he returned to the US from Europe in mid-2005 to a new position as vice-president of global program management. In 2009 he was named vice-president of global product planning.

The following year, Lauckner become responsible for forming GM's venture capital subsidiary and was named president of GM Ventures. In addition to this role, he was named GM vice-president and chief technology officer in 2012 and also has responsibility for leading GM's global R&D organisation.

The past year has also seen Lauckner handle succession in his team. Wade Sheffer has recently joined GM Ventures as managing director following the departure of Sherwin Prior to set up a venture capital firm, Blue Victor Capital.

Prior to joining GM Ventures, Sheffer was executive director of chassis purchasing at US-based car maker General Motors.

Lauckner said: "Sherwin's successor as managing director is an extremely capable senior executive that works in GM, although he doesn't have venture experience. But, neither did any of us including Sherwin when we started. So, we expect to make a relatively seamless transition, although we will miss Sherwin."

Lauckner received a BSc in mechanical engineering from University of Michigan in 1979. He earned a master's in management from Stanford Business School in 1990 through the Sloan fellowship program, and attended the GM-Harvard senior executive program in 2001.

Benoît Legrand ING VENTURES

Netherlands-based financial services firm ING last year launched a €300m ($348m) strategic investment fund called ING Ventures that will make investments into companies that are shaping financial services.

It will form part of ING's Chief Innovation Office and will be headed by Benoît Legrand, who stepped up to the role this year after initially being CEO of ING Ventures and global head of fintech. The establishment of the fund follows some 150 partnerships ING has made with fintech companies.

ING Ventures is focussed on seed and early-stage fintech companies as well as later-stage investments in companies that already have significant traction in the market, in countries where ING is operational, or where it plans to enter.

At launch Legrand, who had previously been CEO then president of ING France, said: "As we see changes in the external environment happen faster and faster, we have to anticipate and step up our pace as well.

"Establishing this fund is yet another way for ING to use the digital revolution as a growth opportunity and help transform the bank to become the go-to platform for financial needs and become part of other platforms."

ING is fully funding ING Ventures, which is intended to commit the capital over the next four years. It already had 15 portfolio companies, ING having begun by participating in the $135m round closed by peer-to-peer lender Kabbage in late 2015, and now has a portfolio of over 20.

The firm has since contributed to a series of deals, including the $160m round completed by another lending marketplace, WeLab, in January 2016, and a $107m round for distributed ledger technology developer R3.

ING Ventures recently hired a managing director, Frederic Hofmann, as well as two associates bringing the team to seven.

Legrand's own entrepreneurial experience came during the dot.com bubble before the millennium when he founded office supplies distributor Well.com but joined ING after 2000 as head of projects and partnerships and working his way up the bank over the next near-two decades.

Jacqueline LeSage Krause MUNICH RE/HSB VENTURES

As managing director of Munich Re/HSB Ventures, Jacqueline LeSage Krause has since late 2014 accelerated a typical corporate venturing launch process by dint of her experience.

She was previously vice-president of innovation and corporate venture capital at US-based insurer Hartford Financial Services Group but left in 2012 after four years as the company embarked on a restructuring plan to sell a number of businesses and focus on the core.

She had been responsible for both internal innovation, incubating new offerings, customer experiences and business models through the Innovation Studio, and external innovation, investing venture capital in startups and forming strategic alliances through Hartford Ventures. LeSage Krause founded Hartford Ventures after being founder and CEO of a digital video startup and spending six years as a consultant with AT Kearney.

Now at Munich Re/HSB Ventures, based in San Francisco, LeSage Krause has applied her insights to help the firm and industry. At the Global Corporate Venturing and Innovation Summit in January said: "As the industry is becoming more professionalised, there is increased interest in sharing knowledge on particular issues and establishing common practices."

Giving an update on the newly-formed GCV Leadership Society accounting and operations taskforce she added: "What we realised is, whether you are a new CVC or have been in the industry for a long time, we are all coming across the same issues. Rather than tackling them on our own and as if it was the first time these were faced, we thought it made sense to get this small taskforce together and establish common approaches to address them."

But her main focus is internally connecting Munich Re with startups. In 2017 alone, the venture unit, which works across all lines of business in insurance and reinsurance including life, non-life, specialties and health, completed at least six new investments, including four as lead investor. These were Slice Labs, Augury, WePredict, Next Insurance, Trov and Boughtbymany.

By the time of the symposium, LeSage Krause said she expected to have 11 companies in its portfolio, mostly in IoT and insurtech, with investments ranging from $500,000 to $15m, spanning all stages, and spread across North America and Europe.

This range of activity and experience has help LeSage Krause attract stars to join her team, including Matt McElhattan and Sophie Dingreville. For her GCV Rising Stars 2018 award, Dingreville said two things attracted her to Munich Re – the seniority of the team, including LeSage Krause, who has more than 15 years' experience in CVC and is co-chairman of the GCV Symposium 2018, and the unit's approach to venture, which implies establishing a commercial partnership with the startup first and investing subsequently, rather than the opposite.

LeSage Krause said two deals exemplified its model. First, its investment in Relayr and coordination with its internal internet-of-things (IoT) strategy.

LeSage Krause said: "HSB drives the commercial and industrial IoT strategy for Munich Re. Our team is highly involved in the development of the strategy and building of the business via transactional innovation, including investments, partnerships and M&A. Last autumn, Munich Re/HSB Ventures led the series B round for Relayr, our fourth IoT portfolio company.

"Along with the investment, we crafted a significant partnership with Relayr for bringing a new-to-the-world type of insurance to the market, creating a unique selling proposition for Relayr and opening up a new market for HSB and Munich Re."

Her second example was in insurtech. "In spring 2016, Munich Re formed the Munich Re Digital Partners business specifically to partner insurtech companies to give them the insurance parts and pieces they need to launch a product, which vary by state and country.

After starting with HSB as its sole internal business partner and then expanding to include the rest of the reinsurance group, including the newly formed Munich Re Digital Partners, LeSage Krause said her ventures team was now expanding into Ergo, the other business group of Munich Re.

However, before its expansion to include Ergo, LeSage Krause said: "Munich Re/HSB Ventures exists to help create the future for Munich Re and HSB, while at the same time enabling the future for our portfolio companies and funding R&D for our industry.

"Over the past year, we have deepened and expanded our internal business relationships, as well as taken a more active role in leading deals. This combination has amplified the strategic value to both our portfolio companies and Munich Re businesses."

Ben Letalik TD VENTURES

With every equity investment TD Ventures, the corporate venturing unit of the Canada-based TD Bank, does it also develops a commercial partnership, according to Ben Letalik, associate vice-president and head of TD Ventures.

As a result, TD Ventures has generally flown under the radar for its eight deals as it avoids co-investing "because our investments follow the line of business planning process rather than the startup's funding cycle".

Letalik organised TD's first ever summit on artificial intelligence (AI) for more than 120 TD senior executives, which culminated in TD Ventures leading the diligence for the $100m acquisition of Layer 6 AI, which was the first time the bank has acquired an AI startup.

For the year ahead, he said TD Ventures was currently evaluating multiple deals and being consulted for many "special projects".

Letalik joined the bank in October 2015 after corporate planning and strategy at Canada-based phone operator Rogers. Earlier he had spent nearly a year as CEO of startup Fun in Progress after the near-obligatory three years as consultant at Bain.

Qing (Jean) Liu DIDI CHUXING

Didi Chuxing, a China-based ride-hailing application, last year raised more than $9bn from a consortium including SoftBank, Tencent, Alibaba and Apple.

They were the largest rounds of funding yet for a technology company, and could reportedly value the company at $50bn. This valuation would make Didi Chuxing the second-most valuable startup in the world behind US-based peer Uber but one it is swiftly looking to surpass after reportedly being in talks to issue an initial public offering which will bring the company up to a value of $70-80bn, according to news provider Wall Street Journal.

Qing (Jean) Liu, president of Didi Chuxing, has been behind much of Didi's rise and was reportedly behind US-listed technology firm Apple's decision to invest $1bn in Uber. She joined Didi in July 2014 as chief operating officer when the company was two years old and was instrumental in last year's $7bn takeover of Uber's Chinese operation in return for the US company taking a 20% stake in the merged business. Didi also invested $1bn in Uber.

Earlier, in 2015, she led the strategic merger of Didi Dache and its main competitor Kuaidi Dache to form Didi Chuxing. Now, she has been preparing its shift towards autonomous driving and artificial intelligence and machine learning, plus international expansion with corporate venturing an important tool.

With Stephen Zhu, vice-president of strategy at Didi Chuxing and ranked first for the GCV Rising Stars 2018 awards, they have had an impressive few years.

Didi Chuxing was formed out of the merger in 2015 of two Chinese ride-hailing platforms – Tencent-backed Didi Dache, and Kuadi Dache, which had received early-stage funding from Alibaba. Didi is now the world's largest online transportation platform with more than 450 million users and 21 million drivers and has a traffic management system to reduce congestion through machine learning.

With Zhu on board and after its merger, Didi set out a clear strategy in 2015 in an interview with Tech In Asia: "From the lowest price point – the bus – to Hitch, to Didi Express, to taxis, to Didi Black and our then upcoming luxury brand, all of these product lines can already solve 70% of consumer transportation within cities.

"So a lot of the focus now is vertically. How can we make the service cheaper, more efficient, faster, and better?"

Didi's meteoric rise has been fuelled by nearly $20bn of funding since it was founded, including $9.5bn across two rounds last year, led by Japan's SoftBank.

Alongside SoftBank, Didi's backers include Chinese tech giants Alibaba, Baidu and Tencent, as well as corporations Apple and Foxconn and state investor Mubadala. The company said the latest round of funding would be used to invest in artificial intelligence technology as well as expansion into new territories.

To develop its international strategy, Zhu used corporate venturing. In his Tech in Asia interview in November 2015 he said: "In each region, you have different users, different drivers, a different regulatory regime. So, we go with a local champion that knows the market much better."

Didi had invested in Uber's main US peer, Lyft, through a series of corporate venturing rounds from 2015, and also, often alongside Tencent or SoftBank or both, has investments in Taxify which operates in Europe and Africa, Careem in the Middle East, Ola in India, Grab in southeast Asia and Brazil's 99 before turning it into a majority stake at an about $1bn valuation.

Didi's investments in these companies involve sharing technological and logistical data between the companies rather than private user data.

Zhu told Tech In Asia: "We work together and we can share experiences in terms of technology, deep learning, product innovation, and operations. We can speed each other up.

"We are thinking about sharing a lot of the learnings we have in China to other markets like southeast Asia and India.

"When you think of the dynamics of the cities, it is quite similar – you have high population density, and you have various price points.

"The bus service we have could potentially work out in southeast Asia or India as well. We think collaboration works perfectly."

But with market share in China and billions in the bank allowing it to develop its service and pricing strategy, Didi has indicated its move into the next stage of its strategy – direct operations in overseas countries, after its acquisition of 99, and said it would set up operations in Mexico this year in competition to Uber in the region.

Didi has also continued to use corporate venturing to expand after investing in China-based bike-sharing service Ofo, while its most recent corporate venturing deal was in Renrenche, a China-based peer-to-peer second-hand car trading platform's, $200m round in September.

Didi is also setting up vehicle management companies and partnering automakers to design and build cars for ridesharing purposes, according to Zhu in an interview with Abu Dhabi-based newspaper National in November last year.

Through its operations in China and its investment portfolio, Didi reaches 60% of the global population in 1,000 cities across the world, the National reported. Zhu's strategy is talking it towards 100% and once you can move all the people around you can start on moving all the things around, too.

The crossholdings between Didi and Uber could prove influential if it leads to consolidation as the two also share external shareholders. Last month, SoftBank completed its acquisition of up to 20% of Uber at about $48bn in value, down from $68bn in its previous round and less than Didi in its latest round, which could encourage consolidation around one global champion.

This is a far cry from when, in May 2013, Tencent invested $15m for a 20% stake in Beijing-based Didi Taxi's series B round, at an estimated $60m valuation. Back then, the Didi Taxi mobile phone app had just entered the Shanghai market with 5,000 new orders from the city every day.

Liu's Beijing office is in Zhongguancun, China's answer to California's Silicon Valley. In a profile for news provider Financial Times, Liu, who is still under 40, "has spent her life bouncing from elite institution to elite institution in a dizzying spiral of success".

Liu was born in 1978 into what the Financial Times referred to as "Chinese tech royalty", as the daughter of Liu Chuanzhi, who founded Lenovo, the computer maker that bought IBM's personal computer (PC) business in 2005 and subsequently became the largest PC maker in the world. She told Financial Times: "My father said one thing that has stayed with me: 'It is supposed to be hard.' When you have that mentality, you find nothing is so difficult. Then you actually start to enjoy it and have fun."

Graduating from Peking University with a degree in computer science, she went on to do a master's at Harvard, followed by 12 years at Goldman Sachs, mostly in Hong Kong, where she worked with Martin Lau and James Mitchell, senior executives at another of Didi's investors, Tencent.

But while gender discrimination remains generally common in China, Liu told Financial Times she had never experienced discrimination while at Goldman Sachs nor at Didi and "my feeling is that there are more women in China in tech than in other industries".

A study by the Cyberspace Administration of China quoted by Financial Times estimated women started 55% of internet companies in the country, compared with 22% of startups in the US, according to research by Vivek Wadhwa and Farai Chideya, authors of Innovating Women.

Liu added: "In the internet era, the key to a successful business is understanding the customers' expectations – and half the customers are women."

And she told Financial Times her own observations had helped. Cheng Wei might have recruited her by taking her and other senior executives on a road trip to Tibet but navigating Chinese streets with small children she had found the state-regulated taxi services maddening.

She said: "When I first moved back to China from Hong Kong, I often found myself stuck with my kids trying to hail a taxi. At that time, in 2012, obviously, there were no choices for people like us."

While there might be further headwinds and hard work ahead with government regulations potentially affecting Didi's army of drivers, now there are choices.

Emma Lloyd SKY

Sky, an entertainment and communications business in 22 million homes across the UK, Ireland, Germany, Austria and Italy, was under competing offers at around an enterprise value of £22bn ($28bn) from shareholder 21st Century Fox and rivals such as Disney and Comcast in the spring, but this has yet to stop Emma Lloyd, director of business development, strategic partnerships and investments, or her team.

The latest offers are more than 50% up on the £7 offer made in 2010 by Fox's predecessor, News Corp, and reflected the growth of the company and ability to tap into future opportunities, including through venturing.

Sky's Startup Investments & Partnerships unit started officially in 2013 after Sky made a few opportunistic investments. Lloyd then called in Marek Rubasinski as director of Sky Ventures in mid-2015. Rubasinski, director of UK-based media company Sky's startup investments and partnerships team, has just left the company to pursue new opportunities at Polystream with James McClurg now as lead for its corporate venturing team and Mike Martin, senior investment manager at Sky Ventures.

Its early success over the past three to four years include at least five exits to date, including 1Mainstream, acquired in October 2015 by Cisco, and Elemental, acquired the same month for $269m by Amazon. Another successful deal was its investment in virtual reality (VR) startup Jaunt in 2013, which led Sky to set up its own VR studio, launch a VR app and strike a commercial deal with the startup. But its biggest financial win has been the flotation of Roku, which went public with a market cap of $1.33bn. On the first day of trading, share price went up by 70%, and within a few days, the group had managed to nearly double in value, hitting a $2.5bn market cap. According to an internal source, the IPO effectively returned all the money Sky Ventures had invested in all its portfolio companies and in running the operation even though it had only a relatively small share of Roku.

Other investments closed by Sky during the year 2017 included Circle Media Labs ($2m), Fubo TV ($55m led by Northzone and Scripps Network Interactive), Molotov TV and Drone Racing League (DRL).

Sky has investments in 19 startups in the US and Europe and in two boutique funds. Before her current role started in 2013, Lloyd had been director of emerging products and business development director since 2008, after joining from phone operator BT.

Melissa Ma BAIDU

Melissa Ma, the wife of China-based search engine provider Baidu founder Robin Li, is now head of corporate venturing at the firm having rejoined the firm about a year ago to help act as a self-proclaimed “big sister” to its development and improve the odds of its bet on artificial intelligence (AI).

This came just after Baidu towards the end of 2016 hired Qi Lu as chief operating officer who focused efforts on its core search engine’s mobile strategy and developing its AI strategy as effectively an engine inside everything, including through corporate venturing. Baidu has since her return shaken up its teams with the departure of Peter Fang, GCV Powerlist winner last year, and has set up a host of corporate venturing initiatives at the earlier and later stage, including Baidu Capital, Baidu Ventures and, most recently, a $500m growth-stage fund called Changcheng Investment Partners to back internet and AI technology developers.

These funds marry a mix of financial and strategic returns and insidiers said had a handful of external limited partners in each to leverage resources.

For Changcheng, Li Xinzhe, Baidu’s former chief financial officer, will run the fund as chief executive, while Jennifer Li and Jenny Wu run Baidu Capital and Baidu Ventures, respectively.

Although it has not invested as frequently as Tencent or as extravagantly as Alibaba, its other chief rival in China’s internet space, Baidu has been an increasingly frequent participant in venture capital, particularly in the AI and autonomous driving sectors.

Formed with $200m, Baidu Ventures funds AI technology developers at seed to series B stage, while Baidu Capital, which concentrates on growth and late-stage deals, has more than $3bn of capital from which to invest.

Baidu’s most notable investments include Nio, the smart electric vehicle developer valued at $5bn as of November 2017, and on-demand ride service Uber China, for which it led a $1.2bn round in 2015 prior to its $7bn acquisition by Didi Chuxing.

Manuel Silva Martinez SANTANDER INNOVENTURES

Manuel Silva Martinez has been partner and head of investments at Santander InnoVentures since mid-2016.

Santander InnoVentures (SIV) is Spain-based Banco Santander's $200m corporate venturing unit backing fintech startups globally, across all stages, to "create meaningful, strategic relationships between our portfolio companies and Santander Group".

Martinez manages the entire investment team and sits on the boards of Elliptic, Tradeshift, Pixoneye, ePesos, Autofi and Creditas, and is part of Payjoy's advisers committee.

He had been a partner for the year before becoming head of investments and portfolio companies included iZettle, MyCheck, CYNGN, Ripple, Kabbage, Digital Asset Holdings, Elliptic, SigFig, Socure, Tradeshift, PayKey, Gridspace, Pixoneye, Curve, Payjoy, ePesos, Visible Alpha, Roostify, Autofi and Creditas.

Santander added $6.7m in 2013 to Sweden-based, corporate-backed mobile payment technology provider iZettle, which this month said it would raise up to Skr2bn ($226m) in an initial public offering on the Nasdaq Stockholm market in Sweden.

Founded in 2010, iZettle provides both mini card readers and payment software that enables merchants to accept chip, swipe or contactless payments, including through platforms such as Apple Pay, Samsung Pay and Android Pay.

Of its recent deals last year, online lender Kabbage raised $250m from SoftBank, while Santander invested in ePesos and Socure and Curve.

Santander InnoVentures focuses on portfolio companies with which it can seal a commercial partnership, and the model's success was behind the fund size being doubled earlier this year, Mariano Belinky, now CEO of Santander Asset Management told Global Corporate Venturing.

Financial services firm Santander formed InnoVentures almost two years ago, putting $100m into the fund, since when it has invested in fintech companies including alternative lender Kabbage and financial settlement platform Ripple, as well as those like mobile operating system developer Cyanogen, which are working on adjacent technologies.

Santander doubled InnoVentures' capital to $200m in July this year, and Belinky said the strategy of the unit, which he described as "a strategic investor that does not like losing money," involves looking at potential partners that can create value for Santander's customers.

"We focus on companies we can partner with, where we can have a commercial agreement," Belinky said. "I think through the investments we have made since the fund's inception in December 2014, the model has worked well for the bank.

"We have a couple of good early cases where the partnerships are working well, and it is a model the bank seems to like, and so the doubling up of the fund has to do with the bank seeing this as a valuable model to capture some of the innovation and disruption happening in the fintech space."

Earlier Martinez had been vice-president at peer, BBVA Ventures (spun out to form

Propel) for four years until June 2015 where he also oversaw deal flow in Latin America (in particular Mexico and Colombia) and Europe.

Some of his deals at BBVA included fund commitments to 500 Startups and Ribbit Capital, and direct investments into SaveUp, Radius, SumUp, FreeMonee, Kasisto, Simple, Taulia, Personal Capital, DocuSign, Prosper, and Insikt.

From 2006 he been first associate, then senior associate and finally vice-president in the strategy and corporate development group at BBVA where he initiated the department's innovation practice.

2016

Dominique Mégret SWISSCOM VENTURES

Dominique Mégret started Swisscom Ventures in 2005 and has been pivotal in the creation of a global network of information and communication technology corporate venturers. This network is likely to be an important part of his plans to raise an external fund co-investing alongside its Swisscom Ventures III fund.

He joined Swisscom, a Switzerland-based telecoms group, in 2002 as head of the group strategy department and led the creation of the corporate venturing unit.

Swisscom Ventures has gone through a number of iterations over its first decade to develop into an evergreen model – where returns from deals are reinvested in new portfolio companies – with an early-stage fund. It has been a successful path with a highlight being the flotation on the Nasdaq stock exchange of Quantenna, a high-speed wifi chip maker.

For last year's Powerlist award, Mégret said Quantenna's $107m initial public offering in October 2016 was a "happy end of a CVC process with both strategic and financial value creation". He added: "Swisscom was Quantenna's first customer, then helped to bring other telecoms customers and investors in to scale up to IPO."

And Megrét has been quick to support his colleagues, nominating Paer Lange, who had been on the board of Quantenna, to GCV Rising Stars 2018 awards, Megrét said: "He had a series of positive exits recently with Lemoptix, sold to Intel [in 2015], Simplivity, sold to HP [at the start of 2017 for $650m], Vilant Systems, sold to Turck [in October], Beqom, secondary sale to Goldman Sachs [as part of a $35m round in July] and is currently in the M&A process for another trade sale."

Other sales of companies where Lange had had a board role include mobile recording company Cognia, which was sold in August to Smarshsaid: "He had a series of positive exits recently with Lemoptix, sold to Intel [in 2015], Simplivity, sold to HP [at the start of 2017 for $650m], Vilant Systems, sold to Turck [in October], Beqom, secondary sale to Goldman Sachs [as part of a $35m round in July] and is currently in the M&A process for another trade sale."

Finding the right mix of financial and strategic returns will be important with its co-investment fund alongside the third fund. In an interview with GCV, Mégret said: "This act of balancing is more an art than a science. This is why we have diversified our investment into more than 40 different companies over the past 10 years, to find out which space we feel most comfortable with, both from a strategic and financial perspective, and to reduce risk.

"We are the corporate venturing unit of Swisscom group, which is a telecoms and IT company based in Switzerland, so strategic impact is what we ultimately aim to achieve, on top of good financial results.

"We invest in core telecoms and IT services, in technology that will emerge in that space and transform our business within the next three years. We also invest in technologies that manage customers and improve customer experience. Then we try to discover new areas of growth which will emerge within the next three to five years for Swisscom.

"That is why we have been taking some bets in areas which seem, at this point, remote but are getting closer to the core business of Swisscom, such as e-health, the internet of things, artificial intelligence, wearables and even fintech.

"So, overall about half our investments are important new technologies bringing efficiencies to our industry, while the other half consists of technologies that will or may become important to us, thus giving us differentiation in the broad customer management and experience field."

Previously, Mégret was an entrepreneur in the UK, strategy consultant in the European telecoms industry and country manager for an IT company in Germany. He co-founded venture firm Kick-Start Ventures and has an MBA from Insead.

Bernhard Mohr EVONIK

Christian Kullmann, CEO at Germany-based chemicals company Evonik Industries, in nominating Bernhard Mohr for the GCV Powerlist said: "Venture capital has established itself as a key pillar of Evonik's innovation and growth strategy.

"Partnering with innovative startup companies and funds creates excellent opportunities for accelerating the development of new businesses and opening up future growth fields.

"Venture capital contributes to realise our vision to build the best in class specialty chemicals company. Additionally, the entrepreneurialism and the pioneering spirit that prevails in young technology firms stimulates our own innovation culture.

" Since inception in 2012, Bernhard Mohr and his team have gained a strong reputation throughout Evonik helping the group to understand and materialise the strong value of corporate venturing."

Mohr joined Evonik in 2012 to set up its corporate venturing activities, and became managing director of Evonik Venture Capital in 2013.

He has more than 20 years of professional experience in the chemicals and venture capital industry, having joined Evonik Industries after five and a half years working at Germany-based chemicals company peer BASF's corporate venturing unit.

Before moving to BASF Venture Capital, Mohr held multiple roles at BASF. Between 1985 and 1996 he studied chemistry in Germany and the US and had postgraduate assignments in Japan, the US and France, working with Nobel laureates Robert Grubbs and Jean-Pierre Sauvage, including Airborne Oil & Gas, Algal Scientific, Biosynthetic Technologies, FRX Polymers, JeNaCell, Nanocomp, Synoste, Vivasure and Wiivv.

Mohr said: "Evonik Venture Capital has a portfolio of about 25 investments, direct and indirect, since inception in 2012 with seven new and about the same number of follow-on investments concluded in 2017.

"The investment activities are global and include fund allocations in China as well as the first direct investment in Israel, [Velox, a digital printing technology developer,] in 2017. Investments are guided by strategic goals and financial return. The investments are oriented towards the company's growth engines and to support Evonik's digital transformation.

"In 2017 Evonik Venture Capital expanded its activities into the digital space with the investment in Digital-plus Partners. The growth equity investor with a fund size of €300m is focused on B2B [business-to-business] technology companies offering digital solutions and business models.

"In 2017, Evonik Venture Capital strengthened its global footprint by opening an office in Shanghai, China [and hiring Er Ning Cao as investment director]. We now operate four offices in Germany, the US and China. The team consists of 10 seasoned investment professionals including Lutz Stoeber, a 2017 and 2018 GCV Rising Star who is responsible for Evonik Venture Capital's operations in North America.

Syndication with other well-known and successful investors is paramount for Evonik Venture Capital, current co-investors include a large number of reputable corporate (BP, Shell, Monsanto, BASF, Sime Darby, Sumitomo, Chevron, Saudi Aramco, Subsea7) and financial (Capricorn, Israel Cleantech, Citic, PMV, Formation 8, Eclipse, Finnvera, High-Tech Gruenderfonds) investors.

Most recently, Evonik Venture Capital led a $12m round for Nanotech Industrial Solutions (NIS), a US-based lubricant additives supplier, and expanded its activities to China with two initial fund investments, including a strategic commitment to the China-based, agriculture and nutrition-focused Hosen Capital Fund III. Its other In addition, limited partnerships include Pangaea Ventures, Emerald Technology Ventures and GRC SinoGreen Fund.

Asked about his ambitions last year, Mohr cited maintaining Evonik's position as one of the most active CVC investors in the chemicals and materials space, expanding Evonik's investment activities into the digital space, and increasing the company's venture capital footprint in Asia.

Girish Nadkarni TOTAL ENERGY VENTURES

Patrick Pouyanne, chairman & CEO at France-based oil major Total, said: "The world of energy and mobility is going through many exciting and disruptive changes driven by emerging technologies as well as new and innovative business models. In these times of large and constant change, it is critical to have an active and engaged corporate venture group to track potential disruptions and participate in emerging opportunities.

"We are delighted that last year we were able to attract Girish Nadkarni to head Total Energy Ventures and are proud that he has been nominated to be on the GCV Powerlist for the fifth year."

Nadkarni had been president of ABB Technology Ventures from 2009 until October 2016, before taking the president position at Total Energy Ventures in 2017.

Nadkarni said he would move to Paris, France, to join Total Energy Ventures (TEV) while Francois Badoual, former chief executive of TEV in France, had moved to San Francisco to be president of Total New Energies Ventures USA.

For the GCV outlook survey this year, he said was watching smart grid and machine learning startups. This is part of a corporate venturing's unit role to "man the crow's nest and flag new sightings," Nadkarni said, and so help management determine appropriate response.

But part of this advice is providing a dose of realism that most corporate venture groups do not have proprietary access to good early-stage deals or have the skills to guide them. And, given "there are few unicorns [companies worth at least $1bn] in our sectors," Nadkarni recommended a new investment strategy focusing on avoiding loss, "not finding the next Google".

In part this has been the recognition of experience in cleantech over the past decade when a wave of hype led VC firms to invest and suffer a host of failures, such as Solyndra or GreenVolts.

As a result, Nadkarni has put a focus on reducing loss ratio by investing in derisked growth-stage deals – those with at least $5m in annual revenues, 30% annual growth rates and paying customers.

To access innovation, emerging technologies and markets, TEV will also over the next five years invest $10,000 to $500,000 in 20 to 30 seed stage companies which have "high disruptive potential" and cut underperformers quickly and so avoid "endless" funding cycles.

Finally, TEV will also commit to VC funds, such as Cathay China Smart Energy Fund and Energy Access Fund, for new tech and markets and if it can have active engagement among other factors.

Prior to setting up ABB Technology Ventures, Nadkarni was senior vice-president of ABB's robotics division. He also worked as an entrepreneur-in-residence at venture capital firm View Group, and was the founder and CEO of the startup VSimplify. .

Nadkarni's past roles included work at industrial conglomerate GE, financial group Prudential and law firm Shearman & Sterling. He has an MBA from Harvard Business School and studied law, economics and statistics at University of Mumbai.

Janis Naeve AMGEN

Janis Naeve, managing director of Amgen Ventures, has headed the corporate venturing unit since 2005, a year after it was formed under the leadership of Jay Hagan with $100m.

Parent company Amgen said it had always appreciated the importance of funding early-stage innovation as it was founded in 1980 by venture capitalists and scientists.

Naeve says on the website: "At Amgen Ventures, we unlock value by making investments that match promising early innovations with more than 30 years of biotechnology experience."

Her own experience does not reach back quite so far. Following her PhD and post-doctoral fellowship in neurobiology in California, she worked on business development at Aurora Biosciences and X-Ceptor Therapeutics from 1997 to 2004 before joining Amgen in March 2005.

For more than a decade, Amgen Ventures has invested in more than 30 emerging biotechnology companies to advance promising medicines and technologies.

For the Global Corporate Venturing annual review, Janis Naeve, managing director at Amgen Ventures, said its focus was on next-generation technologies to improve immuno-oncology and cell-based therapies. Its deals so far this year have included US-based digital medication developer Akili Interactive Labs's $55m series C round, Aetion, the US-based creator of an analytics platform for drug developers', $36.4m B round, and US-based synthetic biology technology startup Senti Biosciences' $53m A round.

This continued the activity levels of the last few months of 2017 when Amgen backed Obsidian Therapeutics, which raised $49.5m with Nunez joining the board as an observer, Syapse's $30m D round, Fortuna Fix's $25m B round, Immatics' $58m E round and Kymera's $30m A round.

Probably its biggest deal was Wuxi NextCode, which achieved a final close of its Amgen Ventures-backed series B round at $240m with additional commitments from investors including Temasek.

Carole Nuechterlein ROCHE VENTURE FUND

Carole Nuechterlein has headed the Roche Venture Fund since 2001, but even after a significant time at the top of the Switzerland-based drugs company's corporate venturing unit, she has said her challenges remain "exits and finding the diamonds in the rough".

That challenge became a little easier this year after Roche agreed to acquire cancer research technology provider and portfolio company Flatiron Health, paying $1.9bn for the remainder of the company's shares.

Roche already owned a 12.6% stake in Flatiron, meaning the acquisition will value the company at approximately $2.15bn.

Founded in 2012, Flatiron has developed electronic health record software configured for oncology research, as well as technology that can manage and develop cancer research data. It works with over 265 community cancer clinics and it offers access to more than 2 million active patient records to its users.

Nuechterlein manages Roche's Sfr500m ($530m) evergreen venture fund, which means it can reinvest in new deals the proceeds from exited portfolio companies, and so the sale of Flatiron could potentially boost its investment activity.

Roche's recent deals since then have included co-leading Macrolide Pharmaceuticals, a US-based antibiotics developer spun out from Harvard University's, $20m series B round and Denmark-based neuromuscular disorder drug developer NMD Pharma's €38m ($47m) A round and backing US-based immuno-oncology therapy developer Ideaya Biosciences' $94m B round.

Before venturing at Roche, Nuechterlein worked in the company as an attorney for 10 years. She joined Roche from SangStat in Fremont, California, where she was general counsel. She began her career working at law firm Skadden Arps Slate Meagher & Flom in its mergers and acquisitions group. From there, she worked at Syntex/Roche in Palo Alto, California, focusing on M&A, research collaborations and licensing deals.

Richard Osborn TELUS VENTURES

It might not seem an obvious leap for a Canada-listed telecoms company to hire a heathcare venture capitalist to run its corporate venturing unit but it is a move that has paid off handsomely so far.

In February 2016, Richard Osborn left his managing director role at healthcare investment fund RecapHealth Ventures for a similar role at Telus Ventures, effectively succeeding the unit's founder, Mathew George.

Osborn has been managing director of health and wellness-focused investment fund RecapHealth Ventures since it was founded in 2010, before which he was a partner at private equity firm Second City Capital Partners.

And this has been an area he has helped Telus Ventures push into. Telus Ventures invests in six primary areas – healthcare IT, internet of things, big data, fintech, digital security and identity. Osborn said: "While most of those areas might be considered fairly standard areas of interest for our peer group, our healthcare focus is unique. With a deep commitment to helping improve Canada's healthcare system and as the largest health technology vendor in Canada, the division of Telus known as Telus Health has, with the active support of Telus Ventures, acquired, developed and partnered to create a suite of complementary technologies serving healthcare professionals and patients across the country.

"I think we are close to a tipping point, where the increasing accessibility and portability of data in areas such as healthcare is very exciting and where I think an especially high number of interesting opportunities will present themselves in the next 12 to 36 months."

Earlier, Osborn co-founded venture capital fund Greenstone Venture Partners in 1998 and non-profit investment organisation Social Venture Partners in 2001.

As an experienced venture investor, he has two of the most powerful attributes required – experience in deal-making across a wide sweep of disruptive technologies and a strong network. This has helped deliver exits, such as this year's sale of US-based cybersecurity technology provider Zenedge to Oracle for an undisclosed size.

In an interview with GCV published in September, Osborn said: "It is no secret to the readers of GCV that the importance of corporate innovation is increasing and that corporate venture funds drive deeper and more productive engagement in the entrepreneurial ecosystem. Our investment thesis is that our organisation can perform better over the long run if we find, fund and support high-potential innovations. We need to do our job well to help our organisation defend core markets, pursue new ones and have capital-efficient ways of learning about game-changing technologies. Specifically Telus Ventures drives investments that span the spectrum from tactical opportunities, where the focus is to drive short-term product development or revenue targets, to those that provide less immediate financial return but contain longer-term compelling insight or market value to Telus.

"Our team supports investee companies through our internal innovation programs where we assemble sector-specific portfolios in conjunction with proven entrepreneurs, initiatives we call catalysts, co-investor syndicates made up of global telecoms partners, a talent Bench made up of Telus team members of all levels that work with our portfolio and numerous other approaches that are a departure from more traditional models. We do this to drive value to Telus obviously, but we also believe it helps the companies to be more successful.

We measure ourselves constantly in how this activity is translating directly to value for our portfolio. We do this by having close relationships with our investees as well as regular polling of our portfolio.

"The Telus Bench is a program we designed to give our investees the opportunity to work directly with, and exchange ideas and expertise with, thought leaders across our organisation. We have a team of Telus people who support portfolio companies as resources, sounding boards, advisers and, in some cases, board members with skillsets matched to the current needs of the company.

"Over the past year, we have accelerated efforts in this realm. In particular we have established a significant partner network designed to serve entrepreneurs and support them in bringing their vision to fruition. These include deep relationships with leading Canadian and US-based incubators and accelerators, financial and distribution partners, including a global consortium of other telecoms companies with CVC arms where we might jointly co-invest and sign distribution agreements covering multiple countries and regions.

Telus Ventures also assists entrepreneurs prior to a potential investment through internally developed programs such as FirstStep, a guided market exploration process where companies spend six to eight hours working with Telus innovation experts to develop holistic roadmaps to determine where technology and market developments are most likely to impact their company.

Innovation centres in our Telus offices in Vancouver, Toronto and Montreal have leading-edge living labs with the latest technology tools where we regularly host open houses for entrepreneurs and executives to take part in thought leadership discussions, hackathons and exploration sessions.

"Telus Ventures was founded 16 years ago and we have traditionally been very quiet about our activities and accomplishments. It must be that we are Canadian. In that time, we have made over 60 investments and had some great successes, both from a strategic impact to Telus corporate but also from an IRR [internal rate of return, a form of annual performance measurement] perspective as well. Not surprisingly, we have also learned some lessons.

"In some sense our role has not and will not change – namely to be on the front lines in Telus's interactions with the entrepreneurial ecosystem. What has changed since we brought in a new team a little over a year ago is how we are going about it. While in the past we were focused on more traditional corporate venture capital investments, we are now pushing the envelope in such areas as catalyst initiatives – which I mentioned – through our carrier-focused global syndication deals, in leading social impact investments in areas such as healthcare, through market force design workshops called First Step, as well as several other forms of activity that we believe are important. We are also taking a much harder look at ensuring we internally leverage the portfolio company's expertise and approach to problem-solving."

He has also moved to expand the ventures unit's connections inside and outside Telus through hosting its second ventures day in Toronto last month. More than 200 people attended the summit.

Telus appears ubiquitous as a phone operator, alongside peers Bell Canada and

Rogers, which has refocused its ventures activity back into Canada and effectively shuttered its Silicon Valley team under Paul Sestili, but, under Paul Lepage, Telus Health is a powerful provider of healthcare technology connecting doctors and healthcare practitioners to one another and to their patients.

Lepage is chairman of Telus Ventures and was instrumental in hiring Osborn.

From an impressive base, therefore, Osborn has quickly made his mark in a company that, almost uniquely among Canadian corporations, has taken venturing seriously.

For last year's GCV Powerlist, Darren Entwistle, president and CEO at Telus, said: "Telus Ventures has played a critical role in ensuring we embrace innovation opportunities that advance our country's digital economy and Telus's leading performance."

Ulrich Quay BMW

Ulrich Quay, managing partner of Germany-based car maker BMW's newly-independent BMW i Ventures corporate venturing unit, has had a busy few years.

Before setting up BMW i Ventures, Quay was senior legal counsel for mergers, acquisitions and joint ventures at BMW, having joined its law department in 2000 after being a top-decile student at University of Freiburg.

BMW i Ventures has invested in 28 companies since 2011, including 16 since 2016 when it raised a €500m ($550m) fund from BMW as sole limited partner on the understanding BMW i Ventures had full autonomy over investment decisions, according to Quay.

Its deals so far this year have included BMW i Ventures lead a $15m round for Sweden-based street-level mapping technology developer Mapillary, an $18m series B round for US-based light detection technology developer Blackmore Sensors and Analytics and US-based shuttle transport technology developer May Mobility's $11.5m seed round, while also joining the $50m series D round for Israel-based urban mobility app developer Moovit.

Last year's deals included Desktop Metal, which secured $45m in February 2017 from GV, Lowe's Ventures and BMW i Ventures at a $340m valuation.

The fund has also seen money flow back in with exits, including Embark acquired by Apple in 2013, Humin acquired by Tinder in 2016, and, both this year, Stratim (formerly known as Zirx) acquired by KAR Auction Services and Skurt acquired by Fair.

In addition, in January BMW acquired US-based parking space booking service and portfolio company Parkmobile for an undisclosed amount after I Ventures invested an undisclosed amount in 2014, the year after the company raised $6.3m from BCD Holdings, Bluefield Investments and Fontinalis Partners, the venture capital firm co-founded by motoring corporate Ford's executive chairman, Bill Ford.

Parkmobile's platform enables motorists to hire car parking bays through a mobile app which has more than 8 million registered users. It connects with a number displayed near the space and can collect payment using online mechanisms such as Visa Checkout or PayPal.

Like independent VC funds, this one, based in Luxembourg, has a performance pay scheme – called carried interest – for principals and partners. The team has grown from three in 2015 to 11 at the beginning of 2017, including the hire of Zach Barasz from Kleiner Perkins Caufield & Byers as partner, although Christian Noske, a GCV Rising Star 2017 winner, left to join multi-corporate backed fund Alliance Ventures.

The bigger fund came with a broader investment mandate, ranging from mobility to general automotive and transportation, Quay added with its deals crossing seven subsectors. However, the fund has retained its ability to support business unit partnerships and development with portfolio companies. Quay noted Ridecell software was running car sharing operations in US (ReachNow), BMW was building a high power charging network with Chargepoint in the US and sourcing parts for plant Spartanburg via Xometry's X platform, while Strivr was offering virtual reality (VR) training for plant workers.

Michael Redding ACCENTURE VENTURES

Relationships are everything in business. With more than 25 years at consulting firm Accenture working directly with global 2000 C-suite executives, Michael Redding, managing director at Accenture Ventures, is well positioned to bring enterprise-relevant startups directly into the boardrooms of the world's biggest companies.

Paul Daugherty, chief technology and innovation officer at Accenture, for last year's Powerlist award said: "Mike Redding is a driving force in Accenture's ventures strategy, leading our strategic minority investments in disruptive new companies that we believe will shape the future of key areas including blockchain and artificial intelligence."

Redding, who this year has been adding to his responsibilities, for 2017's award added: "Accenture's clients are forging ahead with digital transformation and that means embracing new technologies like artificial intelligence (AI) or operating models like crowdsourcing – and applying them now."

In an interview with GCV published in February, Redding said: "I joined at the tail of the mainframe era, and now we are dead in the middle of the digital era. The evolution of Accenture has really been from a classic consultancy into a services partner for our enterprise clients. We have gone from these point technologies to the digital ecosystems which are the storylines of today, so we have had to reimagine ourselves.

"The role we have at Accenture Ventures is to make sure that Accenture has a systematic approach to emerging and disruptive technologies. We announced our first blockchain investment two years ago, and now those first investments are starting to be deployed at scale. Everyone said: 'Oh, blockchain is going to be important.' Accenture invested in Digital Asset Holdings' blockchain platform, and the Australian Stock Exchange announced in December 2017 that they are going to replatform their exchange on to a digital asset-based architecture. Accenture is in the story because of Accenture Ventures working with our business to say: 'We believe blockchain is the future. Where can we put a stake in the ground?'

"As you look at the spectrum of corporate venture plays, we wholeheartedly embrace the end of the spectrum that is corporate strategic. I do not do a deal unless I have a sponsor, who has a Accenture services business case that rationalises why we should invest in an individual company. Of course, we want to do well on the capital return, but we do not even estimate a potential return on equity when we consider the investment. We entirely base it on: 'How does this drive the organic growth of our business?' If it is sufficient strategic growth, then we would consider the investment.

"I always like to say that we should be nervous about any startup that needs Accenture's money, as we are quite frankly nothing compared with the world-class VCs and corporate VCs that are out there. It is not about the cash, it is about the go-to-market. If you are a startup and your target customer base is the world's biggest companies, would you not want to partner the number-one services firm that serves those companies?

"Generally, we are going to invest in a B or C round company, so they have got product and early market traction, and they are ready to scale. They are in this conundrum – they have got engineering talent, and they have probably have a small client success or services arm. We come in and say: 'You still do what you do best, which is to engineer the heck out of your technology; and we will wrap the services, the delivery side, and the industry verticalisation around you, so that you do not have to.'

"One of our plays is with a vertical software-as-a-service play called NCino. They do commercial lending on top of Salesforce. NCino started in North America and cut their teeth on small and medium financial institutions like credit unions. We partnered them to break into their first tier-one bank. After that, we said: 'Wow, this is going to sweep the industry.' We invested. We have swept through quite a few of the North American tier-one banks, and now we are working with them on sweeping European banks. They had their regulatory frameworks down, they already had live customers, and they were ready to break into the big leagues. That is an example of meeting at the right time, making the right deal, and away we go.

"Whereas NCino is an industry application, when you go into a new technology sector – like quantum or blockchain – you are going to have to take on more risk. You have to go upstream a little bit, and go to an earlier stage, knowing that there is a higher probability that you may not partner with the right one, because the market has not spoken yet.

"We believe quantum is the future – the question is when. If I had a crystal ball and could tell you that August 2019 was the date that quantum goes big, I would bet everything I have, retire and go live in Monte Carlo and watch my cash roll in. Like with blockchain, we need to put a stake in the ground. By investing, we have skin in the game, and therefore we have an institutional commitment to the domain, and in particular to 1QBit in this case, such that, if they can be successful with us, we can be successful together. The market will tell us who the winners and losers are, but we believe these guys have the potential."

Redding's team, which includes GCV 2018 Rising Star Pramila Mullan, invests in about eight to 10 deals a year, with those this year including US-based augmented reality (AR) software developer Upskill's $17.2m round.

Its exits include Aptelligent to VMWare, Apigee to Google for $625m, Soasta by Akamai and Predixion Software by Greenwave Systems. The purchase of Applause by Vista Equity Partners saw Accenture Ventures roll over its stake to retain a minority investment.

As Redding said: "We are not a fund, so I do not need to exit. I would like my money back, and I would like it to have appreciated, but I am not like: 'Oh it is eight years in, I have got to get out.' I am never going to force an exit – it is not in our nature.

"For us, exits are a bit fraught, because we are concerned about what this does to our client's business continuity. They get acquired – what is the acquiring company going to do with that customer base? They IPO – great, do they stay solo or do they become an acquisition target for someone? We want our investments to be the next Workday, the next Microsoft and so on. We want them to have a 10, 20, 30-year lifecycle, because that is what most of our enterprise clients are going to use them for. There are systems created in the 1960s that are still alive."

Accenture also formed a strategic relationship with Partech Ventures, a leading venture capitalist firm headquartered in Paris with offices in Berlin and San Francisco, to drive innovation and support the startup ecosystem. Accenture Ventures last year hired Arnaud de Scorbiac to oversee its European investments and manage the Partech Ventures relationship

Finally, Redding, who previously spent five years as the global managing director in Accenture Labs, is working with several of Accenture's clients to help them establish their own innovation capabilities, including corporate venturing as a means of bolstering strategic ambitions. He said last year: "Now Accenture Ventures is bringing our best to the next generation of future technology titans."

Tom Rodgers MCKESSON

Tom Rodgers' return to US healthcare provider McKesson in 2014 has inspired a fast-moving corporate venturing unit.

McKesson's biggest investment was a $1.21bn series B round for Grail in November 2017, with the oncology testing technology developer spun off from genomics technology producer Illumina, planning to raise up to $1bn more this year, according to Bloomberg.

However, McKesson Ventures has usually focused on smaller rounds. This year's deals include a return to co-lead a $50m funding round in US-based healthcare concierge platform Accolade, while last year it was a part of Shyft's series B round and led Truveris' $25m series D round in early September.

Exits have also emerged, such as for US-based virtual clinic developer Carena, which was acquired in October by telehealth services provider Avizia for an undisclosed sum.

Given such activity it has been little surprise Rodgers has added to his team with McKesson Ventures, hiring Carrie Hurwitz Williams as principal and GCV Risiung Star for 2018 and Irem Mertol as a director.

A decade ago, Rodgers himself was vice-president of corporate strategy and business development for McKesson before joining venture capital firm Advanced Technology Ventures in 2004 where he was a partner for nearly eight years. He then had a two-and-a-half-year stint as director of strategic investments at healthcare technology provider Cambia Health Solutions before rejoining McKesson.

In 2014 at the unit's launch, John Hammergren, McKesson's chairman and CEO, said: "McKesson Ventures will help us support the development and commercialisation of innovations taking place across healthcare. By investing and partnering entrepreneurs and other investors that can bring new approaches to the challenges our customers are facing, we will accelerate the innovation cycle and further strengthen the value we provide to industry stakeholders across all segments."

Hiroshi Saijou YAMAHA

There is a cool video of a robot riding a Yamaha motorcycle on YouTube. But whereas even a few years ago there would have been heavy use of computer-generated images to show this, now it is a reality.

The Motobot humanoid robot that can ride an unmodified motorcycle autonomously is one of two internal projects developed by Japan-based vehicles company Yamaha Motor's corporate venturing unit over the past few years.

Hiroshi Saijou, the CEO and managing director at Yamaha Motor Ventures & Lab in Silicon Valley, for last year's award said the other internal project developed was VasP (Vehicle as Probe), an internet-of-things visualisation of microenvironmental information captured by any kind of vehicle.

While such projects are focused on vehicles, Yamaha Motor's background of disruptive shifts – it started out as a musical instruments maker of keyboards – means its tagline is "exploring new Yamaha as value creator for the world", according to Saijou.

He said its other achievement and highlights were establishing Yamaha Motor Ventures & Lab in Silicon Valley (YMVSV), California, with a "great team" and direct reporting to Yamaha Motor's top management. This team includes George Kellerman and Amish Parashar, and Saijou is expecting to increase its size after the departure of Jay Onda to Orange.

YMVSV's investments this year include industrial robot technology developer Soft Robotics' $20m round and reinvesting in US-based drone technology producer PrecisionHawk's $75m round, and it is looking for more in the seed, A and B rounds across robotics, connected service and industrial automation sectors.

He is also developing a funding mechanism either off the balance sheet or through a dedicated fund as well as start Yamaha Motor Business Accelerator to incubate businesses from ideas, Saijou said last year.

This might mean a change in deal completion. Saijou said that although "our decision-making authority is by top management committee at Yamaha Motor [it does] mean we could encourage our top management to explore for uncertain but potential opportunity".

Quoting Yamaha Motor's founder, he added: "Action is the best way to learn, so let's explore rather than research. In the business world today, so many people are obsessed with figures. They become fixated on the numbers of the minute and without them are too afraid to do any real work. But in fact, every situation is in flux from moment to moment, developing with a natural flow. Unless one reads that flow, it is impossible to start out in a new field of business."

And the motto has been taken up more widely in Japan recently. Finance publication Nikkei Asian Review said corporate venturing activity has been rising in Japan over the past few years with 73 deals for a total $671m in funding last year.

Saijou told the Review that this acceleration was largely triggered by Prime Minister Shinzo Abe's visit to Silicon Valley in 2015, when Abe met and talked with some of the valley's top entrepreneurial figures, including Facebook founder Marck Zuckerberg, Tesla founder Elon Musk and Twitter CEO Jack Dorsey.

Saijou said: "I believe Japan has been getting much more hyped in terms of CVC activity lately, with established corporations being more proactive and more eager to acquire new opportunities. The market is growing, and the environment is generally positive.

"Over the past two years, the scene has become particularly exciting for hardware-related businesses. Robotics, IoT and AI are all new areas of innovation that have been brought to hardware design, giving way to new opportunities. Japan has always been known for the quality of its hardware manufacturing, and so foreign investors are starting to look to the Japanese market for good sourcing in these fields."

For Yamaha's Saijou, it was clear the local market needed to open up. He told the Review: "Japanese corporations and startups still operate in a very Japanese style. Their structure itself is Japan-unique, and very domestic. I believe they should operate with international standards. Even within our own [Yamaha's] strategy, we do not really look at Japanese startups at present, as we believe they are not international enough, and too inward-looking.

"At the same time, the local innovation ecosystem should be modelled to fit in with the Japanese culture. There is so much potential for established corporations to use their human and financial resources to their full extent, to be innovative and to find new business opportunities.

"Educating people to VC, putting training systems in place for company employees, being more open and working together with local startups – these are all challenges that Japanese corporates should take up right now."

Prior to founding YMVSV, Saijou was a division manager at Yamaha Motor's US office, where he led exploratory efforts in Silicon Valley. He started his career at Yamaha Motor in Japan where he worked for almost two decades on a broad array of surface mount technology and robotics in addition to new business development.

Saijou earned a software engineering degree from Kyushu University.

Harshul Sanghi AMERICAN EXPRESS

US-based credit card company American Express (Amex) made a big splash in corporate venturing when it hired Harshul Sanghi, formerly head of Motorola Mobility's corporate venturing unit, nearly seven years ago.

It is a splash that continues to ripple outwards as Sanghi, managing partner at Amex Ventures since August 2011, and his team have made investments in more than 30 companies worldwide.

This year, Amex Ventures has seen portfolio company BigCommerce, a US-based e-commerce software provider that counts several corporates as investors, complete a $64m round led by investment banking firm Goldman Sachs' Private Capital. Amex Ventures made an investment of undisclosed size in fraud detection service EverCompliant, behavioral biometrics developer BioCatch's $30m round and in fintech firm Even Financial's $3m round.

Ken Chenault, former chairman and CEO of American Express and now chairman of VC firm General Catalyst, for Sanghi's previous GCV Powerlist profile said: "At American Express, reinvention is in our DNA. We have never focused in a linear way. We have always been focused on challenging the status quo. However, we cannot innovate fast enough on our own, and that is why partnerships are becoming absolutely essential. The Amex Ventures team highlights how American Express is focused on being a fantastic partner for growth and innovation."

Sanghi is a veteran venture capitalist with more than 25 years of operating experience and a proven track record in delivering financial returns and strategic value. For his 2014 Powerlist award, Sanghi said he helped establish Motorola Ventures, after the phone equipment provider's purchase of his previous employer, Ucentric Systems, as the "go-to standard for corporate venturing".

Motorola Ventures was subsequently divided into Motorola Mobility Ventures and Motorola Solutions Ventures, mirroring the parent company's split, with Sanghi becoming head of Motorola Mobility Ventures but leaving before search engine Google's purchase of the parent business in 2014.

Brian Schettler BOEING HORIZONX VENTURES

Launched in April last year as US-based aerospace firm Boeing's corporate venture capital (CVC) unit, HorizonX was set up to invest in innovative aerospace technologies, business models and manufacturing processes.

But, perhaps as befits a company used to building things to a high specification and able to fly quickly, Michael Lohnert, investing director at Boeing HorizonX Ventures and GCV Rising Star 2018, said: "The reputation we are getting in the aerospace industry is that we are moving fast, while being thoughtful about our investment strategy and respectful of the entrepreneurs."

With the CVC fund headed by managing director Brian Schettler, who reports to HorizonX vice-president Steve Nordlund, formerly vice-president of strategy for Boeing Defense, Space and Security, the unit has screened 2,000 companies to date, and closed seven investments by the end of 2017 with evaluating another 40 to 50 potential deals in their near-term pipeline.

The unit's first two investments were in hybrid electric aircraft producer Zunum Aero and augmented reality technology developer Upskill were announced pretty much simultaneously with the fund's launch, and were quickly followed by cognitive security analytics specialist group SparkCognition and C360 Technology, which manufactures 360-degree video camera systems.

In late 2017, HorizonX was also the lead investor in the first funding round of Pittsburgh, US-based startup Near Earth Autonomy, which develops autonomous flight technology, and in the seed round of aluminium alloys maker Gamma Alloys. This year's deals include UK-based propulsion system developer Reaction Engines, which raised $37.3m from engine and car producer Rolls-Royce and aerospace companies Boeing and BAE Systems.

Schettler has more than 17 years of experience in aerospace, technology, and defence companies in areas of corporate and business strategy, mergers and acquisitions, business development, and product portfolio management. Most recently at Boeing, he was senior strategist for Boeing Military Aircraft, where he led mergers and acquisitions, business strategy, and partnership development in Silicon Valley and beyond. He also served as a strategist for Phantom Works, where he partnered with Boeing Research & Technology to build development strategies for new technologies and products while also building product and market strategies for new platforms and concepts.

Outside Boeing, Schettler has experience leading global companies in strategy and development. He spent three years as vice president of corporate strategy at Cobham, a UK-based technology company, where he led corporate and business strategy development, including the evaluation and prioritization of private venture investment across its diversified product lines. He spent another two years at ATK and was responsible for corporate strategy and portfolio development. Finally, Schettler led strategy and program operations for the Space Systems Division of Northrop Grumman, managing their technology portfolio and investments.

Schettler holds a Bachelor of Science in electrical engineering from Northwestern University and a Master of Business Administration from the University of Maryland. He has completed executive education courses at Northwestern's Kellogg School of Management and has certifications from the Swiss Federal Institute of Technology.

Reese Schroeder TYSON VENTURES

Reese Schroeder is no stranger to GCV nominations. In fact, he stands as what one may call a cornerstone of the CVC industry, with 15 years' experience in it.

As managing director for Motorola Solutions Venture Capital, a position to which he was appointed in 2004 and which he held for over 13 years, Schroeder was nominated to GCV's Powerlist for five consecutive years between 2012 and 2017.

In 2016, all his nominations culminated in a Lifetime Achievement Award attributed by GCV on the basis of "his outstanding, enduring success at the helm of Motorola Solutions Venture Capital, but also in recognition of his invaluable support of the wider venturing ecosystem".

Last year though, and after almost 28 years spent within the Motorola corporation, Schroeder made a significant move into a new venture, becoming managing director at Tyson Foods' freshly formed corporate venture capital unit, Tyson Ventures, where he was put forward by his peers as a GCV Rising Star again.

Schroeder, for his part, identified two driving reasons for joining Tyson: first, the chance to be part of an entirely new project, and, second, that of being able to discover a whole new sector of activity.

He said for the Rising Stars profile: "I was very happy in my role at Motorola, and I think they were still very happy with me. But the Tyson opportunity came along, and it was an honour for me to be part of the founding team of a corporate venture group. It was also an occasion to enter a totally different world, moving on from 20 years in the communications industry to foodtech, which I found very intriguing."

Established in 2016 by Tyson Foods, one of the world's largest meat providers, Tyson Ventures was launched with an initial investment capacity of $150m aimed to support "companies developing breakthrough technologies, business models and products to sustainably feed a growing world population," the corporation announced at the time.

More specifically, the firm identified two key investment areas: sustainability, and "the internet of food" – referring to technologies using big data, drones, robotics and consumer information to enhance performance throughout the food chain.

In October 2016, Tyson Ventures made its very first investment, acquiring a 5% stake in vegan food producer Beyond Meat, which had reportedly received $17m in funding from other investors including General Mills the previous year.

In an interview published in April, Schroeder said: "As an individual, under sustainability, we talk about alternate proteins. I knew a lot about plant-based vegetarian burgers. I had been eating them as part of my diet for three years. But, for example, cultured meats like Memphis Meats, one of our portfolio companies, is something I knew nothing about until I joined Tyson. It is really interesting and exciting, as an investor and an individual.

The other thing that excites me is the connected kitchen. I have always been a gadget guy. I was known at Motorola as the gadget guy. It is amazing how many different kitchen gadgets there are out there. We have invested in Tovala, a company that has created a smart oven. The oven has three cooking methods – broil, convection and steam. There is a barcode that you scan, push the button, and it goes through those cooking cycles and cooks a perfect meal in 15 to 20 minutes.

Assessing his experience at Tyson Ventures so far, he said: "It has been a great learning process, and I now know 10 times more about food and foodtech than I did prior to joining. So there's been a lot to take in, but I also have not felt totally uprooted. Certain things have felt familiar in the sense that a lot of VCs and CVCs I was used to dealing with are still the same, but simply investing in another sector.

"A lot of parallels can also be drawn between foodtech and tech at large, with similar technologies being used for different applications.

"We have taken the approach that we will overcommunicate, if anything. We have fairly regular meetings with the three heads of our businesses. Tyson Foods has three business units – fresh meats and international under Noel White, prepared foods under Sally Grimes, and poultry under Doug Ramsey. Those three have a seat on the investment committee on a rotating basis. We are really going out of our way to make sure that everything we do is communicated and understood, all the way up the chain to our CEO, Tom Hayes."

Outside the world of CVC, the MD mostly describes himself as a family man and an animal lover, with two puppies at home and a collection of fish tanks.

Ray Schuder HP VENTURES (PATHFINDER)

There are three main constituencies corporate venturers try to work with and ultimately impress – their senior management, other venture investors and entrepreneurs.

In a highly-networked entrepreneurial ecosystem such as Silicon Valley, being without a good reputation among entrepreneurs means the chances of working with top-tier serial founders are low indeed. So it was telling that Ray Schuder, managing director at HP Ventures (Pathfinder), was praised by this group in his nomination for the GCV Powerlist 2017.

Andy Palmer, CEO at Tamr, for last year's award said: "I have worked with many of the top venture investors of every flavour, including NEA, Kleiner Perkins Caufield & Byers, GV. My experience with HP Ventures has been exceptional in that context."

He added: "CVCs come and go so I appreciate Ray's continuity even if HP's winds change. When I started Tamr I was very selective with VCs but I also wanted a strategic that could offer value beyond cash, so it was natural to talk with HP. I was sceptical they would be slow-moving as a huge company and credit having the opposite experience with Ray. He made the elephant dance.

"HP beat another customer to lead. They bring value beyond money with Ray as quarterback. Ray really understands what we need – revenue and faster growth. He is very unique – other CVCs talk the talk but delivery is a whole different thing. Ray is interested in us. I trust him deeply."

Schuder, in his own words for his naming as a GCV Rising Star 2016, had "day-tripped" back to the firm where he first worked as a research and development engineer in the late 1990s. His start at HP was precipitated when his wife "finally told me I had to get a job" after studying for too long at Stanford University.

With the departure of Lak Ananth to head Siemens' Next47 corporate venturing unit, Schuder now leads HP's strategic investment unit's deal team, which from the beginning of November 2015 became part of Hewlett Packard Enterprise (HPE) after a demerger of Hewlett-Packard into two businesses. The group's other managing directors are Vishal Lall and Paul Glaser.

The program was launched in 2014 and Schuder came on board in January that year with three quick deals.

Microsoft acquired his first investment, Adallom, for a reported $320m. While Schuder declined to disclose the sale price, he said the exit after its $30m series C round of financing in April came "just under five months after I closed the deal".

He said: "It is a personal record for internal rate of return [a measure of annual performance] in my career and has helped validate our model. With Adallom, we achieved a trifecta [investment, HP as a customer and HP as a go-to-market partner] and this is something we aspire to do in all our deals."

Other deals in 2015 included Chef (formerly Opscode), which raised $40m in September 2015 less than a year after a development partnership with HP, and Tamr, which raised $22.5m in June's B round of financing after spinning out from research conducted by Prof Michael Stonebraker at Massachusetts Institute of Technology.

Other deals include the $90m round for Cohesity, a US-based secondary storage business launched by ex-Googler and Nutanix co-founder Mohit Aron. Its series C round was co-led by existing investors GV and Sequoia Capital with the corporate venturing units of Cisco Systems and HPE as strategic investors.

Schuder has maintained this pace and added greater support for portfolio companies. He said: "I closed three new investments [in 2016] where I serve as a board observer – Hexadite, SafeBreach and KeenIO.

In a continuation of a pattern, two of those deals have since been acquired, while Schuder said SafeBreach was "an investment I sourced an led in their A round successfully raised a B round at a nice step up from the A".

Microsoft acquired Israel-based Hexadite for a reported $100m, while at the end of the year Scaleworks bought Keen IO for an undisclosed amount. Schuder said of Hexadite: "This was an investment I sourced and led in their A round."

Schuder has also led Hewlett Packard's investments in Chargifi, which raised $8m in April's B round following Schuder's lead in it's earlier A round, and Platform9, which closed on $22m for its C round last July.

Schuder said: "Chargifi… is also our first investment in Europe (HQ in the UK).

"I sourced and led an investment in Platform9. This was their C round. We moved quickly to a commercial partnership and to date it is the fastest commercial deal we have closed post investment in a net new opportunity for HPE."

Schuder has become used to rapid success. Before Hewlett Packard Ventures, he co-founded and led AMD Ventures, where he created an early exit for video software company ViVu, which was sold to communications company Polycom. The deal took place approximately six months after investment.

He was a principal with venture capital firm El Dorado Ventures from 2005 to 2010, and before that spent three years as an investment professional with Pequot Ventures and SVB Capital.

To Schuder, the industry requirements are clear and demonstrated through his company testimonials. "In general, corporate venturers need to behave as a good actor in the ecosystem. Shorten lengthy processes and do not introduce non-standard deal terms. Make sure you deliver on strategic value and commitments. If we all did this, we could make a lot of progress improving our reputation among pure-play venture capitalists and entrepreneurs."

He spends the time with business colleagues to help spread the good word. He said: "I presented to HPE's Customer Advisory Board at our annual meeting in London in Feb 2018. In addition to my presentation I moderated a panel with four of our portfolio companies.

"I delivered a keynote to 2500-plus people at our largest pre-sales conference of the year in The Hague in March of 2018. The focus of my keynote was innovation and our corporate venturing program."

He makes it all sound so simple. For Schuder, it probably is, given that he has three master's degrees from Stanford University and graduated in mechanical engineering with the highest honours from University of California Santa Barbara.

Peter Quadros Seiffert EMBRAER

Investors tend to consider vision and persistence the best attributes for entrepreneurs, and Peter Quadros Seiffert, head of corporate venture capital at Brazil-based aeroplane maker Embraer, scores on both.

After a decade of discussions, Embraer started its corporate venture capital initiative in July 2012. When he became a GCV Rising Star in 2016, Seiffert said: "The greatest success was to propose, develop and raise cash for a CVC fund, bringing three institutional investors [the Brazilian development bank BNDES, Brazil's Funding Authority for Studies and Projects and the Brazilian development agency Desenvolve SP] besides Embraer into a general partner [fund manager] and limited partner [investor] investment structure."

This first Embraer-sponsored fund, FIP Aeroespacial, has been joined by another covering the US (called Catapult Ventures) and a global indirect fund to commit to VCs called Embraer Ventures.

José Antonio Filippo, Embraer chief financial officer before his departure last month to join cosmetics company Natura, said: "The operation of the first investment fund – the FIP Aeroespacial – has enabled the development and consolidation of the competence in Corporate Venture Capital (CVC) at Embraer.

Since it was created in 2014, FIP Aerospace has been supporting small and medium-sized innovative companies throughout Brazil (nine companies invested up to today).

"The corporate venture capital [CVC] approach allows investment in new opportunities, with risk sharing and resource leverage. In addition, such investments are executed faster and at a lower experimental capex [capital expenditure].

Recently we expanded our CVC operations internationally, setting a new fund in Silicon Valley with three investments already made in the first quarter of 2018.

"The expectations are that this first international experience and the overall results will consolidate our global investment platform and CVC competence, allowing further enhancements in the future."

Seiffert said Embraer had increased more than three times the direct resources in its CVC funds for the period of 2018 to 2022 to R$125m from R$40. In addition, other institutional and corporations had committed a further R$246m to its programs.

Last year's deals for the first FIP Aeroespacial fund included Virtual Avionics, Aquarela, Desh and EZ Security.

As befits one of Brazil's largest and most innovative industrial groups, Embraer is ahead of its peers. In October 2015, Brazil's state development bank BNDES said it had visited 20 corporations over the previous few months to discuss the issue of corporate venturing. The bank held a breakfast meeting for 50 CEOs and chief financial officers on the morning of the second day of the Corporate Venture in Brazil event, curated by Global Corporate Venturing and hosted by the country's inward investment agency, Apex-Brasil.

As Leonardo Pereira, head of investment funds at BNDES, said in his opening keynote speech to the conference: "Many of the boards did not know about open innovation or corporate venturing."

However, a year later in October, more than 100 local corporations were actively engaged in innovation and venture strategies at the second Corporate Venture in Brazil conference organised by Apex-Brasil in partnership with Global Corporate Venturing and in last year's third conference there were others, such as Stefanini, RBS, Algar and Natura, developing their programs.

Seiffert said he had already helped more than eight Brazilian corporations or leaders on their benchmark process to set their own CVC initiative and also mentored startups of InovAtiva Brasil, a government virtual accelerator program.

Seiffert was one of the few people able to convince a Brazilian board to start venturing, having written a book "– Corporate Venturing: Strategies, Process and Best Practices – in 2004 after completing his master's degree, PhD and post-doctoral studies in business administration in the 1990s and early 2000s.

Being handed the remit of new business development in 2001 enabled Seiffert to pull together a group of 50 executives to develop a 15-year strategic plan that they started to put into effect from 2007.

His personal attributes also helped persuade the board of the merits of corporate venturing. In a LinkedIn testimonial, Fabricio Simoes, a former colleague who is now director of marketing operations at Dell, said: "Peter is an outstanding professional. He combines strong analytical skills and a deep knowledge of strategy with the courage of an entrepreneur."

As well as his zeal for the industry and startups, Seiffert, for his Rising Stars profile, said: "The possibility to converge strategic thinking, entrepreneurship, innovation, business development and M&A expertise, together in just one mission, to create wealth, jobs and transform society, through investing in exciting businesses is amazing.

"I am passionate about entrepreneurship. In my spare time, I am an angel investor and startup mentor. I am a mentor at Inovativa.org.br, a government virtual accelerator program, and angel investor and co-founder of Allgoo.com.br. In the past, I have founded startups such as Valetec.com.br."

He is firmly on track to achieve his Rising Stars ambition of being "recognised as the founder and the executive developer of one the most admired CVCs in the aerospace and defence sector, as Google and Intel did in the information and communication technology sector, for example".

Ian Simmons MAGNA INTERNATIONAL

With $32bn in revenues last year, Magna International, global automotive supplier, is probably the largest company you have never heard of – unless you are in the automotive industry. Its clients range from Aston Martin to Ford and just about everyone in between. Its product range is equally diverse, from electronics to chassis, drive trains and seating. The chances are that many, if not most, of the parts of the car you drive were made by Magna.

It manufactures at more than 312 sites globally, employing 155,000 people. Ian Simmons, who began his automotive career as a mechanical engineer with Ford in the UK nearly 40 years ago, is charged with running Magna's "all-tech" venturing strategy, which is designed to keep it in the vanguard of automotive design and manufacturing. And his deals are starting to attract the right sort of attention to Magna.

In March, Magna International agreed to invest $200m in US-based ride hailing service Lyft as part of a multi-year strategic collaboration deal.

Founded in 2012, Lyft has established itself as the second largest on-demand ride platform in the US, behind Uber, and recently entered its first international market in Toronto, Canada. The Magna funding values the company at $11.7bn. according to the Financial Times.

The partnership will involve the companies making joint investments in the development and manufacturing of autonomous driving systems. Lyft is already working on and testing driverless car technology and has established a dedicated research centre in Silicon Valley.

Magna will bring its expertise on in-car systems, vehicular safety, driver assistance technology and manufacturing to the partnership while Lyft will contribute its existing technology and driver data. They have also agreed to share intellectual property.

The investment will bring Lyft's total funding to about $3.8bn, with other shareholders including car makers General Motors and Jaguar Land Rover, which invested $500m and $25m respectively, and ride hailing service Didi Chuxing.

Swamy Kotagiri, chief technology officer of Magna, of the deal said: "There is a new mobility landscape emerging and partnerships like this put us at the forefront of this change.

"Lyft's leadership in ride sharing and Magna's automotive expertise makes this strategic partnership ideal to effect a positive change as a new transportation ecosystem unfolds."

But Lyft is the outlier for Magna, with most of its deals being similar to its backing of Zubie, which is a device-agnostic platform that can collect data from anything and whose CEO presented at the Global Corporate Venturing and Innovation Summit in January.

For last year's GCV Powerlist award, Simmons said: "We are looking at early-stage technologies that could complement or enhance Magna's current product portfolio. So we are a strategic partner not a financial investor. And bearing in mind that we have a very wide product range, our appetite for new technology is very broad. In addition, we look outside the automotive industry because innovations we may need are just as likely to be found in medical, aerospace and software. I want the venturing and innovation world to understand that Magna is an active player in the transformation of the vehicle and the automotive landscape in general.

"Many of the light-weighting composite technology and materials used by the automotive industry today came initially from aerospace. The biometric security technologies that we are increasingly exploring came initially from the medical industry. And as connectivity increases in transportation, the technology required for cybersecurity and the effective use of big data is coming from the software industry. We are now an all-tech industry and Magna has an all-tech venturing strategy.

"We manufacture all over the world so we have a global footprint which we have used to cultivate relationships with the best universities, venture funds, startup community and accelerators, and even with individual innovators. We have invested alongside other VCs and accelerators to increase dealflow. For example, we recently backed companies in Israel, Canada and the US.

"We also seek innovation internally, not just through traditional R&D, but by challenging our employees to generate new business and technology ideas. And we co-invest too of course. We are increasing our venturing efforts.

"There will be 50 billion items connected to the internet by 2020 and this creates big security challenges. A lot of personal information will be going through your car. We invested in Argus Cyber Security because car users will expect their vehicles to be protected from cyberattack just like their other smart devices. We believe that Argus is the world leader in this field. We also invested in Zubie because it is a pioneer in adding connectivity to the whole automotive supply chain, which is going to impact us very directly.

"Another investment is with Peloton, a company leading the way in introducing autonomy to transportation, starting with trucks and haulage. We do not manufacture extensively for trucks, but by investing in Peloton we can learn how autonomy is likely to be adopted in mobility overall.

"The venture firms we have backed extend our pipeline of potential investments and provide a window on innovation across several industries."

While not a financial-only investor, Magna has already had positive exits. Israel-based connected automotive security software developer Argus Cyber Security, in November agreed to an acquisition by automotive components producer Continental.

Financial terms were not disclosed but local media reports last month suggested the deal would value Argus at approximately $400m having raised about $30m.

In April last year US-based automated car technology developer Peloton Technology raised $60m in its series B round including Magna and a host of other strategic and financial investors showing that while the portfolio company connects trucks, Magna led by Simmons in ventures for the past six years is often the connective tissue between investors.

Simmons had previously been at various roles at Magna Steyr North America in Troy, Michigan, since 2003 having joined the company after four years at Porsche.

Bonny Simi JETBLUE TECHNOLOGY VENTURES

Bonny Simi is president of JetBlue Technology Ventures (JTV), the wholly-owned venture subsidiary of US-based JetBlue Airways.

JetBlue Technology Ventures, named GCV's new entrant of the year in 2016, is regarded as the only Silicon Valley corporate venture unit focusing exclusively on travel and hospitality.

It is a first in a long tradition for the company. Robin Hayes, CEO of JetBlue Airways: said: "JetBlue has always been an innovator. First, in so many things, whether it's live TV on the back of the seats or free broadband WiFi on the airplane. But we knew there were so many other ideas out there that could make us either a better company or make us more relevant in the travel space. So, we created JTV to really help give us that insight and give us that knowledge."

Since its inception, JTV has identified and reviewed more than 2,500 startups, and made 18 investments as of April 2018. Its portfolio includes startups that will reduce cost, increase revenue, improve customer service and optimise operations.

Recent investments include Joby Aero's $100m B round for building a fully-electric vertical take-off and landing passenger aircraft optimised to deliver air-transportation-as-a-service, and Climacell, which offers next generation hyper-local weather prediction.

As Simi said at the time of the Joby deal: "At JetBlue Technology Ventures, we believe the regional transportation ecosystem is ripe for disruption and startups like Joby Aviation will revolutionise how people move across urban areas.

"We are excited about the transformative potential of eVTOLs and believe Joby Aviation is the most advanced company in this emerging sector. Its vehicle platform will be the standard to beat."

Earlier investments range from an internet-of-things mesh network startup, to electric-hybrid aircraft manufacturer Zunum Aero that aims to be the "Tesla of aircraft", to the $15m round for internet-of-things technology developer Filament. Its first strategic investment was a $1m commitment to Flyr, a US-based firm operating a data-analytics platform for flights.

JetBlue plans to expand beyond the US and into other brand extensions beyond air travel. The funding comes off the JetBlue balance sheet and the team is based in San Carlos, California, appropriately at an airport.

Simi has been with JetBlue for 15 years in a variety of leadership and operational positions, and is still an active captain at the airline. She is a graduate of Stanford Business School and Stanford Engineering School, and is a three-time Olympic athlete in the sport of luge, a form of sled racing.

Ruchita Sinha SANOFI

Ruchita Sinha has been senior director of investments at France-based drugs maker Sanofi's corporate venturing unit since joining in November 2016.

Her deals at Sanofi Ventures includes a $3.5m seed round for Curisium, a US-based developer of a blockchain-equipped healthcare management platform. Sinha joined Curisium's board as an observer.

Sinha's best exit so far has seen Sanofi exit cancer treatment developer Impact Biomedicines, which was acquired by fellow pharmaceutical firm Celgene for $1.1bn up front but with $6bn more dependent on milestones.

Founded in 2016, Impact had acquired the development and commercialisation rights for Fedratinib from Sanofi, which in turn took an equity stake of undisclosed size in the company. Sanofi had originally developed Fedratinib but its roll-out came to a halt in 2013 when the US Food and Drug Administration issued a clinical hold order. After acquiring the rights, Impact managed, however, to convince the regulator that the issues were solvable and the hold was rescinded.

Before Sanofi Ventures she had been a director for nearly four years at GE Ventures where her deals included board observer roles at HeadSense and CareMerge. Previously she had been director for strategy, portfolio management and commercial operations at drugs peer Pfizer for nearly three years

Anne Sissel BAXTER VENTURES

Anne Sissel, vice-president and head of Baxter Ventures, the corporate venturing unit of the US-based healthcare company, ended 2016 on a high note as she was selected to publisher Crain's Top 40 Under 40 list. She said: "This is a huge honour – leaders such as US President Barack Obama and TV personality Oprah Winfrey have been included."

For Baxter, this was also a huge deal. The last Baxter team member on the list was Tom Polen in 2008, who is likely to be the next CEO of medical technology company Becton Dickinson (and is currently president of its preanalytical systems). Before that, it was Rob Davis, now chief financial officer at Merck, and Harry Kraemer, who went on to be CEO and chairman of Baxter (and is now a professor at Kellogg's).

For last year's GCV Powerlist award Sissel said: "We have accomplished quite a bit at Baxter Ventures over the [previous] year. We have redefined our strategy after the spinoff of Baxalta, relaunched our governance process and committee formation and built a new team – Amy Kobe [a GCV Rising Star 2017, and Blake Arnold for the 2018 award] being a valuable part of that.

"The Baxter organisation has dramatically moved into a deep focus on innovation and growth, under the visionary leadership of our [chairman and] CEO, Joe Almeida. Baxter Ventures has been a driving force behind shifting our culture to an innovative, entrepreneurial focus and we are very excited about the path forward."

Set up in 2011 by healthcare group Baxter International with a $200m capacity, Baxter Ventures mostly targets patient care companies with innovative technologies. One of its most recent investments was a $38m C round co-led with MVM Life Science for biosensor system developer VitalConnect.

Baxter Ventures earlier investments include TVA Medical and KitCheck's $15m series C round, with technologies and therapies to improve patient care globally and with a focus on therapeutic areas complementary to those of Baxter's hospital products and renal businesses.

Sissel was previously on the founding and executive team as head of finance and business development for Veracyte, a life sciences company backed by Domain Associates, Kleiner Perkins Caufield & Byers, TPG and Versant Ventures and eventually listed on the Nasdaq stock exchange.

Before Veracyte, she worked in the investment banking division of Goldman Sachs and completed more than $200bn in transactions for clients in the healthcare industry, including Johnson & Johnson, Genentech and Qiagen.

Sissel holds an MBA from the Wharton School of University of Pennsylvania and a BS in finance from Indiana University. She is also a chartered financial analyst.

Paula Blazquez Solano BANCO SABADELL'S INNOCELLS

As head of strategic investments at Spain-based Banco Sabadell's InnoCells corporate venturing unit, Paula Blazquez Solano is effectively the hub of new digital ventures.

The strategic investments division works as active partners, supporting portfolio companies invested in at the seed to B-stages with between €500,000 to €3m with the corporate assets of a fully-fledged financial institution.

Banco Sabadell is the fourth largest bank in Spain, with operations in Spain, Mexico and UK (where it acquired TSB Bank).

Blazquez Solano said: "Within Innocells there are three main activities. First, we lead the digital agenda of the bank. Second, we create our own ventures from scratch under our venture building division. And, third, we make strategic Investments through our corporate venture vehicle in startups that have an strategic fit with the bank.

"InnoCells was created in January 2017, and we have walked a long way since then. The corporate venture vehicle was created in Q3 [July to September] 2017 and we have made two investments so far. The first one in UK startup Bud, a financial services platform, and Biometric Vox, a voice biometric startup.

"We have a robust pipeline of opportunities and we look into deals that offer a financial return but also strategic return to the bank. We have developed several pilots with our portfolio startups and the startups we have within or dealflow. We measure our success not only in terms of investments but also in terms of collaboration. We have gained an strategic positioning within the bank which is heavily betting in innovation (inside out and outside in)."

Other deals by Banco Sabadell include the $12m series B round for Spain-based sales assistance app developer ForceManager, Spain-based social commerce platform 21Buttons' $10m series A round and Spain-based online recruitment marketplace CornerJob, which raised $19m in series C funding.

Before Innocells, Blazquez Solano had been fintech strategy manager at Banco Sabadell from March 2016. Earlier roles included as startup competition and acceleration manager at Finnovista and senior investment associate and investment analyst at Axon Partners Group and Hercules Technology Growth Capital, respectively, which make venture capital investments in the broad technology sector.

Markus Solibieda BASF

Markus Solibieda, formerly a partner at private equity firm Mandarin Capital Partners, was appointed managing director at BASF Venture Capital, Germany-based chemical company BASF's investment subsidiary in 2016.

Solibieda works out of the unit's office in Ludwigshafen, initially alongside Dirk Nachtigal, chief executive of BASF Venture Capital since 2001, before the latter's departure to become a venture capital consultant last year.

Mandarin Capital hired Solibieda in April 2013 to head the firm's Frankfurt office. Mandarin focuses on growth-stage businesses in Europe that are planning to expand into China, and in December 2015 it closed its second fund at approximately €200m ($220m).

Solibieda was responsible for the firm's fundraising activities from European and US investors. He began his career as an investment manager at private equity firm Deutsche Beteiligungs in 1995.

Nachtigal built up one of Germany's most active corporate venturing units.

During the past decade he expanded the corporate venturing team to 14 in offices in the US, China and Germany. Most of the team rotate into and out of BASF's business units and former staffers have populated many of the country's best corporate venturing units, with Bernhard Mohr now head of Evonik Venture Capital, Konrad Augustin at Eon's US-based ventures team, and Sven Harmsen joining Merck's venture unit.

BASF has collaborated with more than 350 startups since 2001, investing in more than 30 of them but Solibieda has taken note of BASF's strategic direction in its expansion over the past year.

At the Corporate Venture in Brasil conference last year, Solibieda said Brazil was its second-largest market for agriculture but of perhaps more interest to its corporate venturing unit was the new business models its entrepreneurs were developing. This, rather than technology, was the big value driver.

In a similar way, BASF Venture Capital was closing its Hong Kong and Japan offices in favour of opening one in Shanghai, China, as the country was changing the way the chemicals industry's value chain was operated. He said: "China does not care how business has been done elsewhere in the world as the past 20 years of growth has been from domestic expansion and exports."

However, most of its recent deals have been in the US. BASF Venture Capital's deals last year included leading US-based energy storage technology developer ESS's $13m series B round and US-based chemical additive producer NBD Nanotechnologies' $8m B round, while also joining US-based industrial coating producer Slips Technologies' $8.6m funding. In Germany, BASF backed solar film developer Heliatek's €15m ($17.6m) funding.

Most of these deals have been focused on the digitisation affecting the industrials sector, which Solibieda noted in the GCV outlook survey was the most pressing issue of the year.

Investment professionals from industrial businesses told Global Corporate Venturing in last year's sector review that over the prior year they observed industry-wide efforts to catch up with the rapid pace of digitisation, which has come to the sector later than other sectors.

As a result of Solibieda's efforts, BASF appears in front of the changes.

Jonathan Tudor CENTRICA

In October Jonathan Tudor left petroleum producer BP, where he was managing director of its BP Ventures unit, and accepted "an offer I could not refuse" to head a corporate venturing subsidiary of UK-listed energy utility Centrica.

Tudor, the winner of a Global Corporate Venturing Rising Stars award in 2016, had been venture director at Castrol InnoVentures, a division of BP, before its reorganisation into BP Ventures in the past year.

Tudor had worked at lubricants provider Castrol and BP, where he had found ample support as a "self-confessed geek, who likes technology with the allure of making money in addition to shifting the corporate dial," since 2012.

Following three years at glass manufacturer Schott, Tudor's initial move into investing was as an investment director at government technology contractor Qinetiq's venture capital arm, Qinetiq Ventures, from 2002 to 2007, before its secondary buyout backed by Coller Capital led to the formation of CG Innovation Partners.

In addition to his core activities, Tudor is head of British Private Equity and Venture Capital Association's CVC committee, and wants to "share best practice on how to manage strategic measures, as well as work on training and the professionalisation" of the work done by corporate venturers.

Tudor brings a decade of venture experience to Centrica, where Sam Salisbury and Christophe Defert, directors and co-heads of Centrica Innovations (CI), have scaled up a unique blend of corporate and impact venturing for the utility.

Centrica launched CI in January 2017 and plans to invest £100m ($125m) in startups over the next five years. The unit will incorporate the £10m Ignite social impact fund it formed in 2014, and which won GCV's corporate impact venturing award in 2016.

Christophe Defert has spent seven years at Anglo-American energy utility Centrica after completing his MBA from Wharton business school in 2010.

His move into ventures in February 2017 from being chief of staff to the CEO of Centrica's US-based business, Direct Energy, came with a renewed push into corporate venture capital (CVC).

Sam Salisbury and Defert, directors of Centrica Innovations (CI), had scaled up a unique blend of corporate and impact venturing for the utility before being joined by Jonathan Tudor from BP Ventures in October.

Centrica launched CI in January 2017 and planned to invest £100m ($125m) in startups over the next five years. The unit will incorporate the £10m Ignite social impact fund it formed in 2014, and which won GCV's corporate impact venturing award in 2016.

As Iain Conn, Centrica's group chief executive, said for the GCV Powerlist 2017 awards: "The launch of Centrica Innovations is an important step in identifying and responding to the changing needs of our customers. The new venture will ensure innovation is embedded across our business and will allow us to invest in the technologies that can support our customers into the future. We are already investing £1.2bn to 2020 in our connected home and distributed energy and power businesses, helping residential and business customers take control of their energy and save money."

Centrica's deals included an undisclosed amount into LO3 Energy, a US-based energy-focused blockchain service.

LO3 has a blockchain-based platform to enable peer-to-peer energy marketplaces and accelerate the transition to a distributed energy future after helping set up the world's first blockchain-based microgrid and peer to peer energy transactions in Brooklyn, New York.

At the time, Defert said: "We look forward to working with LO3 on blockchain-based projects more broadly across Centrica, and the opportunity to provide our customers with more flexibility and control over how they buy and use their energy."

However, Tudor in the GCV outlook survey said he was cautious about dealmaking when valuations were overhyped. Sensible advice from an experienced investor will help Centrica steer its path over the next few years.

Lin Wang JD FINANCE

Lin Wang, senior director of finance at Asia-based e-commerce provider JD Finance, and his colleagues have been busy growing several companies.

Backed by Tencent, JD.com – also known as Jingdong Mall – set up its JD Finance subsidiary, created out of a company reorganisation in 2016.

Insurance provider China Taiping Insurance co-led a $1bn share subscription for JD Finance later billed as a series A round by JD.com in 2016. VC firm Sequoia Capital and investment firm China Harvest Investments co-led that round.

JD.com's decision to divest its 68.6% stakeholding in JD Finance was a first step towards an initial public offering for the financial services spinout and a success for

Wang, who as a director for the chief financial officer, Sidney Xuande Huang, is also a vice-president of JD Finance.

The divestment last year provided JD.com with a RMB14.3bn ($2bn) windfall. The parent company will also secure the rights to 40% of JD Finance's future pre-tax profit, which may then be exchanged for a 40% equity stake, pending regulatory approval.

JD Finance, the financial services arm of China-based e-commerce firm JD.com, has formally launched a strategic venture capital fund called Qianshu Capital, China Money Network reported.

The unit will take minority stakes in domestic startups looking to meet consumer demand, and will invest at seed and series A stage. JD has not revealed the size of the fund or how much it will typically provide at a time.

Qianshu Capital is already active and its portfolio companies so far include connected radio producer AirSmart, smart running shoe developer Runmi Technology and towel designer Zuishenghuo.

Those companies make up part of a portfolio that spans lifestyle technology, entertainment and media, and personal health, fashion and cosmetic products.

Qianshu utilises a big data model to analyse potential funding recipients based both on their business plans and data already generated by JD Finance's crowdfunding efforts. It will also offer portfolio companies training, consulting and financial services.

Separately, JD Finance has backed companies, such as Meiliche Jinrong, the automotive-focused spinoff of China-based online lending platform Meili Jinrong, which recently received RMB239m ($38m) in series B capital.

And amid investing in others, JD Finance, which was launched by JD.com in 2013, was reportedly seeking $2bn in funding for itself from investors, including food processing firm Cofco, China Money Network reported.

Cofco, also known as China National Cereals, Oils and Foodstuffs Corporation, has entered discussions with JD finance over a lead investment in the round, as has investment bank China International Capital.

The deal is expected to value JD Finance at $26bn to $30bn, unnamed sources told China Securities Journal.

The funding will enable JD Finance to acquire financial licenses and to boost its research and market development activities.

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